
Final Report

December 31, 2010

**Indiana Disparity Study –
Final Report Appendices**

Indiana Department of Administration
Indiana Department of Transportation
Ball State University
Indiana State University
Indiana University
Ivy Tech Community College
Purdue University
University of Southern Indiana
Vincennes University

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Prepared for

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APPENDIX A.

Definitions of Terms

This appendix provides explanations and definitions useful to understanding the Indiana disparity study report. These definitions are only relevant in the context of this report.

Anecdotal evidence. Includes personal accounts and perceptions of incidents, including of discrimination, told from an individual's perspective.

Availability analysis. Examination of the relative number of minority- and women-owned firms ready, willing and able to perform work for the Indiana Department of Administration (IDOA), Indiana Department of Transportation (INDOT) or state educational institutions (SEIs).

Business. A for-profit company, including all of its establishments (equivalent to "firm").

Business listing. A record in the Dun & Bradstreet database of businesses (or other database). A D&B record is just a "listing" until the study team determines it to actually be a business establishment with a working phone number.

Business establishment. A place of business with an address and working phone number. One firm can have many business establishments (same as "establishment").

Certified MBE/WBE. A firm certified with the State of Indiana as a minority- or women-owned firm. To become certified, a firm must be owned and controlled by one or more people who are members of a minority group (as defined by 13 CFR 124.103) or who are women. Those individuals must be U.S. citizens. There are no personal net worth or gross receipt limits.

The State of Indiana's MBE/WBE certification program is governed by Indiana State regulations 25 IAC § 5 et seq. and administered by IDOA's Division of Minority and Women's Business Enterprises. Other entities also provide MBE/WBE certification, including the City of Indianapolis.

Contract. A legally binding relationship between the seller of goods or services and a buyer.

Contractor. A firm performing a contract. Also used to refer to a construction firm.

Controlled. Exercising management and executive authority for a company, per federal regulations, including 49 CFR Section 26.71.

Disadvantaged Business Enterprise (DBE). A small business owned and controlled by one or more individuals who are both socially and economically disadvantaged according to the guidelines in the Federal DBE Program (49 CFR Part 26). Membership in certain race and ethnic groups identified under “minority-owned business enterprise” in this appendix may meet the presumption of socially and economically disadvantaged. Women are also presumed to be socially and economically disadvantaged. Examination of economic disadvantage also includes investigating the gross revenues and the firm owner’s personal net worth (maximum of \$750,000 excluding equity in a home and in the business).¹ Some minority- and women-owned firms do not qualify as DBEs because of the gross revenue or the net worth requirements. A firm owned by a non-minority male can be certified as a DBE if the enterprise meets the requirements in 49 CFR Part 26.

Disparity. A difference or gap between an actual outcome and a reference point. For example, a difference between an outcome for one race/ethnic group and an outcome for non-Hispanic whites may constitute a disparity.

Disparity analysis. Comparisons of actual outcomes with what might be expected based on other data. Analysis of whether there is a “disparity” between minority- and women-owned business utilization and availability is one tool in examining whether there is evidence consistent with discrimination against minority- and women-owned businesses.

Disparity index. Computed by dividing percentage utilization by percentage availability and then multiplying the result by 100. A disparity index of 100 indicates “parity.” Smaller disparity indices indicated larger disparities.

Dun & Bradstreet. The leading firm in the United States and abroad that provides lists of business establishments and other business information (see www.dnb.com).

Employer firms. Firms with paid employees other than the business owner and family members.

Enterprise. An economic unit that could be a for-profit firm or establishment, not-for-profit organization or public sector organization.

Establishment. See “business establishment.”

Federal DBE Program. Unless otherwise specified, “Federal DBE Program” refers to the Disadvantaged Business Enterprise program established by the U.S. Department of Transportation (USDOT) after enactment of the Transportation Equity Act for the 21st Century (TEA-21) as amended in 1998. The regulations promulgated for the Program are set forth in 49 CFR Part 26.

Federal Highway Administration (FHWA). An agency of the USDOT that works with state and local governments to construct, preserve and improve the National Highway System, other roads eligible for federal aid, and certain roads on federal and tribal lands.

¹ A USDOT Notice of Proposed Rulemaking published on May 10, 2010 proposes adjusting the personal net worth threshold for inflation.

Federal Transit Administration (FTA). An agency of the USDOT that administers federal funding to support local public transportation systems including buses, subways, light rail, passenger ferry boats and other forms of transportation.

Firm. See “business.”

Federally-funded contract. Any contract or project funded in whole or in part with FHWA or FTA financial assistance, including loans. As used in this study, it is synonymous with “federally-assisted contract.”

Industry. A broad grouping of firms providing related goods or services.

Majority-owned businesses. For-profit firms not owned and controlled by minorities or women (see definition of “minorities” below).

Minorities. Racial and ethnic groups identified in the federal regulations in 49 CFR Part 26:

- Black Americans (or “African Americans” in this study), which includes persons having origins in any of the black racial groups of Africa;
- Hispanic Americans, which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
- Native Americans, which includes persons who are American Indians, Eskimos, Aleuts or Native Hawaiians;
- Asian-Pacific Americans, which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, Hong Kong, and other countries and territories in the Pacific set forth in 49 CFR Section 26.5; and
- Subcontinent Asian Americans, which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka.

Minority-owned business (MBE). A firm with at least 51 percent ownership and control by minorities. Minority groups are defined according to federal regulations, as outlined above. For purposes of this study, a firm need not be certified to be counted as a minority-owned firm. Firms owned by minority women are counted as MBEs in this study (where that information is available).

NAICS code. North American Industry Classification System code that identifies the primary line of business of an enterprise. See <http://www.census.gov/epcd/www/naics.html>.

Non-DBEs. Firms not certified as DBEs.

Non-response bias. Occurs when the observed value to a survey question differs from what would be obtained if all individuals in a population, including non-respondents, answered the question.

Owned. Ownership of at least 51 percent of a company. For example, a “minority-owned” firm is at least 51 percent owned by one or more minorities. (For DBE certification, additional regulations are set forth in 49 CFR Section 26.69.)

Prime consultant. The professional services firm performing a contract for an end user, such as the State of Indiana.

Prime contract. The contract between the seller and end user, such as the State of Indiana.

Prime contractor. The firm performing a prime contract for an end user, such as the State of Indiana.

Race-and gender-based measures. Remedies or measures that apply to individuals or firms that include some races and ethnicities and not others, or includes women and not men. This term is equivalent to “race- and gender-conscious.” A DBE contract goal is one example of a race- and gender-based measure. Note that this term is more accurately “race-,” “*ethnicity*-” and “gender-” based. For ease of communication, the study team has shortened this to “race- and gender-conscious” or “race- and gender-based” measures.

Race- and gender-neutral measures. Remedies or measures that apply to individuals or firms that are not classified based on race, ethnicity or gender. Note that this term is more accurately “race-,” “*ethnicity*-” and “gender-” neutral. For ease of communication, the study team has shortened this to “race- and gender-neutral.”

Race- and gender-neutral measures may include assistance in overcoming bonding and financing obstacles, simplifying bidding procedures, providing technical assistance, establishing programs to assist start-up firms, and other methods open to all firms or any disadvantaged firm regardless of race or gender. (A broader list of examples can be found in 49 CFR Section 26.51(b).)

Relevant geographic market area. The geographic area that contains most establishments receiving IDOA, INDOT or SEI work, based on dollars. It is also referred to as the “local marketplace.” Case law related to MBE/WBE programs requires disparity analyses to focus on the “relevant geographic market area.”²

Remedy. A program element designed to address barriers to full participation for a particular group.

Small business. In general, a firm with low revenues or employment size relative to other firms in the industry. “Small business” does not necessarily mean that the firm is certified as such.

Small Business Administration (SBA). The U.S. Small Business Administration, which is an independent agency of the United States government.

State-funded contract. Any contract or project funded in whole or in part with State of Indiana funds and is administered through the State of Indiana. Those contracts do not include federal funds.

² See, e.g., Croson, 448 U.S. at 509; 49 C.F.R. § 26.35; Rothe, 545 F.3d at 1041-1042; N. Contracting, 473 F.3d at 718, 722-23; Western States Paving, 407 F.3d at 995.

Statistically significant difference. A difference in which chance in the sampling process can be eliminated as a reasonable explanation at the 95 percent confidence level (meaning that chance in the sampling process could still explain the difference in no more than 5 out of 100 cases).

Subconsultant. A professional services firm performing a service for the prime consultant as part of a larger contract.

Subcontract. The contract between a prime contractor and another firm selling goods or services to the prime contractor.

Subcontractor. A firm performing a service for a prime contractor as part of a larger project.

Subrecipient. Local agency receiving USDOT financial assistance directly from INDOT.

Supplier. A firm selling supplies to a firm as part of a larger project.

Uniform Certification Program (UCP) database. The statewide electronic directory of firms certified as DBEs in Indiana under the guidelines in 49 CFR Part 26.

USDOT. U.S. Department of Transportation, which includes the Federal Highway Administration, the Federal Transit Administration and the Federal Aviation Administration.

Utilization. Percentage of total dollars of a type of work going to DBEs or MBE/WBEs (or another group).

Women-owned business (WBE). A firm with at least 51 percent ownership and control by women. For this study, a firm need not be certified as a WBE or DBE to be counted as a woman-owned firm. In addition, firms owned and controlled by minority women are counted as minority-owned firms. Therefore, WBEs principally refer to firms owned by white women.

APPENDIX B.

Legal Framework and Analysis

Appendix B provides the legal framework and analysis for the Indiana disparity study. A table of contents for Appendix B is provided on the following pages.

Table of Contents

| | | |
|----|--|----|
| A. | Introduction | 2 |
| B. | U.S. Supreme Court Cases | 4 |
| | 1. <u>City of Richmond V. J.A. Croson Co.</u> , 488 U.S. 469 (1989)..... | 4 |
| | 2. <u>Adarand Constructors, Inc. V. Pena</u> (“Adarand I”), 515 U.S. 200 (1995)..... | 5 |
| C. | The Legal Framework Applied to State and Local Government MBE/WBE Programs and the Federal DBE Program | 6 |
| | 1. Strict Scrutiny Analysis | 7 |
| | a. The Compelling Governmental Interest Requirement | 8 |
| | b. The Narrow Tailoring Requirement | 12 |
| | 2. Intermediate Scrutiny Analysis..... | 17 |
| D. | Recent Decisions Involving State or Local Government MBE/WBE and DBE Programs In The Seventh Circuit | 18 |
| | 1. <u>Northern Contracting, Inc. v. Illinois</u> , 473 F.3d 715 (7th Cir. 2007) | 18 |
| | 2. <u>Northern Contracting, Inc. v. Illinois</u> , 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005), aff’d 473 F.3d 715 (7th Cir. 2007)..... | 20 |
| | 3. <u>Northern Contracting, Inc. v. State of Illinois, Illinois DOT, and USDOT</u> , 2004 WL 422704 (N.D. Ill. March 3, 2004) | 25 |
| | 4. <u>Rapid Test Prods., Inc. v. Durham Sch. Servs., Inc.</u> , 460 F.3d 859 (7th Cir. 2006) | 27 |
| | 5. <u>Builders Ass’n of Greater Chicago v. County of Cook, Chicago</u> , 256 F.3d 642 (7th Cir. 2001) | 28 |
| | 6. <u>The Builders Ass’n of Greater Chicago v. The City of Chicago</u> , 298 F. Supp. 2d 725 (N.D. Ill. 2003) | 30 |
| | 7. <u>Indianapolis Minority Contractors Association, Inc. v. Wiley</u> , 1998 WL 1988826 (S.D. Ind. 1998) (Not reported in F.Supp.)..... | 31 |
| E. | Recent Decisions Involving State or Local Government MBE/WBE Programs in Other Jurisdictions | 36 |
| | Recent Decisions in Federal Circuit Courts of Appeal | 36 |
| | 1. <u>H. B. Rowe Co., Inc. v. W. Lyndo Tippet, NCDOT, et al</u> , ___ F.3d ___ 2010 WL 2871076 (4th Cir. July 22, 2010)..... | 36 |
| | 2. <u>Jana-Rock Construction, Inc. v. New York State Dept. of Economic Development</u> , 438 F.3d 195 (2d Cir. 2006) | 46 |
| | 3. <u>Virdi v. DeKalb County School District</u> , 135 Fed. Appx. 262, 2005 WL 138942 (11th Cir. 2005) (unpublished opinion) | 46 |
| | 4. <u>Concrete Works of Colorado, Inc. v. City and County of Denver</u> , 321 F.3d 950 (10th Cir. 2003), cert. denied, 540 U.S. 1027, 124 S. Ct. 556 (2003) (Scalia, Justice with whom the Chief Justice Rehnquist, joined, dissenting from the denial of certiorari)..... | 50 |
| | 5. <u>In re City of Memphis</u> , 293 F. 3d 345 (6th Cir. 2002) | 62 |

| | | |
|-----|---|-----|
| 6. | <u>Associated Gen. Contractors v. Drabik</u> , 214 F.3d 730 (6th Cir. 2000), <u>aff'g</u> Case No. C2-98-943, 998 WL 812241 (S.D. Ohio 1998) | 62 |
| 7. | <u>W.H. Scott Constr. Co. v. City of Jackson</u> , 199 F.3d 206 (5th Cir. 1999) | 62 |
| 8. | <u>Monterey Mechanical v. Wilson</u> , 125 F.3d 702 (9th Cir. 1997) | 63 |
| 9. | <u>Eng'g Contractors Ass'n of S. Florida v. Metropolitan Dade County</u> , 122 F.3d 895 (11th Cir. 1997)..... | 64 |
| | Recent District Court Decisions | 76 |
| 10. | <u>H.B. Rowe Corp., Inc. v. W. Lyndo Tippet</u> , North Carolina DOT, et al; 589 F. Supp. 2d 587 (E.D.N.C. 2008), <u>aff'd in part and rev'd in part</u> , ___ F.3d ___, 2010 WL 2871076 (4th Cir. July 22, 2010) | 76 |
| 11. | <u>Thomas v. City of Saint Paul</u> , 526 F. Supp. 2d 959 (D. Minn 2007), <u>aff'd</u> , 2009 WL 777932 (8th Cir. March 26, 2009) (unpublished opinion)..... | 82 |
| 12. | <u>Thompson Building Wrecking Co. v. Augusta, Georgia</u> , No. 1:07CV019, 2007 WL 926153 (S.D. Ga. Mar. 14, 2007)(Slip. Op.) | 84 |
| 13. | <u>Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County</u> , 333 F. Supp. 2d 1305 (S.D. Fla. 2004) | 85 |
| 14. | <u>Florida A.G.C. Council, Inc. v. State of Florida</u> , 303 F. Supp. 2d 1307 (N.D. Fla. 2004) | 90 |
| 15. | <u>Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore</u> , 218 F. Supp. 2d 749 (D. Md. 2002)..... | 91 |
| 16. | <u>Kornhass Construction, Inc. v. State of Oklahoma, Department of Central Services</u> , 140 F.Supp.2d 1232 (W.D. OK. 2001) | 92 |
| 17. | <u>Associated Utility Contractors of Maryland, Inc. v. The Mayor and City Council of Baltimore</u> , 83 F. Supp. 2d 613 (D. Md. 2000)..... | 97 |
| 18. | <u>Webster v. Fulton County</u> , 51 F. Supp. 2d 1354 (N.D. Ga. 1999), <u>aff'd per curiam</u> 218 F.3d 1267 (11th Cir. 2000)..... | 97 |
| 19. | <u>Associated Gen. Contractors v. Drabik</u> , 50 F. Supp. 2d 741 (S.D. Ohio 1999)..... | 100 |
| 20. | <u>Phillips & Jordan, Inc. v. Watts</u> , 13 F. Supp. 2d 1308 (N.D. Fla. 1998) | 101 |
| | Recent State Court Decisions | 101 |
| 21. | <u>Cleveland Constr., Inc. v. City of Cincinnati</u> , 169 Ohio App. 3d 627, 864 N.E.2d 116 (2006), cert. denied 128 S. Ct. 379 (U.S. 2007)..... | 101 |
| 22. | <u>Cleveland Constr., Inc. v. City of Cincinnati</u> , Case No. A042683, WL 4880918 (Ohio Court of Common Pleas, July 13, 2005 and August 29, 2005)..... | 103 |
| F. | Recent Decisions Involving the Federal DBE Program and Federally Funded Projects in Other Jurisdictions | 104 |
| 1. | <u>Western States Paving Co. v. Washington State DOT</u> , 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006) | 104 |
| 2. | <u>Western States Paving Co. v. Washington DOT, US DOT & FHWA</u> , 2006 WL 1734163 (W.D. Wash. June 23, 2006) (unpublished opinion) | 108 |
| 3. | <u>Sherbrooke Turf, Inc. v. Minnesota DOT, and Gross Seed Company v. Nebraska Department of Road</u> , 345 F.3d 964 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004) | 109 |
| 4. | <u>Sherbrooke Turf, Inc. v. Minnesota DOT</u> , 2001 WL 1502841, No. 00-CV-1026 (D. Minn. 2001) (unpublished opinion), <u>aff'd</u> 345 F.3d 964 (8th Cir. 2003)..... | 113 |

| | | |
|----|--|-----|
| 5. | <u>Gross Seed Co. v. Nebraska Department of Roads</u> , Civil Action File No. 4:00CV3073 (D. Neb. May 6, 2002), <u>aff'd</u> 345 F. 3d 964 (8th Cir. 2003)..... | 114 |
| 6. | <u>Adarand Constructors, Inc. v. Slater</u> , 228 F.3d 1147 (10th Cir. 2000) <u>cert. granted then dismissed as improvidently granted sub nom, Adarand Constructors, Inc. v. Mineta</u> , 532 U.S. 941, 534 U.S. 103 (2001)..... | 114 |
| 7. | <u>Geod Corporation v. New Jersey Transit Corporation</u> , et. seq. ____ F.Supp. 2d ____, 2009 WL 2595607 (D.N.J. August 20, 2009) | 116 |
| 8. | <u>Klaver Construction, Inc. v. Kansas DOT</u> , 211 F. Supp. 2d 1296 (D. Kan. 2002) | 119 |
| G. | Recent Decisions and Authorities Involving Federal Procurement That May Impact Indiana MBE/WBE and Disadvantaged Business Programs..... | 120 |
| 1. | <u>Rothe Development Corp. v. U.S. Department of Defense</u> , 545 F.3d 1023 (Fed. Cir. 2008) | 120 |
| 2. | <u>Dynalantic Corp. v. United States Dept. of Defense</u> , 503 F. Supp. 2d 262 (D.D.C. 2007) ... | 129 |
| 3. | “Federal Procurement After Adarand” (USCCR Report September, 2005)..... | 130 |

APPENDIX B.

Legal Framework and Analysis

A. Introduction

In this section Holland & Knight LLP analyzes recent cases and materials regarding state and local Minority and Women Business Enterprise (“MBE/WBE”)¹ and Disadvantaged Business Enterprise (“DBE”) programs to provide a summary of the legal framework for the disparity study as applicable to the Indiana agencies and universities (“Indiana”) contracting and procurement. This section begins with a brief review of the landmark United States Supreme Court decision in City of Richmond v. J.A. Croson.² Croson sets forth the strict scrutiny legal analysis applicable in conducting a disparity study and in evaluating the Indiana agencies’ contracting and procurement practices: whether there is strong evidence of discrimination that establishes a compelling interest for remedial relief and certain criteria and factors appropriate to narrowly tailor any remedial relief.

This section notes the United States Supreme Court decision in Adarand Constructors, Inc. v. Peña,³ (“Adarand I”) which applied the strict scrutiny analysis set forth in Croson to federal programs that impact state government recipients of federal financial assistance.

The legal framework then analyzes and applies significant recent court decisions that have followed, interpreted, and applied Croson and Adarand I to the present and are applicable to Indiana’s disparity study and the strict scrutiny analysis. In particular, the legal framework analyzes and focuses upon recent federal cases in the Seventh Circuit Court of Appeals, which is the federal appellate court controlling on Indiana, and recent decisions from other federal courts in this area of the law. In addition, the framework analyzes recent cases that consider and rule on the validity of the United States Department of Transportation Regulations promulgated to implement the Transportation Equity Act for the 21st Century,⁴ known as the Federal Disadvantaged Business Enterprise (“DBE”) Program⁵ and its implementation by local and state government recipients of federal funds from the United States Department of Transportation, which are instructive to state and locally-enacted DBE or MBE/WBE programs (independent from the Federal DBE Program).

The analyses of these recent court decisions are instructive to the Indiana agencies and the disparity study because they include the most recent and significant decisions by courts construing the validity of government programs involving MBE/WBEs and DBEs and applying the compelling interest and

¹ Some of the case law and materials included herein also utilize the term Minority- and Female-Owned Business Enterprise, or MBE/FBE. The terms MBE/WBE and MBE/FBE are used interchangeably throughout this section.

² 488 U.S. 469 (1989).

³ 515 U.S. 200 (1995).

⁴ Pub L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1156; preceded by Pub L. 105-178, Title I, § 1101(b), June 9, 1998, 112 Stat. 107.

⁵ 49 C.F.R. Part 26 (Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs (“Federal DBE Program”).

narrow tailoring tests. They also are instructive in terms of the preparation of any legislation or programs by the Indiana agencies and universities in this area concerning contracting and procurement and providing a non-discriminatory equal business opportunity for contractors, vendors, and suppliers.

The analyses of recent cases involving the Federal DBE Program are instructive to the Indiana agencies and universities and the disparity study because they are the most recent and significant decisions by federal courts setting forth the legal framework applied to the strict scrutiny analysis, in particular focusing on the Federal DBE Program and its implementation by recipients of federal financial assistance governed by 49 C.F.R. Part 26.⁶ They also are instructive in terms of the preparation of DBE programs by the members of the Indiana DOT submitted in compliance with the Federal DBE regulations.

⁶ See Northern Contracting, Inc. v. Illinois DOT, 473 F.3d 715 (7th Cir. 2007); Western States Paving Co. v. Washington State DOT, 407 F.3d 983 (9 Cir. 2005); Sherbrooke Turf, Inc. v. Minn. DOT, 345 F.3d 964 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004); Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000) ("Adarand VII").

B. U.S. Supreme Court Cases

1. City of Richmond V. J.A. Croson Co., 488 U.S. 469 (1989)

In Croson, the U.S. Supreme Court struck down the City of Richmond's "set-aside" program as unconstitutional because it did not satisfy the strict scrutiny analysis applied to "race-based" governmental programs. J.A. Croson Co. ("Croson") challenged the City of Richmond's minority contracting preference plan, which required prime contractors to subcontract at least 30 percent of the dollar amount of contracts to one or more Minority Business Enterprises ("MBE"). In enacting the plan, the City cited past discrimination and an intent to increase minority business participation in construction projects as motivating factors.

The Supreme Court held the City of Richmond's "set-aside" action plan violated the Equal Protection Clause of the Fourteenth Amendment. The Court applied the "strict scrutiny" standard, generally applicable to any race-based classification, which requires a governmental entity to have a "compelling governmental interest" in remedying past identified discrimination and that any program adopted by a local or state government must be "narrowly tailored" to achieve the goal of remedying the identified discrimination.

The Court determined that the plan neither served a "compelling governmental interest" nor offered a "narrowly tailored" remedy to past discrimination. The Court found no "compelling governmental interest" because the City had not provided "a strong basis in evidence for its conclusion that [race-based] remedial action was necessary." The Court held the City presented no direct evidence of any race discrimination on its part in awarding construction contracts or any evidence that the City's prime contractors had discriminated against minority-owned subcontractors. The Court also found there were only generalized allegations of societal and industry discrimination coupled with positive legislative motives. The Court concluded that this was insufficient evidence to demonstrate a compelling interest in awarding public contracts on the basis of race.

Similarly, the Court held the City failed to demonstrate that the plan was "narrowly tailored" for several reasons, including because there did not appear to have been any consideration of race-neutral means to increase minority business participation in city contracting, and because of the over inclusiveness of certain minorities in the "preference" program (for example, Aleuts) without any evidence they suffered discrimination in Richmond.

The Court further found "if the City could show that it had essentially become a 'passive participant' in a system of racial exclusion practiced by elements of the local construction industry ... [i]t could take affirmative steps to dismantle such a system." The Court held that "[w]here there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise." The Supreme Court noted that it did not intend its decision to preclude a state or local government from "taking action to rectify the effects of identified discrimination within its jurisdiction."

2. Adarand Constructors, Inc. V. Pena (“Adarand I”), 515 U.S. 200 (1995)

In Adarand I, the U.S. Supreme Court extended the holding in Croson and ruled that all federal government programs that use racial or ethnic criteria as factors in procurement decisions must pass a test of strict scrutiny in order to survive constitutional muster. The cases interpreting Adarand I are the most recent and significant decisions by federal courts setting forth the legal framework for disparity studies as well as the predicate constitutional strict scrutiny standard of review, which applies to the Indiana agencies’ implementation of the Federal DBE Program.

C. The Legal Framework Applied to State and Local Government MBE/WBE Programs and the Federal DBE Program

The following provides an analysis for the legal framework focusing on recent key cases regarding state and local MBE/WBE programs and the Federal DBE Program, and their implications for a disparity study. The recent decisions involving the Federal DBE Program are instructive to the Indiana DOT, Indiana agencies and universities and the disparity study because they concern the strict scrutiny analysis and legal framework in this area, and implementation of the DBE Program by recipients of federal financial assistance (like Indiana DOT) based on 49 C.F.R. Part 26.

After the Adarand decision, the U.S. Department of Justice in 1996 conducted a study of evidence on the issue of discrimination in government construction procurement contracts, which Congress relied upon as documenting a compelling governmental interest to have a federal program to remedy the effects of current and past discrimination in the transportation contracting industry for federally funded contracts.⁷ Subsequently, in 1998, Congress passed the Transportation Equity Act for the 21st Century (“TEA-21”), which authorized the United States Department of Transportation to expend funds for federal highway programs for 1998 - 2003. Pub.L. 105-178, Title I, § 1101(b), 112 Stat. 107, 113 (1998). The USDOT promulgated new regulations in 1999 contained at 49 C.F.R. Part 26 to establish the current Federal DBE Program. The TEA-21 was subsequently extended in both 2003 and 2005. The reauthorization of TEA-21 in 2005 was for a five year period from 2005 to 2009. Pub.L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1153-57 (“SAFETEA”).

The Federal DBE Program as amended changed certain requirements for federal aid recipients and accordingly changed how recipients of federal funds implemented the Federal DBE Program for federally-assisted contracts. The federal government determined that there is a compelling governmental interest for race- and gender-based programs at the national level, and that the program is narrowly tailored because of the federal regulations, including the flexibility in implementation provided to individual federal aid recipients by the regulations. State and local governments are not required to implement race- and gender-based measures where they are not necessary to achieve DBE goals and those goals may be achieved by race- and gender-neutral measures. 49 C.F.R. § 26.51.

The Federal DBE Program established responsibility for implementing the DBE Program to state and local government recipients of federal funds. A recipient of federal financial assistance must set an annual DBE goal specific to conditions in the relevant marketplace. Even though an overall annual 10 percent aspirational goal applies at the federal level, it does not affect the goals established by individual state or local governmental recipients. The new Federal DBE Program outlines certain steps a state or local government recipient can follow in establishing a goal, and USDOT considers and must approve the goal and the recipient’s DBE program. The implementation of the Federal DBE Program is substantially in the hands of the state or local government recipient and is set forth in detail in the federal regulations, including 49 C.F.R. § 26.45.

⁷ Appendix-The Compelling Interest for Affirmative Action in Federal Procurement, 61 Fed. Reg. 26,050, 26,051-63 & nn. 1-136 (May 23, 1996) (hereinafter “The Compelling Interest”); see Adarand VII, 228 F.3d at 1167-1176, citing The Compelling Interest.

Provided in 49 C.F.R. § 26.45 are instructions as to how recipients of federal funds should set the overall goals for their DBE programs. In summary, the recipient establishes a base figure for relative availability of DBEs. 49 C.F.R. § 26.45(a), (b), (c). This is accomplished by determining the relative number of ready, willing, and able DBEs in the recipient's market. *Id.* Second, the recipient must determine an appropriate adjustment, if any, to the base figure to arrive at the overall goal. *Id.* at § 26.45(d). There are many types of evidence considered when determining if an adjustment is appropriate, according to 49 C.F.R. § 26.45(d). These include, among other types, the current capacity of DBEs to perform work on the recipient's contracts as measured by the volume of work DBEs have performed in recent years. If available, recipients consider evidence from related fields that affect the opportunities for DBEs to form, grow, and compete, such as statistical disparities between the ability of DBEs to obtain financing, bonding, and insurance, as well as data on employment, education, and training. *Id.* This process, based on the federal regulations, aims to establish a goal that reflects a determination of the level of DBE participation one would expect absent the effects of discrimination. 49 C.F.R. § 26.45(b)-(d).

Further, the Federal DBE Program requires state and local government recipients of federal funds to assess how much of the DBE goal can be met through race- and gender-neutral efforts and what percentage, if any, should be met through race- and gender-based efforts. 49 C.F.R. § 26.51.

A state or local government recipient is responsible for seriously considering and determining race- and gender-neutral measures that can be implemented. 49 C.F.R. § 26.51(b). A recipient of federal funds must establish a contract clause requiring prime contractors to promptly pay subcontractors in the Federal DBE Program (42 C.F.R. § 26.29). The Federal DBE Program also established certain record-keeping requirements, including maintaining a bidders list containing data on contractors and subcontractors seeking federally-assisted contracts from the agency (42 C.F.R. § 26.11). There are multiple administrative requirements that recipients must comply with in accordance with the regulations. 49 C.F.R. §§ 26.21-26.37.

Federal aid recipients are to certify DBEs according to their race/gender, size, net worth and other factors related to defining an economically and socially disadvantaged business as outlined in 49 C.F.R. §§ 26.61-26.73.

1. Strict Scrutiny Analysis

A race- and ethnicity-based program implemented by a state or local government is subject to the strict scrutiny constitutional analysis.⁸ IDOT's implementation of the Federal DBE Program also is subject to the strict scrutiny analysis. The strict scrutiny analysis is comprised of two prongs:

- The program must serve an established compelling governmental interest; and
- The program must be narrowly tailored to achieve that compelling government interest.⁹

⁸ *Croson*, 448 U.S. at 493.

⁹ *N. Contracting*, 473 F.3d at 721; *Western States Paving*, 407 F.3d at 991; *Sherbrooke Turf*, 345 F.3d at 969; *Adarand VII*, 228 F.3d at 1176.; *Associated Gen. Contractors of Ohio, Inc. v. Drabik ("Drabik II")*, 214 F.3d 730 (6th Cir. 2000);

a. The Compelling Governmental Interest Requirement

The first prong of the strict scrutiny analysis requires a governmental entity to have a “**compelling governmental interest**” in remedying past identified discrimination in order to implement a race- and ethnicity-based program. State and local governments cannot rely on national statistics of discrimination in an industry to draw conclusions about the prevailing market conditions in their own regions.¹⁰ Rather, state and local governments must measure discrimination in their state or local market, however, that is not necessarily confined by the jurisdiction’s boundaries.¹¹

The federal courts have held that, with respect to the Federal DBE Program, recipients of federal funds do not need to independently satisfy this prong because Congress has satisfied the compelling interest test of the strict scrutiny analysis.¹² The federal courts have held that Congress had ample evidence of discrimination in the transportation contracting industry to justify the Federal DBE Program (TEA-21), and the federal regulations implementing the program (49 C.F.R. Part 26).¹³ Specifically, the federal courts found Congress “spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry.”¹⁴ The evidence found to satisfy the compelling interest standard included numerous congressional investigations and hearings, and outside studies of statistical and anecdotal evidence (e.g., disparity studies).¹⁵

Eng’g Contractors Ass’n of South Florida, Inc. v. Metropolitan Dade County, 122 F.3d 895 (11th Cir. 1997); Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”), 6 F.3d 990 (3d Cir. 1993).

¹⁰ See e.g., Concrete Works, Inc. v. City and County of Denver (“Concrete Works I”), 36 F.3d 1513, 1520 (10th Cir. 1994).

¹¹ Id.

¹² N. Contracting, 473 F.3d at 721; Western States Paving, 407 F.3d at 991; Sherbrooke Turf, 345 F.3d at 969; Adarand VII, 228 F.3d at 1176.

¹³ Id. In the case of Rothe Dev. Corp. v. U.S. Dept. of Defense, 545 F.3d 1023 (Fed. Cir. 2008), the Federal Circuit Court of Appeals pointed out it had questioned in its earlier decision whether the evidence of discrimination before Congress was in fact so “outdated” so as to provide an insufficient basis in evidence for the Department of Defense program (i.e., whether a compelling interest was satisfied). 413 F.3d 1327 (Fed. Cir. 2005). The Federal Circuit Court of Appeals after its 2005 decision remanded the case to the district court to rule on this issue. Rothe considered the validity of race- and gender-conscious Department of Defense (“DOD”) regulations (2006 Reauthorization of the 1207 Program). The decisions in N. Contracting, Sherbrooke Turf, Adarand VII, and Western States Paving held the evidence of discrimination nationwide in transportation contracting was sufficient to find the Federal DBE Program on its face was constitutional. On remand, the district court in Rothe on August 10, 2007 issued its order denying plaintiff Rothe’s Motion for Summary Judgment and granting Defendant United States Department of Defense’s Cross-Motion for Summary Judgment, holding the 2006 Reauthorization of the 1207 DOD Program constitutional. Rothe Devel. Corp. v. U.S. Dept. of Defense, 499 F.Supp.2d 775 (W.D.Tex. Aug 10, 2007). The district court found the data contained in the Appendix (The Compelling Interest, 61 Fed. Reg. 26050 (1996)), the Urban Institute Report, and the Benchmark Study — relied upon in part by the courts in Sherbrooke Turf, Adarand VII, and Western States Paving in upholding the constitutionality of the Federal DBE Program — was “stale” as applied to and for purposes of the 2006 Reauthorization of the 1207 DOD Program. This district court finding was not appealed or considered by the Federal Circuit Court of Appeals. 545 F.3d 1023, 1037. See the discussion of the recent 2008 Federal Circuit Court of Appeals decision in Rothe below in Section VI.I.

¹⁴ Sherbrooke Turf, 345 F.3d at 970, (citing Adarand VII, 228 F.3d at 1167–76); Western States Paving, 407 F.3d at 992–93.

¹⁵ See, e.g., Adarand VII, 228 F.3d at 1167–76; see also Western States Paving, 407 F.3d at 992 (Congress “explicitly relied upon” the Department of Justice study that “documented the discriminatory hurdles that minorities must overcome to secure federally funded contracts”).

The evidentiary basis on which Congress relied to support its finding of discrimination includes:

- **Barriers to minority business formation.** Congress found that discrimination by prime contractors, unions, and lenders has woefully impeded the formation of qualified minority business enterprises in the subcontracting market nationwide, noting the existence of “old boy” networks, from which minority firms have traditionally been excluded, and the race-based denial of access to capital, which affects the formation of minority subcontracting enterprise.¹⁶
- **Barriers to competition for existing minority enterprises.** Congress found evidence showing systematic exclusion and discrimination by prime contractors, private sector customers, business networks, suppliers, and bonding companies precluding minority enterprises from opportunities to bid. When minority firms are permitted to bid on subcontracts, prime contractors often resist working with them. Congress found evidence of the same prime contractor using a minority business enterprise on a government contract not using that minority business enterprise on a private contract, despite being satisfied with that subcontractor’s work. Congress found that informal, racially exclusionary business networks dominate the subcontracting construction industry.¹⁷
- **Local disparity studies.** Congress found that local studies throughout the country tend to show a disparity between utilization and availability of minority-owned firms, raising an inference of discrimination.¹⁸
- **Results of removing affirmative action programs.** Congress found evidence that when race-conscious public contracting programs are struck down or discontinued, minority business participation in the relevant market drops sharply or even disappears, which courts have found strongly supports the government’s claim that there are significant barriers to minority competition, raising the specter of discrimination.¹⁹

Burden of proof. Under the strict scrutiny analysis, and to the extent a state or local governmental entity has implemented a race- and gender-conscious program, the governmental entity has the initial burden of showing a strong basis in evidence (including statistical and anecdotal evidence) to support its remedial action.²⁰ If the government makes its initial showing, the burden shifts to the challenger to rebut that showing.²¹ The challenger bears the ultimate burden of showing that the governmental entity’s evidence “did not support an inference of prior discrimination.”²²

¹⁶ Adarand VII, 228 F.3d at 1168-70; Western States Paving, 407 F.3d at 992.

¹⁷ Adarand VII, at 1170-72.

¹⁸ Id. at 1172-74.

¹⁹ Id. at 1174-75.

²⁰ See Rothe Development Corp. v. Department of Defense, 545 F.3d 1023, 1036 (Fed. Cir. 2008); N. Contracting, Inc. v. Illinois, 473 F.3d at 715, 721 (7th Cir. 2007) (Federal DBE Program); Western States Paving Co. v. Washington State DOT, 407 F.3d 983, 991 (9th Cir. 2005) (Federal DBE Program); Sherbrooke Turf, Inc. v. Minnesota DOT, 345 F.3d 964, 969 (8th Cir. 2003) (Federal DBE Program); Adarand Constructors Inc. v. Slater (“Adarand VII”), 228 F.3d 1147, 1166 (10th Cir. 2000) (Federal DBE Program); Eng’g Contractors Ass’n, 122 F.3d at 916; Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County, 333 F. Supp. 2d 1305, 1316 (S.D. Fla. 2004).

²¹ Adarand VII, 228 F.3d at 1166; Eng’g Contractors Ass’n, 122 F.3d at 916.

²² See, e.g., Adarand VII, 228 F.3d at 1166; Eng’g Contractors Ass’n, 122 F.3d at 916; see also Sherbrooke Turf, 345 F.3d at 971; N. Contracting, 473 F.3d at 721.

Statistical evidence. Statistical evidence of discrimination is a primary method used to determine whether or not a strong basis in evidence exists to develop, adopt and support a remedial program (i.e., to prove a compelling governmental interest), or in the case of a recipient complying with the Federal DBE Program, to prove narrow tailoring of program implementation at the state recipient level.²³ “Where gross statistical disparities can be shown, they alone in a proper case may constitute *prima facie* proof of a pattern or practice of discrimination.”²⁴

One form of statistical evidence is the comparison of a government’s utilization of MBE/WBEs compared to the relative availability of qualified, willing and able MBE/WBEs.²⁵ The federal courts have held that a disparity between utilization and availability of minority- and women-owned firms may raise an inference of discriminatory exclusion.²⁶ However, a small statistical disparity, standing alone, may be insufficient to establish discrimination.²⁷

Other considerations regarding statistical evidence include:

- **Availability analysis.** A disparity index requires an availability analysis. MBE/WBE and DBE availability measures the relative number of MBE/WBEs and DBEs among all firms ready, willing and able to perform a certain type of work within a particular geographic market area.²⁸ There is authority that measures of availability may be approached with different levels of specificity and the practicality of various approaches must be considered.²⁹ “An analysis is not devoid of probative value simply because it may theoretically be possible to adopt a more refined approach.”³⁰
- **Utilization analysis.** Courts have accepted measuring utilization based on the proportion of an agency’s contract dollars going to MBE/WBEs and DBEs.³¹
- **Disparity index.** An important component of statistical evidence is the “disparity index.”³² A disparity index is defined as the ratio of the percentage utilization to the percentage availability

²³ See, e.g., Croson, 488 U.S. at 509; N. Contracting, 473 F.3d at 718-19, 723-24; Western States Paving, 407 F.3d at 991; Adarand VII, 228 F.3d at 1166.

²⁴ Croson, 488 U.S. at 501, quoting Hazelwood School Dist. v. United States, 433 U.S. 299, 307-08 (1977).

²⁵ Croson, 448 U.S. at 509; see Rothe, 545 F.3d at 1041-1042; Concrete Works of Colo., Inc. v. City and County of Denver (“Concrete Works II”), 321 F.3d 950, 959 (10th Cir. 2003); Drabik II, 214 F.3d 730, 734-736.

²⁶ See, e.g., Croson, 488 U.S. at 509; Rothe, 545 F.3d at 1041; Concrete Works II, 321 F.3d at 970; see Western States Paving, 407 F.3d at 1001.

²⁷ Western States Paving, 407 F.3d at 1001.

²⁸ See, e.g., Croson, 448 U.S. at 509; 49 C.F.R. § 26.35; Rothe, 545 F.3d at 1041-1042; N. Contracting, 473 F.3d at 718, 722-23; Western States Paving, 407 F.3d at 995.

²⁹ Contractors Ass’n of Eastern Pennsylvania, Inc. v. City of Philadelphia (“CAEP II”), 91 F.3d 586, 603 (3d Cir. 1996).

³⁰ Id.

³¹ See Eng’g Contractors Ass’n, 122 F.3d at 912; N. Contracting, 473 F.3d at 717-720; Sherbrooke Turf, 345 F.3d at 973.

³² Eng’g Contractors Ass’n, 122 F.3d at 914; W.H. Scott Constr. Co. v. City of Jackson, 199 F.3d 206, 218 (5th Cir. 1999); Contractors Ass’n of Eastern Pennsylvania, Inc. v. City of Philadelphia, 6 F.3d 990 at 1005 (3rd Cir. 1993).

times 100. A disparity index below 80 has been accepted as evidence of adverse impact. This has been referred to as “The Rule of Thumb” or “The 80 Percent Rule.”³³

- **Two standard deviation test.** The standard deviation figure describes the probability that the measured disparity is the result of mere chance. Some courts have held that a statistical disparity corresponding to a standard deviation of less than two is not considered statistically significant.³⁴

Anecdotal evidence. Anecdotal evidence includes personal accounts of incidents, including of discrimination, told from the witness’ perspective. Anecdotal evidence of discrimination, standing alone, generally is insufficient to show a systematic pattern of discrimination.³⁵ But personal accounts of actual discrimination may complement empirical evidence and play an important role in bolstering statistical evidence.³⁶ It has been held that anecdotal evidence of a local or state government’s institutional practices that exacerbate discriminatory market conditions are often particularly probative.³⁷

Examples of anecdotal evidence may include:

- Testimony of MBE/WBE or DBE owners regarding whether they face difficulties or barriers;
- Descriptions of instances in which MBE/WBE or DBE owners believe they were treated unfairly or were discriminated against based on their race, ethnicity, or gender or believe they were treated fairly without regard to race, ethnicity, or gender;
- Statements regarding whether firms solicit, or fail to solicit, bids or price quotes from MBE/WBE’s or DBEs on non-goal projects; and
- Statements regarding whether there are instances of discrimination in bidding on specific contracts and in the financing and insurance markets.³⁸

³³ See, e.g., Ricci v. DeStefano, ___ U.S. ___, ___ S.Ct. ___, 2009 WL 1835138 at 18, 77 USLW 4639 (June 29, 2009); Rothe, 545 F.3d at 1041; Eng’g Contractors Ass’n, 122 F.3d at 914, 923; Concrete Works I, 36 F.3d at 1524.

³⁴ Eng’g Contractors Ass’n, 122 F.3d at 914, 917, 923. The Eleventh Circuit found that a disparity greater than two or three standard deviations has been held to be statistically significant and may create a presumption of discriminatory conduct.; Peightal v. Metropolitan Eng’g Contractors Ass’n, 26 F.3d 1545, 1556 (11th Cir. 1994). The Seventh Circuit Court of Appeals in Kadas v. MCI Systemhouse Corp., 255 F.3d 359 (7th Cir. 2001), raised questions as to the use of the standard deviation test alone as a controlling factor in determining the admissibility of statistical evidence to show discrimination. Rather, the Court concluded it is for the judge to say, on the basis of the statistical evidence, whether a particular significance level, in the context of a particular study in a particular case, is too low to make the study worth the consideration of judge or jury. 255 F.3d at 363.

³⁵ Eng’g Contractors Ass’n, 122 F.3d at 924-25; Coral Constr. Co. v. King County, 941 F.2d 910, 919 (9th Cir. 1991); O’Donnel Constr. Co. v. District of Columbia, 963 F.2d 420, 427 (D.C. Cir. 1992).

³⁶ See, e.g., Eng’g Contractors Ass’n, 122 F.3d at 925-26; Concrete Works, 36 F.3d at 1520; Contractors Ass’n, 6 F.3d at 1003; Coral Constr. Co. v. King County, 941 F.2d 910, 919 (9th Cir. 1991).

³⁷ Concrete Works I, 36 F.3d at 1520.

³⁸ See, Northern Contracting, 2005 WL 2230195, at 13-15 (N.D. Ill. 2005), affirmed, 473 F.3d 715 (7th Cir. 2007); e.g., Concrete Works, 321 F.3d at 989; Adarand VII, 228 F.3d at 1166-76. For additional examples of anecdotal evidence, see Eng’g Contractors Ass’n, 122 F.3d at 924; Florida A.G.C. Council, Inc. v. State of Florida, 303 F. Supp. 2d 1307, 1325 (N.D. Fla. 2004); Webster v. Fulton County, Georgia, 51 F. Supp. 2d 1354, 1379 (N.D. Ga. 1999), aff’d per curiam 218

Courts have accepted and recognize that anecdotal evidence is the witness' narrative of incidents told from his or her perspective, including the witness' thoughts, feelings, and perceptions, and thus anecdotal evidence need not be verified.³⁹

b. The Narrow Tailoring Requirement

The second prong of the strict scrutiny analysis requires that a race- or ethnicity-based program or legislation implemented to remedy past identified discrimination in the relevant market be “narrowly tailored” to reach that objective.

The narrow tailoring requirement has several components and the courts analyze several criteria or factors in determining whether a program or legislation satisfies this requirement including:

- The necessity for the relief and the efficacy of alternative race-, ethnicity-, and gender-neutral remedies;
- The flexibility and duration of the relief, including the availability of waiver provisions;
- The relationship of numerical goals to the relevant labor market; and
- The impact of a race-, ethnicity-, or gender-conscious remedy on the rights of third parties.⁴⁰

The second prong of the strict scrutiny analysis requires the implementation of the Federal DBE Program by recipients of federal funds be “narrowly tailored” to remedy identified discrimination in the particular recipient's contracting and procurement market.⁴¹ The narrow tailoring requirement has several components.

It should be pointed out that in the Northern Contracting decision (2007), the Seventh Circuit Court of Appeals cited its earlier precedent in Milwaukee County Pavers v. Fielder to hold “that a state is insulated from [a narrow tailoring] constitutional attack, absent a showing that the state exceeded its federal authority. IDOT [Illinois DOT] here is acting as an instrument of federal policy and Northern Contracting (NCI) cannot collaterally attack the federal regulations through a challenge to IDOT's program.”⁴² The Seventh Circuit Court of Appeals distinguished both the Ninth Circuit Court of Appeals decision in Western States Paving and the Eighth Circuit Court of Appeals decision in Sherbrooke Turf, relating to an as-applied narrow tailoring analysis.

F.3d 1267 (11th Cir. 2000); Concrete Works, 36 F.3d at 1520; Cone Corp. v. Hillsborough County, 908 F.2d 908, 915 (11th Cir. 1990).

³⁹ See, e.g., Concrete Works II, 321 F.3d at 989; Eng'g Contractors Ass'n, 122 F.3d at 924-26; Cone Corp., 908 F.2d at 915; Northern Contracting, Inc. v. Illinois, 2005 WL 2230195 at *21, N. 32 (N.D. Ill. Sept. 8, 2005), aff'd 473 F.3d 715 (7th Cir. 2007).

⁴⁰ See, e.g., Rothe, 545 F.3d at 1036; Eng'g Contractors Ass'n, 122 F.3d at 927 (internal quotations and citations omitted).

⁴¹ Western States Paving, 407 F.3d at 995-998; Sherbrooke Turf, 345 F.3d at 970-71.

⁴² 473 F.3d at 722

The Seventh Circuit Court of Appeals held that the state DOT's [Illinois DOT] application of a federally mandated program is limited to the question of whether the state exceeded its grant of federal authority under the Federal DBE Program.⁴³ The Seventh Circuit Court of Appeals analyzed IDOT's compliance with the federal regulations regarding calculation of the availability of DBEs, adjustment of its goal based on local market conditions and its use of race-neutral methods set forth in the federal regulations.⁴⁴ The court held NCI failed to demonstrate that IDOT did not satisfy compliance with the federal regulations (49 C.F.R. Part 26).⁴⁵ Accordingly, the Seventh Circuit Court of Appeals affirmed the district court's decision upholding the validity of IDOT's DBE program. See the discussion of the Northern Contracting decision below in Section D.

According to Western States Paving, the recipient of federal funds must have independent evidence of discrimination within the recipient's own transportation contracting and procurement marketplace in order to determine whether or not there is the need for race-, ethnicity-, or gender-conscious remedial action.⁴⁶ Thus, the Ninth Circuit held in Western States Paving that mere compliance with the Federal DBE Program does not satisfy strict scrutiny.⁴⁷

In Western States Paving, the court found that even where evidence of discrimination is present in a recipient's market, a narrowly tailored program must apply only to those minority groups who have actually suffered discrimination. Thus, under a race- or ethnicity -conscious program, for each of the minority groups to be included in any race- or ethnicity-conscious elements in a recipient's implementation of the Federal DBE Program, there must be evidence that the minority group suffered discrimination within the recipient's marketplace.

To satisfy the narrowly tailored prong of the strict scrutiny analysis in the context of the Federal DBE Program, the federal courts, which evaluated state DOT DBE Programs and their implementation of the Federal DBE Program, have held the following factors are pertinent:

- Evidence of discrimination or its effects in the state transportation contracting industry;
- Flexibility and duration of a race- or ethnicity-conscious remedy;
- Relationship of any numerical DBE goals to the relevant market;
- Effectiveness of alternative race- and ethnicity-neutral remedies;
- Impact of a race- or ethnicity-conscious remedy on third parties; and
- Application of any race- or ethnicity-conscious program to only those minority groups who have actually suffered discrimination.⁴⁸

⁴³ Id. at 722.

⁴⁴ Id. at 723-24.

⁴⁵ Id.

⁴⁶ Western States Paving, 407 F.3d at 997-98, 1002-03.

⁴⁷ Id. at 995-1003. The Seventh Circuit Court of Appeals stated in a footnote that the court in Western States Paving "misread" the decision in Milwaukee County Pavers. 473 F.3d at 722, n.5.

⁴⁸ See, e.g., Western States Paving, 407 F.3d at 998; Sherbrooke Turf, 345 F.3d at 971; Adarand VII, 228 F.3d at 1181.

The Eleventh Circuit described the “the essence of the ‘narrowly tailored’ inquiry [as] the notion that explicitly racial preferences ... must only be a ‘last resort’ option.”⁴⁹ Courts have found that “[w]hile narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require serious, good faith consideration of whether such alternatives could serve the governmental interest at stake.”⁵⁰

Similarly, the Sixth Circuit Court of Appeals in Associated Gen. Contractors v. Drabik (“Drabik II”), stated: “Adarand teaches that a court called upon to address the question of narrow tailoring must ask, “for example, whether there was ‘any consideration of the use of race-neutral means to increase minority business participation’ in government contracting ... or whether the program was appropriately limited such that it ‘will not last longer than the discriminatory effects it is designed to eliminate.’”⁵¹

Recently, the Supreme Court in Parents Involved in Community Schools v. Seattle School District, 127 S.Ct. 2738, 2760-61 (2007) also found that race- and ethnicity-based measures should be employed as a last resort. The majority opinion stated: “Narrow tailoring requires ‘serious, good faith consideration of workable race-neutral alternatives,’ and yet in Seattle several alternative assignment plans — many of which would not have used express racial classifications — were rejected with little or no consideration.” 127 S.Ct. at 2760-61; see also Grutter v. Bollinger, 539 U.S. 305 (2003). The Court found that the District failed to show it seriously considered race-neutral measures.

The “narrowly tailored” analysis is instructive for the Indiana agencies and universities in terms of developing any potential legislation or programs that involve MBE/WBEs and DBEs implementing the Federal DBE Program, or in connection with determining appropriate remedial measures to achieve legislative objectives.

Race-, ethnicity-, and gender-neutral measures. To the extent a “strong basis in evidence” exists concerning discrimination in a local or state government’s relevant contracting and procurement market, the courts analyze several criteria or factors to determine whether a state’s implementation of a race- or ethnicity-conscious program is necessary and thus narrowly tailored to achieve remedying identified discrimination. One of the key factors discussed above is consideration of race-, ethnicity- and gender-neutral measures.

The courts require that a local or state government seriously consider race-, ethnicity- and gender-neutral efforts to remedy identified discrimination.⁵² And the courts have held unconstitutional those

⁴⁹ Eng’g Contractors Ass’n, 122 F.3d at 926 (internal citations omitted); see also Viridi v. DeKalb County School District, 135 Fed. Appx. 262, 264, 2005 WL 138942 (11th Cir. 2005) (unpublished opinion); Webster v. Fulton County, 51 F. Supp. 2d 1354, 1380 (N.D. Ga. 1999), aff’d per curiam 218 F.3d 1267 (11th Cir. 2000).

⁵⁰ See Grutter v. Bollinger, 539 U.S. 306, 339 (2003), and Richmond v. J.A. Croson Co., 488 U.S. 469, 509-10 (1989).

⁵¹ Associated Gen. Contractors of Ohio, Inc. v. Drabik (“Drabik II”), 214 F.3d 730, 738 (6th Cir. 2000).

⁵² See, e.g., Western States Paving, 407 F.3d at 993; Sherbrooke Turf, 345 F.3d at 972; Adarand VII, 228 F.3d at 1179; Eng’g Contractors Ass’n, 122 F.3d at 927; Coral Constr., 941 F.2d at 923.

race- and ethnicity-conscious programs implemented without consideration of race- and ethnicity-neutral alternatives to increase minority business participation in state and local contracting.⁵³

The Court in Croson followed by decisions from federal courts of appeal found that local and state governments have at their disposal a “whole array of race-neutral devices to increase the accessibility of city contracting opportunities to small entrepreneurs of all races.”⁵⁴

The federal regulations and the courts require that recipients of federal financial assistance governed by 49 C.F.R. Part 26 implement or seriously consider race-, ethnicity-, and gender-neutral remedies prior to the implementation of race-, ethnicity-, and gender-conscious remedies.⁵⁵ The courts have also found “the regulations require a state to ‘meet the maximum feasible portion of [its] overall goal by using race neutral means.’⁵⁶

Examples of race-, ethnicity-, and gender-neutral alternatives include, but are not limited to, the following:

- Providing assistance in overcoming bonding and financing obstacles;
- Relaxation of bonding requirements;
- Providing technical, managerial and financial assistance;
- Establishing programs to assist start-up firms;
- Simplification of bidding procedures;
- Training and financial aid for all disadvantaged entrepreneurs;
- Non-discrimination provisions in contracts and in state law;
- Mentor-protégé programs and mentoring;
- Efforts to address prompt payments to smaller businesses;

⁵³ See Croson, 488 U.S. at 507; Drabik I, 214 F.3d at 738 (citations and internal quotations omitted); see also Eng’g Contractors Ass’n, 122 F.3d at 927; Virdi, 135 Fed. Appx. At 268.

⁵⁴ Croson, 488 U.S. at 509-510.

⁵⁵ 49 C.F.R. § 26.51(a) requires recipients of federal funds to “meet the maximum feasible portion of your overall goal by using race-neutral means of facilitating DBE participation.” See, e.g., Adarand VII, 228 F.3d at 1179; Western States Paving, 407 F.3d at 993; Sherbrooke Turf, 345 F.3d at 972. Additionally, in September of 2005, the United States Commission on Civil Rights (the “Commission”) issued its report entitled “Federal Procurement After Adarand” setting forth its findings pertaining to federal agencies’ compliance with the constitutional standard enunciated in Adarand. United States Commission on Civil Rights: Federal Procurement After Adarand (Sept. 2005), available at <http://www.usccr.gov>. The Commission found that 10 years after the Court’s Adarand decision, federal agencies have largely failed to narrowly tailor their reliance on race-conscious programs and have failed to seriously consider race-neutral measures that would effectively redress discrimination. See discussion of USCCR Report at Section G. below. See also the discussion of Rothe below at Section G, which notes the dissenting opinion by Commissioner Yaki. 499 F.Supp.2d at 864-66.

⁵⁶ See, e.g., Northern Contracting, 473 F.3d at 723–724; Western States Paving, 407 F.3d at 993 (citing 49 C.F.R. § 26.51(a)).

- Small contract solicitations to make contracts more accessible to smaller businesses;
- Expansion of advertisement of business opportunities;
- Outreach programs and efforts;
- “How to do business” seminars;
- Sponsoring networking sessions throughout the state acquaint small firms with large firms;
- Creation and distribution of MBE/FBE and DBE directories; and
- Streamlining and improving the accessibility of contracts to increase small business participation.⁵⁷

49 C.F.R. § 26.51(b) provides examples of race-, ethnicity-, and gender-neutral measures that should be seriously considered and utilized. The courts have held that while the narrow tailoring analysis does not require a governmental entity to exhaust every possible race-, ethnicity-, and gender-neutral alternative, it does “require serious, good faith consideration of workable race-neutral alternatives.”⁵⁸

Additional factors considered under narrow tailoring. In addition to the required consideration of the necessity for the relief and the efficacy of alternative remedies (race- and ethnicity-neutral efforts), the courts require evaluation of additional factors as listed above.⁵⁹ For example, to be considered narrowly tailored, courts have held that a MBE/WBE- or DBE-type program should include: (1) built-in flexibility;⁶⁰ (2) a good faith efforts provisions;⁶¹ (3) waiver provisions;⁶² (4) a rational basis for goals;⁶³ (5) graduation provisions;⁶⁴ (6) remedies only for groups for which there were findings of discrimination;⁶⁵ (7) sunset provisions;⁶⁶ and (8) limitation in its geographical scope to the boundaries of the enacting jurisdiction.⁶⁷

⁵⁷ See 49 C.F.R. § 26.51(b); see, e.g., Croson, 488 U.S. at 509-510; N. Contracting, 473 F.3d at 724; Adarand VII, 228 F.3d 1179; 49 C.F.R. § 26.51(b); Eng’g Contractors Ass’n, 122 F.3d at 927-29.

⁵⁸ Western States Paving, 407 F.3d at 993.

⁵⁹ Eng’g Contractors Ass’n, 122 F.3d at 927.

⁶⁰ CAEP I, 6 F.3d at 1009; Associated Gen. Contractors of Ca., Inc. v. Coalition for Economic Equality (“AGC of Ca.”), 950 F.2d 1401, 1417 (9th Cir. 1991); Coral Constr. Co. v. King County, 941 F.2d 910, 923 (9th Cir. 1991); Cone Corp. v. Hillsborough County, 908 F.2d 908, 917 (11th Cir. 1990).

⁶¹ CAEP I, 6 F.3d at 1019; Cone Corp., 908 F.2d at 917.

⁶² CAEP I, 6 F.3d at 1009; AGC of Ca., 950 F.2d at 1417; Cone Corp., 908 F.2d at 917.

⁶³ Id.

⁶⁴ Id.

⁶⁵ Western States Paving, 407 F.3d at 998; AGC of Ca., 950 F.2d at 1417.

⁶⁶ Peightal, 26 F.3d at 1559.

⁶⁷ Coral Constr., 941 F.2d at 925.

2. Intermediate Scrutiny Analysis

Certain Federal Courts of Appeal apply intermediate scrutiny to gender-conscious programs.⁶⁸ The courts have interpreted this standard to require that gender-based classifications be:

1. Supported by both “sufficient probative” evidence or “exceedingly persuasive justification” in support of the stated rationale for the program; and
2. Substantially related to the achievement of that underlying objective.⁶⁹

Under the traditional intermediate scrutiny standard, the court reviews a gender-conscious program by analyzing whether the state actor has established a sufficient factual predicate for the claim that female-owned businesses have suffered discrimination, and whether the gender-conscious remedy is an appropriate response to such discrimination. This standard requires the state actor to present “sufficient probative” evidence in support of its stated rationale for the program.⁷⁰

Intermediate scrutiny, as interpreted by certain federal circuit courts of appeal, requires a direct, substantial relationship between the objective of the gender preference and the means chosen to accomplish the objective. The measure of evidence required to satisfy intermediate scrutiny is less than that necessary to satisfy strict scrutiny. Unlike strict scrutiny, the intermediate scrutiny standard it has been held does not require a showing of government involvement, active or passive, in the discrimination it seeks to remedy.⁷¹ And the Eleventh Circuit has held that “[w]hen a gender-conscious affirmative action program rests on sufficient evidentiary foundation, the government is not required to implement the program only as a last resort ... Additionally, under intermediate scrutiny, a gender-conscious program need not closely tie its numerical goals to the proportion of qualified women in the market.”⁷²

The Seventh Circuit Court of Appeals, however, in Builders Ass’n of Greater Chicago v. County of Cook, Chicago,⁷³ did not hold there is a different level of scrutiny for gender discrimination or gender-based programs.⁷⁴ The court in Cook County rejected the distinction applied by the Eleventh Circuit in Engineering Contractors.

Ongoing review. The above represents a brief summary of the legal framework pertinent to implementation of MBE/WBE, DBE, or race-, ethnicity-, or gender-neutral programs. Because this is a dynamic area of the law, the framework is subject to ongoing review as the law continues to evolve. The following provides more detailed summaries of key recent decisions.

⁶⁸ See generally, Western States Paving, 407 F.3d at 990 n. 6; Coral Constr. Co., 941 F.2d at 931-932 (9th Cir. 1991); Equal. Found. v. City of Cincinnati, 128 F.3d 289 (6th Cir. 1997); Eng’g Contractors Ass’n, 122 F.3d at 905, 908, 910; Ensley Branch N.A.A.C.P. v. Seibels, 31 F.3d 1548 (11th Cir. 1994); see also U.S. v. Virginia, 518 U.S. 515, 532 and n.6 (1996) (“exceedingly persuasive justification.”)

⁶⁹ Id.

⁷⁰ Id.

⁷¹ See Eng’g Contractors Ass’n, 122 F.3d at 910.

⁷² Id. at 929 (internal citations omitted.)

⁷³ 256 F.3d 642 (7th Cir. 2001).

⁷⁴ 256 F.3d at 644-645.

D. Recent Decisions Involving State or Local Government MBE/WBE and DBE Programs In The Seventh Circuit

1. Northern Contracting, Inc. v. Illinois, 473 F.3d 715 (7th Cir. 2007)

In Northern Contracting, Inc. v. Illinois, the Seventh Circuit affirmed the district court decision upholding the validity and constitutionality of the Illinois Department of Transportation's ("IDOT") DBE Program. Plaintiff Northern Contracting Inc. ("NCI") was a white male-owned construction company specializing in the construction of guardrails and fences for highway construction projects in Illinois. 473 F.3d 715, 717 (7th Cir. 2007). Initially, NCI challenged the constitutionality of both the federal regulations and the Illinois statute implementing these regulations. Id. at 719. The district court granted the USDOT's Motion for Summary Judgment, concluding that the federal government had demonstrated a compelling interest and that TEA-21 was sufficiently narrowly tailored. NCI did not challenge this ruling and thereby forfeited the opportunity to challenge the federal regulations. Id. at 720. NCI also forfeited the argument that IDOT's DBE program did not serve a compelling government interest. Id. The sole issue on appeal to the Seventh Circuit was whether IDOT's program was narrowly tailored. Id.

IDOT typically adopted a new DBE plan each year. Id. at 718. In preparing for Fiscal Year 2005, IDOT retained a consulting firm to determine DBE availability. Id. The consultant first identified the relevant geographic market (Illinois) and the relevant product market (transportation infrastructure construction). Id. The consultant then determined availability of minority- and women-owned firms through analysis of Dun & Bradstreet's Marketplace data. Id. This initial list was corrected for errors in the data by surveying the D&B list. Id. In light of these surveys, the consultant arrived at a DBE availability of 22.77 percent. Id. The consultant then ran a regression analysis on earnings and business information and concluded that in the absence of discrimination, relative DBE availability would be 27.5 percent. Id. IDOT considered this, along with other data, including DBE utilization on IDOT's "zero goal" experiment conducted in 2002 to 2003, in which IDOT did not use DBE goals on 5 percent of its contracts (1.5% utilization) and data of DBE utilization on projects for the Illinois State Toll Highway Authority which does not receive federal funding and whose goals are completely voluntary (1.6% utilization). Id. at 719. On the basis of all of this data, IDOT adopted a 22.77 percent goal for 2005. Id.

Despite the fact the NCI forfeited the argument that IDOT's DBE program did not serve a compelling state interest, the Seventh Circuit briefly addressed the compelling interest prong of the strict scrutiny analysis, noting that IDOT had satisfied its burden. Id. at 720. The court noted that, post-Adarand, two other circuits have held that a state may rely on the federal government's compelling interest in implementing a local DBE plan. Id. at 720-21, citing Western States Paving Co., Inc. v. Washington State DOT, 407 F.3d 983, 987 (9th Cir. 2005), cert. denied, 126 S.Ct. 1332 (Feb. 21, 2006) and Sherbrooke Turf, Inc. v. Minnesota DOT, 345 F.3d 964, 970 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004). The court stated that NCI had not articulated any reason to break ranks from the other circuits and explained that "[i]nsofar as the state is merely complying with federal law it is acting as the agent of the federal government If the state does exactly what the statute expects it to do, and the statute is conceded for purposes of litigation to be constitutional, we do not see how the state can be thought to have violated the Constitution." Id. at 721, quoting Milwaukee County Pavers Association v. Fielder, 922 F.2d 419, 423 (7th Cir. 1991). The court did not address whether IDOT had an independent interest that could have survived constitutional scrutiny.

In addressing the narrowly tailored prong with respect to IDOT's DBE program, the court held that IDOT had complied. *Id.* The court concluded its holding in *Milwaukee* that a state is insulated from a constitutional attack absent a showing that the state exceeded its federal authority remained applicable. *Id.* at 721-22. The court noted that the Supreme Court in *Adarand Constructors v. Peña*, 515 U.S. 200 (1995) did not seize the opportunity to overrule that decision, explaining that the court did not invalidate its conclusion that a challenge to a state's application of a federally mandated program must be limited to the question of whether the state exceeded its authority. *Id.* at 722.

The court further clarified the *Milwaukee* opinion in light of the interpretations of the opinions offered in by the Ninth Circuit in *Western States* and Eighth Circuit in *Sherbrooke*. *Id.* The court stated that the Ninth Circuit in *Western States* misread the *Milwaukee* decision in concluding that *Milwaukee* did not address the situation of an as-applied challenge to a DBE program. *Id.* at 722, n.5. Relatedly, the court stated that the Eighth Circuit's opinion in *Sherbrooke* (that the *Milwaukee* decision was compromised by the fact that it was decided under the prior law "when the 10 percent federal set-aside was more mandatory") was unconvincing since all recipients of federal transportation funds are still required to have compliant DBE programs. *Id.* at 722. Federal law makes more clear now that the compliance could be achieved even with no DBE utilization if that were the result of a good faith use of the process. *Id.* at 722, n.5. The court stated that IDOT in this case was acting as an instrument of federal policy and NCI's collateral attack on the federal regulations was impermissible. *Id.* at 722.

The remainder of the court's opinion addressed the question of whether IDOT exceeded its grant of authority under federal law, and held that all of NCI's arguments failed. *Id.* First, NCI challenged the method by which the local base figure was calculated, the first step in the goal-setting process. *Id.* NCI argued that the number of registered and prequalified DBEs in Illinois should have simply been counted. *Id.* The court stated that while the federal regulations list several examples of methods for determining the local base figure, *Id.* at 723, these examples are not intended as an exhaustive list. The court pointed out that the fifth item in the list is entitled "Alternative Methods," and states: "You may use other methods to determine a base figure for your overall goal. Any methodology you choose must be based on demonstrable evidence of local market conditions and be designated to ultimately attain a goal that is rationally related to the relative availability of DBEs in your market." *Id.* (citing 49 C.F.R. § 26.45(c)(5)). According to the court, the regulations make clear that "relative availability" means "the availability of ready, willing and able DBEs relative to all business ready, willing, and able to participate" on DOT contracts. *Id.* The court stated NCI pointed to nothing in the federal regulations that indicated that a recipient must so narrowly define the scope of the ready, willing, and available firms to a simple count of the number of registered and prequalified DBEs. *Id.* The court agreed with the district court that the remedial nature of the federal scheme militates in favor of a method of DBE availability calculation that casts a broader net. *Id.*

Second, NCI argued that the IDOT failed to properly adjust its goal based on local market conditions. *Id.* The court noted that the federal regulations do not require any adjustments to the base figure, but simply provide recipients with authority to make such adjustments if necessary. *Id.* According to the court, NCI failed to identify any aspect of the regulations requiring IDOT to separate prime contractor availability from subcontractor availability, and pointed out that the regulations require the local goal to be focused on overall DBE participation. *Id.*

Third, NCI contended that IDOT violated the federal regulations by failing to meet the maximum feasible portion of its overall goal through race-neutral means of facilitating DBE participation. Id. at 723-24. NCI argued that IDOT should have considered DBEs who had won subcontracts on goal projects where the prime contractor did not consider DBE status, instead of only considering DBEs who won contracts on no-goal projects. Id. at 724. The court held that while the regulations indicate that where DBEs win subcontracts on goal projects strictly through low bid this can be counted as race-neutral participation, the regulations did not require IDOT to search for this data, for the purpose of calculating past levels of race-neutral DBE participation. Id. According to the court, the record indicated that IDOT used nearly all the methods described in the regulations to maximize the portion of the goal that will be achieved through race-neutral means. Id.

The court affirmed the decision of the district court upholding the validity of the IDOT DBE program and found that it was narrowly tailored to further a compelling governmental interest. Id.

2. Northern Contracting, Inc. v. Illinois, 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005), aff'd 473 F.3d 715 (7th Cir. 2007)

This decision is the district court's order that was affirmed by the Seventh Circuit Court of Appeals. This decision is instructive to the Indiana DOT, and Indiana agencies and universities, in that it is one of the recent cases to address the validity of the Federal DBE Program and local and state governments' implementation of the program as recipients of federal funds. The case also is instructive in that the court set forth a detailed analysis of race-, ethnicity-, and gender-neutral measures as well as evidentiary data required to satisfy constitutional scrutiny.

The district court conducted a trial after denying the parties' Motions for Summary Judgment in Northern Contracting, Inc. v. State of Illinois, Illinois DOT, and USDOT, 2004 WL 422704 (N.D. Ill. March 3, 2004), discussed infra. The following summarizes the opinion of the district court.

Northern Contracting, Inc. (the "plaintiff"), an Illinois highway contractor, sued the State of Illinois, the Illinois DOT, the United States DOT, and federal and state officials seeking a declaration that federal statutory provisions, the federal implementing regulations ("TEA-21"), the state statute authorizing the DBE program, and the Illinois DBE program itself were unlawful and unconstitutional. 2005 WL 2230195 at *1 (N.D. Ill. Sept. 8, 2005).

Under TEA-21, a recipient of federal funds is required to meet the "maximum feasible portion" of its DBE goal through race-neutral means. Id. at *4 (citing regulations). If a recipient projects that it cannot meet its overall DBE goal through race-neutral means, it must establish contract goals to the extent necessary to achieve the overall DBE goal. Id. (citing regulation). [The court provided an overview of the pertinent regulations including compliance requirements and qualifications for DBE status.]

Statistical evidence. To calculate its 2005 DBE participation goals, IDOT followed the two-step process set forth in TEA-21: (1) calculation of a base figure for the relative availability of DBEs, and (2) consideration of a possible adjustment of the base figure to reflect the effects of the DBE program and the level of participation that would be expected but for the effects of past and present discrimination. Id. at *6. IDOT engaged in a study to calculate its base figure and conduct a custom

census to determine whether a more reliable method of calculation existed as opposed to IDOT's previous method of reviewing a bidder's list. Id.

In compliance with TEA-21, IDOT used a study to evaluate the base figure using a six-part analysis: (1) the study identified the appropriate and relevant geographic market for IDOT's contracting activity and its prime contractors as the State of Illinois; (2) the study identified the relevant product markets in which IDOT and its prime contractors contract; (3) the study sought to identify all available contractors and subcontractors in the relevant industries within Illinois using Dun & Bradstreet's Marketplace; (4) the study collected lists of DBEs from IDOT and twenty other public and private agencies; (5) the study attempted to correct for the possibility that certain businesses listed as DBEs were no longer qualified or, alternatively, businesses not listed as DBEs but qualified as such under the federal regulations; and (6) the study attempted to correct for the possibility that not all DBE businesses were listed in the various directories. Id. at *6-7. The study utilized a standard statistical sampling procedure to correct for the latter two biases. Id. at *7. The study thus calculated a weighted average base figure of 22.7 percent. Id.

IDOT then adjusted the base figure based upon two disparity studies and some reports considering whether the DBE availability figures were artificially low due to the effects of past discrimination. Id. at *8. One study examined disparities in earnings and business formation rates as between DBEs and their white male-owned counterparts. Id. Another study included a survey reporting that DBEs are rarely utilized in non-goals projects. Id.

IDOT considered three reports prepared by expert witnesses. Id. at *9. The first report concluded that minority- and women-owned businesses were underutilized relative to their capacity and that such underutilization was due to discrimination. Id. The second report concluded, after controlling for relevant variables such as credit worthiness, "that minorities and women are less likely to form businesses, and that when they do form businesses, those businesses achieve lower earnings than did businesses owned by white males." Id. The third report, again controlling for relevant variables (education, age, marital status, industry and wealth), concluded that minority- and female-owned businesses formation rates are lower than those of their white male counterparts, and that such businesses engage in a disproportionate amount of government work and contracts as a result of their inability to obtain private sector work. Id.

IDOT also conducted a series of public hearings in which a number of DBE owners who testified that they "were rarely, if ever, solicited to bid on projects not subject to disadvantaged-firm hiring goals." Id. Additionally, witnesses identified twenty prime contractors in IDOT District 1 alone who rarely or never solicited bids from DBEs on non-goals projects. Id. The prime contractors did not respond to IDOT's requests for information concerning their utilization of DBEs. Id.

Finally, IDOT reviewed unremediated market data from four different markets (the Illinois State Toll Highway Authority, the Missouri DOT, Cook County's public construction contracts, and a "non-goals" experiment conducted by IDOT between 2001 and 2002), and considered past utilization of DBEs on IDOT projects. Id. at *11. After analyzing all of the data, the study recommended an upward adjustment to 27.51 percent, however, IDOT decided to maintain its figure at 22.77 percent. Id.

IDOT's representative testified that the DBE program was administered on a "contract-by-contract basis." Id. She testified that DBE goals have no effect on the award of prime contracts but that contracts are awarded exclusively to the "lowest responsible bidder." IDOT also allowed contractors to petition for a waiver of individual contract goals in certain situations (e.g., where the contractor has been unable to meet the goal despite having made reasonable good faith efforts). Id. at *12. Between 2001 and 2004, IDOT received waiver requests on 8.53 percent of its contracts and granted three out of four; IDOT also provided an appeal procedure for a denial from a waiver request. Id.

IDOT implemented a number of race- and gender-neutral measures both in its fiscal year 2005 plan and in response to the district court's earlier summary judgment order, including:

1. A "prompt payment provision" in its contracts, requiring that subcontractors be paid promptly after they complete their work, and prohibiting prime contractors from delaying such payments;
2. An extensive outreach program seeking to attract and assist DBE and other small firms DBE and other small firms enter and achieve success in the industry (including retaining a network of consultants to provide management, technical and financial assistance to small businesses, and sponsoring networking sessions throughout the state to acquaint small firms with larger contractors and to encourage the involvement of small firms in major construction projects);
3. Reviewing the criteria for prequalification to reduce any unnecessary burdens;
4. "Unbundling" large contracts; and
5. Allocating some contracts for bidding only by firms meeting the SBA's definition of small businesses.

Id. (internal citations omitted). IDOT was also in the process of implementing bonding and financing initiatives to assist emerging contractors obtain guaranteed bonding and lines of credit, and establishing a mentor-protégé program. Id.

The court found that IDOT attempted to achieve the "maximum feasible portion" of its overall DBE goal through race- and gender-neutral measures. Id. at *13. The court found that IDOT determined that race- and gender-neutral measures would account for 6.43 percent of its DBE goal, leaving 16.34 percent to be reached using race- and gender-conscious measures. Id.

Anecdotal evidence. A number of DBE owners testified to instances of perceived discrimination and to the barriers they face. Id. The DBE owners also testified to difficulties in obtaining work in the private sector and "unanimously reported that they were rarely invited to bid on such contracts." Id. The DBE owners testified to a reluctance to submit unsolicited bids due to the expense involved and identified specific firms that solicited bids from DBEs for goals projects but not for non-goals projects. Id. A number of the witnesses also testified to specific instances of discrimination in bidding, on specific contracts, and in the financing and insurance markets. Id. at *13-14. One witness acknowledged that all small firms face difficulties in the financing and insurance markets, but testified that it is especially burdensome for DBEs who "frequently are forced to pay higher insurance rates due to racial and gender discrimination." Id. at *14. The DBE witnesses also testified they have obstacles in obtaining prompt payment. Id.

The plaintiff called a number of non-DBE business owners who unanimously testified that they solicit business equally from DBEs and non-DBEs on non-goals projects. *Id.* Some non-DBE firm owners testified that they solicit bids from DBEs on a goals project for work they would otherwise complete themselves absent the goals; others testified that they “occasionally award work to a DBE that was not the low bidder in order to avoid scrutiny from IDOT.” *Id.* A number of non-DBE firm owners accused of failing to solicit bids from DBEs on non-goals projects, testified and denied the allegations. *Id.* at *15.

Strict scrutiny. The court applied strict scrutiny to the program as a whole (including the gender-based preferences). *Id.* at *16. The court, however, set forth a different burden of proof, finding that the government must demonstrate identified discrimination with specificity and must have a “‘strong basis in evidence’ to conclude that remedial action was necessary, *before* it embarks on an affirmative action program ... If the government makes such a showing, the party challenging the affirmative action plan bears the ‘ultimate burden’ of demonstrating the unconstitutionality of the program.” *Id.* The court held that challenging party’s burden “can only be met by presenting credible evidence to rebut the government’s proffered data.” *Id.* at *17.

To satisfy strict scrutiny, the court found that IDOT did not need to demonstrate an independent compelling interest; however, as part of the narrowly tailored prong, IDOT needed to show “that there is a demonstrable need for the implementation of the federal DBE program within its jurisdiction.” *Id.* at *16.

The court found that IDOT presented “an abundance” of evidence documenting the disparities between DBEs and non-DBEs in the construction industry. *Id.* at *17. The plaintiff argued that the study was “erroneous because it failed to limit its DBE availability figures to those firms ... registered and pre-qualified with IDOT.” *Id.* The plaintiff also alleged the calculations of the DBE utilization rate were incorrect because the data included IDOT subcontracts and prime contracts, despite the fact that the latter are awarded to the lowest bidder as a matter of law. *Id.* Accordingly, the plaintiff alleged that IDOT’s calculation of DBE availability and utilization rates was incorrect. *Id.*

The court found that other jurisdictions had utilized the custom census approach without successful challenge. *Id.* at *18. Additionally, the court found “that the remedial nature of the federal statutes counsels for the casting of a broader net when measuring DBE availability.” *Id.* at *19. The court found that IDOT presented “an array of statistical studies concluding that DBEs face disproportionate hurdles in the credit, insurance, and bonding markets.” *Id.* at *21. The court also found that the statistical studies were consistent with the anecdotal evidence. *Id.* The court did find, however, that “there was no evidence of even a single instance in which a prime contractor failed to award a job to a DBE that offered the low bid. This ... is [also] supported by the statistical data ... which shows that at least at the level of subcontracting, DBEs are generally utilized at a rate in line with their ability.” *Id.* at *21, n. 31. Additionally, IDOT did not verify the anecdotal testimony of DBE firm owners who testified to barriers in financing and bonding, however, the court found that such verification was unnecessary. *Id.* at *21, n. 32.

The court further found:

That such discrimination indirectly affects the ability of DBEs to compete for prime contracts, despite the fact that they are awarded solely on the basis of low bid, cannot be doubted: ‘[E]xperience and size are not race- and gender-neutral variables ... [DBE] construction firms are generally smaller and less experienced *because* of industry discrimination.’

Id. at *21, citing Concrete Works of Colorado, Inc. v. City and County of Denver, 321 F.3d 950 (10th Cir. 2003).

The parties stipulated to the fact that DBE utilization goals exceed DBE availability for 2003 and 2004. Id. at *22. IDOT alleged, and the court so found, that the high utilization on goals projects was due to the success of the DBE program, and not to an absence of discrimination. Id. The court found that the statistical disparities coupled with the anecdotal evidence indicated that IDOT’s fiscal year 2005 goal was a “‘plausible lower-bound estimate’ of DBE participation in the absence of discrimination.” Id. The court found that the plaintiff did not present persuasive evidence to contradict or explain IDOT’s data. Id.

The plaintiff argued that even if accepted at face value, IDOT’s marketplace data did not support the imposition of race- and gender-conscious remedies because there was no evidence of direct discrimination by prime contractors. Id. The court found first that IDOT’s indirect evidence of discrimination in the bonding, financing, and insurance markets was sufficient to establish a compelling purpose. Id. Second, the court found:

[M]ore importantly, plaintiff fails to acknowledge that, in enacting its DBE program, IDOT acted not to remedy its own prior discriminatory practices, but pursuant to federal law, which both authorized and required IDOT to remediate the effects of *private* discrimination on federally funded highway contracts. This is a fundamental distinction ... [A] state or local government need not independently identify a compelling interest when its actions come in the course of enforcing a federal statute.

Id. at *23. The court distinguished Builders Ass’n of Greater Chicago v. County of Cook, 123 F. Supp. 2d 1087 (N.D. Ill. 2000), aff’d 256 F.3d 642 (7th Cir. 2001), noting that the program in that case was not federally-funded. Id. at *23, n. 34.

The court also found that “IDOT has done its best to maximize the portion of its DBE goal” through race- and gender-neutral measures, including anti-discrimination enforcement and small business initiatives. Id. at *24. The anti-discrimination efforts included: an internet website where a DBE can file an administrative complaint if it believes that a prime contractor is discriminating on the basis of race or gender in the award of sub-contracts; and requiring contractors seeking prequalification to maintain and produce solicitation records on all projects, both public and private, with and without goals, as well as records of the bids received and accepted. Id. The small business initiative included: “unbundling” large contracts; allocating some contracts for bidding only by firms

meeting the SBA's definition of small businesses; a "prompt payment provision" in its contracts, requiring that subcontractors be paid promptly after they complete their work, and prohibiting prime contractors from delaying such payments; and an extensive outreach program seeking to attract and assist DBE and other small firms DBE and other small firms enter and achieve success in the industry (including retaining a network of consultants to provide management, technical and financial assistance to small businesses, and sponsoring networking sessions throughout the state to acquaint small firms with larger contractors and to encourage the involvement of small firms in major construction projects). Id.

The court found "[s]ignificantly, plaintiff did not question the efficacy or sincerity of these race- and gender-neutral measures." Id. at *25. Additionally, the court found the DBE program had significant flexibility in that utilized contract-by-contract goal setting (without a fixed DBE participation minimum) and contained waiver provisions. Id. The court found that IDOT approved 70 percent of waiver requests although waivers were requested on only 8 percent of all contracts. Id., citing Adarand Constructors, Inc. v. Slater "Adarand VII", 228 F.3d 1147, 1177 (10th Cir. 2000) (citing for the proposition that flexibility and waiver are critically important).

The court held that IDOT's DBE plan was narrowly tailored to the goal of remedying the effects of racial and gender discrimination in the construction industry, and was therefore constitutional.

3. Northern Contracting, Inc. v. State of Illinois, Illinois DOT, and USDOT, 2004 WL 422704 (N.D. Ill. March 3, 2004)

This is the earlier decision in Northern Contracting, Inc., 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005), see above, which resulted in the remand of the case to consider the implementation of the Federal DBE Program by the Illinois DOT. This case involves the challenge to the Federal DBE Program. The plaintiff contractor sued the Illinois Department of Transportation and the USDOT challenging the facial constitutionality of the Federal DBE Program (TEA-21 and 49 C.F.R. Part 26) as well as the implementation of the Federal Program by the Illinois Department of Transportation (i.e., the IDOT DBE Program). The court held valid the Federal DBE Program, finding there is a compelling governmental interest and the federal program is narrowly tailored. The court also held there are issues of fact regarding whether Illinois DOT's ("IDOT") DBE Program is narrowly tailored to achieve the federal government's compelling interest. The court denied the Motions for Summary Judgment filed by the plaintiff and by IDOT, finding there were issues of material fact relating to IDOT's implementation of the Federal DBE Program.

The court in Northern Contracting, held that there is an identified compelling governmental interest for implementing the Federal DBE Program and that the Federal DBE Program is narrowly tailored to further that interest. Therefore, the court granted the Federal defendants' Motion for Summary Judgment challenging the validity of the Federal DBE Program. In this connection, the district court followed the decisions and analysis in Sherbrooke Turf, Inc. v. Minnesota Department of Transportation, 345 F. 3d 964 (8th Cir. 2003) and Adarand Constructors, Inc. v. Slater, 228 F. 3d 1147 (10th Cir. 2000) ("Adarand VII"), cert. granted then dismissed as improvidently granted, 532 U.S. 941, 534 U.S. 103 (2001). The court held, like these two Courts of Appeals that have addressed this issue, that Congress had a strong basis in evidence to conclude that the DBE Program was necessary to redress private discrimination in federally-assisted highway subcontracting. The court agreed with the Adarand VII and Sherbrooke Turf courts that the evidence presented to Congress is

sufficient to establish a compelling governmental interest, and that the contractors had not met their burden of introducing credible particularized evidence to rebut the Government's initial showing of the existence of a compelling interest in remedying the nationwide effects of past and present discrimination in the federal construction procurement subcontracting market. 2004 WL422704 at *34, citing Adarand VII, 228 F. 3d at 1175.

In addition, the court analyzed the second prong of the strict scrutiny test, whether the government provided sufficient evidence that its program is narrowly tailored. In making this determination, the court looked at several factors, such as the efficacy of alternative remedies; the flexibility and duration of the race-conscious remedies, including the availability of waiver provisions; the relationships between the numerical goals and relevant labor market; the impact of the remedy on third parties; and whether the program is over-or-under-inclusive. The narrow tailoring analysis with regard to the as-applied challenge focused on Illinois' implementation of the Federal DBE Program.

First, the court held that the Federal DBE Program does not mandate the use of race-conscious measures by recipients of federal dollars, but in fact requires only that the goal reflect the recipient's determination of the level of DBE participation it would expect absent the effects of the discrimination. 49 C.F.R. § 26.45(b). The court recognized, as found in the Sherbrooke Turf and Adarand VII cases, that the Federal Regulations place strong emphasis on the use of race-neutral means to increase minority business participation in government contracting, that although narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require "serious, good faith consideration of workable race-neutral alternatives." 2004 WL422704 at *36, citing and quoting Sherbooke Turf, 345 F. 3d at 972, quoting Grutter v. Bollinger, 539 U.S. 306 (2003). The court held that the Federal regulations, which prohibit the use of quotas and severely limit the use of set-asides meet this requirement. The court agreed with the Adarand VII and Sherbrooke Turf courts that the Federal DBE Program does require recipients to make a serious good faith consideration of workable race-neutral alternatives before turning to race-conscious measures.

Second, the court found that because the Federal DBE Program is subject to periodic reauthorization, and requires recipients of Federal dollars to review their programs annually, the Federal DBE scheme is appropriately limited to last no longer than necessary.

Third, the court held that the Federal DBE Program is flexible for many reasons, including that the presumption that women and minority are socially disadvantaged is deemed rebutted if an individual's personal net worth exceeds \$750,000.00, and a firm owned by individual who is not presumptively disadvantaged may nevertheless qualify for such status if the firm can demonstrate that its owners are socially and economically disadvantaged. 49 C.F.R. § 26.67(b)(1)(d). The court found other aspects of the Federal Regulations provide ample flexibility, including recipients may obtain waivers or exemptions from any requirements. Recipients are not required to set a contract goal on every USDOT-assisted contract. If a recipient estimates that it can meet its entire overall goals for a given year through race-neutral means, it must implement the Program without setting contract goals during the year. If during the course of any year in which it is using contract goals a recipient determines that it will exceed its overall goals, it must adjust the use of race-conscious contract goals accordingly. 49 C.F.R. § 26.51(e)(f). Recipients also administering a DBE Program in good faith can not be penalized for failing to meet their DBE goals, and a recipient may terminate its DBE Program if it meets its annual overall goal through race-neutral means for two consecutive years. 49 C.F.R. §

26.51(f). Further, a recipient may award a contract to a bidder/offeror that does not meet the DBE Participation goals so long as the bidder has made adequate good faith efforts to meet the goals. 49 C.F.R. § 26.53(a)(2). The regulations also prohibit the use of quotas. 49 C.F.R. § 26.43.

Fourth, the court agreed with the Sherbrooke Turf court's assessment that the Federal DBE Program requires recipients to base DBE goals on the number of ready, willing and able disadvantaged business in the local market, and that this exercise requires recipients to establish realistic goals for DBE participation in the relevant labor markets.

Fifth, the court found that the DBE Program does not impose an unreasonable burden on third parties, including non-DBE subcontractors and taxpayers. The court found that the Federal DBE Program is a limited and properly tailored remedy to cure the effects of prior discrimination, a sharing of the burden by parties such as non-DBEs is not impermissible.

Finally, the court found that the Federal DBE Program was not over-inclusive because the regulations do not provide that every women and every member of a minority group is disadvantaged. Preferences are limited to small businesses with a specific average annual gross receipts over three fiscal years of \$16.6 million or less (at the time of this decision), and businesses whose owners' personal net worth exceed \$750,000.00 are excluded. 49 C.F.R. § 26.67(b)(1). A firm owned by a white male may qualify as social and economically disadvantaged. 49 C.F.R. § 26.67(d).

The court analyzed the constitutionality of the Illinois DBE Program. The court adopted the reasoning of the Eighth Circuit in Sherbrooke Turf, that a recipient's implementation of the Federal DBE Program must be analyzed under the narrow tailoring analysis but not the compelling interest inquiry. Therefore, the court agreed with Sherbrooke Turf that a recipient need not establish a distinct compelling interest before implementing the Federal DBE Program, but did conclude that a recipient's implementation of the Federal DBE Program must be narrowly tailored. The court found that issues of fact remain in terms of the validity of the Illinois DOT's DBE Program as implemented in terms of whether it was narrowly tailored to achieve the Federal Government's compelling interest. The court, therefore, denied the contractor plaintiff's Motion for Summary Judgment and the Illinois DOT's Motion for Summary Judgment.

4. Rapid Test Prods., Inc. v. Durham Sch. Servs., Inc., 460 F.3d 859 (7th Cir. 2006)

In Rapid Test Products, Inc. v. Durham School Services Inc., the Seventh Circuit Court of Appeals held that 42 U.S.C. § 1981 (the federal anti-discrimination law) did not provide an "entitlement" in disadvantaged businesses to receive contracts subject to set aside programs; rather, § 1981 provided a remedy for individuals who were subject to discrimination.

Durham School Services, Inc. ("Durham"), a prime contractor, submitted a bid for and won a contract with an Illinois school district. The contract was subject to a set-aside program reserving some of the subcontracts for disadvantaged business enterprises (a race- and gender-conscious program). Prior to bidding, Durham negotiated with Rapid Test Products, Inc. ("Rapid Test"), made one payment to Rapid Test as an advance, and included Rapid Test in its final bid. Rapid Test believed it had received the subcontract. However, after the school district awarded the contract to Durham, Durham gave the subcontract to one of Rapid Test's competitor's, a business owned by an

Asian male. The school district agreed to the substitution. Rapid Test brought suit against Durham under 42 U.S.C. § 1981 alleging that Durham discriminated against it because Rapid's owner was a black woman.

The district court granted summary judgment in favor of Durham holding the parties' dealing had been too indefinite to create a contract. On appeal, the Seventh Circuit Court of Appeals stated that "§ 1981 establishes a rule against discrimination in contracting and does not create any entitlement to be the beneficiary of a contract reserved for firms owned by specified racial, sexual, ethnic, or religious groups. Arguments that a particular set-aside program is a lawful remedy for prior discrimination may or may not prevail if a potential subcontractor claims to have been excluded, but it is to victims of discrimination rather than frustrated beneficiaries that § 1981 assigns the right to litigate."

The court held that if race or sex discrimination is the reason why Durham did not award the subcontract to Rapid Test, then § 1981 provides relief. Having failed to address this issue, the Seventh Circuit Court of Appeals remanded the case to the district court to determine whether Rapid Test had evidence to back up its claim that race and sex discrimination, rather than a nondiscriminatory reason such as inability to perform the services Durham wanted, accounted for Durham's decision to hire Rapid Test's competitor.

5. Builders Ass'n of Greater Chicago v. County of Cook, Chicago, 256 F.3d 642 (7th Cir. 2001)

This case is instructive to the disparity study because of its analysis of the Cook County MBE/WBE program and the evidence used to support that program. The decision emphasizes the need for any race-conscious program to be based upon credible evidence of discrimination by the local government against MBE/WBEs and to be narrowly tailored to remedy only that identified discrimination.

In Builders Ass'n of Greater Chicago v. County of Cook, Chicago, 256 F.3d 642 (7th Cir. 2001) the United States Court of Appeals for the Seventh Circuit held the Cook County, Chicago MBE/WBE Program was unconstitutional. The court concluded there was insufficient evidence of a compelling interest. The court held there was no credible evidence that Cook County in the award of construction contracts discriminated against any of the groups "favored" by the Program. The court also found that the Program was not "narrowly tailored" to remedy the wrong sought to be redressed, in part because it was over-inclusive in the definition of minorities. The court noted the list of minorities included groups that have not been subject to discrimination by Cook County.

The court considered as an unresolved issue whether a different, and specifically a more permissive, standard than strict scrutiny is applicable to preferential treatment on the basis of sex, rather than race or ethnicity. 256 F.3d at 644. The court noted that the United States Supreme Court in United States v. Virginia ("VMI"), 518 U.S. 515, 532 and n.6 (1996), held racial discrimination to a stricter standard than sex discrimination, although the court in Cook County stated the difference between the applicable standards has become "vanishingly small." *Id.* The court pointed out that the Supreme Court said in the VMI case, that "parties who seek to defend gender-based government action must demonstrate an 'exceedingly persuasive' justification for that action ..." and, realistically, the law can ask no more of race-based remedies either." 256 F.3d at 644, quoting in part VMI, 518 U.S. at 533.

The court indicated that the Eleventh Circuit Court of Appeals in the Engineering Contract Association of South Florida, Inc. v. Metropolitan Dade County, 122 F.3d 895, 910 (11th Cir. 1997) decision created the “paradox that a public agency can provide stronger remedies for sex discrimination than for race discrimination; it is difficult to see what sense that makes.” 256 F.3d at 644. But, since Cook County did not argue for a different standard for the minority and women’s “set aside programs,” the women’s program the court determined must clear the same “hurdles” as the minority program.” 256 F.3d at 644-645.

The court found that since the ordinance requires prime contractors on public projects to reserve a substantial portion of the subcontracts for minority contractors, which is inapplicable to private projects, it is “to be expected that there would be more soliciting of these contractors on public than on private projects.” *Id.* Therefore, the court did not find persuasive that there was discrimination based on this difference alone. 256 F.3d at 645. The court pointed out the County “conceded that [it] had no specific evidence of pre-enactment discrimination to support the ordinance.” 256 F.3d at 645 quoting the district court decision, 123 F.Supp. 2d at 1093. The court held that a “public agency must have a strong evidentiary basis for thinking a discriminatory remedy appropriate *before* it adopts the remedy.” 256 F.3d at 645 (emphasis in original).

The court stated that minority enterprises in the construction industry “tend to be subcontractors, moreover, because as the district court found not clearly erroneously, 123 F.Supp. 2d at 1115, they tend to be new and therefore small and relatively untested — factors not shown to be attributable to discrimination by the County.” 256 F.3d at 645. The court held that there was no basis for attributing to the County any discrimination that prime contractors may have engaged in. *Id.* The court noted that “[i]f prime contractors on County projects were discriminating against minorities and this was known to the County, whose funding of the contracts thus knowingly perpetuated the discrimination, the County might be deemed sufficiently complicit ... to be entitled to take remedial action.” *Id.* But, the court found “of that there is no evidence either.” *Id.*

The court stated that if the County had been complicit in discrimination by prime contractors, it found “puzzling” to try to remedy that discrimination by requiring discrimination in favor of minority stockholders, as distinct from employees. 256 F.3d at 646. The court held that even if the record made a case for remedial action of the general sort found in the MWBE ordinance by the County, it would “flunk the constitutional test” by not being carefully designed to achieve the ostensible remedial aim and no more. 256 F.3d at 646. The court held that a state and local government that has discriminated just against blacks may not by way of remedy discriminate in favor of blacks and Asian Americans and women. *Id.* Nor, the court stated, may it discriminate more than is necessary to cure the effects of the earlier discrimination. *Id.* “Nor may it continue the remedy in force indefinitely, with no effort to determine whether, the remedial purpose attained, continued enforcement of the remedy would be a gratuitous discrimination against nonminority persons.” *Id.* The court, therefore, held that the ordinance was not “narrowly tailored” to the wrong that it seeks to correct. *Id.*

The court thus found that the County both failed to establish the premise for a racial remedy, and also that the remedy goes further than is necessary to eliminate the evil against which it is directed. 256 F.3d at 647. The court held that the list of “favored minorities” includes groups that have never been subject to significant discrimination by Cook County. *Id.* The court found it unreasonable to

“presume” discrimination against certain groups merely on the basis of having an ancestor who had been born in a particular country. *Id.* Therefore, the court held the ordinance was overinclusive.

The court found that the County did not make any effort to show that, were it not for a history of discrimination, minorities would have 30 percent, and women 10 percent, of County construction contracts. 256 F.3d at 647. The court also rejected the proposition advanced by the County in this case -- “that a comparison of the fraction of minority subcontractors on public and private projects established discrimination against minorities by prime contractors on the latter type of project.” 256 F.3d at 647-648.

6. The Builders Ass’n of Greater Chicago v. The City of Chicago, 298 F. Supp. 2d 725 (N.D. Ill. 2003)

This case is instructive because of the court’s focus and analysis on whether the City of Chicago’s MBE/WBE program was narrowly tailored. The basis of the court’s holding that the program was not narrowly tailored is instructive for any program considered because of the reasons provided as to why the program did not pass muster.

The plaintiff, the Builders Association of Greater Chicago, brought this suit challenging the constitutionality of the City of Chicago’s construction Minority- and Women-Owned Business (“MWBE”) Program. The court held that the City of Chicago’s MWBE Program was unconstitutional because it did not satisfy the requirement that it be narrowly tailored to achieve a compelling governmental interest. The court held that it was not narrowly tailored for several reasons, including because there was no “meaningful individualized review” of MBE/WBEs; it had no termination date nor did it have any means for determining a termination; the “graduation” revenue amount for firms to graduate out of the program was very high, \$27,500,000 and in fact very few firms graduated; there was no net worth threshold; and, waivers were rarely or never granted on construction contracts. The court found that the City program was a “rigid numerical quota,” a quota related not to the number of available, willing and able firms. Formulistic percentages, the court held, could not survive the strict scrutiny.

The court held that the goals plan did not address issues raised as to discrimination regarding market access and credit. The court found that a goals program does not directly impact prime contractor’s selection of subcontractors on non-goals private projects. The court found that a set-aside or goals program does not directly impact difficulties in accessing credit, and does not address discriminatory loan denials or higher interest rates. The court found the City has not sought to attack discrimination by primes directly, “but it could.” 298 F.2d 725. “To monitor possible discriminatory conduct it could maintain its certification list and require those contracting with the City to consider unsolicited bids, to maintain bidding records, and to justify rejection of any certified firm submitting the lowest bid. It could also require firms seeking City work to post private jobs above a certain minimum on a website or otherwise provide public notice ...” *Id.*

The court concluded that other race-neutral means were available to impact credit, high interest rates, and other potential marketplace discrimination. The court pointed to race-neutral means including linked deposits, with the City banking at institutions making loans to startup and smaller firms. Other race-neutral programs referenced included quick pay and contract downsizing; restricting self-performance by prime contractors; a direct loan program; waiver of bonds on contracts under

\$100,000; a bank participation loan program; a 2 percent local business preference; outreach programs and technical assistance and workshops; and seminars presented to new construction firms.

The court held that race and ethnicity do matter, but that racial and ethnical classifications are highly suspect, can be used only as a last resort, and cannot be made by some mechanical formulation. Therefore, the court concluded the City's MWBE Program could not stand in its present guise. The court held that the present program was not narrowly tailored to remedy past discrimination and the discrimination demonstrated to now exist.

The court entered an injunction, but delayed the effective date for six months from the date of its Order, December 29, 2003. The court held that the City had a "compelling interest in not having its construction projects slip back to near monopoly domination by white male firms." The court ruled a brief continuation of the program for six months was appropriate "as the City rethinks the many tools of redress it has available." Subsequently, the court declared unconstitutional the City's MWBE Program with respect to construction contracts and permanently enjoined the City from enforcing the Program. 2004 WL 757697 (N.D. Ill 2004).

7. Indianapolis Minority Contractors Association, Inc. v. Wiley, 1998 WL 1988826 (S.D. Ind. 1998) (Not reported in F.Supp.)

In this case, plaintiffs, an association of Indianapolis Minority Contractors, brought suit to challenge the manner in which the State of Indiana administered its program for minority and disadvantaged businesses that is a part of the federal DBE program, which is regulated by the United States DOT. The plaintiffs contended that state officials and others engaged in wrongful actions in disbursement of federal highway funds to undeserving businesses that did not qualify for the DBE program because they were not controlled by either minority individuals or financially disadvantaged individuals. In addition, the plaintiffs claimed that because of this wrongdoing, they did not receive their fair share of the federal highway funds as minority contractors. The district court stated that this case concerns whether the State of Indiana complied with federal law related to the receipt of Federal Highway funds or whether it engaged in a practice of discrimination with respect to those funds. 1998 WL 1988826 at *10. The district court noted the case did not involve a challenge concerning the State of Indiana Minority Business Enterprise Program that did not involve projects utilizing federal funds.

The district court rejected testimony submitted by the plaintiffs as not meeting standards for expert testimony with regard to claims that the defendants were discriminating against African Americans, because the court concluded the claims were conclusory allegations and opinions, based in part on speculation, hearsay and not on any sufficient probative evidence to support the opinions. 1998 WL 1988826 at *13-15. The court rejected the statistical analysis submitted regarding a disparate impact on African Americans, finding there was no evidence shown concerning any possible error rate, standard deviation or confidence levels related to the proffered results. *Id.* The court found there was no evidence related to whether the proper statistical pool was used to calculate the percentages proffered as evidence of a disparate impact. *Id.* The testimony submitted by the plaintiffs compared Indiana DOT's compliance with the mandatory Federal DBE Program with other states, and concluded that Indiana ranked as one of the worst based on the testimony that Indiana's demographics were 8 to 9 percent black. *Id.* at *14. But, the district court found the state-wide demographic utilized may be a statistical universe larger than the number of firms actually qualified, willing and able to work on the construction contracts. *Id.*

The district court also found that the testimony proffered was not sufficient in connection with the claim that the defendants were discriminating against African Americans. *Id.* at *13. The court stated plaintiffs “merely” concluded that the State was discriminating based upon a review of the percentages of payments which the plaintiffs’ witness considered to be “legitimate black companies,” as compared to the payments made to what the witness considered to be “front” companies. *Id.* at *13. The court found that these were conclusory opinions based only on the witness’s knowledge of “legitimate black companies,” and deemed the opinions “problematic.” The court stated the witness admitted he had not been involved in activities within the State for many years, and he did not show any basis for his knowledge as to which companies that were paid funds by Indiana DOT were “legitimate black companies” and which were not. *Id.*

The court rejected plaintiffs’ witness’s opinion concerning his finding that only 3.8 percent of the total contracts went to “legitimate black-owned businesses.” The court noted that the regulations do not provide for a 10 percent participation by African Americans, but a 10 percent participation by many groups, including African Americans, and that the witness did not testify as to whether he performed any study of the federal reports to test Indiana DOT’s compliance with the 10 percent goal based on *all* DBE as defined by federal law. *Id.* at *13. The district court concluded that unsupported, conclusory testimony is not sufficient. *Id.*

The court also considered the issue raised by the plaintiffs as to whether the then existing federal regulations, 49 C.F.R. Part 23, provided enforceable rights subject to a 42 U.S.C. § 1983 action brought by the plaintiffs. The court concluded that the federal regulations do not provide a basis to conclude that they were intended to provide rights enforceable under Section 1983. *Id.* at *28. The district court found that the federal regulations provide a means to assure that the federal DBE program benefits legitimate DBEs, and provides the Secretary of the United States DOT a means to ensure its integrity. *Id.*

The court stated these regulations provided a method for the USDOT to oversee the services provided by the States, rather than a means to ensure that individual DBEs receive funds for services. *Id.* at *28. The federal regulations do not create an individual entitlement to services, but are a yardstick for the USDOT to measure the system-wide performance of the program. *Id.* Therefore, the district court concluded that although the plaintiffs may benefit from their State’s plan implemented in order to receive federal transportation funds, they are only indirect beneficiaries. *Id.* at *29. Further, the court held that as the DBE program is not an entitlement program, the regulations implementing the program do not provide enforceable rights under § 1983.

In conclusion, the court held that the plaintiffs may utilize § 1983 to enforce their right to a state-wide plan that complies with the federal requirements for the receipt of federal transportation and highway funds. *Id.* at *29. The plaintiffs, the court held, do not have rights under § 1983 to remedy isolated violations of requirements under the plan, which includes claims that certain companies should not have been certified under the DBE program. The court dismissed all claims under 42 U.S.C. § 1983 brought against the State, Indiana DOT and the Indiana Department of Administrative Services and all claims for damages against the State officials sued in their official capacity.

The court then found that Indiana’s DBE program met all federal requirements, including ensuring that DBEs have an equitable opportunity to compete for contracts and subcontracts as mandated by

49 C.F.R. § 23.45(c). The court pointed out that Indiana DOT arranges solicitations, time for the presentation of bids, quantities, specifications, and delivery schedules to facilitate participation by DBEs. *Id.* at *35. The district court pointed out that Indiana DOT requires prime contractors to solicit bids from certified DBEs as part of its good-faith efforts requirements, that certified DBEs are provided notices of bids and that these notices are also posted on the Internet and in Indiana Contractors' Association publications. *Id.*

The court also indicated Indiana DOT's Civil Rights Division had a Supportive Services Division that provided managerial and technical assistance to DBEs, training workshops and one-on-one consultations in estimating, bidding, bookkeeping, marketing, financial issues and other areas directed by Indiana DOT. The DBE assistance provided for business planning, bookkeeping, marketing, accounting, estimating, bidding, employee relations, contract negotiations, computerization, financial decisions and other business related issues. Consultants were contracted to perform selected training or individualized assistance to DBEs. *Id.* at *35-36.

Specifically, Indiana DOT provided services to assist DBEs, at no cost to them, including conducting internal orientation sessions for newly certified DBEs; provided training on the metric system through Ivy Tech State College; consulting one-on-one with individual DBE firms to improve their business operations, provided training in finance and bookkeeping analysis, business plan preparation, job cost, cash flow preparation and analysis, bid estimation, computerization, strategic planning, loan packaging assistance and other operations; attended trade fairs, organized meetings, and performed other outreach functions for the purpose of reaching non-certified DBE firms, informing them of Indiana DOT DBE programs, and encouraging them to become certified; referred DBEs to establish state and federal business assistance organizations when appropriate; encouraged DBE firms to contact the civil rights office regarding any problems that arise on the job site or with respect to any aspect of their relationship with Indiana DOT and prime contractors and responded and sought to resolve the problems and complaints in a prompt manner; and provided classroom style training workshops including a twelve-day workshop to instruct 25 to 30 Indiana DBEs on all aspects of operations of the construction business. *Id.* at *35-36.

The court also found that Indiana DOT strived to remove barriers DBEs frequently encountered in other states by not requiring subcontractors to be bonded, and exploring using Supportive Services funding to provide direct financial assistance to DBEs, utilizing funds from the FHWA exclusively for the recruitment of DBEs, managerial and technical assistance to DBEs, and monitoring DBE activities. Indiana DOT also established a mentor-protégé program for contractors on Indiana DOT contracts. *Id.* at *37.

The district court stated that Indiana DOT met its overall 10 percent DBE goal and set practical contract goals on individual contracts complying with the requirements of the federal acts and regulations. In setting the individual contracts goal, the Indiana DOT evaluated each contract individually, including factors such as geographic location of the contract, its size, the number of items that can be performed by certified DBEs, the number of certified DBEs that can perform the work, the relative location of certified DBEs who can and are willing to work in the area, the current workload of those DBEs and DBE prequalification limits. *Id.* at *39.

The district court found that the individual contract goals were not rigid requirements that contractors must meet under all circumstances. The bidder that fails to achieve an individual contract

DBE goal may remain eligible to be awarded the contract if it can demonstrate that it has made good faith efforts to meet the goal. *Id.* at *39. The district court pointed out that Indiana DOT's methods to ensure compliance with the federal regulations, reporting and recordkeeping requirements were met by Indiana DOT and that Indiana DOT's Civil Rights Office responded to requests for assistance as a part of its daily activities. *Id.* at *42.

The district court noted that none of the plaintiffs complained to Indiana DOT that he bid on a subcontract to a construction contract administered by Indiana DOT and was denied the bid on the basis of race-based discrimination. *Id.* at *42. The district court analyzed plaintiff's claims that the State does not have a bonding or financial assistance program in place, did not always conduct site visits as part of the DBE certification process, and never met the 10 percent goal requirement. *Id.* at *43. The court in reviewing the federal regulations concluded that the bonding and financial assistance programs were not mandatory requirements of state wide plans, although they were mentioned in the federal regulations. *Id.* at *44.

The district court found that although the State may not always conduct site visits in the certification process, the testimony did not conclusively establish that site visits were not conducted. The court also found that plaintiffs did not establish that Indiana failed to meet the 10 percent goal that existed at this time in the federal regulations. In light of the evidence, the court found that the plaintiffs failed to show any genuine issues of fact regarding the State's compliance with the requirements for the DBE plan necessary to receive federal transportation funds and granted the defendants' Motion for Summary Judgment. *Id.* at *45.

The district court also considered plaintiffs' claims under § 1983 that the State's administration of the required DBE program violated their rights under the Equal Protection Clause of the Fourteenth Amendment. The court found that the plaintiffs produced no evidence that showed a race-based or discriminatory policy of the State, or barrier otherwise imposed by the State, that impeded the plaintiffs' ability to bid on contracts. *Id.* at *48. The district court found that the plaintiffs did not show how they were treated differently from all other qualified DBEs in their efforts to obtain contracts, and that the State of Indiana does not have the power to modify the Congressional mandate that all certified DBEs are to compete on an equal basis. *Id.* Thus, the court rejected the plaintiffs' argument that because women-owned DBEs are receiving a disproportionate share of federally funded contracts, a discriminatory practice must be in place. *Id.*

The district court held that the plaintiffs could not show any discriminatory intent by the State of Indiana. Plaintiffs alleged that defendants had raised barriers to their participation in contracts funded by federal dollars and that they had not received their fair percentage of the contracts compared to non-African American DBEs. The court found the plaintiffs failed to demonstrate that such barriers exist, and that they did not demonstrate how they had been treated differently than the other similarly situated minority and disadvantaged enterprises served by the DBE program. *Id.* at *49. The court held that a showing of a disproportionate impact is not enough, as a state's "official action will not be held unconstitutional solely because it results in a racially disproportionate impact ... Proof of racially discriminatory intent or purpose is required to show a violation of the Equal Protection Clause." *Id.* at *49. (citations omitted).

Lastly, the district court pointed out that the plaintiffs did not challenge the constitutionality of the federal DBE program, but only challenged the State's administration of that program. *Id.* at *50.

Thus, the court held “If the DOA and INDOT are only doing ‘what federal law requires, [their] conduct is constitutional, at least where, as here, the constitutionality of the federal program is not challenged.” Id. at *50, quoting Converse Construction Co., Inc. v. Massachusetts Bay Transportation Authority, 899 F.Supp. 753, 761 (D.Mass. 1995)(citing Milwaukee Co. Pavers, 922 F.2d at 423). The court noted that the Second, Sixth, and Tenth Circuits reached the similar conclusion that insofar as the State is merely complying with federal law, it is acting as the agent of the federal government and is no more subject to being enjoined on equal protection grounds than the federal civil servants who drafted the regulations. Id. at *50 (citations omitted).

Therefore, the court granted summary judgment to the defendants finding that they were complying with federal law and could not be enjoined under the Equal Protection Clause or under a claim based on Title VI.

E. Recent Decisions Involving State or Local Government MBE/WBE Programs in Other Jurisdictions

Recent Decisions in Federal Circuit Courts of Appeal

1. H. B. Rowe Co., Inc. v. W. Lyndo Tippett, NCDOT, et al, ___ F.3d ___ 2010 WL 2871076 (4th Cir. July 22, 2010)

The State of North Carolina enacted statutory legislation that required prime contractors to engage in good faith efforts to satisfy participation goals for minority and women subcontractors on state-funded projects. (See facts as detailed in the decision of the United States District Court for the Eastern District of North Carolina discussed below.) The plaintiff, a prime contractor, brought this action after being denied a contract because of its failure to demonstrate good faith efforts to meet the participation goals set on a particular contract that it was seeking an award to perform work with NCDOT. Plaintiff asserted that the participation goals violated the Equal Protection Clause and sought injunctive relief and money damages.

After a bench trial, the district court held the challenged statutory scheme constitutional both on its face and as applied, and the plaintiff prime contractor appealed. 2010 WL 2871076 at *1. The Court of Appeals held that the State did not meet its burden of proof in all respects to uphold the validity of the state legislation. But, the Court agreed with the district court that the State produced a strong basis in evidence justifying the statutory scheme on its face, and as applied to African American and Native American subcontractors, and that the State demonstrated that the legislative scheme is narrowly tailored to serve its compelling interest in remedying discrimination against these racial groups. The Court thus affirmed the decision of the district court in part, reversed it in part and remanded for further proceedings consistent with the opinion. Id.

The Court found that the North Carolina statutory scheme “largely mirrored the federal Disadvantaged Business Enterprise (‘DBE’) program, with which every state must comply in awarding highway construction contracts that utilize federal funds.” 2010 WL 2871076 at *1. The Court also noted that federal courts of appeal “have uniformly upheld the federal DBE program against equal-protection challenges.” Id., at footnote 1, citing, Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000).

In 2004, the State retained a consultant to prepare and issue a third study of subcontractors employed in North Carolina's highway construction industry. The study, according to the Court, marshaled evidence to conclude that disparities in the utilization of minority subcontractors persisted. 2010 WL 2871076 at *3. The Court pointed out that in response to the study, the North Carolina General Assembly substantially amended state legislation section 136-28.4 and the new law went into effect in 2006. The new statute modified the previous statutory scheme, according to the Court in five important respects. Id.

First, the amended statute expressly conditions implementation of any participation goals on the findings of the 2004 study. Second, the amended statute eliminates the 5 and 10 percent annual goals that were set in the predecessor statute. Id. at *3–*4. Instead, as amended, the statute requires the NCDOT to “establish annual aspirational goals, not mandatory goals, ... for the overall participation in contracts by disadvantaged minority-owned and women-owned businesses ... [that] shall not be applied rigidly on specific contracts or projects.” Id. at *4, quoting, N.C. Gen.Stat. § 136-

28.4(b)(2010). The statute further mandates that the NCDOT set “contract-specific goals or project-specific goals ... for each disadvantaged minority-owned and women-owned business category that has demonstrated significant disparity in contract utilization” based on availability, as determined by the study. *Id.*

Third, the amended statute narrowed the definition of “minority” to encompass only those groups that have suffered discrimination. *Id.* at *4. The amended statute replaced a list of defined minorities to any certain groups by defining “minority” as “only those racial or ethnicity classifications identified by [the study] ... that have been subjected to discrimination in the relevant marketplace and that have been adversely affected in their ability to obtain contracts with the Department.” *Id.* at *4 quoting section 136-28.4(c)(2)(2010).

Fourth, the amended statute required the Department to reevaluate the Program over time and respond to changing conditions. *Id.* Accordingly, the NCDOT must conduct a study similar to the 2004 study at least every five years. *Id.* § 136-28.4(b). Finally, the amended statute contained a sunset provision which was set to expire on August 31, 2009, but the General Assembly subsequently extended the sunset provision to August 31, 2010. *Id.* Section 136-28.4(e) (2010).

The Court also noted that the statute required only good faith efforts by the prime contractors to utilize subcontractors, and that the good faith requirement, the Court found, proved permissive in practice: prime contractors satisfied the requirement in 98.5 percent of cases, failing to do so in only 13 of 878 attempts. *Id.* at *5.

Strict scrutiny. The Court stated the strict scrutiny standard was applicable to justify a race-conscious measure, and that it is a substantial burden but not automatically “fatal in fact.” *Id.* at *6. The Court pointed out that “[t]he unhappy persistence of both the practice and the lingering effects of racial discrimination against minority groups in this country is an unfortunate reality, and government is not disqualified from acting in response to it.” *Id.* at *6 quoting *Alexander v. Estep*, 95 F.3d 312, 315 (4th Cir. 1996). In so acting, a governmental entity must demonstrate it had a compelling interest in “remedying the effects of past or present racial discrimination.” *Id.* at *6, quoting *Shaw v. Hunt*, 517 U.S. 899, 909 (1996).

Thus, the Court found that to justify a race-conscious measure, a state must identify that discrimination, public or private, with some specificity, and must have a strong basis in evidence for its conclusion that remedial action is necessary. *Id.* at *6 quoting *Croson*, 488 U.S. at 504 and *Wygant v. Jackson Board of Education*, 476 U.S. 267, 277 (1986)(plurality opinion).

The Court significantly noted that: “There is no ‘precise mathematical formula to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark.” *Id.* at *6, quoting *Rothe Dev. Corp. v. Department of Defense*, 545 F.3d 1023, 1049 (Fed.Cir. 2008). The Court stated that the sufficiency of the State’s evidence of discrimination “must be evaluated on a case-by-case basis.” *Id.* at *6. (internal quotation marks omitted).

The Court held that a state “need not conclusively prove the existence of past or present racial discrimination to establish a strong basis in evidence for concluding that remedial action is necessary.” *Id.* at *6, citing *Concrete Works*, 321 F.3d at 958. Instead, a state may meet its burden by relying on “a significant statistical disparity” between the availability of qualified, willing, and able

minority subcontractors and the utilization of such subcontractors by the governmental entity or its prime contractors. *Id.* at *6, citing Croson, 488 U.S. at 509 (plurality opinion). The Court stated that “we further require that such evidence be ‘corroborated by significant anecdotal evidence of racial discrimination.’” *Id.* at *6, quoting Maryland Troopers Association, Inc. v. Evans, 993 F.2d 1072, 1077 (4th Cir. 1993).

The Court pointed out that those challenging race-based remedial measures must “introduce credible, particularized evidence to rebut” the state’s showing of a strong basis in evidence for the necessity for remedial action. *Id.* at *6, citing Concrete Works, 321 F.3d at 959. Challengers may offer a neutral explanation for the state’s evidence, present contrasting statistical data, or demonstrate that the evidence is flawed, insignificant, or not actionable. *Id.* at *6 (citations omitted). However, the Court stated “that mere speculation that the state’s evidence is insufficient or methodologically flawed does not suffice to rebut a state’s showing.” *Id.* at *6, citing Concrete Works, 321 F.3d at 991.

The Court held that to satisfy strict scrutiny, the state's statutory scheme must also be “narrowly tailored” to serve the state’s compelling interest in not financing private discrimination with public funds. *Id.* at *7, citing Alexander, 95 F.3d at 315 (citing Adarand, 515 U.S. at 227).

Intermediate scrutiny. The Court held that courts apply “intermediate scrutiny” to statutes that classify on the basis of gender. *Id.* at *7. The Court found that a defender of a statute that classifies on the basis of gender meets this intermediate scrutiny burden “by showing at least that the classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives.” *Id.* at *7, quoting Mississippi University for Women v. Hogan, 458 U.S. 718, 724 (1982). The Court noted that intermediate scrutiny requires less of a showing than does “the most exacting” strict scrutiny standard of review. *Id.* at *7.

The Court found that its “sister circuits” provide guidance in formulating a governing evidentiary standard for intermediate scrutiny. These courts agree that such a measure “can rest safely on something less than the ‘strong basis in evidence’ required to bear the weight of a race- or ethnicity-conscious program.” *Id.* at *7, quoting Engineering Contractors, 122 F.3d at 909 (other citations omitted).

In defining what constitutes “something less” than a “strong basis in evidence,” the courts also agree that the party defending the statute must “present ... sufficient probative evidence in support of its stated rationale for enacting a gender preference, i.e., ... the evidence [must be] sufficient to show that the preference rests on evidence-informed analysis rather than on stereotypical generalizations.” *Id.* at *7 quoting Engineering Contractors, 122 F.3d at 910 and Concrete Works, 321 F.3d at 959. The gender-based measures must be based on “reasoned analysis rather than on the mechanical application of traditional, often inaccurate, assumptions.” *Id.* at *7 quoting Hogan, 458 U.S. at 726.

Plaintiff's burden. The Court found that when a plaintiff alleges that a statute violates the Equal Protection Clause as applied and on its face, the plaintiff bears a heavy burden. In its facial challenge, the Court held that a plaintiff “has a very heavy burden to carry, and must show that [a statutory scheme] cannot operate constitutionally under any circumstance.” *Id.* at *7, quoting West Virginia v. U.S. Department of Health & Human Services, 289 F.3d 281, 292 (4th Cir. 2002).

Statistical evidence. The Court examined the State's statistical evidence of discrimination in public-sector subcontracting, including its disparity evidence and regression analysis. The Court noted that the statistical analysis analyzed the difference or disparity between the amount of subcontracting dollars minority- and women-owned businesses actually won in a market and the amount of subcontracting dollars they would be expected to win given their presence in that market. *Id.* at *8. The Court found that the study grounded its analysis in the “disparity index,” which measures the participation of a given racial, ethnic, or gender group engaged in subcontracting. *Id.* In calculating a disparity index, the study divided the percentage of total subcontracting dollars that a particular group won by the percent that group represents in the available labor pool, and multiplied the result by 100. *Id.* The closer the resulting index is to 100, the greater that group's participation. *Id.*

The Court held that after Croson, a number of our sister circuits have recognized the utility of the disparity index in determining statistical disparities in the utilization of minority- and women-owned businesses. *Id.* (Citations to multiple federal circuit court decisions omitted.) The Court also found that generally “courts consider a disparity index lower than 80 as an indication of discrimination.” *Id.* Accordingly, the study considered only a disparity index lower than 80 as warranting further investigation. *Id.*

The Court pointed out that after calculating the disparity index for each relevant racial or gender group, the consultant tested for the statistical significance of the results by conducting standard deviation analysis through the use of t-tests. The Court noted that standard deviation analysis “describes the probability that the measured disparity is the result of mere chance.” *Id.* at *9, quoting Eng'g Contractors, 122 F.3d at 914. The consultant considered the finding of two standard deviations to demonstrate “with 95 percent certainty that disparity, as represented by either overutilization or underutilization, is actually present.” *Id.* *9, citing Eng'g Contractors, 122 F.3d at 914.

The study analyzed the participation of minority and women subcontractors in construction contracts awarded and managed from the central Department office in Raleigh, North Carolina. *Id.* *9. To determine utilization of minority and women subcontractors, the consultant developed a master list of contracts mainly from State-maintained electronic databases and hard copy files; then selected from that list a statistically valid sample of contracts, and calculated the percentage of subcontracting dollars awarded to minority- and women-owned businesses during the 5-year period ending in June 2003. (The study was published in 2004). *Id.* at *9.

The Court found that the use of data for centrally-awarded contracts was sufficient for its analysis. It was noted that data from construction contracts awarded and managed from the department divisions across the state and from preconstruction contracts, which involve work from engineering firms and architectural firms on the design of highways, was incomplete and not accurate. *Id.* at *9, n.6. These data were not relied upon in forming the opinions relating to the study. *Id.* at *9, n. 6.

To estimate availability, which the Court defined as the percentage of a particular group in the relevant market area, the consultant created a vendor list comprising: (1) subcontractors approved by the department to perform subcontract work on state-funded projects, (2) subcontractors that performed such work during the study period, and (3) contractors qualified to perform prime construction work on state-funded contracts. Id. at *9. The Court noted that prime construction work on state-funded contracts was included based on the testimony by the consultant that prime contractors are qualified to perform subcontracting work and often do perform such work. Id. The Court also noted that the consultant submitted its master list to the Department for verification. Id.

Based on the utilization and availability figures, the study prepared the disparity analysis comparing the utilization based on the percentage of subcontracting dollars over the five year period, determining the availability in numbers of firms and their percentage of the labor pool, a disparity index which is the percentage of utilization in dollars divided by the percentage of availability multiplied by 100, and a T Value. Id.

The Court concluded that the figures demonstrated prime contractors underutilized all of the minority subcontractor classifications on state-funded construction contracts during the study period. Id. at *10. The disparity index for each group was less than 80 and, thus, the Court found warranted further investigation. Id. The t-test results, however, demonstrated marked underutilization only of African American and Native American subcontractors. Id. For African Americans the t-value fell outside of two standard deviations from the mean and, therefore, was statistically significant at a 95 percent confidence level. Id. The Court found there was at least a 95 percent probability that prime contractors' underutilization of African American subcontractors was *not* the result of mere chance. Id.

For Native American subcontractors, the t-value of 1.41 was significant at a confidence level of approximately 85 percent. Id. The t-values for Hispanic American and Asian American subcontractors, demonstrated significance at a confidence level of approximately 60 percent. The disparity index for women subcontractors found that they were overutilized during the study period. The overutilization was statistically significant at a 95 percent confidence level. Id.

The consultant also conducted a regression analysis studying the influence of certain company and business characteristics — with a particular focus on owner race and gender — on a firm's gross revenues. Id. The consultant obtained the data from a telephone survey of firms that conducted or attempted to conduct business with the Department. The survey pool consisted of a random sample of such firms. Id.

The consultant used the firms' gross revenues as the dependent variable in the regression analysis to test the effect of other variables, including company age and number of full-time employees, and the owners' years of experience, level of education, race, ethnicity, and gender. Id. at *10. The analysis revealed that minority and women ownership universally had a negative effect on revenue, and African American ownership of a firm had the largest negative effect on that firm's gross revenue of all the independent variables included in the regression model. Id. These findings led to the conclusion that for African Americans the disparity in firm revenue was not due to capacity-related or managerial characteristics alone. Id.

The Court rejected the arguments by the plaintiffs attacking the availability estimates. The Court rejected the plaintiff's expert, Dr. George LaNoue, who testified that bidder data — reflecting the number of subcontractors that actually bid on Department subcontracts — estimates availability better than “vendor data.” *Id.* at *11. Dr. LaNoue conceded, however, that the State does not compile bidder data and that bidder data actually reflects skewed availability in the context of a goals program that urges prime contractors to solicit bids from minority and women subcontractors. *Id.* The Court found that the plaintiff's expert did not demonstrate that the vendor data used in the study was unreliable, or that the bidder data would have yielded less support for the conclusions reached. In sum, the Court held that the plaintiff's challenge to the availability estimate failed because it could not demonstrate that the 2004 study's availability estimate was inadequate. *Id.* at *11. The Court cited *Concrete Works*, 321 F.3d at 991 for the proposition that a challenger cannot meet its burden of proof through conjecture and unsupported criticisms of the state's evidence,” and that the plaintiff Rowe presented no viable alternative for determining availability. *Id.* at *11, citing *Concrete Works*, 321 F.3d 991 and *Sherbrooke Turf, Inc. v. Minn. Department of Transportation*, 345 F.3d 964, 973 (8th Cir. 2003).

The Court also rejected the plaintiff's argument that minority subcontractors participated on state-funded projects at a level consistent with their availability in the relevant labor pool, based on the state's response that evidence as to the *number* of minority subcontractors working with state-funded projects does not effectively rebut the evidence of discrimination in terms of subcontracting *dollars*. *Id.* at *11. The State pointed to evidence indicating that prime contractors used minority businesses for low-value work in order to comply with the goals, and that African American ownership had a significant negative impact on firm revenue unrelated to firm capacity or experience. *Id.* The Court concluded plaintiff did not offer any contrary evidence. *Id.*

The Court found that the State bolstered its position by presenting evidence that minority subcontractors have the capacity to perform higher-value work. *Id.* at *12. The study concluded, based on a sample of subcontracts and reports of annual firm revenue, that exclusion of minority subcontractors from contracts under \$500,000 was not a function of capacity. *Id.* at *12. Further, the State showed that over 90 percent of the Department's subcontracts were valued at \$500,000 or less, and that capacity constraints do not operate with the same force on subcontracts as they may on prime contracts because subcontracts tend to be relatively small. *Id.* at *12. The Court pointed out that the Court in *Rothe II*, 545 F.3d at 1042-45, faulted disparity analyses of total construction dollars, including prime contracts, for failing to account for the relative capacity of firms in that case. *Id.* at *12.

The Court pointed out that in addition to the statistical evidence, the State also presented evidence demonstrating that from 1991 to 1993, during the Program's suspension, prime contractors awarded substantially less subcontracting dollars to minority and women subcontractors on state-funded projects. The Court rejected the plaintiff's argument that evidence of a decline in utilization does not raise an inference of discrimination. *Id.* at *12. The Court held that the very significant decline in utilization of minority and women-subcontractors — nearly 38 percent — “surely provides a basis for a fact finder to infer that discrimination played some role in prime contractors' reduced utilization of these groups during the suspension.” *Id.* at *12, citing *Adarand v. Slater*, 228 F.3d at 1174 (finding that evidence of declining minority utilization after a program has been discontinued “strongly supports the government's claim that there are significant barriers to minority competition

in the public subcontracting market, raising the specter of racial discrimination.”) The Court found such an inference is particularly compelling for minority-owned businesses because, even during the study period, prime contractors continue to underutilize them on state-funded road projects. *Id.* at *12.

Anecdotal evidence. The State additionally relied on three sources of anecdotal evidence contained in the study: a telephone survey, personal interviews, and focus groups. The Court found the anecdotal evidence showed an informal “good old boy” network of white contractors that discriminated against minority subcontractors. *Id.* at *12. The Court noted that three-quarters of African American respondents to the telephone survey agreed that an informal network of prime and subcontractors existed in the state, as did the majority of other minorities, and that more than half of African American respondents believed the network excluded their companies from bidding or awarding a contract, as did many of the other minorities. *Id.* at *12. The Court found that nearly half of non-minority male respondents corroborated the existence of an informal network; however, only 17 percent of them believed that the network excluded their companies from bidding or winning contracts. *Id.*

Anecdotal evidence also showed a large majority of African American respondents reported that double standards in qualifications and performance made it more difficult for them to win bids and contracts, that prime contractors view minority firms as being less competent than nonminority firms, and that nonminority firms change their bids when not required to hire minority firms. *Id.* at *13. In addition, the anecdotal evidence showed African American and Native American respondents believed that prime contractors sometimes dropped minority subcontractors after winning contracts. *Id.* at *13. The Court found that interview and focus-group responses echoed and underscored these reports. *Id.*

The anecdotal evidence indicated that prime contractors already know who they will use on the contract before they solicit bids; that the “good old boy network” affects business because prime contractors just pick up the phone and call their buddies, which excludes others from that market completely; that prime contractors prefer to use other less qualified minority-owned firms to avoid subcontracting with African American-owned firms; and that prime contractors use their preferred subcontractor regardless of the bid price. *Id.* at 13. Several minority subcontractors reported that prime contractors do not treat minority firms fairly, pointing to instances in which prime contractors solicited quotes the day before bids were due, did not respond to bids from minority subcontractors, refused to negotiate prices with them, or gave minority subcontractors insufficient information regarding the project. *Id.* at *13.

The Court rejected the plaintiffs’ contention that the anecdotal data was flawed because the study did not verify the anecdotal data and that the consultant oversampled minority subcontractors in collecting the data. The Court stated that the plaintiffs offered no rationale as to why a fact finder could not rely on the State’s “unverified” anecdotal data, and pointed out that a fact finder could very well conclude that anecdotal evidence need not — and indeed cannot — be verified because it “is nothing more than a witness’s narrative of an incident told from the witness’s perspective and including the witness’s perceptions.” *Id.* at *13, quoting *Concrete Works*, 321 F.3d at 989.

The Court held that anecdotal evidence simply supplements statistical evidence of discrimination. *Id.* at *13. The Court rejected plaintiffs’ argument that the study oversampled representatives from

minority groups, and found that surveying more non-minority men would not have advanced the inquiry. Id. at *13. It was noted that the samples of the minority groups were randomly selected. Id. The Court found the state had compelling anecdotal evidence that minority subcontractors face race-based obstacles to successful bidding. Id. at *14.

Strong basis in evidence that the minority participation goals were necessary to remedy discrimination. The Court held that the State presented a “strong basis in evidence” for its conclusion that minority participation goals were necessary to remedy discrimination against African American and Native American subcontractors. Id. at *14. Therefore, the Court held that the State satisfied the strict scrutiny test. The Court found that the State’s data demonstrated that prime contractors grossly underutilized African American and Native American subcontractors in public sector subcontracting during the study. Id. at *14. The Court noted that these findings have particular resonance because since 1983, North Carolina has encouraged minority participation in state-funded highway projects, and yet African American and Native American subcontractors continue to be underutilized on such projects. Id. at *14.

In addition, the Court found the disparity index in the study demonstrated statistically significant underutilization of African American subcontractors at a 95 percent confidence level, and of Native American subcontractors at a confidence level of approximately 85 percent. Id. at *15. The Court concluded the State bolstered the disparity evidence with regression analysis demonstrating that African American ownership correlated with a significant, negative impact on firm revenue, and demonstrated there was a dramatic decline in the utilization of minority subcontractors during the suspension of the program in the 1990s. Id.

Thus, the Court held the State’s evidence showing a gross statistical disparity between the availability of qualified American and Native American subcontractors and the amount of subcontracting dollars they win on public sector contracts established the necessary statistical foundation for upholding the minority participation goals with respect to these groups. Id. at *15. The Court then found that the State’s anecdotal evidence of discrimination against these two groups sufficiently supplemented the State’s statistical showing. Id. The survey in the study exposed an informal, racially exclusive network that systemically disadvantaged minority subcontractors. Id. at *15. The Court held that the State could conclude with good reason that such networks exert a chronic and pernicious influence on the marketplace that calls for remedial action. Id. The Court found the anecdotal evidence indicated that racial discrimination is a critical factor underlying the gross statistical disparities presented in the study. Id. at *15. Thus, the Court held that the State presented substantial statistical evidence of gross disparity, corroborated by “disturbing” anecdotal evidence.

The Court held in circumstances like these, the Supreme Court has made it abundantly clear a state can remedy a public contracting system that withholds opportunities from minority groups because of their race. Id. at *16.

Narrowly tailored. The Court then addressed whether the North Carolina statutory scheme was narrowly tailored to achieve the State’s compelling interest in remedying discrimination against African American and Native American subcontractors in public-sector subcontracting. The following factors were considered in determining whether the statutory scheme was narrowly tailored.

Neutral measures. The Court held that narrowly tailoring requires “serious, good faith consideration of workable race-neutral alternatives,” but a state need not “exhaust ... every conceivable race-neutral alternative.” *Id.* at *16 quoting *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003). The Court found that the study details numerous alternative race-neutral measures aimed at enhancing the development and competitiveness of small or otherwise disadvantaged businesses in North Carolina. *Id.* at *16. The Court pointed out various race-neutral alternatives and measures, including a Small Business Enterprise Program; waiving institutional barriers of bonding and licensing requirements on certain small business contracts of \$500,000 or less; and the Department contracts for support services to assist disadvantaged business enterprises with bookkeeping and accounting, taxes, marketing, bidding, negotiation, and other aspects of entrepreneurial development. *Id.* at *16.

The Court found that plaintiff identified no viable race-neutral alternatives that North Carolina had failed to consider and adopt. The Court also found that the State had undertaken most of the race-neutral alternatives identified by the U.S. Department of Transportation in its regulations governing the Federal DBE Program. *Id.* at *16, citing 49 C.F.R. § 26.51(b). The Court concluded that the State gave serious good faith consideration to race-neutral alternatives prior to adopting the statutory scheme. *Id.*

The Court concluded that despite these race-neutral efforts, the study demonstrated disparities continue to exist in the utilization of African American and Native American subcontractors in state-funded highway construction subcontracting, and that these “persistent disparities indicate the necessity of a race-conscious remedy.” *Id.* at *17.

Duration. The Court agreed with the district court that the program was narrowly tailored in that it set a specific expiration date and required a new disparity study every five years. *Id.* at *17. The Court found that the program’s inherent time limit and provisions requiring regular reevaluation ensure it is carefully designed to endure only until the discriminatory impact has been eliminated. *Id.* at *17, citing *Adarand Constructors v. Slater*, 228 F.3d at 1179 (quoting *United States v. Paradise*, 480 U.S. 149, 178 (1987)).

Program’s goals related to percentage of minority subcontractors. The Court concluded that the State had demonstrated that the Program’s participation goals are related to the percentage of minority subcontractors in the relevant markets in the State. *Id.* at *17. The Court found that the Department had taken concrete steps to ensure that these goals accurately reflect the availability of minority-owned businesses on a project-by-project basis. *Id.*

Flexibility. The Court held that the Program was flexible and thus satisfied this indicator of narrow tailoring. *Id.* at *17. The Program contemplated a waiver of project-specific goals when prime contractors make good faith efforts to meet those goals, and that the good faith efforts essentially require only that the prime contractor solicit and consider bids from minorities. *Id.* The State does not require or expect the prime contractor to accept any bid from an unqualified bidder, or any bid that is not the lowest bid. *Id.* The Court found there was a lenient standard and flexibility of the

“good faith” requirement, and noted the evidence showed only 13 of 878 good faith submissions failed to demonstrate good faith efforts. *Id.*

Burden on non-MWBE/DBEs. The Court rejected the two arguments presented by plaintiff that the Program created onerous solicitation and follow-up requirements, finding that there was no need for additional employees dedicated to the task of running the solicitation program to obtain MBE/WBEs, and that there was no evidence to support the claim that plaintiff was required to subcontract millions of dollars of work that it could perform itself for less money. *Id.* at *18. The State offered evidence from the study that prime contractors need not submit subcontract work that they can self-perform. *Id.*

Overinclusive. The Court found by its own terms the statutory scheme is not overinclusive because it limited relief to only those racial or ethnicity classifications that have been subjected to discrimination in the relevant marketplace and that had been adversely affected in their ability to obtain contracts with the Department. *Id.* at *18. The Court concluded that in tailoring the remedy this way, the legislature did not randomly include racial groups that may never have suffered from discrimination in the construction industry, but rather, contemplated participation goals only for those groups shown to have suffered discrimination. *Id.*

In sum, the Court held that the statutory scheme is narrowly tailored to achieve the State’s compelling interest in remedying discrimination in public-sector subcontracting against African American and Native American subcontractors. *Id.* at *18.

Women-owned businesses overutilized. The study’s public-sector disparity analysis demonstrated that women-owned businesses won far more than their expected share of subcontracting dollars during the study period. *Id.* at *18. In other words, the Court concluded that prime contractors substantially overutilized women subcontractors on public road construction projects. *Id.* The Court found the public-sector evidence did not evince the “exceedingly persuasive justification” the Supreme Court requires. *Id.* at *18.

The Court noted that the State relied heavily on private-sector data from the study attempting to demonstrate that prime contractors significantly underutilized women subcontractors in the general construction industry statewide and in the Charlotte, North Carolina area. *Id.* at *19. However, because the study did not provide a t-test analysis on the private sector disparity figures to calculate statistical significance, the Court could not determine whether this private underutilization was “the result of mere chance.” *Id.* at *19. The Court found troubling the “evidentiary gap” that there was no evidence indicating the extent to which women-owned businesses competing on public sector road projects vied for private sector subcontracts in the general construction industry. *Id.* at *19. The Court also found that the State did not present any anecdotal evidence indicating that women subcontractors successfully bidding on State contracts faced private-sector discrimination. *Id.* In addition, the Court found missing any evidence prime contractors that discriminate against women subcontractors in the private sector nevertheless win public-sector contracts. *Id.*

The Court pointed out that it did not suggest that the proponent of a gender-conscious program “must always tie private discrimination to public action.” *Id.* at *19, FN. 11. But the Court held that where, as here, there existed substantial probative evidence of overutilization in the relevant public

sector, a state must present something more than generalized private sector data unsupported by compelling anecdotal evidence to justify a gender-conscious program. *Id.* at *19, n. 11.

Moreover, the Court found the State failed to establish the amount of overlap between general construction and road construction subcontracting. *Id.* at *19. The Court said that the dearth of evidence as to the correlation between public road construction subcontracting and private general construction subcontracting severely limits the private data's probative value in this case. *Id.*

Thus, the Court held that the State could not overcome the strong evidence of overutilization in the public sector in terms of gender participation goals, and that the proffered private sector data failed to establish discrimination in the particular field in question. *Id.* at *20. Further, the anecdotal evidence, the Court concluded, indicated that most women subcontractors do not experience discrimination. *Id.* Thus, the Court held that the State failed to present sufficient evidence to support the Program's current inclusion of women subcontractors in setting participation goals. *Id.*

Holding. The Court held that the state legislature had crafted legislation that withstood the constitutional scrutiny. *Id.* at *21. The Court concluded that in light of the statutory scheme's flexibility and responsiveness to the realities of the marketplace, and given the State's strong evidence of discrimination against African American and Native American subcontractors in public-sector subcontracting, the State's application of the statute to these groups is constitutional. *Id.* at *21. However, the Court also held that because the State failed to justify its application of the statutory scheme to women, Asian American, and Hispanic American subcontractors, the Court found those applications were not constitutional.

Therefore, the Court affirmed the judgment of the district court with regard to the facial validity of the statute, and with regard to its application to African American and Native American subcontractors. *Id.* at *21. The Court reversed the district court's judgment insofar as it upheld the constitutionality of the state legislature as applied to women, Asian American and Hispanic American subcontractors. *Id.* The Court thus remanded the case to the district court to fashion an appropriate remedy consistent with the opinion. *Id.*

Concurring opinions. It should be pointed out that there were two concurring opinions by the three Judge panel: one judge concurred in the judgment, and the other judge concurred fully in the majority opinion and the judgment.

2. Jana-Rock Construction, Inc. v. New York State Dept. of Economic Development, 438 F.3d 195 (2d Cir. 2006)

This recent case is instructive in connection with the determination of the groups that may be included in a MBE/WBE-type program, and the standard of analysis utilized to evaluate a local government's non-inclusion of certain groups. In this case, the Second Circuit Court of Appeals held racial classifications that are challenged as "under-inclusive" (i.e., those that exclude persons from a particular racial classification) are subject to a "rational basis" review, not strict scrutiny.

Plaintiff Luiere, a 70 percent shareholder of Jana-Rock Construction, Inc. ("Jana Rock") and the "son of a Spanish mother whose parents were born in Spain," challenged the constitutionality of the State of New York's definition of "Hispanic" under its local minority-owned business program. 438

F.3d 195, 199-200 (2d Cir. 2006). Under the U.S. Department of Transportation regulations, 49 C.F.R. § 26.5, “Hispanic Americans” are defined as “persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race.” *Id.* at 201. Upon proper application, Jana-Rock was certified by the New York Department of Transportation as a Disadvantaged Business Enterprise (“DBE”) under the federal regulations. *Id.*

However, unlike the federal regulations, the State of New York’s local minority-owned business program included in its definition of minorities “Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American of either Indian or Hispanic origin, regardless of race.” The definition did not include all persons from, or descendants of persons from, Spain or Portugal. *Id.* Accordingly, Jana-Rock was denied MBE certification under the local program; Jana-Rock filed suit alleging a violation of the Equal Protection Clause. *Id.* at 202-03. The plaintiff conceded that the overall minority-owned business program satisfied the requisite strict scrutiny, but argued that the definition of “Hispanic” was fatally under-inclusive. *Id.* at 205.

The Second Circuit found that the narrow-tailoring prong of the strict scrutiny analysis “allows New York to identify which groups it is prepared to prove are in need of affirmative action without demonstrating that no other groups merit consideration for the program.” *Id.* at 206. The court found that evaluating under-inclusiveness as an element of the strict scrutiny analysis was at odds with the United States Supreme Court decision in *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989) which required that affirmative action programs be no broader than necessary. *Id.* at 207-08. The court similarly rejected the argument that the state should mirror the federal definition of “Hispanic,” finding that Congress has more leeway than the states to make broader classifications because Congress is making such classifications on the national level. *Id.* at 209.

The court opined — without deciding — that it may be impermissible for New York to simply adopt the “federal USDOT definition of Hispanic without at least making an independent assessment of discrimination against Hispanics of Spanish Origin in New York.” *Id.* Additionally, finding that the plaintiff failed to point to any discriminatory purpose by New York in failing to include persons of Spanish or Portuguese descent, the court determined that the rational basis analysis was appropriate. *Id.* at 213.

The court held that the plaintiff failed the rational basis test for three reasons: (1) because it was not irrational nor did it display animus to exclude persons of Spanish and Portuguese descent from the definition of Hispanic; (2) because the fact the plaintiff could demonstrate evidence of discrimination that he personally had suffered did not render New York’s decision to exclude persons of Spanish and Portuguese descent irrational; and (3) because the fact New York may have relied on Census data including a small percentage of Hispanics of Spanish descent did not mean that it was irrational to conclude that Hispanics of Latin American origin were in greater need of remedial legislation. *Id.* at 213-14. Thus, the Second Circuit affirmed the conclusion that New York had a rational basis for its definition to not include persons of Spanish and Portuguese descent, and thus affirmed the district court decision upholding the constitutionality of the challenged definition.

3. Viridi v. DeKalb County School District, 135 Fed. Appx. 262, 2005 WL 138942 (11th Cir. 2005) (unpublished opinion)

Although it is an unpublished opinion, Viridi v. DeKalb County School District is a recent Eleventh Circuit decision reviewing a challenge to a local government MBE/WBE-type program, which is instructive to the disparity study. In Viridi, the Eleventh Circuit struck down a MBE/WBE goal program that the court held contained racial classifications. The court based its ruling primarily on the failure of the DeKalb County School District (the “District”) to seriously consider and implement a race-neutral program and to the infinite duration of the program.

Plaintiff Viridi, an Asian American architect of Indian descent, filed suit against the District, members of the DeKalb County Board of Education (both individually and in their official capacities) (the “Board”) and the Superintendent (both individually and in his official capacity) (collectively “defendants”) pursuant to 42 U.S.C. §§ 1981 and 1983 and the Fourteenth Amendment alleging that they discriminated against him on the basis of race when awarding architectural contracts. 135 Fed. Appx. 262, 264 (11th Cir. 2005). Viridi also alleged the school district’s Minority Vendor Involvement Program was facially unconstitutional. Id.

The district court initially granted the defendants’ Motions for Summary Judgment on all of Viridi’s claims and the Eleventh Circuit Court of Appeals reversed in part, vacated in part, and remanded. Id. On remand, the district court granted the defendants’ Motion for Partial Summary Judgment on the facial challenge, and then granted the defendants’ motion for a judgment as a matter of law on the remaining claims at the close of Viridi’s case. Id.

In 1989, the Board appointed the Tillman Committee (the “Committee”) to study participation of female- and minority-owned businesses with the District. Id. The Committee met with various District departments and a number of minority contractors who claimed they had unsuccessfully attempted to solicit business with the District. Id. Based upon a “general feeling” that minorities were under-represented, the Committee issued the Tillman Report (the “Report”) stating “the Committee’s impression that ‘[m]inorities ha[d] not participated in school board purchases and contracting in a ratio reflecting the minority make-up of the community.’” Id. The Report contained no specific evidence of past discrimination nor any factual findings of discrimination. Id.

The Report recommended that the District: (1) Advertise bids and purchasing opportunities in newspapers targeting minorities, (2) conduct periodic seminars to educate minorities on doing business with the District, (3) notify organizations representing minority firms regarding bidding and purchasing opportunities, and (4) publish a “how to” booklet to be made available to any business interested in doing business with the District.

Id. The Report also recommended that the District adopt annual, aspirational participation goals for women- and minority-owned businesses. Id. The Report contained statements indicating the selection process should remain neutral and recommended that the Board adopt a non-discrimination statement. Id.

In 1991, the Board adopted the Report and implemented several of the recommendations, including advertising in the AJC, conducting seminars, and publishing the “how to” booklet. Id. The Board

also implemented the Minority Vendor Involvement Program (the “MVP”) which adopted the participation goals set forth in the Report. Id. at 265.

The Board delegated the responsibility of selecting architects to the Superintendent. Id. Virdi sent a letter to the District in October 1991 expressing interest in obtaining architectural contracts. Id. Virdi sent the letter to the District Manager and sent follow-up literature; he re-contacted the District Manager in 1992 and 1993. Id. In August 1994, Virdi sent a letter and a qualifications package to a project manager employed by Heery International. Id. In a follow-up conversation, the project manager allegedly told Virdi that his firm was not selected not based upon his qualifications, but because the “District was only looking for ‘black-owned firms.’” Id. Virdi sent a letter to the project manager requesting confirmation of his statement in writing and the project manager forwarded the letter to the District. Id.

After a series of meetings with District officials, in 1997, Virdi met with the newly hired Executive Director. Id. at 266. Upon request of the Executive Director, Virdi re-submitted his qualifications but was informed that he would be considered only for future projects (Phase III SPLOST projects). Id. Virdi then filed suit before any Phase III SPLOST projects were awarded. Id.

The Eleventh Circuit considered whether the MVP was facially unconstitutional and whether the defendants intentionally discriminated against Virdi on the basis of his race. The court held that strict scrutiny applies to all racial classifications and is not limited to merely set-asides or mandatory quotas; therefore, the MVP was subject to strict scrutiny because it contained racial classifications. Id. at 267. The court first questioned whether the identified government interest was compelling. Id. at 268. However, the court declined to reach that issue because it found the race-based participation goals were not narrowly tailored to achieving the identified government interest. Id.

The court held the MVP was not narrowly tailored for two reasons. Id. First, because no evidence existed that the District considered race-neutral alternatives to “avoid unwitting discrimination.” The court found that “[w]hile narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require serious, good faith consideration of whether such alternatives could serve the governmental interest at stake.” Id., citing Grutter v. Bollinger, 539 U.S. 306, 339 (2003), and Richmond v. J.A. Croson Co., 488 U.S. 469, 509-10 (1989). The court found that District could have engaged in any number of equally effective race-neutral alternatives, including using its outreach procedure and tracking the participation and success of minority-owned business as compared to non-minority-owned businesses. Id. at 268, n.8. Accordingly, the court held the MVP was not narrowly tailored. Id. at 268.

Second, the court held that the unlimited duration of the MVP’s racial goals negated a finding of narrow tailoring. Id. “[R]ace conscious ... policies must be limited in time.” Id., citing Grutter, 539 U.S. at 342, and Walker v. City of Mequite, TX, 169 F.3d 973, 982 (5th Cir. 1999). The court held that because the government interest could have been achieved utilizing race-neutral measures, and because the racial goals were not temporally limited, the MVP could not withstand strict scrutiny and was unconstitutional on its face. Id. at 268.

With respect to Virdi’s claims of intentional discrimination, the court held that although the MVP was facially unconstitutional, no evidence existed that the MVP or its unconstitutionality caused Virdi to lose a contract that he would have otherwise received. Id. Thus, because Virdi failed to

establish a causal connection between the unconstitutional aspect of the MVP and his own injuries, the court affirmed the district court's grant of judgment on that issue. Id. at 269. Similarly, the court found that Virdi presented insufficient evidence to sustain his claims against the Superintendent for intentional discrimination. Id.

The court reversed the district court's order pertaining to the facial constitutionality of the MVP's racial goals, and affirmed the district court's order granting defendants' motion on the issue of intentional discrimination against Virdi. Id. at 270.

4. Concrete Works of Colorado, Inc. v. City and County of Denver, 321 F.3d 950 (10th Cir. 2003), cert. denied, 540 U.S. 1027, 124 S. Ct. 556 (2003) (Scalia, Justice with whom the Chief Justice Rehnquist, joined, dissenting from the denial of certiorari)

This case is instructive to the disparity study because it is one of the only recent decisions to uphold the validity of a local government MBE/WBE program. It is significant to note that the Tenth Circuit did not apply the narrowly tailored test and thus did not rule on an application of the narrowly tailored test, instead finding that the plaintiff had waived that challenge in one of the earlier decisions in the case. This case also is one of the only cases to have found private sector marketplace discrimination as a basis to uphold an MBE/WBE-type program.

In Concrete Works the United States Court of Appeals for the Tenth Circuit held that the City and County of Denver had a compelling interest in limiting race discrimination in the construction industry, that the City had an important governmental interest in remedying gender discrimination in the construction industry, and found that the City and County of Denver had established a compelling governmental interest to have a race- and gender-based program. In Concrete Works, the Court of Appeals did not address the issue of whether the MWBE Ordinance was narrowly tailored because it held the district court was barred under the law of the case doctrine from considering that issue since it was not raised on appeal by the plaintiff construction companies after they had lost that issue on summary judgment in an earlier decision. Therefore, the Court of Appeals did not reach a decision as to narrowly tailoring or consider that issue in the case.

Case history. Plaintiff, Concrete Works of Colorado, Inc. ("CWC") challenged the constitutionality of an "affirmative action" ordinance enacted by the City and County of Denver (hereinafter the "City" or "Denver"). 321 F.3d 950, 954 (10th Cir. 2003). The ordinance established participation goals for racial minorities and women on certain City construction and professional design projects. Id.

The City enacted an Ordinance No. 513 ("1990 Ordinance") containing annual goals for MBE/WBE utilization on all competitively bid projects. Id. at 956. A prime contractor could also satisfy the 1990 Ordinance requirements by using "good faith efforts." Id. In 1996, the City replaced the 1990 Ordinance with Ordinance No. 304 (the "1996 Ordinance"). The district court stated that the 1996 Ordinance differed from the 1990 Ordinance by expanding the definition of covered contracts to include some privately financed contracts on City-owned land; added updated information and findings to the statement of factual support for continuing the program; refined the requirements for W/MBE certification and graduation; mandated the use of MBEs and WBEs on change orders; and expanded sanctions for improper behavior by MBEs, WBEs or majority-owned

contractors in failing to perform the affirmative action commitments made on City projects. Id. at 956-57.

The 1996 Ordinance was amended in 1998 by Ordinance No. 948 (the “1998 Ordinance”). The 1998 Ordinance reduced annual percentage goals and prohibited an MBE or a WBE, acting as a bidder, from counting self-performed work toward project goals. Id. at 957.

CWC filed suit challenging the constitutionality of the 1990 Ordinance. Id. The district court conducted a bench trial on the constitutionality of the three ordinances. Id. The district court ruled in favor of CWC and concluded that the ordinances violated the Fourteenth Amendment. Id. The City then appealed to the Tenth Circuit Court of Appeals. Id. The Court of Appeals reversed and remanded. Id. at 954.

The Court of Appeals applied strict scrutiny to race-based measures and intermediate scrutiny to the gender-based measures. Id. at 957-58, 959. The Court of Appeals also cited Richmond v. J.A. Croson Co., for the proposition that a governmental entity “can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment.” 488 U.S. 469, 492 (1989) (plurality opinion). Because “an effort to alleviate the effects of *societal* discrimination is not a compelling interest,” the Court of Appeals held that Denver could demonstrate that its interest is compelling only if it (1) identified the past or present discrimination “with some specificity,” and (2) demonstrated that a “strong basis in evidence” supports its conclusion that remedial action is necessary. Id. at 958, quoting Shaw v. Hunt, 517 U.S. 899, 909-10 (1996).

The court held that Denver could meet its burden without conclusively proving the existence of past or present racial discrimination. Id. Rather, Denver could rely on “empirical evidence that demonstrates ‘a significant statistical disparity between the number of qualified minority contractors ... and the number of such contractors actually engaged by the locality or the locality’s prime contractors.’” Id., quoting Croson, 488 U.S. at 509 (plurality opinion). Furthermore, the Court of Appeals held that Denver could rely on statistical evidence gathered from the six-county Denver Metropolitan Statistical Area (MSA) and could supplement the statistical evidence with anecdotal evidence of public and private discrimination. Id.

The Court of Appeals held that Denver could establish its compelling interest by presenting evidence of its own direct participation in racial discrimination or its passive participation in private discrimination. Id. The Court of Appeals held that once Denver met its burden, CWC had to introduce “credible, particularized evidence to rebut [Denver’s] initial showing of the existence of a compelling interest, which could consist of a neutral explanation for the statistical disparities.” Id. (internal citations and quotations omitted). The Court of Appeals held that CWC could also rebut Denver’s statistical evidence “by (1) showing that the statistics are flawed; (2) demonstrating that the disparities shown by the statistics are not significant or actionable; or (3) presenting contrasting statistical data.” Id. (internal citations and quotations omitted). The Court of Appeals held that the burden of proof at all times remained with CWC to demonstrate the unconstitutionality of the ordinances. Id. at 960.

The Court of Appeals held that to meet its burden of demonstrating an important governmental interest per the intermediate scrutiny analysis, Denver must show that the gender-based measures in

the ordinances were based on “reasoned analysis rather than through the mechanical application of traditional, often inaccurate, assumptions.” *Id.*, quoting Miss. Univ. for Women v. Hogan, 458 U.S. 718, 726 (1982).

The studies. Denver presented historical, statistical and anecdotal evidence in support of its MBE/WBE programs. Denver commissioned a number of studies to assess its MBE/WBE programs. *Id.* at 962. The consulting firm hired by Denver utilized disparity indices in part. *Id.* at 962. The 1990 Study also examined MBE and WBE utilization in the overall Denver MSA construction market, both public and private. *Id.* at 963.

The consulting firm also interviewed representatives of MBEs, WBEs, majority-owned construction firms, and government officials. *Id.* Based on this information, the 1990 Study concluded that, despite Denver’s efforts to increase MBE and WBE participation in DPW projects, some Denver employees and private contractors engaged in conduct designed to circumvent the goals program. *Id.* After reviewing the statistical and anecdotal evidence contained in the 1990 Study, the City Council enacted the 1990 Ordinance. *Id.*

After the Tenth Circuit decided Concrete Works II, Denver commissioned another study (the “1995 Study”). *Id.* at 963. Using 1987 Census Bureau data, the 1995 Study again examined utilization of MBEs and WBEs in the construction and professional design industries within the Denver MSA. *Id.* The 1995 Study concluded that MBEs and WBEs were more likely to be one-person or family-run businesses. The Study concluded that Hispanic-owned firms were less likely to have paid employees than white-owned firms but that Asian/Native American-owned firms were more likely to have paid employees than white- or other minority-owned firms. To determine whether these factors explained overall market disparities, the 1995 Study used the Census data to calculate disparity indices for all firms in the Denver MSA construction industry and separately calculated disparity indices for firms with paid employees and firms with no paid employees. *Id.* at 964.

The Census Bureau information was also used to examine average revenues per employee for Denver MSA construction firms with paid employees. Hispanic-, Asian-, Native American-, and women-owned firms with paid employees all reported lower revenues per employee than majority-owned firms. The 1995 Study also used 1990 Census data to calculate rates of self-employment within the Denver MSA construction industry. The Study concluded that the disparities in the rates of self-employment for blacks, Hispanics, and women persisted even after controlling for education and length of work experience. The 1995 Study controlled for these variables and reported that blacks and Hispanics working in the Denver MSA construction industry were less than half as likely to own their own businesses as were whites of comparable education and experience. *Id.*

In late 1994 and early 1995, a telephone survey of construction firms doing business in the Denver MSA was conducted. *Id.* at 965. Based on information obtained from the survey, the consultant calculated percentage utilization and percentage availability of MBEs and WBEs. Percentage utilization was calculated from revenue information provided by the responding firms. Percentage availability was calculated based on the number of MBEs and WBEs that responded to the survey question regarding revenues. Using these utilization and availability percentages, the 1995 Study showed disparity indices of 0.64 for MBEs and 0.70 for WBEs in the construction industry. In the professional design industry, disparity indices were 0.67 for MBEs and 0.69 for WBEs. The 1995 Study concluded that the disparity indices obtained from the telephone survey data were more

accurate than those obtained from the 1987 Census data because the data obtained from the telephone survey were more recent, had a narrower focus, and included data on C corporations. Additionally, it was possible to calculate disparity indices for professional design firms from the survey data. Id.

In 1997, the City conducted another study to estimate the availability of MBEs and WBEs and to examine, *inter alia*, whether race and gender discrimination limited the participation of MBEs and WBEs in construction projects of the type typically undertaken by the City (the “1997 Study”). Id. at 966. The 1997 Study used geographic and specialization information to calculate MBE/WBE availability. Availability was defined as “the ratio of MBE/WBE firms to the total number of firms in the four-digit SIC codes and geographic market area relevant to the City’s contracts.” Id.

The 1997 Study compared MBE/WBE availability and utilization in the Colorado construction industry. Id. The statewide market was used because necessary information was unavailable for the Denver MSA. Id. at 967. Additionally, data collected in 1987 by the Census Bureau was used because more current data was unavailable. The Study calculated disparity indices for the statewide construction market in Colorado as follows: 0.41 for African American firms, 0.40 for Hispanic firms, 0.14 for Asian and other minorities, and 0.74 for women-owned firms. Id.

The 1997 Study also contained an analysis of whether African Americans, Hispanics, or Asian Americans working in the construction industry are less likely to be self-employed than similarly situated whites. Id. Using data from the Public Use Microdata Samples (“PUMS”) of the 1990 Census of Population and Housing, the Study used a sample of individuals working in the construction industry. The Study concluded that in both Colorado and the Denver MSA, African Americans, Hispanics, and Native Americans working in the construction industry had lower self-employment rates than whites. Asian Americans had higher self-employment rates than whites.

Using the availability figures calculated earlier in the Study, the Study then compared the actual availability of MBE/WBEs in the Denver MSA with the potential availability of MBE/WBEs if they formed businesses at the same rate as whites with the same characteristics. Id. Finally, the Study examined whether self-employed minorities and women in the construction industry have lower earnings than white males with similar characteristics. Id. at 968. Using linear regression analysis, the Study compared business owners with similar years of education, of similar age, doing business in the same geographic area, and having other similar demographic characteristics. Even after controlling for several factors, the results showed that self-employed African Americans, Hispanics, Native Americans, and women had lower earnings than white males. Id.

The 1997 Study also conducted a mail survey of both MBE/WBEs and non-MBE/WBEs to obtain information on their experiences in the construction industry. Of the MBE/WBEs who responded, 35 percent indicated that they had experienced at least one incident of disparate treatment within the last five years while engaged in business activities. The survey also posed the following question: “How often do prime contractors who use your firm as a subcontractor on public sector projects with [MBE/WBE] goals or requirements ... also use your firm on public sector or private sector projects without [MBE/WBE] goals or requirements?” Fifty-eight percent of minorities and 41 percent of white women who responded to this question indicated they were “seldom or never” used on non-goals projects. Id.

MBE/WBEs were also asked whether the following aspects of procurement made it more difficult or impossible to obtain construction contracts: (1) bonding requirements, (2) insurance requirements, (3) large project size, (4) cost of completing proposals, (5) obtaining working capital, (6) length of notification for bid deadlines, (7) prequalification requirements, and (8) previous dealings with an agency. This question was also asked of non-MBE/WBEs in a separate survey. With one exception, MBE/WBEs considered each aspect of procurement more problematic than non-MBE/WBEs. To determine whether a firm's size or experience explained the different responses, a regression analysis was conducted that controlled for age of the firm, number of employees, and level of revenues. The results again showed that with the same, single exception, MBE/WBEs had more difficulties than non-MBE/WBEs with the same characteristics. Id. at 968-69.

After the 1997 Study was completed, the City enacted the 1998 Ordinance. The 1998 Ordinance reduced the annual goals to 10 percent for both MBEs and WBEs and eliminated a provision which previously allowed MBE/WBEs to count their own work toward project goals. Id. at 969.

The anecdotal evidence included the testimony of the senior vice-president of a large, majority-owned construction firm who stated that when he worked in Denver, he received credible complaints from minority and women-owned construction firms that they were subject to different work rules than majority-owned firms. Id. He also testified that he frequently observed graffiti containing racial or gender epithets written on job sites in the Denver metropolitan area. Further, he stated that he believed, based on his personal experiences, that many majority-owned firms refused to hire minority- or women-owned subcontractors because they believed those firms were not competent. Id.

Several MBE/WBE witnesses testified that they experienced difficulty prequalifying for private sector projects and projects with the City and other governmental entities in Colorado. One individual testified that her company was required to prequalify for a private sector project while no similar requirement was imposed on majority-owned firms. Several others testified that they attempted to prequalify for projects but their applications were denied even though they met the prequalification requirements. Id.

Other MBE/WBEs testified that their bids were rejected even when they were the lowest bidder; that they believed they were paid more slowly than majority-owned firms on both City projects and private sector projects; that they were charged more for supplies and materials; that they were required to do additional work not part of the subcontracting arrangement; and that they found it difficult to join unions and trade associations. Id. There was testimony detailing the difficulties MBE/WBEs experienced in obtaining lines of credit. One WBE testified that she was given a false explanation of why her loan was declined; another testified that the lending institution required the co-signature of her husband even though her husband, who also owned a construction firm, was not required to obtain her co-signature; a third testified that the bank required her father to be involved in the lending negotiations. Id.

The court also pointed out anecdotal testimony involving recitations of racially- and gender-motivated harassment experienced by MBE/WBEs at work sites. There was testimony that minority and female employees working on construction projects were physically assaulted and fondled, spat upon with chewing tobacco, and pelted with two-inch bolts thrown by males from a height of 80 feet. Id. at 969-70.

The legal framework applied by the court. The court held that the district court incorrectly believed Denver was required to prove the existence of discrimination. Instead of considering whether Denver had demonstrated strong evidence from which an inference of past or present discrimination could be drawn, the district court analyzed whether Denver’s evidence showed that there is pervasive discrimination. *Id.* at 970. The court, quoting *Concrete Works II*, stated that “the Fourteenth Amendment does not require a court to make an ultimate finding of discrimination before a municipality may take affirmative steps to eradicate discrimination.” *Id.* at 970, quoting *Concrete Works II*, 36 F.3d 1513, 1522 (10th Cir. 1994). Denver’s initial burden was to demonstrate that strong evidence of discrimination supported its conclusion that remedial measures were necessary. Strong evidence is that “approaching a prima facie case of a constitutional or statutory violation,” not irrefutable or definitive proof of discrimination. *Id.* at 97, quoting *Croson*, 488 U.S. at 500. The burden of proof at all times remained with the contractor plaintiff to prove by a preponderance of the evidence that Denver’s “evidence did not support an inference of prior discrimination and thus a remedial purpose.” *Id.*, quoting *Adarand VII*, 228 F.3d at 1176.

Denver, the court held, did introduce evidence of discrimination against each group included in the ordinances. *Id.* at 971. Thus, Denver’s evidence did not suffer from the problem discussed by the court in *Croson*. The court held the district court erroneously concluded that Denver must demonstrate that the private firms directly engaged in any discrimination in which Denver passively participates do so intentionally, with the purpose of disadvantaging minorities and women. The *Croson* majority concluded that a “city would have a compelling interest in preventing its tax dollars from assisting [local trade] organizations in maintaining a racially segregated construction market.” *Id.* at 971, quoting *Croson*, 488 U.S. 503. Thus, the court held Denver’s burden was to introduce evidence which raised the inference of discriminatory exclusion in the local construction industry and linked its spending to that discrimination. *Id.*

The court noted the Supreme Court has stated that the inference of discriminatory exclusion can arise from statistical disparities. *Id.*, citing *Croson*, 488 U.S. at 503. Accordingly, it concluded that Denver could meet its burden through the introduction of statistical and anecdotal evidence. To the extent the district court required Denver to introduce additional evidence to show discriminatory motive or intent on the part of private construction firms, the district court erred. Denver, according to the court, was under no burden to identify any specific practice or policy that resulted in discrimination. Neither was Denver required to demonstrate that the purpose of any such practice or policy was to disadvantage women or minorities. *Id.* at 972.

The court found Denver’s statistical and anecdotal evidence relevant because it identifies discrimination in the local construction industry, not simply discrimination in society. The court held the genesis of the identified discrimination is irrelevant and the district court erred when it discounted Denver’s evidence on that basis. *Id.*

The court held the district court erroneously rejected the evidence Denver presented on marketplace discrimination. *Id.* at 973. The court rejected the district court’s erroneous legal conclusion that a municipality may only remedy its own discrimination. The court stated this conclusion is contrary to the holdings in *Concrete Works II* and the plurality opinion in *Croson*. *Id.* The court held it previously recognized in this case that “a municipality has a compelling interest in taking affirmative steps to remedy both public *and private* discrimination specifically identified in its area.” *Id.*, quoting

Concrete Works II, 36 F.3d at 1529 (emphasis added). In Concrete Works II, the court stated that “we do not read Croson as requiring the municipality to identify an exact linkage between its award of public contracts and private discrimination.” Id., quoting Concrete Works II, 36 F.3d at 1529.

The court stated that Denver could meet its burden of demonstrating its compelling interest with evidence of private discrimination in the local construction industry coupled with evidence that it has become a passive participant in that discrimination. Id. at 973. Thus, Denver was not required to demonstrate that it is “guilty of prohibited discrimination” to meet its initial burden. Id.

Additionally, the court had previously concluded that Denver’s statistical studies, which compared utilization of MBE/WBEs to availability, supported the inference that “local prime contractors” are engaged in racial and gender discrimination. Id. at 974, quoting Concrete Works II, 36 F.3d at 1529. Thus, the court held Denver’s disparity studies should not have been discounted because they failed to specifically identify those individuals or firms responsible for the discrimination. Id.

The Court’s rejection of CWC’s arguments and the district court findings

Use of marketplace data. The court held the district court, inter alia, erroneously concluded that the disparity studies upon which Denver relied were significantly flawed because they measured discrimination in the overall Denver MSA construction industry, not discrimination by the City itself. Id. at 974. The court found that the district court’s conclusion was directly contrary to the holding in Adarand VII that evidence of both public and private discrimination in the construction industry is relevant. Id., citing Adarand VII, 228 F.3d at 1166-67).

The court held the conclusion reached by the majority in Croson that marketplace data are relevant in equal protection challenges to affirmative action programs was consistent with the approach later taken by the court in Shaw v. Hunt. Id. at 975. In Shaw, a majority of the court relied on the majority opinion in Croson for the broad proposition that a governmental entity’s “interest in remedying the effects of past or present racial discrimination may in the proper case justify a government’s use of racial distinctions.” Id., quoting Shaw, 517 U.S. at 909. The Shaw court did not adopt any requirement that only discrimination by the governmental entity, either directly or by utilizing firms engaged in discrimination on projects funded by the entity, was remediable. The court, however, did set out two conditions that must be met for the governmental entity to show a compelling interest. “First, the discrimination must be identified discrimination.” Id. at 976, quoting Shaw, 517 U.S. at 910. The City can satisfy this condition by identifying the discrimination, “‘public or private, with some specificity.’” Id. at 976, citing Shaw, 517 U.S. at 910, quoting Croson, 488 U.S. at 504 (emphasis added). The governmental entity must also have a “strong basis in evidence to conclude that remedial action was necessary.” Id. Thus, the court concluded Shaw specifically stated that evidence of either public or private discrimination could be used to satisfy the municipality’s burden of producing strong evidence. Id. at 976.

In Adarand VII, the court noted it concluded that evidence of marketplace discrimination can be used to support a compelling interest in remedying past or present discrimination through the use of affirmative action legislation. Id., citing Adarand VII, 228 F.3d at 1166-67 (“[W]e may consider public and private discrimination not only in the specific area of government procurement contracts but also in the construction industry generally; thus *any findings Congress has made as to the entire construction industry are relevant.*” (emphasis added)). Further, the court pointed out in this case it

earlier rejected the argument CWC reasserted here that marketplace data are irrelevant and remanded the case to the district court to determine whether Denver could link its public spending to “the Denver MSA evidence of industry-wide discrimination.” *Id.*, quoting Concrete Works II, 36 F.3d at 1529. The court stated that evidence explaining “the Denver government’s role in contributing to the underutilization of MBEs and WBEs in the *private construction market in the Denver MSA*” was relevant to Denver’s burden of producing strong evidence. *Id.*, quoting Concrete Works II, 36 F.3d at 1530 (emphasis added).

Consistent with the court’s mandate in Concrete Works II, the City attempted to show at trial that it “indirectly contributed to private discrimination by awarding public contracts to firms that in turn discriminated against MBE and/or WBE subcontractors in other private portions of their business.” *Id.* The City can demonstrate that it is a “passive participant’ in a system of racial exclusion practiced by elements of the local construction industry” by compiling evidence of marketplace discrimination and then linking its spending practices to the private discrimination. *Id.*, quoting Croson, 488 U.S. at 492.

The court rejected CWC’s argument that the lending discrimination studies and business formation studies presented by Denver were irrelevant. In Adarand VII, the court concluded that evidence of discriminatory barriers to the formation of businesses by minorities and women and fair competition between MBE/WBEs and majority-owned construction firms shows a “strong link” between a government’s “disbursements of public funds for construction contracts and the channeling of those funds due to private discrimination.” *Id.* at 977, quoting Adarand VII, 228 F.3d at 1167-68. The court found that evidence that private discrimination resulted in barriers to business formation is relevant because it demonstrates that MBE/WBEs are precluded *at the outset* from competing for public construction contracts. The court also found that evidence of barriers to fair competition is relevant because it again demonstrates that *existing* MBE/WBEs are precluded from competing for public contracts. Thus, like the studies measuring disparities in the utilization of MBE/WBEs in the Denver MSA construction industry, studies showing that discriminatory barriers to business formation exist in the Denver construction industry are relevant to the City’s showing that it indirectly participates in industry discrimination. *Id.* at 977.

The City presented evidence of lending discrimination to support its position that MBE/WBEs in the Denver MSA construction industry face discriminatory barriers to business formation. Denver introduced a disparity study prepared in 1996 and sponsored by the Denver Community Reinvestment Alliance, Colorado Capital Initiatives, and the City. The Study ultimately concluded that “despite the fact that loan applicants of three different racial/ethnic backgrounds in this sample were not appreciably different as businesspeople, they were ultimately treated differently by the lenders on the crucial issue of loan approval or denial.” *Id.* at 977-78. In Adarand VII, the court concluded that this study, among other evidence, “strongly support[ed] an initial showing of discrimination in lending.” *Id.* at 978, quoting, Adarand VII, 228 F.3d at 1170, n. 13 (“Lending discrimination alone of course does not justify action in the construction market. However, the persistence of such discrimination ... supports the assertion that the formation, as well as utilization, of minority-owned construction enterprises has been impeded.”). The City also introduced anecdotal evidence of lending discrimination in the Denver construction industry.

CWC did not present any evidence that undermined the reliability of the lending discrimination evidence but simply repeated the argument, foreclosed by circuit precedent, that it is irrelevant. The court rejected the district court criticism of the evidence because it failed to determine whether the discrimination resulted from discriminatory attitudes or from the neutral application of banking regulations. The court concluded, that discriminatory motive can be inferred from the results shown in disparity studies. The court held the district court's criticism did not undermine the study's reliability as an indicator that the City is passively participating in marketplace discrimination. The court noted that, in Adarand VII it took "judicial notice of the obvious causal connection between access to capital and ability to implement public works construction projects." Id. at 978, quoting Adarand VII, 228 F.3d at 1170.

Denver also introduced evidence of discriminatory barriers to competition faced by MBE/WBEs in the form of business formation studies. The 1990 Study and the 1995 Study both showed that all minority groups in the Denver MSA formed their own construction firms at rates lower than the total population but that women formed construction firms at higher rates. The 1997 Study examined self-employment rates and controlled for gender, marital status, education, availability of capital, and personal/family variables. As discussed, *supra*, the Study concluded that African Americans, Hispanics, and Native Americans working in the construction industry have lower rates of self-employment than similarly situated whites. Asian Americans had higher rates. The 1997 Study also concluded that minority and female business owners in the construction industry, with the exception of Asian American owners, have lower earnings than white male owners. This conclusion was reached after controlling for education, age, marital status, and disabilities. Id. at 978.

The court held that the district court's conclusion that the business formation studies could not be used to justify the ordinances conflicts with its holding in Adarand VII. "[T]he existence of evidence indicating that the number of [MBEs] would be significantly (but unquantifiably) higher but for such barriers is nevertheless relevant to the assessment of whether a disparity is sufficiently significant to give rise to an inference of discriminatory exclusion." Id. at 979, quoting Adarand VII, 228 F.3d at 1174.

In sum, the court held the district court erred when it refused to consider or give sufficient weight to the lending discrimination study, the business formation studies, and the studies measuring marketplace discrimination. That evidence was legally relevant to the City's burden of demonstrating a strong basis in evidence to support its conclusion that remedial legislation was necessary. Id. at 979-80.

Variables. CWC challenged Denver's disparity studies as unreliable because the disparities shown in the studies may be attributable to firm size and experience rather than discrimination. Denver countered, however, that a firm's size has little effect on its qualifications or its ability to provide construction services and that MBE/WBEs, like all construction firms, can perform most services either by hiring additional employees or by employing subcontractors. CWC responded that elasticity itself is relative to size and experience; MBE/WBEs are less capable of expanding because they are smaller and less experienced. Id. at 980.

The court concluded that even if it assumed that MBE/WBEs are less able to expand because of their smaller size and more limited experience, CWC did not respond to Denver's argument and the evidence it presented showing that experience and size are not race- and gender-neutral variables and

that MBE/WBE construction firms are generally smaller and less experienced *because* of industry discrimination. Id. at 981. The lending discrimination and business formation studies, according to the court, both strongly supported Denver's argument that MBE/WBEs are smaller and less experienced because of marketplace and industry discrimination. In addition, Denver's expert testified that discrimination by banks or bonding companies would reduce a firm's revenue and the number of employees it could hire. Id.

Denver also argued its Studies controlled for size and the 1995 Study controlled for experience. It asserted that the 1990 Study measured revenues per employee for construction for MBE/WBEs and concluded that the resulting disparities, "suggest[] that even among firms of the same employment size, industry utilization of MBEs and WBEs was lower than that of non-minority male-owned firms." Id. at 982. Similarly, the 1995 Study controlled for size, calculating, *inter alia*, disparity indices for firms with no paid employees which presumably are the same size.

Based on the uncontroverted evidence presented at trial, the court concluded that the district court did not give sufficient weight to Denver's disparity studies because of its erroneous conclusion that the studies failed to adequately control for size and experience. The court held that Denver is permitted to make assumptions about capacity and qualification of MBE/WBEs to perform construction services if it can support those assumptions. The court found the assumptions made in this case were consistent with the evidence presented at trial and supported the City's position that a firm's size does not affect its qualifications, willingness, or ability to perform construction services and that the smaller size and lesser experience of MBE/WBEs are, themselves, the result of industry discrimination. Further, the court pointed out CWC did not conduct its own disparity study using marketplace data and thus did not demonstrate that the disparities shown in Denver's studies would decrease or disappear if the studies controlled for size and experience to CWC's satisfaction. Consequently, the court held CWC's rebuttal evidence was insufficient to meet its burden of discrediting Denver's disparity studies on the issue of size and experience. Id. at 982.

Specialization. The district court also faulted Denver's disparity studies because they did not control for firm specialization. The court noted the district court's criticism would be appropriate only if there was evidence that MBE/WBEs are more likely to specialize in certain construction fields. Id. at 982.

The court found there was no identified evidence showing that certain construction specializations require skills less likely to be possessed by MBE/WBEs. The court found relevant the testimony of the City's expert, that the data he reviewed showed that MBEs were represented "widely across the different [construction] specializations." Id. at 982-83. There was no contrary testimony that aggregation bias caused the disparities shown in Denver's studies. Id. at 983.

The court held that CWC failed to demonstrate that the disparities shown in Denver's studies are eliminated when there is control for firm specialization. In contrast, one of the Denver studies, which controlled for SIC-code subspecialty and still showed disparities, provided support for Denver's argument that firm specialization does not explain the disparities. Id. at 983.

The court pointed out that disparity studies may make assumptions about availability as long as the same assumptions can be made for all firms. Id. at 983.

Utilization of MBE/WBEs on City projects. CWC argued that Denver could not demonstrate a compelling interest because it overutilized MBE/WBEs on City construction projects. This argument, according to the court, was an extension of CWC's argument that Denver could justify the ordinances only by presenting evidence of discrimination by the City itself or by contractors while working on City projects. Because the court concluded that Denver could satisfy its burden by showing that it is an indirect participant in industry discrimination, CWC's argument relating to the utilization of MBE/WBEs on City projects goes only to the weight of Denver's evidence. Id. at 984.

Consistent with the court's mandate in Concrete Works II, at trial Denver sought to demonstrate that the utilization data from projects subject to the goals program were tainted by the program and "reflect[ed] the intended remedial effect on MBE and WBE utilization." Id. at 984, quoting Concrete Works II, 36 F.3d at 1526. Denver argued that the non-goals data were the better indicator of past discrimination in public contracting than the data on all City construction projects. Id. at 984-85. The court concluded that Denver presented ample evidence to support the conclusion that the evidence showing MBE/WBE utilization on City projects not subject to the ordinances or the goals programs is the better indicator of discrimination in City contracting. Id. at 985.

The court rejected CWC's argument that the marketplace data were irrelevant but agreed that the non-goals data were also relevant to Denver's burden. The court noted that Denver did not rely heavily on the non-goals data at trial but focused primarily on the marketplace studies to support its burden. Id. at 985.

In sum, the court held Denver demonstrated that the utilization of MBE/WBEs on City projects had been affected by the affirmative action programs that had been in place in one form or another since 1977. Thus, the non-goals data were the better indicator of discrimination in public contracting. The court concluded that, on balance, the non-goals data provided some support for Denver's position that racial and gender discrimination existed in public contracting before the enactment of the ordinances. Id. at 987-88.

Anecdotal evidence. The anecdotal evidence, according to the court, included several incidents involving profoundly disturbing behavior on the part of lenders, majority-owned firms, and individual employees. Id. at 989. The court found that the anecdotal testimony revealed behavior that was not merely sophomoric or insensitive, but which resulted in real economic or physical harm. While CWC also argued that all new or small contractors have difficulty obtaining credit and that treatment the witnesses characterized as discriminatory is experienced by all contractors, Denver's witnesses specifically testified that they believed the incidents they experienced were motivated by race or gender discrimination. The court found they supported those beliefs with testimony that majority-owned firms were not subject to the same requirements imposed on them. Id.

The court held there was no merit to CWC's argument that the witnesses' accounts must be verified to provide support for Denver's burden. The court stated that anecdotal evidence is nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions. Id.

After considering Denver's anecdotal evidence, the district court found that the evidence "shows that race, ethnicity and gender affect the construction industry and those who work in it" and that the egregious mistreatment of minority and women employees "had direct financial consequences" on

construction firms. *Id.* at 989, quoting Concrete Works III, 86 F. Supp. 2d at 1074, 1073. Based on the district court’s findings regarding Denver’s anecdotal evidence and its review of the record, the court concluded that the anecdotal evidence provided persuasive, un rebutted support for Denver’s initial burden. *Id.* at 989-90, citing Int’l Bhd. of Teamsters v. United States, 431 U.S. 324, 339 (1977) (concluding that anecdotal evidence presented in a pattern or practice discrimination case was persuasive because it “brought the cold [statistics] convincingly to life”).

Summary. The court held the record contained extensive evidence supporting Denver’s position that it had a strong basis in evidence for concluding that the 1990 Ordinance and the 1998 Ordinance were necessary to remediate discrimination against both MBEs and WBEs. *Id.* at 990. The information available to Denver and upon which the ordinances were predicated, according to the court, indicated that discrimination was persistent in the local construction industry and that Denver was, at least, an indirect participant in that discrimination.

To rebut Denver’s evidence, the court stated CWC was required to “establish that Denver’s evidence did not constitute strong evidence of such discrimination.” *Id.* at 991, quoting Concrete Works II, 36 F.3d at 1523. CWC could not meet its burden of proof through conjecture and unsupported criticisms of Denver’s evidence. Rather, it must present “credible, particularized evidence.” *Id.*, quoting Adarand VII, 228 F.3d at 1175. The court held that CWC did not meet its burden. CWC *hypothesized* that the disparities shown in the studies on which Denver relies could be explained by any number of factors other than racial discrimination. However, the court found it did not conduct its own marketplace disparity study controlling for the disputed variables and presented no other evidence from which the court could conclude that such variables explain the disparities. *Id.* at 991-92.

Narrow tailoring. Having concluded that Denver demonstrated a compelling interest in the race-based measures and an important governmental interest in the gender-based measures, the court held it must examine whether the ordinances were narrowly tailored to serve the compelling interest and are substantially related to the achievement of the important governmental interest. *Id.* at 992.

The court stated it had previously concluded in its earlier decisions that Denver’s program was narrowly tailored. CWC appealed the grant of summary judgment and that appeal culminated in the decision in Concrete Works II. The court reversed the grant of summary judgment on the compelling-interest issue and concluded that CWC had waived any challenge to the narrow tailoring conclusion reached by the district court. Because the court found Concrete Works did not challenge the district court’s conclusion with respect to the second prong of Croson’s strict scrutiny standard — i.e., that the Ordinance is narrowly tailored to remedy past and present discrimination — the court held it need not address this issue. *Id.* at 992, citing Concrete Works II, 36 F.3d at 1531, n. 24.

The court concluded that the district court lacked authority to address the narrow tailoring issue on remand because none of the exceptions to the law of the case doctrine are applicable. The district court’s earlier determination that Denver’s affirmative-action measures were narrowly tailored is law of the case and binding on the parties.

5. In re City of Memphis, 293 F. 3d 345 (6th Cir. 2002)

This case is instructive to the disparity study in particular based on its holding that a local government may be prohibited from utilizing post-enactment evidence in support of a MBE/WBE-type program. The United States Court of Appeals for Sixth Circuit held that pre-enactment evidence was required to justify the City of Memphis' MBE/WBE Program. The Sixth Circuit held that a government must have had sufficient evidentiary justification for a racially conscious statute in advance of its passage. The district court had ruled that the City could not introduce the post-enactment study as evidence of a compelling interest to justify its MBE/WBE Program. The Sixth Circuit denied the City's application for an interlocutory appeal on the district court's order and refused to grant the City's request to appeal this issue.

**6. Associated Gen. Contractors v. Drabik, 214 F.3d 730 (6th Cir. 2000),
aff'g Case No. C2-98-943, 998 WL 812241 (S.D. Ohio 1998)**

This case is instructive to the disparity study based on the analysis applied in finding the evidence insufficient to justify an MBE/WBE program, and the application of the narrowly tailored test. The Sixth Circuit Court of Appeals enjoined the enforcement of the state MBE program, and in so doing reversed state court precedent finding the program constitutional. This case affirmed a district court decision enjoining the award of a "set-aside" contract based on the State of Ohio's MBE program with the award of construction contracts. The court held, among other things, that the mere existence of societal discrimination was insufficient to support a racial classification. The court found that the economic data were insufficient and too outdated. The court held the State could not establish a compelling governmental interest and that the statute was not narrowly tailored. The court held, among other things, the statute failed the narrow tailoring test because there was no evidence that the State had considered race-neutral remedies.

The court was mindful of the fact that it was striking down an entire class of programs by declaring the State of Ohio MBE statute in question unconstitutional, and noted that its decision was "not reconcilable" with the Ohio Supreme Court's decision in Ritchie Produce, 707 N.E.2d 871 (Ohio 1999) (upholding the Ohio State MBE Program).

7. W.H. Scott Constr. Co. v. City of Jackson, 199 F.3d 206 (5th Cir. 1999)

This case is instructive to the disparity study because the decision highlights the evidentiary burden imposed by the courts necessary to support a local MBE/WBE program. In addition, the Fifth Circuit permitted the aggrieved contractor to recover lost profits from the City of Jackson, Mississippi due to the City's enforcement of the MBE/WBE program that the court held was unconstitutional.

The Fifth Circuit, applying strict scrutiny, held that the City of Jackson, Mississippi failed to establish a compelling governmental interest to justify its policy placing 15 percent minority participation goals for City construction contracts. In addition, the court held the evidence upon which the City relied was faulty for several reasons, including because it was restricted to the letting of prime contracts by the City under the City's Program, and it did not include an analysis of the availability and utilization of qualified minority subcontractors, the relevant statistical pool in the City's construction projects. Significantly, the court also held that the plaintiff in this case could recover lost profits against the City as damages as a result of being denied a bid award based on the application of the MBE/WBE program.

8. Monterey Mechanical v. Wilson, 125 F.3d 702 (9th Cir. 1997)

This case is instructive in that the Ninth Circuit analyzed and held invalid the enforcement of a MBE/WBE-type program. Although the program at issue utilized the term “goals” as opposed to “quotas,” the Ninth Circuit rejected such a distinction, holding “[t]he relevant question is not whether a statute requires the use of such measures, but whether it authorizes or encourages them.” The case also is instructive because it found the use of “goals” and the application of “good faith efforts” in connection with achieving goals to trigger strict scrutiny.

Monterey Mechanical Co. (the “plaintiff”) submitted the low bid for a construction project for the California Polytechnic State University (the “University”). 125 F.3d 702, 704 (9th Cir. 1994). The University rejected the plaintiff’s bid because the plaintiff failed to comply with a state statute requiring prime contractors on such construction projects to subcontract 23 percent of the work to MBE/WBEs or, alternatively, demonstrate good faith outreach efforts. Id. The plaintiff conducted good faith outreach efforts but failed to provide the requisite documentation; the awardee prime contractor did not subcontract any portion of the work to MBE/WBEs but did include documentation of good faith outreach efforts. Id.

Importantly, the University did not conduct a disparity study, and instead argued that because “the ‘goal requirements’ of the scheme [did] not involve racial or gender quotas, set-asides or preferences,” the University did not need a disparity study. Id. at 705. The plaintiff protested the contract award and sued the University’s trustees, and a number of other individuals (collectively the “defendants”) alleging the state law was violative of the Equal Protection Clause. Id. The district court denied the plaintiff’s motion for an interlocutory injunction and the plaintiff appealed to the Ninth Circuit Court of Appeals. Id.

The defendants first argued that the statute was constitutional because it treated all general contractors alike, by requiring all to comply with the MBE/WBE participation goals. Id. at 708. The court held, however, that a minority or women business enterprise could satisfy the participation goals by allocating the requisite percentage of work to itself. Id. at 709. The court held that contrary to the district court’s finding, such a difference was not *de minimis*. Id.

The defendant’s also argued that the statute was not subject to strict scrutiny because the statute did not impose rigid quotas, but rather only required good faith outreach efforts. Id. at 710. The court rejected the argument finding that although the statute permitted awards to bidders who did not meet the percentage goals, “they are rigid in requiring precisely described and monitored efforts to attain those goals.” Id. The court cited its own earlier precedent to hold that “the provisions are not immunized from scrutiny because they purport to establish goals rather than quotas . . . [T]he relevant question is not whether a statute requires the use of such measures, but whether it authorizes or encourages them.” Id. at 710-11 (internal citations and quotations omitted). The court found that the statute encouraged set asides and cited Concrete Works of Colorado v. Denver, 36 F.3d 1512 (10th Cir. 1994), as analogous support for the proposition. Id. at 711.

The court found that the statute treated contractors differently based upon their race, ethnicity and gender, and although “worded in terms of goals and good faith, the statute imposes mandatory requirements with concreteness.” Id. The court also noted that the statute may impose additional

compliance expenses upon non-MBE/WBE firms who are required to make good faith outreach efforts (e.g., advertising) to MBE/WBE firms. Id. at 712.

The court then conducted strict scrutiny (race), and an intermediate scrutiny (gender) analyses. Id. at 712-13. The court found the University presented “no evidence” to justify the race- and gender-based classifications and thus did not consider additional issues of proof. Id. at 713. The court found that the statute was not narrowly tailored because the definition of “minority” was overbroad (e.g., inclusion of Aleuts). Id. at 714, citing Wygant v. Jackson Board of Education, 476 U.S. 267, 284, n. 13 (1986) and City of Richmond v. J.A. Croson, Co., 488 U.S. 469, 505-06 (1989). The court found “[a] broad program that sweeps in all minorities with a remedy that is in no way related to past harms cannot survive constitutional scrutiny.” Id. at 714, citing Hopwood v. State of Texas, 78 F.3d 932, 951 (5th Cir. 1996). The court held that the statute violated the Equal Protection Clause.

9. Eng’g Contractors Ass’n of S. Florida v. Metropolitan Dade County, 122 F.3d 895 (11th Cir. 1997)

Engineering Contractors Association of South Florida v. Metropolitan Engineering Contractors Association is a paramount case in the Eleventh Circuit and is instructive to the disparity study. This decision has been cited and applied by the courts in various circuits that have addressed MBE/WBE-type programs or legislation involving local government contracting and procurement.

In Engineering Contractors Association, six trade organizations (the “plaintiffs”) filed suit in the District Court for the Southern District of Florida, challenging three affirmative action programs administered by Engineering Contractors Association, Florida, (the “County”) as violative of the Equal Protection Clause. 122 F.3d 895, 900 (11th Cir. 1997). The three affirmative action programs challenged were the Black Business Enterprise Program (“BBE”), the Hispanic Business Enterprise Program (“HBE”), and the Woman Business Enterprise Program, (“WBE”), (collectively “MWBE” programs). Id. The plaintiffs challenged the application of the program to County construction contracts. Id.

For certain classes of construction contracts valued over \$25,000, the County set participation goals of 15 percent for BBEs, 19 percent for HBEs, and 11 percent for WBEs. Id. at 901. The County established five “contract measures” to reach the participation goals: (1) set asides, (2) subcontractor goals, (3) project goals, (4) bid preferences, and (5) selection factors. Once a contract was identified as covered by a participation goal, a review committee would determine whether a contract measure should be utilized. Id. The County Commission would make the final determination and its decision was appealable to the County Manager. Id. The County reviewed the efficacy of the MWBE programs annually, and reevaluated the continuing viability of the MWBE programs every five years. Id.

In a bench trial, the district court applied strict scrutiny to the BBE and HBE programs and held that the County lacked the requisite “strong basis in evidence” to support the race- and ethnicity-conscious measures. Id. at 902. The district court applied intermediate scrutiny to the WBE program and found that the “County had presented insufficient probative evidence to support its stated rationale for implementing a gender preference.” Id. Therefore, the County had failed to demonstrate a “compelling interest” necessary to support the BBE and HBE programs, and failed to demonstrate an “important interest” necessary to support the WBE program. Id. The district court assumed the

existence of a sufficient evidentiary basis to support the existence of the MWBE programs but held the BBE and HBE programs were not narrowly tailored to the interests they purported to serve; the district court held the WBE program was not substantially related to an important government interest. Id. The district court entered a final judgment enjoining the County from continuing to operate the MWBE programs and the County appealed. The Eleventh Circuit Court of Appeals affirmed. Id. at 900, 903.

On appeal, the Eleventh Circuit considered four major issues:

1. Whether the plaintiffs had standing. [The Eleventh Circuit answered this in the affirmative and that portion of the opinion is omitted from this summary];
2. Whether the district court erred in finding the County lacked a “strong basis in evidence” to justify the existence of the BBE and HBE programs;
3. Whether the district court erred in finding the County lacked a “sufficient probative basis in evidence” to justify the existence of the WBE program; and
4. Whether the MWBE programs were narrowly tailored to the interests they were purported to serve.

Id. at 903.

The Eleventh Circuit held that the BBE and HBE programs were subject to the strict scrutiny standard enunciated by the U.S. Supreme Court in City of Richmond v. J.A. Croson Co., 488 U.S. 469 (1989). Id. at 906. Under this standard, “an affirmative action program must be based upon a ‘compelling government interest’ and must be ‘narrowly tailored’ to achieve that interest.” Id. The Eleventh Circuit further noted:

In practice, the interest that is alleged in support of racial preferences is almost always the same — remedying past or present discrimination. That interest is widely accepted as compelling. As a result, the true test of an affirmative action program is usually not the nature of the government’s interest, but rather the adequacy of the evidence of discrimination offered to show that interest.

Id. (internal citations omitted).

Therefore, strict scrutiny requires a finding of a “‘strong basis in evidence’ to support the conclusion that remedial action is necessary.” Id., citing Croson, 488 U.S. at 500). The requisite “‘strong basis in evidence’ cannot rest on ‘an amorphous claim of societal discrimination, on simple legislative assurances of good intention, or on congressional findings of discrimination in the national economy.’” Id. at 907, citing Ensley Branch, NAACP v. Seibels, 31 F.3d 1548, 1565 (11th Cir. 1994) (citing and applying Croson). However, the Eleventh Circuit found that a governmental entity can “justify affirmative action by demonstrating ‘gross statistical disparities’ between the proportion of minorities hired ... and the proportion of minorities willing and able to do the work ... Anecdotal evidence may also be used to document discrimination, especially if buttressed by relevant statistical evidence.” Id. (internal citations omitted).

Notwithstanding the “exceedingly persuasive justification” language utilized by the Supreme Court in United States v. Virginia, 116 S. Ct. 2264 (1996) (evaluating gender-based government action), the Eleventh Circuit held that the WBE program was subject to traditional intermediate scrutiny. Id. at 908. Under this standard, the government must provide “sufficient probative evidence” of

discrimination, which is a lesser standard than the “strong basis in evidence” under strict scrutiny. Id. at 910.

The County provided two types of evidence in support of the MWBE programs: (1) statistical evidence, and (2) non-statistical “anecdotal” evidence. Id. at 911. As an initial matter, the Eleventh Circuit found that in support of the BBE program, the County permissibly relied on substantially “post-enactment” evidence (i.e., evidence based on data related to years following the initial enactment of the BBE program). Id. However, “such evidence carries with it the hazard that the program at issue may itself be masking discrimination that might otherwise be occurring in the relevant market.” Id. at 912. A district court should not “speculate about what the data *might* have shown had the BBE program never been enacted.” Id.

The statistical evidence. The County presented five basic categories of statistical evidence: (1) County contracting statistics; (2) County subcontracting statistics; (3) marketplace data statistics; (4) The Wainwright Study; and (5) The Brimmer Study. Id. In summary, the Eleventh Circuit held that the County’s statistical evidence (described more fully below) was subject to more than one interpretation. Id. at 924. The district court found that the evidence was “insufficient to form the requisite strong basis in evidence for implementing a racial or ethnic preference, and that it was insufficiently probative to support the County’s stated rationale for imposing a gender preference.” Id. The district court’s view of the evidence was a permissible one. Id.

County contracting statistics. The County presented a study comparing three factors for County non-procurement construction contracts over two time periods (1981-1991 and 1993): (1) the percentage of bidders that were MWBE firms; (2) the percentage of awardees that were MWBE firms; and (3) the proportion of County contract dollars that had been awarded to MWBE firms. Id. at 912.

The Eleventh Circuit found that notably, for the BBE and HBE statistics, generally there were no “consistently negative disparities between the bidder and awardee percentages. In fact, by 1993, the BBE and HBE bidders are being awarded *more* than their proportionate ‘share’ ... when the bidder percentages are used as the baseline.” Id. at 913. For the WBE statistics, the bidder/awardee statistics were “decidedly mixed” as across the range of County construction contracts. Id.

The County then refined those statistics by adding in the total percentage of annual County construction dollars awarded to MBE/WBEs, by calculating “disparity indices” for each program and classification of construction contract. The Eleventh Circuit explained:

[A] disparity index compares the amount of contract awards a group actually got to the amount we would have expected it to get based on that group’s bidding activity and awardee success rate. More specifically, a disparity index measures the participation of a group in County contracting dollars by dividing that group’s contract dollar percentage by the related bidder or awardee percentage, and multiplying that number by 100 percent.

Id. at 914. “The utility of disparity indices or similar measures ... has been recognized by a number of federal circuit courts.” Id.

The Eleventh Circuit found that “[i]n general . . . disparity indices of 80 percent or greater, which are close to full participation, are not considered indications of discrimination.” Id. The Eleventh Circuit noted that “the EEOC’s disparate impact guidelines use the 80 percent test as the boundary line for determining a prima facie case of discrimination.” Id., citing 29 C.F.R. § 1607.4D. In addition, no circuit that has “explicitly endorsed the use of disparity indices [has] indicated that an index of 80 percent or greater might be probative of discrimination.” Id., citing Concrete Works v. City & County of Denver, 36 F.3d 1513, 1524 (10th Cir. 1994) (crediting disparity indices ranging from 0% to 3.8%); Contractors Ass’n v. City of Philadelphia, 6 F.3d 990 (3d Cir. 1993) (crediting disparity index of 4%).

After calculation of the disparity indices, the County applied a standard deviation analysis to test the statistical significance of the results. Id. at 914. “The standard deviation figure describes the probability that the measured disparity is the result of mere chance.” Id. The Eleventh Circuit had previously recognized “[s]ocial scientists consider a finding of two standard deviations significant, meaning there is about one chance in 20 that the explanation for the deviation could be random and the deviation must be accounted for by some factor other than chance.” Id.

The statistics presented by the County indicated “statistically significant underutilization of BBEs in County construction contracting.” Id. at 916. The results were “less dramatic” for HBEs and mixed as between favorable and unfavorable for WBEs. Id.

The Eleventh Circuit then explained the burden of proof:

[O]nce the proponent of affirmative action introduces its statistical proof as evidence of its remedial purpose, thereby supplying the [district] court with the means for determining that [it] had a firm basis for concluding that remedial action was appropriate, it is incumbent upon the [plaintiff] to prove their case; they continue to bear the ultimate burden of persuading the [district] court that the [defendant’s] evidence did not support an inference of prior discrimination and thus a remedial purpose, or that the plan instituted on the basis of this evidence was not sufficiently ‘narrowly tailored.’

Id. (internal citations omitted).

The Eleventh Circuit noted that a plaintiff has at least three methods to rebut the inference of discrimination with a “neutral explanation” by: “(1) showing that the statistics are flawed; (2) demonstrating that the disparities shown by the statistics are not significant or actionable; or (3) presenting contrasting statistical data.” Id. (internal quotations and citations omitted). The Eleventh Circuit held that the plaintiffs produced “sufficient evidence to establish a neutral explanation for the disparities.” Id.

The plaintiffs alleged that the disparities were “better explained by firm size than by discrimination . . . [because] minority and female-owned firms tend to be smaller, and that it stands to reason smaller firms will win smaller contracts.” Id. at 916-17. The plaintiffs produced Census data indicating, on average, minority- and female-owned construction firms in Engineering Contractors Association were smaller than non-MBE/WBE firms. Id. at 917. The Eleventh Circuit found that the plaintiffs

explanation of the disparities was a “plausible one, in light of the uncontroverted evidence that MBE/WBE construction firms tend to be substantially smaller than non-MBE/WBE firms.” Id.

Additionally, the Eleventh Circuit noted that the County’s own expert admitted that “firm size plays a significant role in determining which firms win contracts.” Id. The expert stated:

The size of the firm has got to be a major determinant because of course some firms are going to be larger, are going to be better prepared, are going to be in a greater natural capacity to be able to work on some of the contracts while others simply by virtue of their small size simply would not be able to do it.

Id.

The Eleventh Circuit then summarized:

Because they are bigger, bigger firms have a bigger chance to win bigger contracts. It follows that, all other factors being equal and in a perfectly nondiscriminatory market, one would expect the bigger (on average) non-MWBE firms to get a disproportionately higher percentage of total construction dollars awarded than the smaller MWBE firms.

Id.

In an anticipation of such an argument, the County conducted a regression analysis to control for firm size. Id. A regression analysis is “a statistical procedure for determining the relationship between a dependent and independent variable, e.g., the dollar value of a contract award and firm size.” Id. (internal citations omitted). The purpose of the regression analysis is “to determine whether the relationship between the two variables is statistically meaningful.” Id.

The County’s regression analysis sought to identify disparities that could not be explained by firm size, and theoretically instead based on another factor, such as discrimination. Id. The County conducted two regression analyses using two different proxies for firm size: (1) total awarded value of all contracts bid on; and (2) largest single contract awarded. Id. The regression analyses accounted for most of the negative disparities regarding MBE/WBE participation in County construction contracts (i.e., most of the unfavorable disparities became statistically insignificant, corresponding to standard deviation values less than two). Id.

Based on an evaluation of the regression analysis, the district court held that the demonstrated disparities were attributable to firm size as opposed to discrimination. Id. at 918. The district court concluded that the few unexplained disparities that remained after regressing for firm size were insufficient to provide the requisite “strong basis in evidence” of discrimination of BBEs and HBEs. Id. The Eleventh Circuit held that this decision was not clearly erroneous. Id.

With respect to the BBE statistics, the regression analysis explained all but one negative disparity, for one type of construction contract between 1989-1991. Id. The Eleventh Circuit held the district court permissibly found that this did not constitute a “strong basis in evidence” of discrimination. Id.

With respect to the HBE statistics, one of the regression methods failed to explain the unfavorable disparity for one type of contract between 1989-1991, and both regression methods failed to explain the unfavorable disparity for another type of contract during that same time period. Id. However, by 1993, both regression methods accounted for all of the unfavorable disparities, and one of the disparities for one type of contract was actually favorable for HBEs. Id. The Eleventh Circuit held the district court permissibly found that this did not constitute a “strong basis in evidence” of discrimination. Id.

Finally, with respect to the WBE statistics, the regression analysis explained all but one negative disparity, for one type of construction contract in the 1993 period. Id. The regression analysis explained all of the other negative disparities, and in the 1993 period, a disparity for one type of contract was actually favorable to WBEs. Id. The Eleventh Circuit held the district court permissibly found that this evidence was not “sufficiently probative of discrimination.” Id.

The County argued that the district court erroneously relied on the disaggregated data (i.e., broken down by contract type) as opposed to the consolidated statistics. Id. at 919. The district court declined to assign dispositive weight to the aggregated data for the BBE statistics for 1989-1991 because (1) the aggregated data for 1993 did not show negative disparities when regressed for firm size, (2) the BBE disaggregated data left only one unexplained negative disparity for one type of contract for 1989-1991 when regressed for firm size, and (3) “the County’s own expert testified as to the utility of examining the disaggregated data ‘insofar as they reflect different kinds of work, different bidding practices, perhaps a variety of other factors that could make them heterogeneous with one another.’” Id.

Additionally, the district court noted, and the Eleventh Circuit found that “the aggregation of disparity statistics for nonheterogenous data populations can give rise to a statistical phenomenon known as ‘Simpson’s Paradox,’ which leads to illusory disparities in improperly aggregated data that disappear when the data are disaggregated.” Id. at 919, n. 4 (internal citations omitted). “Under those circumstances,” the Eleventh Circuit held that the district court did not err in assigning less weight to the aggregated data, in finding the aggregated data for BBEs for 1989-1991 did not provide a “strong basis in evidence” of discrimination, or in finding that the disaggregated data formed an insufficient basis of support for any of the MBE/WBE programs given the applicable constitutional requirements. Id. at 919.

County subcontracting statistics. The County performed a subcontracting study to measure MBE/WBE participation in the County’s subcontracting businesses. For each MBE/WBE category (BBE, HBE, and WBE), “the study compared the proportion of the designated group that filed a subcontractor’s release of lien on a County construction project between 1991 and 1994 with the proportion of sales and receipt dollars that the same group received during the same time period.” Id.

The district court found the statistical evidence insufficient to support the use of race- and ethnicity-conscious measures, noting problems with some of the data measures. Id. at 920.

Most notably, the denominator used in the calculation of the MWBE sales and receipts percentages is based upon the total sales and receipts from all sources for the firm filing a subcontractor's release of lien with the County. That means, for instance, that if a nationwide non-MWBE company performing 99 percent of its business outside of Dade County filed a single subcontractor's release of lien with the County during the relevant time frame, all of its sales and receipts for that time frame would be counted in the denominator against which MWBE sales and receipts are compared. As the district court pointed out, that is not a reasonable way to measure Dade County subcontracting participation.

Id. The County's argument that a strong majority (72%) of the subcontractors were located in Dade County did not render the district court's decision to fail to credit the study erroneous. Id.

Marketplace data statistics. The County conducted another statistical study "to see what the differences are in the marketplace and what the relationships are in the marketplace." Id. The study was based on a sample of 568 contractors, from a pool of 10,462 firms, that had filed a "certificate of competency" with Dade County as of January 1995. Id. The selected firms participated in a telephone survey inquiring about the race, ethnicity, and gender of the firm's owner, and asked for information on the firm's total sales and receipts from all sources. Id. The County's expert then studied the data to determine "whether meaningful relationships existed between (1) the race, ethnicity, and gender of the surveyed firm owners, and (2) the reported sales and receipts of that firm." Id. The expert's hypothesis was that unfavorable disparities may be attributable to marketplace discrimination. The expert performed a regression analysis using the number of employees as a proxy for size. Id.

The Eleventh Circuit first noted that the statistical pool used by the County was substantially larger than the actual number of firms, willing, able, and qualified to do the work as the statistical pool represented all those firms merely licensed as a construction contractor. Id. Although this factor did not render the study meaningless, the district court was entitled to consider that in evaluating the weight of the study. Id. at 921. The Eleventh Circuit quoted the Supreme Court for the following proposition: "[w]hen special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value." Id., quoting Croson, 488 U.S. at 501, quoting Hazelwood Sch. Dist. v. United States, 433 U.S. 299, 308 n. 13 (1977).

The Eleventh Circuit found that after regressing for firm size, neither the BBE nor WBE data showed statistically significant unfavorable disparities. Id. Although the marketplace data did reveal unfavorable disparities even after a regression analysis, the district court was not required to assign those disparities controlling weight, especially in light of the dissimilar results of the County Contracting Statistics, discussed supra. Id.

The Wainwright Study. The County also introduced a statistical analysis prepared by Jon Wainwright, analyzing “the personal and financial characteristics of self-employed persons working full-time in the Dade County construction industry, based on data from the 1990 Public Use Microdata Sample database” (derived from the decennial census). Id. The study “(1) compared construction business ownership rates of MBE/WBEs to those of non-MBE/WBEs, and (2) analyzed disparities in personal income between MBE/WBE and non-MBE/WBE business owners.” Id. “The study concluded that blacks, Hispanics, and women are less likely to own construction businesses than similarly situated white males, and MBE/WBEs that do enter the construction business earn less money than similarly situated white males.” Id.

With respect to the first conclusion, Wainwright controlled for “human capital” variables (education, years of labor market experience, marital status, and English proficiency) and “financial capital” variables (interest and dividend income, and home ownership). Id. The analysis indicated that blacks, Hispanics and women enter the construction business at lower rates than would be expected, once numerosity, and identified human and financial capital are controlled for. Id. The disparities for blacks and women (but not Hispanics) were substantial and statistically significant. Id. at 922. The underlying theory of this business ownership component of the study is that any significant disparities remaining after control of variables are due to the ongoing effects of past and present discrimination. Id.

The Eleventh Circuit held, in light of Croson, the district court need not have accepted this theory. Id. The Eleventh Circuit quoted Croson, in which the Supreme Court responded to a similar argument advanced by the plaintiffs in that case: “There are numerous explanations for this dearth of minority participation, including past societal discrimination in education and economic opportunities *as well as both black and white career and entrepreneurial choices. Blacks may be disproportionately attracted to industries other than construction.*” Id., quoting Croson, 488 U.S. at 503. Following the Supreme Court in Croson, the Eleventh Circuit held “the disproportionate attraction of a minority group to non-construction industries does not mean that discrimination in the construction industry is the reason.” Id., quoting Croson, 488 U.S. at 503. Additionally, the district court had evidence that between 1982 and 1987, there was a substantial growth rate of MBE/WBE firms as opposed to non-MBE/WBE firms, which would further negate the proposition that the construction industry was discriminating against minority- and women-owned firms. Id. at 922.

With respect to the personal income component of the Wainwright study, after regression analyses were conducted, only the BBE statistics indicated a statistically significant disparity ratio. Id. at 923. However, the Eleventh Circuit held the district court was not required to assign the disparity controlling weight because the study did not regress for firm size, and in light of the conflicting statistical evidence in the County Contracting Statistics and Marketplace Data Statistics, discussed *supra*, which did regress for firm size. Id.

The Brimmer Study. The final study presented by the County was conducted under the supervision of Dr. Andrew F. Brimmer and concerned only black-owned firms. Id. The key component of the study was an analysis of the business receipts of black-owned construction firms for the years of 1977, 1982 and 1987, based on the Census Bureau’s Survey of Minority- and Women-Owned Businesses, produced every five years. Id. The study sought to determine the existence of

disparities between sales and receipts of black-owned firms in Dade County compared to the sales and receipts of all construction firms in Dade County. Id.

The study indicated substantial disparities in 1977 and 1987 but not 1982. Id. The County alleged that the absence of disparity in 1982 was due to substantial race-conscious measures for a major construction contract (Metrorail project), and not due to a lack of discrimination in the industry. Id. However, the study made no attempt to filter for the Metrorail project and “complete[ly] fail[ed]” to account for firm size. Id. Accordingly, the Eleventh Circuit found the district court permissibly discounted the results of the Brimmer study. Id. at 924.

Anecdotal evidence. In addition, the County presented a substantial amount of anecdotal evidence of perceived discrimination against BBes, a small amount of similar anecdotal evidence pertaining to WBEs, and no anecdotal evidence pertaining to HBEs. Id. The County presented three basic forms of anecdotal evidence: “(1) the testimony of two County employees responsible for administering the MBE/WBE programs; (2) the testimony, primarily by affidavit, of twenty-three MBE/WBE contractors and subcontractors; and (3) a survey of black-owned construction firms.” Id.

The County employees testified that the decentralized structure of the County construction contracting system affords great discretion to County employees, which in turn creates the opportunity for discrimination to infect the system. Id. They also testified to specific incidents of discrimination, for example, that MBE/WBEs complained of receiving lengthier punch lists than their non-MBE/WBE counterparts. Id. They also testified that MBE/WBEs encounter difficulties in obtaining bonding and financing. Id.

The MBE/WBE contractors and subcontractors testified to numerous incidents of perceived discrimination in the Dade County construction market, including:

Situations in which a project foreman would refuse to deal directly with a black or female firm owner, instead preferring to deal with a white employee; instances in which an MWBE owner knew itself to be the low bidder on a subcontracting project, but was not awarded the job; instances in which a low bid by an MWBE was “shopped” to solicit even lower bids from non-MWBE firms; instances in which an MWBE owner received an invitation to bid on a subcontract within a day of the bid due date, together with a “letter of unavailability” for the MWBE owner to sign in order to obtain a waiver from the County; and instances in which an MWBE subcontractor was hired by a prime contractor, but subsequently was replaced with a non-MWBE subcontractor within days of starting work on the project.

Id. at 924-25.

Finally, the County submitted a study prepared by Dr. Joe E. Feagin, comprised of interviews of 78 certified black-owned construction firms. Id. at 925. The interviewees reported similar instances of perceived discrimination, including: “difficulty in securing bonding and financing; slow payment by general contractors; unfair performance evaluations that were tainted by racial stereotypes; difficulty

in obtaining information from the County on contracting processes; and higher prices on equipment and supplies than were being charged to non-MBE/WBE firms.” Id.

The Eleventh Circuit found that numerous black- and some female-owned construction firms in Dade County perceived that they were the victims of discrimination and two County employees also believed that discrimination could taint the County’s construction contracting process. Id. However, such anecdotal evidence is helpful “only when it [is] combined with and reinforced by sufficiently probative statistical evidence.” Id. In her plurality opinion in Croson, Justice O’Connor found that “evidence of a pattern of individual discriminatory acts can, *if supported by appropriate statistical proof*, lend support to a local government’s determination that broader remedial relief is justified.” Id., quoting Croson, 488 U.S. at 509 (emphasis added by the Eleventh Circuit). Accordingly, the Eleventh Circuit held that “anecdotal evidence can play an important role in bolstering statistical evidence, but that only in the rare case will anecdotal evidence suffice standing alone.” Id. at 925. The Eleventh Circuit also cited to opinions from the Third, Ninth and Tenth Circuits as supporting the same proposition. Id. at 926. The Eleventh Circuit affirmed the decision of the district court enjoining the continued operation of the MBE/WBE programs because they did not rest on a “constitutionally sufficient evidentiary foundation.” Id.

Although the Eleventh Circuit determined that the MBE/WBE program did not survive constitutional muster due to the absence of a sufficient evidentiary foundation, the Eleventh Circuit proceeded with the second prong of the strict scrutiny analysis of determining whether the MBE/WBE programs were narrowly tailored (BBE and HBE programs) or substantially related (WBE program) to the legitimate government interest they purported to serve, i.e., “remedying the effects of present and past discrimination against blacks, Hispanics, and women in the Dade County construction market.” Id.

Narrow tailoring. “The essence of the ‘narrowly tailored’ inquiry is the notion that explicitly racial preferences ... must only be a ‘last resort’ option.” Id., quoting Hayes v. North Side Law Enforcement Officers Ass’n, 10 F.3d 207, 217 (4th Cir. 1993) and citing Croson, 488 U.S. at 519 (Kennedy, J., concurring in part and concurring in the judgment) (“[T]he strict scrutiny standard ... forbids the use of even narrowly drawn racial classifications except as a last resort.”).

The Eleventh Circuit has identified four factors to evaluate whether a race- or ethnicity-conscious affirmative action program is narrowly tailored: (1) “the necessity for the relief and the efficacy of alternative remedies; (2) the flexibility and duration of the relief; (3) the relationship of numerical goals to the relevant labor market; and (4) the impact of the relief on the rights of innocent third parties.” Id. at 927, citing Ensley Branch, 31 F.3d at 1569. The four factors provide “a useful analytical structure.” Id. at 927. The Eleventh Circuit focused only on the first factor in the present case “because that is where the County’s MBE/WBE programs are most problematic.” Id.

The Eleventh Circuit

flatly reject[ed] the County's assertion that 'given a strong basis in evidence of a race-based problem, a race-based remedy is necessary.' That is simply not the law. If a race-neutral remedy is sufficient to cure a race-based problem, then a race-conscious remedy can never be narrowly tailored to that problem." *Id.*, citing *Croson*, 488 U.S. at 507 (holding that affirmative action program was not narrowly tailored where "there does not appear to have been any consideration of the use of race-neutral means to increase minority business participation in city contracting") ... Supreme Court decisions teach that a race-conscious remedy is not merely one of many equally acceptable medications the government may use to treat a race-based problem. Instead, it is the strongest of medicines, with many potential side effects, and must be reserved for those severe cases that are highly resistant to conventional treatment.

Id. at 927.

The Eleventh Circuit held that the County "clearly failed to give serious and good faith consideration to the use of race- and ethnicity-neutral measures." *Id.* Rather, the determination of the necessity to establish the MWBE programs was based upon a conclusory legislative statement as to its necessity, which in turn was based upon an "equally conclusory analysis" in the Brimmer study, and a report that the SBA only was able to direct 5 percent of SBA financing to black-owned businesses between 1968-1980. *Id.*

The County admitted, and the Eleventh Circuit concluded, that the County failed to give any consideration to any alternative to the HBE affirmative action program. *Id.* at 928. Moreover, the Eleventh Circuit found that the testimony of the County's own witnesses indicated the viability of race- and ethnicity-neutral measures to remedy many of the problems facing black- and Hispanic-owned construction firms. *Id.* The County employees identified problems, virtually all of which were related to the County's own processes and procedures, including: "the decentralized County contracting system, which affords a high level of discretion to County employees; the complexity of County contract specifications; difficulty in obtaining bonding; difficulty in obtaining financing; unnecessary bid restrictions; inefficient payment procedures; and insufficient or inefficient exchange of information." *Id.* The Eleventh Circuit found that the problems facing MBE/WBE contractors were "institutional barriers" to entry facing every new entrant into the construction market, and were perhaps affecting the MBE/WBE contractors disproportionately due to the "institutional youth" of black- and Hispanic-owned construction firms. *Id.* "It follows that those firms should be helped the most by dismantling those barriers, something the County could do at least in substantial part." *Id.*

The Eleventh Circuit noted that the race- and ethnicity-neutral options available to the County mirrored those available and cited by Justice O'Connor in Croson:

[T]he city has at its disposal a whole array of race-neutral measures to increase the accessibility of city contracting opportunities to small entrepreneurs of all races. Simplification of bidding procedures, relaxation of bonding requirements, and training and financial aid for disadvantaged entrepreneurs of all races would open the public contracting market to all those who have suffered the effects of past societal discrimination and neglect ... The city may also act to prohibit discrimination in the provision of credit or bonding by local suppliers and banks.

Id., quoting Croson, 488 U.S. at 509-10. The Eleventh Circuit found that except for some “half-hearted programs” consisting of “limited technical and financial aid that might benefit BBEs and HBEs,” the County had not “seriously considered” or tried most of the race- and ethnicity-neutral alternatives available. *Id.* at 928. “Most notably ... the County has not taken any action whatsoever to ferret out and respond to instances of discrimination if and when they have occurred in the County’s own contracting process.” *Id.*

The Eleventh Circuit found that the County had taken no steps to “inform, educate, discipline, or penalize” discriminatory misconduct by its own employees. *Id.* at 929. Nor had the County passed any local ordinances expressly prohibiting discrimination by local contractors, subcontractors, suppliers, bankers, or insurers. *Id.* “Instead of turning to race- and ethnicity-conscious remedies as a last resort, the County has turned to them as a first resort.” Accordingly, the Eleventh Circuit held that even if the BBE and HBE programs were supported by the requisite evidentiary foundation, they violated the Equal Protection Clause because they were not narrowly tailored. *Id.*

Substantial relationship. The Eleventh Circuit held that due to the relaxed “substantial relationship” standard for gender-conscious programs, if the WBE program rested upon a sufficient evidentiary foundation, it could pass the substantial relationship requirement. *Id.* However, because it did not rest upon a sufficient evidentiary foundation, the WBE program could not pass constitutional muster. *Id.*

For all of the foregoing reasons, the Eleventh Circuit affirmed the decision of the district court declaring the MBE/WBE programs unconstitutional and enjoining their continued operation.

Recent District Court Decisions

10. H.B. Rowe Corp., Inc. v. W. Lyndo Tippet, North Carolina DOT, et al; 589 F. Supp. 2d 587 (E.D.N.C. 2008), aff’d in part and rev’d in part, ___ F.3d ___ 2010 WL 2871076 (4th Cir. July 22, 2010).

In H.B. Rowe Company v. Tippet, North Carolina Department of Transportation, et al. (“Rowe”), the United States District Court for the Eastern District of North Carolina, Western Division, heard a challenge to the State of North Carolina Minority Business Enterprise and Woman Business Enterprise Program (“MBE Program” or “WBE Program”), which is a State of North Carolina “affirmative action” program administered by the North Carolina DOT (“NCDOT”). The

NCDOT MWBE Program challenged in Rowe involves projects funded solely by the State of North Carolina and not funded by the Federal Department of Transportation. 589 F.Supp. 2d 587.

Background. In this case plaintiff, a family-owned road construction business, bid on a NCDOT initiated state-funded project. NCDOT rejected plaintiff's bid in favor of the next low bid that had proposed higher minority participation on the project as part of its bid. According to NCDOT, plaintiff's bid was rejected because of plaintiff's failure to demonstrate "good faith efforts" to obtain pre-designated levels of minority participation on the project.

As a prime contractor, plaintiff Rowe was obligated under the MWBE Program to either obtain participation of specified levels of minority business enterprise and women business enterprise participation as subcontractors, or to demonstrate good faith efforts to do so. For this particular project, NCDOT had set MBE and WBE subcontractor participation goals of 10 percent and 5 percent, respectively. Plaintiff's bid included 6.6 percent WBE participation, but no MBE participation. The bid was rejected after a review of plaintiff's good faith efforts to obtain MBE participation. The next lowest bidder submitted a bid including 3.3 percent MBE participation and 9.3 percent WBE participation, and although not obtaining a specified level of MBE participation, it was determined to have made good faith efforts to do so. (Order of the District Court, dated March 29, 2007).

North Carolina's MWBE Program "largely mirrors" the Federal Disadvantage Business Enterprise ("DBE") Program, which NCDOT is required to comply with in awarding construction contracts that utilize Federal funds. (589 F.Supp. 2d 587; Order of the District Court, dated September 28, 2007). Like the Federal DBE Program, under North Carolina's MWBE Program, the goals for minority and female participation are aspirational rather than mandatory. Id. An individual target for MBE participation was set for each project. Id.

Historically, NCDOT had engaged in several disparity studies. The most recent study was done in 2004. Id. The 2004 Study, which followed the study in 1998, concluded that disparities in utilization of MBEs persist and that a basis remains for continuation of the MWBE Program. The new statute as revised was approved in 2006, which modified the previous MBE statute by eliminating the 10 percent and 5 percent goals and establishing a fixed expiration date of 2009.

Plaintiff filed its complaint in this case in 2003 against the NCDOT and individuals associated with NCDOT, including the Secretary of the NCDOT, W. Lyndo Tippett. In its complaint, plaintiff alleged that the MWBE statute for NCDOT was unconstitutional on its face and as applied. 589 F.Supp. 2d 587.

March 29, 2007 Order of the District Court. The matter came before the district court initially on several motions, including the defendants' Motion to Dismiss or for Partial Summary Judgment, defendants' Motion to Dismiss the Claim for Mootness and plaintiff's Motion for Summary Judgment. The court in its October 2007 Order granted in part and denied in part defendants' Motion to Dismiss or for partial summary judgment; denied defendants' Motion to Dismiss the Claim for Mootness; and dismissed without prejudice plaintiff's Motion for Summary Judgment.

The court held the Eleventh Amendment to the United States Constitution bars plaintiff from obtaining any relief against defendant NCDOT, and from obtaining a retrospective damages award

against any of the individual defendants in their official capacities. The court ruled that plaintiff's claims for relief against the NCDOT were barred by the Eleventh Amendment, and the NCDOT was dismissed from the case as a defendant. plaintiff's claims for interest, actual damages, compensatory damages and punitive damages against the individual defendants sued in their official capacities also was held barred by the Eleventh Amendment and were dismissed. But, the court held that plaintiff was entitled to sue for an injunction to prevent state officers from violating a federal law, and under the *Ex Parte Young* exception, plaintiff's claim for declaratory and injunctive relief was permitted to go forward as against the individual defendants who were acting in an official capacity with the NCDOT. The court also held that the individual defendants were entitled to qualified immunity, and therefore dismissed plaintiff's claim for money damages against the individual defendants in their individual capacities. Order of the District Court, dated March 29, 2007.

Defendants argued that the recent amendment to the MWBE statute rendered plaintiff's claim for declaratory injunctive relief moot. The new MWBE statute adopted in 2006, according to the court, does away with many of the alleged shortcomings argued by the plaintiff in this lawsuit. The court found the amended statute has a sunset date in 2009; specific aspirational participation goals by women and minorities are eliminated; defines "minority" as including only those racial groups which disparity studies identify as subject to underutilization in state road construction contracts; explicitly references the findings of the 2004 Disparity Study and requires similar studies to be conducted at least once every five years; and directs NCDOT to enact regulations targeting discrimination identified in the 2004 and future studies.

The court held, however, that the 2004 Disparity Study and amended MWBE statute do not remedy the primary problem which the plaintiff complained of: the use of remedial race- and gender- based preferences allegedly without valid evidence of past racial and gender discrimination. In that sense, the court held the amended MWBE statute continued to present a live case or controversy, and accordingly denied the defendants' Motion to Dismiss Claim for Mootness as to plaintiff's suit for prospective injunctive relief. Order of the District Court, dated March 29, 2007.

The court also held that since there had been no analysis of the MWBE statute apart from the briefs regarding mootness, plaintiff's pending Motion for Summary Judgment was dismissed without prejudice. Order of the District Court, dated March 29, 2007.

September 28, 2007 Order of the District Court. On September 28, 2007, the district court issued a new order in which it denied both the plaintiff's and the defendants' Motions for Summary Judgment. Plaintiff claimed that the 2004 Disparity Study is the sole basis of the MWBE statute, that the study is flawed, and therefore it does not satisfy the first prong of strict scrutiny review. Plaintiff also argued that the 2004 Study tends to prove non-discrimination in the case of women; and finally the MWBE Program fails the second prong of strict scrutiny review in that it is not narrowly tailored.

The court found summary judgment was inappropriate for either party and that there are genuine issues of material fact for trial. The first and foremost issue of material fact, according to the court, was the adequacy of the 2004 Disparity Study as used to justify the MWBE Program. Therefore, because the court found there was a genuine issue of material fact regarding the 2004 Study, summary judgment was denied on this issue.

The court also held there was confusion as to the basis of the MWBE Program, and whether it was based solely on the 2004 Study or also on the 1993 and 1998 Disparity Studies. Therefore, the court held a genuine issue of material fact existed on this issue and denied summary judgment. Order of the District Court, dated September 28, 2007.

December 9, 2008 Order of the District Court (589 F.Supp. 2d 587). The district court on December 9, 2008, after a bench trial, issued an Order that found as a fact and concluded as a matter of law that plaintiff failed to satisfy its burden of proof that the North Carolina Minority and Women's Business Enterprise program, enacted by the state legislature to affect the awarding of contracts and subcontracts in state highway construction, violated the United States Constitution.

Plaintiff, in its complaint filed against the NCDOT alleged that N.C. Gen. St. § 136-28.4 is unconstitutional on its face and as applied, and that the NCDOT while administering the MWBE program violated plaintiff's rights under the federal law and the United States Constitution. Plaintiff requested a declaratory judgment that the MWBE program is invalid and sought actual and punitive damages.

As a prime contractor, plaintiff was obligated under the MWBE program to either obtain participation of specified levels of MBE and WBE subcontractors, or to demonstrate that good faith efforts were made to do so. Following a review of plaintiff's good faith efforts to obtain minority participation on the particular contract that was the subject of plaintiff's bid, the bid was rejected. Plaintiff's bid was rejected in favor of the next lowest bid, which had proposed higher minority participation on the project as part of its bid. According to NCDOT, plaintiff's bid was rejected because of plaintiff's failure to demonstrate good faith efforts to obtain pre-designated levels of minority participation on the project. 589 F.Supp. 2d 587.

North Carolina's MWBE program. The MWBE program was implemented following amendments to N.C. Gen. Stat. §136-28.4. Pursuant to the directives of the statute, the NCDOT promulgated regulations governing administration of the MWBE program. See N.C. Admin. Code tit. 19A, § 2D.1101, et seq. The regulations had been amended several times and provide that NCDOT shall ensure that MBEs and WBEs have the maximum opportunity to participate in the performance of contracts financed with non-Federal funds. N.C. Admin. Code Tit. 19A § 2D.1101.

North Carolina's MWBE program, which affected only highway bids and contracts funded solely with state money, according to the district court, largely mirrored the Federal DBE Program which NCDOT is required to comply with in awarding construction contracts that utilize federal funds. 589 F.Supp. 2d 587. Like the Federal DBE Program, under North Carolina's MWBE program, the targets for minority and female participation were aspirational rather than mandatory, and individual targets for disadvantaged business participation were set for each individual project. N.C. Admin. Code tit. 19A § 2D.1108. In determining what level of MBE and WBE participation was appropriate for each project, NCDOT would take into account "the approximate dollar value of the contract, the geographical location of the proposed work, a number of the eligible funds in the geographical area, and the anticipated value of the items of work to be included in the contract." *Id.* NCDOT would also consider "the annual goals mandated by Congress and the North Carolina General Assembly." *Id.*

A firm could be certified as a MBE or WBE by showing NCDOT that it is “owner controlled by one or more socially and economically disadvantaged individuals.” NC Admin. Code tit. 1980, § 2D.1102.

The district court stated the MWBE program did not directly discriminate in favor of minority and women contractors, but rather “encouraged prime contractors to favor MBEs and WBEs in subcontracting before submitting bids to NCDOT.” 589 F.Supp. 2d 587. In determining whether the lowest bidder is “responsible,” NCDOT would consider whether the bidder obtained the level of certified MBE and WBE participation previously specified in the NCDOT project proposal. If not, NCDOT would consider whether the bidder made good faith efforts to solicit MBE and WBE participation. N.C. Admin. Code tit. 19A§ 2D.1108.

There were multiple studies produced and presented to the North Carolina General Assembly in the years 1993, 1998 and 2004. The 1998 and 2004 studies concluded that disparities in the utilization of minority and women contractors persist, and that there remains a basis for continuation of the MWBE program. The MWBE program as amended after the 2004 Study includes provisions that eliminated the 10 percent and 5 percent goals and instead replaced them with contract-specific participation goals created by NCDOT; established a sunset provision that has the statute expiring on August 31, 2009; and provides reliance on a disparity study produced in 2004.

The MWBE program, as it stood at the time of this decision, provides that NCDOT “dictates to prime contractors the express goal of MBE and WBE subcontractors to be used on a given project. However, instead of the state hiring the MBE and WBE subcontractors itself, the NCDOT makes the prime contractor solely responsible for vetting and hiring these subcontractors. If a prime contractor fails to hire the goal amount, it must submit efforts of ‘good faith’ attempts to do so.” 589 F.Supp. 2d 587.

Compelling interest. The district court held that NCDOT established a compelling governmental interest to have the MWBE program. The court noted that the United States Supreme Court in Croson made clear that a state legislature has a compelling interest in eradicating and remedying private discrimination in the private subcontracting inherent in the letting of road construction contracts. 589 F.Supp. 2d 587, citing Croson, 488 U.S. at 492. The district court found that the North Carolina Legislature established it relied upon a strong basis of evidence in concluding that prior race discrimination in North Carolina’s road construction industry existed so as to require remedial action.

The court held that the 2004 Disparity Study demonstrated the existence of previous discrimination in the specific industry and locality at issue. The court stated that disparity ratios provided for in the 2004 Disparity Study highlighted the underutilization of MBEs by prime contractors bidding on state funded highway projects. In addition, the court found that evidence relied upon by the legislature demonstrated a dramatic decline in the utilization of MBEs during the program’s suspension in 1991. The court also found that anecdotal support relied upon by the legislature confirmed and reinforced the general data demonstrating the underutilization of MBEs. The court held that the NCDOT established that, “based upon a clear and strong inference raised by this Study, they concluded minority contractors suffer from the lingering effects of racial discrimination.” 589 F.Supp. 2d 587.

With regard to WBEs, the court applied a different standard of review. The court held the legislative scheme as it relates to MWBEs must serve an important governmental interest and must be substantially related to the achievement of those objectives. The court found that NCDOT established an important governmental interest. The 2004 Disparity Study provided that the average contracts awarded WBEs are significantly smaller than those awarded non-WBEs. The court held that NCDOT established based upon a clear and strong inference raised by the Study, women contractors suffer from past gender discrimination in the road construction industry.

Narrowly tailored. The district court noted that the Fourth Circuit of Appeals lists a number of factors to consider in analyzing a statute for narrow tailoring: (1) the necessity of the policy and the efficacy of alternative race neutral policies; (2) the planned duration of the policy; (3) the relationship between the numerical goal and the percentage of minority group members in the relevant population; (4) the flexibility of the policy, including the provision of waivers if the goal cannot be met; and (5) the burden of the policy on innocent third parties. 589 F.Supp. 2d 587, quoting Belk v. Charlotte-Mecklenburg Board of Education, 269 F.3d 305, 344 (4th Cir. 2001).

The district court held that the legislative scheme in N.C. Gen. Stat. § 136-28.4 is narrowly tailored to remedy private discrimination of minorities and women in the private subcontracting inherent in the letting of road construction contracts. The district court's analysis focused on narrowly tailoring factors (2) and (4) above, namely the duration of the policy and the flexibility of the policy. With respect to the former, the court held the legislative scheme provides the program be reviewed at least every five years to revisit the issue of utilization of MWBEs in the road construction industry. N.C. Gen. Stat. §136-28.4(b). Further, the legislative scheme includes a sunset provision so that the program will expire on August 31, 2009, unless renewed by an act of the legislature. Id. at § 136-28.4(e). The court held these provisions ensured the legislative scheme last no longer than necessary.

The court also found that the legislative scheme enacted by the North Carolina legislature provides flexibility insofar as the participation goals for a given contract or determined on a project by project basis. § 136-28.4(b)(1). Additionally, the court found the legislative scheme in question is not overbroad because the statute applies only to "those racial or ethnicity classifications identified by a study conducted in accordance with this section that had been subjected to discrimination in a relevant marketplace and that had been adversely affected in their ability to obtain contracts with the Department." § 136-28.4(c)(2). The court found that plaintiff failed to provide any evidence that indicates minorities from non-relevant racial groups had been awarded contracts as a result of the statute.

The court held that the legislative scheme is narrowly tailored to remedy private discrimination of minorities and women in the private subcontracting inherent in the letting of road construction contracts, and therefore found that § 136-28.4 is constitutional.

The decision of the district court was appealed to the United States Court of Appeals for the Fourth Circuit. The Fourth Circuit affirmed in part and reversed in part the decision of the District Court. H. B. Rowe Co., Inc. v. W. Lyndo Tippet, NCDOT, et al, F.3d 2010 WL 2871076 (4th Cir. July 22, 2010) discussed above.

11. Thomas v. City of Saint Paul, 526 F. Supp. 2d 959 (D. Minn 2007), affirmed, 2009 WL 777932 (8th Cir. March 26, 2009) (unpublished opinion)

In Thomas v. City of Saint Paul, the plaintiffs are African American business owners who brought this lawsuit claiming that the City of Saint Paul, Minnesota discriminated against them in awarding publicly-funded contracts. The City moved for summary judgment, which the United States district court granted and issued an order dismissing the plaintiff's lawsuit in December 2007.

The background of the case involves the adoption by the City of Saint Paul of a Vendor Outreach Program (the "VOP") that was designed to assist minority and other small business owners in competing for City contracts. Plaintiffs were VOP-certified minority business owners. Plaintiffs contended that the City engaged in racially discriminatory illegal conduct in awarding City contracts for publicly-funded projects. Plaintiff Thomas claimed that the City denied him opportunities to work on projects because of his race arguing that the City failed to invite him to bid on certain projects, the City failed to award him contracts and the fact independent developers had not contracted with his company. 526 F. Supp. 2d at 962. The City contended that Thomas was provided opportunities to bid for the City's work.

Plaintiff Brian Conover owned a trucking firm, and he claimed that none of his bids as a subcontractor on 22 different projects to various independent developers were accepted. 526 F. Supp. 2d at 962. The court found that after years of discovery, plaintiff Conover offered no admissible evidence to support his claim, had not identified the subcontractors whose bids were accepted, and did not offer any comparison showing the accepted bid and the bid he submitted. Id. Plaintiff Conover also complained that he received bidding invitations only a few days before a bid was due, which did not allow him adequate time to prepare a competitive bid. Id. The court found, however, that he failed to identify any particular project for which he had only a single day of bid, and did not identify any similar situated person of any race who was afforded a longer period of time in which to submit a bid. Id. at 963. Plaintiff Newell claimed he submitted numerous bids on the City's projects all of which were rejected. Id. The court found, however, that he provided no specifics about why he did not receive the work. Id.

The VOP. Under the VOP, the City sets annual bench marks or levels of participation for the targeted minorities groups. Id. at 963. The VOP prohibits quotas and imposes various "good faith" requirements on prime contractors who bid for City projects. Id. at 964. In particular, the VOP requires that when a prime contractor rejects a bid from a VOP-certified business, the contractor must give the City its basis for the rejection, and evidence that the rejection was justified. Id. The VOP further imposes obligations on the City with respect to vendor contracts. Id. The court found the City must seek where possible and lawful to award a portion of vendor contracts to VOP-certified businesses. Id. The City contract manager must solicit these bids by phone, advertisement in a local newspaper or other means. Where applicable, the contract manager may assist interested VOP participants in obtaining bonds, lines of credit or insurance required to perform under the contract. Id. The VOP ordinance provides that when the contract manager engages in one or more possible outreach efforts, he or she is in compliance with the ordinance. Id.

Analysis and Order of the Court. The district court found that the City is entitled to Summary Judgment because plaintiffs lack standing to bring these claims and that no genuine issue of material

fact remains. Id. at 965. The court held that the plaintiffs had no standing to challenge the VOP because they failed to show they were deprived of an opportunity to compete, or that their inability to obtain any contract resulted from an act of discrimination. Id. The court found they failed to show any instance in which their race was a determinant in the denial of any contract. Id. at 966. As a result, the court held plaintiffs failed to demonstrate the City engaged in discriminatory conduct or policy which prevented plaintiffs from competing. Id. at 965-966.

The court held that in the absence of any showing of intentional discrimination based on race, the mere fact the City did not award any contracts to plaintiffs does not furnish that causal nexus necessary to establish standing. Id. at 966. The court held the law does not require the City to voluntarily adopt “aggressive race-based affirmative action programs” in order to award specific groups publicly-funded contracts. Id. at 966. The court found that plaintiffs had failed to show a violation of the VOP ordinance, or any illegal policy or action on the part of the City. Id.

The court stated that the plaintiffs must identify a discriminatory policy in effect. Id. at 966. The court noted, for example, even assuming the City failed to give plaintiffs more than one day’s notice to enter a bid, such a failure is not, per se, illegal. Id. The court found the plaintiffs offered no evidence that anyone else of any other race received an earlier notice, or that he was given this allegedly tardy notice as a result of his race. Id.

The court concluded that even if plaintiffs may not have been hired as a subcontractor to work for prime contractors receiving City contracts, these were independent developers and the City is not required to defend the alleged bad acts of others. Id. Therefore, the court held plaintiffs had no standing to challenge the VOP. Id. at 966.

Plaintiffs claims. The court found that even assuming plaintiffs possessed standing, they failed to establish facts which demonstrated a need for a trial, primarily because each theory of recovery is viable only if the City “intentionally” treated plaintiffs unfavorably because of their race. Id. at 967. The court held to establish a prima facie violation of the equal protection clause, there must be state action. Id. Plaintiffs must offer facts and evidence that constitute proof of “racially discriminatory intent or purpose.” Id. at 967. Here, the court found that plaintiff failed to allege any single instance showing the City “intentionally” rejected VOP bids based on their race. Id.

Court also found that plaintiffs offered no evidence of a specific time when any one of them submitted the lowest bid for a contract or a subcontract, or showed any case where their bids were rejected on the basis of race. Id. The court held the alleged failure to place minority contractors in a preferred position, without more, is insufficient to support a finding that the City failed to treat them equally based upon their race. Id.

The City rejected the plaintiffs claims of discrimination because the plaintiffs did not establish by evidence that the City “intentionally” rejected their bid due to race or that the City “intentionally” discriminated against these plaintiffs. Id. at 967-968. The court held that the plaintiffs did not establish a single instance showing the City deprived them of their rights, and the plaintiffs did not produce evidence of a “discriminatory motive.” Id. at 968. The court concluded that plaintiffs had failed to show that the City’s actions were “racially motivated.” Id.

The Eight Circuit Court of Appeals recently affirmed the ruling of the district court. Thomas v. City of Saint Paul, 2009 WL 777932 (8th Cir. March 26, 2009)(unpublished opinion). The Eighth Circuit affirmed based on the decision of the district court and finding no reversible error.

12. Thompson Building Wrecking Co. v. Augusta, Georgia, No. 1:07CV019, 2007 WL 926153 (S.D. Ga. Mar. 14, 2007)(Slip. Op.)

This case considered the validity of the City of Augusta’s local minority disadvantaged business enterprise (“DBE”) program. The district court enjoined the City from favoring any contract bid on the basis of racial classification and based its decision principally upon the outdated and insufficient data proffered by the City in support of its program. 2007 WL 926153 at *9-10.

The City of Augusta enacted a local DBE program based upon the results of a disparity study completed in 1994. The disparity study examined the disparity in socioeconomic status among races, compared black-owned businesses in Augusta with those in other regions and those owned by other racial groups, examined “Georgia’s racist history” in contracting and procurement, and examined certain data related to Augusta’s contracting and procurement. Id. at *1-4. The plaintiff contractors and subcontractors challenged the constitutionality of the DBE program and sought to extend a temporary injunction enjoining the City’s implementation of racial preferences in public bidding and procurement.

The City defended the DBE program arguing that it did not utilize racial classifications because it only required vendors to make a “good faith effort” to ensure DBE participation. Id. at *6. The court rejected this argument noting that bidders were required to submit a “Proposed DBE Participation” form and that bids containing DBE participation were treated more favorably than those bids without DBE participation. The court stated: “Because a person’s business can qualify for the favorable treatment based on that person’s race, while a similarly situated person of another race would not qualify, the program contains a racial classification.” Id.

The court noted that the DBE program harmed subcontractors in two ways: first, because prime contractors will discriminate between DBE and non-DBE subcontractors and a bid with a DBE subcontractor would be treated more favorably; and second, because the City would favor a bid containing DBE participation over an equal or even superior bid containing no DBE participation. Id.

The court applied the strict scrutiny standard set forth in Croson and Engineering Contractors Association to determine whether the City had a compelling interest for its program and whether the program was narrowly tailored to that end. The court noted that pursuant to Croson, the City would have a compelling interest in assuring that tax dollars would not perpetuate private prejudice. But, the court found (citing to Croson), that a state or local government must identify that discrimination, “public or private, with some specificity before they may use race-conscious relief.” The court cited the Eleventh Circuit’s position that “‘gross statistical disparities’ between the proportion of minorities hired by the public employer and the proportion of minorities hired by the public employer and the proportion of minorities willing and able to work” may justify an affirmative action program. Id. at *7. The court also stated that anecdotal evidence is relevant to the analysis.

The court determined that while the City’s disparity study showed some statistical disparities buttressed by anecdotal evidence, the study suffered from multiple issues. Id. at *7-8. Specifically, the

court found that those portions of the study examining discrimination outside the area of subcontracting (e.g., socioeconomic status of racial groups in the Augusta area) were irrelevant for purposes of showing a compelling interest. The court also cited the failure of the study to differentiate between different minority races as well as the improper aggregation of race- and gender-based discrimination referred to as Simpson's Paradox.

The court assumed for purposes of its analysis that the City could show a compelling interest but concluded that the program was not narrowly tailored and thus could not satisfy strict scrutiny. The court found that it need look no further beyond the fact of the thirteen-year duration of the program absent further investigation, and the absence of a sunset or expiration provision, to conclude that the DBE program was not narrowly tailored. *Id.* at *8. Noting that affirmative action is permitted only sparingly, the court found: "[i]t would be impossible for Augusta to argue that, 13 years after last studying the issue, racial discrimination is so rampant in the Augusta contracting industry that the City must affirmatively act to avoid being complicit." *Id.* The court held in conclusion, that the plaintiffs were "substantially likely to succeed in proving that, when the City requests bids with minority participation and in fact favors bids with such, the plaintiffs will suffer racial discrimination in violation of the Equal Protection Clause." *Id.* at *9.

In a subsequent Order dated September 5, 2007, the court denied the City's motion to continue plaintiff's Motion for Summary Judgment, denied the City's Rule 12(b)(6) motion to dismiss, and stayed the action for 30 days pending mediation between the parties. Importantly, in this Order, the court reiterated that the female- and locally-owned business components of the program (challenged in plaintiff's Motion for Summary Judgment) would be subject to intermediate scrutiny and rational basis scrutiny, respectively. The court also reiterated its rejection of the City's challenge to the plaintiffs' standing. The court noted that under *Adarand*, preventing a contractor from competing on an equal footing satisfies the particularized injury prong of standing. And showing that the contractor will sometime in the future bid on a City contract "that offers financial incentives to a prime contractor for hiring disadvantaged subcontractors" satisfies the second requirement that the particularized injury be actual or imminent. Accordingly, the court concluded that the plaintiffs have standing to pursue this action.

13. Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County, 333 F. Supp. 2d 1305 (S.D. Fla. 2004)

The decision in Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County, is significant to the disparity study because it applied and followed the Engineering Contractors Association decision in the context of contracting and procurement for goods and services (including architect and engineer services). Many of the other cases focused on construction, and thus Hershell Gill is instructive as to the analysis relating to architect and engineering services. The decision in Hershell Gill also involved a district court in the Eleventh Circuit imposing compensatory and punitive damages upon individual County Commissioners due to the district court's finding of their willful failure to abrogate an unconstitutional MBE/WBE Program. In addition, the case is noteworthy because the district court refused to follow the 2003 Tenth Circuit Court of Appeals decision in Concrete Works of Colorado, Inc. v. City and County of Denver, 321 F.3d 950 (10th Cir. 2003). See discussion, *infra*.

Six years after the decision in Engineering Contractors Association, two white male-owned engineering firms (the "plaintiffs") brought suit against Engineering Contractors Association (the

“County”), the former County Manager, and various current County Commissioners (the “Commissioners”) in their official and personal capacities (collectively the “defendants”), seeking to enjoin the same “participation goals” in the same MWBE program deemed to violate the Fourteenth Amendment in the earlier case. 333 F. Supp. 1305, 1310 (S.D. Fla. 2004). After the Eleventh Circuit’s decision in Engineering Contractors Association striking down the MWBE programs as applied to construction contracts, the County enacted a Community Small Business Enterprise (CSBE) program for construction contracts, “but continued to apply racial, ethnic, and gender criteria to its purchases of goods and services in other areas, including its procurement of A&E services.” Id. at 1311.

The plaintiffs brought suit challenging the Black Business Enterprise (BBE) program, the Hispanic Business Enterprise (HBE) program, and the Women Business Enterprise (WBE) program (collectively “MBE/WBE”). Id. The MBE/WBE programs applied to A&E contracts in excess of \$25,000. Id. at 1312. The County established five “contract measures” to reach the participation goals: (1) set asides, (2) subcontractor goals, (3) project goals, (4) bid preferences, and (5) selection factors. Id. Once a contract was identified as covered by a participation goal, a review committee would determine whether a contract measure should be utilized. Id. The County was required to review the efficacy of the MBE/WBE programs annually, and reevaluated the continuing viability of the MBE/WBE programs every five years. Id. at 1313. However, the district court found “the participation goals for the three MBE/WBE programs challenged ... remained unchanged since 1994.” Id.

In 1998, counsel for plaintiffs contacted the County Commissioners requesting the discontinuation of contract measures on A&E contracts. Id. at 1314. Upon request of the Commissioners, the county manager then made two reports (an original and a follow-up) measuring parity in terms of dollars awarded and dollars paid in the areas of A&E for blacks, Hispanics, and women, and concluded both times that the “County has reached parity for Black, Hispanic, and Women-owned firms in the areas of [A&E] services.” The final report further stated “Based on all the analyses that have been performed, the County does not have a basis for the establishment of participation goals which would allow staff to apply contract measures.” Id. at 1315. The district court also found that the Commissioners were informed that “there was even less evidence to support [the MBE/WBE] programs as applied to architects and engineers than there was in contract construction.” Id. Nonetheless, the Commissioners voted to continue the MBE/WBE participation goals at their previous levels. Id.

In May of 2000 (18 months after the lawsuit was filed), the County commissioned Dr. Manuel J. Carvajal, an econometrician, to study architects and engineers in the county. His final report had four parts:

- (1) data identification and collection of methodology for displaying the research results;
- (2) presentation and discussion of tables pertaining to architecture, civil engineering, structural engineering, and awards of contracts in those areas;
- (3) analysis of the structure and empirical estimates of various sets of regression equations, the calculation of corresponding indices, and an assessment of their importance; and
- (4) a conclusion that there is discrimination against women and Hispanics — but not against blacks — in the fields of architecture and engineering. Id.

The district court issued a preliminary injunction enjoining the use of the MBE/WBE programs for A&E contracts, pending the United States Supreme Court decisions in Gratz v. Bollinger, 539 U.S. 244 (2003) and Grutter v. Bollinger, 539 U.S. 306 (2003). Id. at 1316.

The court considered whether the MBE/WBE programs were violative of Title VII of the Civil Rights Act, and whether the County and the County Commissioners were liable for compensatory and punitive damages.

The district court found that the Supreme Court decisions in Gratz and Grutter did not alter the constitutional analysis as set forth in Adarand and Croson. Id. at 1317. Accordingly, the race- and ethnicity-based classifications were subject to strict scrutiny, meaning the County must present “a strong basis of evidence” indicating the MBE/WBE program was necessary and that it was narrowly tailored to its purported purpose. Id. at 1316. The gender-based classifications were subject to intermediate scrutiny, requiring the County to show the “gender-based classification serves an important governmental objective, and that it is substantially related to the achievement of that objective.” Id. at 1317 (internal citations omitted). The court found that the proponent of a gender-based affirmative action program must present “sufficient probative evidence” of discrimination. Id. (internal citations omitted). The court found that under the intermediate scrutiny analysis, the County must (1) demonstrate past discrimination against women but not necessarily at the hands of the County, and (2) that the gender-conscious affirmative action program need not be used only as a “last resort.” Id.

The County presented both statistical and anecdotal evidence. Id. at 1318. The statistical evidence consisted of Dr. Carvajal’s report, most of which consisted of “post-enactment” evidence. Id. Dr. Carvajal’s analysis sought to discover the existence of racial, ethnic and gender disparities in the A&E industry, and then to determine whether any such disparities could be attributed to discrimination. Id. The study used four data sets: three were designed to establish the marketplace availability of firms (architecture, structural engineering, and civil engineering), and the fourth focused on awards issued by the County. Id. Dr. Carvajal used the phone book, a list compiled by infoUSA, and a list of firms registered for technical certification with the County’s Department of Public Works to compile a list of the “universe” of firms competing in the market. Id. For the architectural firms only, he also used a list of firms that had been issued an architecture professional license. Id.

Dr. Carvajal then conducted a phone survey of the identified firms. Based on his data, Dr. Carvajal concluded that disparities existed between the percentage of A&E firms owned by blacks, Hispanics, and women, and the percentage of annual business they received. Id. Dr. Carvajal conducted regression analyses “in order to determine the effect a firm owner’s gender or race had on certain dependent variables.” Id. Dr. Carvajal used the firm’s annual volume of business as a dependent variable and determined the disparities were due in each case to the firm’s gender and/or ethnic classification. Id. at 1320. He also performed variants to the equations including: (1) using certification rather than survey data for the experience / capacity indicators, (2) with the outliers deleted, (3) with publicly owned firms deleted, (4) with the dummy variables reversed, and (5) using only currently certified firms.” Id. Dr. Carvajal’s results remained substantially unchanged. Id.

Based on his analysis of the marketplace data, Dr. Carvajal concluded that the “gross statistical disparities” in the annual business volume for Hispanic- and women-owned firms could be attributed to discrimination; he “did not find sufficient evidence of discrimination against blacks.” Id.

The court held that Dr. Carvajal's study constituted neither a "strong basis in evidence" of discrimination necessary to justify race- and ethnicity-conscious measures, nor did it constitute "sufficient probative evidence" necessary to justify the gender-conscious measures. Id. The court made an initial finding that no disparity existed to indicate underutilization of MBE/WBEs in the award of A&E contracts by the County, nor was there underutilization of MBE/WBEs in the contracts they were awarded. Id. The court found that an analysis of the award data indicated, "[i]f anything, the data indicates an overutilization of minority-owned firms by the County in relation to their numbers in the marketplace." Id.

With respect to the marketplace data, the County conceded that there was insufficient evidence of discrimination against blacks to support the BBE program. Id. at 1321. With respect to the marketplace data for Hispanics and women, the court found it "unreliable and inaccurate" for three reasons: (1) the data failed to properly measure the geographic market, (2) the data failed to properly measure the product market, and (3) the marketplace data survey was unreliable. Id. at 1321-25.

The court ruled that it would not follow the Tenth Circuit decision of Concrete Works of Colorado, Inc. v. City and County of Denver, 321 F.3d 950 (10th Cir. 2003), as the burden of proof enunciated by the Tenth Circuit conflicts with that of the Eleventh Circuit, and the "Tenth Circuit's decision is flawed for the reasons articulated by Justice Scalia in his dissent from the denial of certiorari." Id. at 1325 (internal citations omitted).

The defendant intervenors presented anecdotal evidence pertaining only to discrimination against women in the County's A&E industry. Id. The anecdotal evidence consisted of the testimony of three A&E professional women, "nearly all" of which was related to discrimination in the award of County contracts. Id. at 1326. However, the district court found that the anecdotal evidence contradicted Dr. Carvajal's study indicating that no disparity existed with respect to the award of County A&E contracts. Id.

The court quoted the Eleventh Circuit in Engineering Contractors Association for the proposition "that only in the rare case will anecdotal evidence suffice standing alone." Id. (internal citations omitted). The court held that "[t]his is not one of those rare cases." The district court concluded that the statistical evidence was "unreliable and fail[ed] to establish the existence of discrimination," and the anecdotal evidence was insufficient as it did not even reach the level of anecdotal evidence in Engineering Contractors Association where the County employees themselves testified. Id.

The court made an initial finding that a number of minority groups provided preferential treatment were in fact majorities in the County in terms of population, voting capacity, and representation on the County Commission. Id. at 1326-1329. For purposes only of conducting the strict scrutiny analysis, the court then assumed that Dr. Carvajal's report demonstrated discrimination against Hispanics (note the County had conceded it had insufficient evidence of discrimination against blacks) and sought to determine whether the HBE program was narrowly tailored to remedying that discrimination. Id. at 1330. However, the court found that because the study failed to "identify who is engaging in the discrimination, what form the discrimination might take, at what stage in the process it is taking place, or how the discrimination is accomplished ... it is virtually impossible to narrowly tailor any remedy, and the HBE program fails on this fact alone." Id.

The court found that even after the County Managers informed the Commissioners that the County had reached parity in the A&E industry, the Commissioners declined to enact a CSBE ordinance, a race-neutral measure utilized in the construction industry after Engineering Contractors Association. Id. Instead, the Commissioners voted to continue the HBE program. Id. The court held that the County's failure to even explore a program similar to the CSBE ordinance indicated that the HBE program was not narrowly tailored. Id. at 1331.

The court also found that the County enacted a broad anti-discrimination ordinance imposing harsh penalties for a violation thereof. Id. However, "not a single witness at trial knew of any instance of a complaint being brought under this ordinance concerning the A&E industry," leading the court to conclude that the ordinance was either not being enforced, or no discrimination existed. Id. Under either scenario, the HBE program could not be narrowly tailored. Id.

The court found the waiver provisions in the HBE inflexible in practice. Id. Additionally, the court found the County had failed to comply with the provisions in the HBE program requiring adjustment of participation goals based on annual studies, because the County had not in fact conducted annual studies for several years. Id. The court found this even "more problematic" because the HBE program did not have a built-in durational limit, and thus blatantly violated Supreme Court jurisprudence requiring that racial and ethnic preferences "must be limited in time." Id. at 1332, citing Grutter, 123 S. Ct. at 2346. For the foregoing reasons, the court concluded the HBE program was not narrowly tailored. Id. at 1332.

With respect to the WBE program, the court found that "the failure of the County to identify who is discriminating and where in the process the discrimination is taking place indicates (though not conclusively) that the WBE program is not substantially related to eliminating that discrimination." Id. at 1333. The court found that the existence of the anti-discrimination ordinance, the refusal to enact a small business enterprise ordinance, and the inflexibility in setting the participation goals rendered the WBE unable to satisfy the substantial relationship test. Id.

The court held that the County was liable for any compensatory damages. Id. at 1333-34. The court held that the Commissioners had absolute immunity for their legislative actions; however, they were not entitled to qualified immunity for their actions in voting to apply the race-, ethnicity-, and gender-conscious measures of the MBE/WBE programs if their actions violated "clearly established statutory or constitutional rights of which a reasonable person would have known ... Accordingly, the question is whether the state of the law at the time the Commissioners voted to apply [race-, ethnicity-, and gender-conscious measures] gave them 'fair warning' that their actions were unconstitutional." Id. at 1335-36 (internal citations omitted).

The court held that the Commissioners were not entitled to qualified immunity because they "had before them at least three cases that gave them fair warning that their application of the MBE/WBE programs ... were unconstitutional: Croson, Adarand and [Engineering Contractors Association]." Id. at 1137. The court found that the Commissioners voted to apply the contract measures after the Supreme Court decided both Croson and Adarand. Id. Moreover, the Eleventh Circuit had already struck down the construction provisions of the same MBE/WBE programs. Id. Thus, the case law was "clearly established" and gave the Commissioners fair warning that the MBE/WBE programs were unconstitutional. Id.

The court also found the Commissioners had specific information from the County Manager and other internal studies indicating the problems with the MBE/WBE programs and indicating that parity had been achieved. *Id.* at 1338. Additionally, the Commissioners did not conduct the annual studies mandated by the MBE/WBE ordinance itself. *Id.* For all the foregoing reasons, the court held the Commissioners were subject to individual liability for any compensatory and punitive damages.

The district court enjoined the County, the Commissioners, and the County Manager from using, or requiring the use of, gender, racial, or ethnic criteria in deciding (1) whether a response to an RFP submitted for A&E work is responsive, (2) whether such a response will be considered, and (3) whether a contract will be awarded to a consultant submitting such a response. The court awarded the plaintiffs \$100 each in nominal damages and reasonable attorneys' fees and costs, for which it held the County and the Commissioners jointly and severally liable.

14. Florida A.G.C. Council, Inc. v. State of Florida, 303 F. Supp. 2d 1307 (N.D. Fla. 2004)

This case is instructive to the disparity study as to the manner in which district courts within the Eleventh Circuit are interpreting and applying Engineering Contractors Association. It is also instructive in terms of the type of legislation to be considered by the local and state governments as to what the courts consider to be a "race-conscious" program and/or legislation, as well as to the significance of the implementation of the legislation to the analysis.

The plaintiffs, A.G.C. Council, Inc. and the South Florida Chapter of the Associated General Contractors brought this case challenging the constitutionality of certain provisions of a Florida statute (Section 287.09451, *et seq.*). The plaintiffs contended that the statute violated the Equal Protection Clause of the Fourteenth Amendment by instituting race- and gender-conscious "preferences" in order to increase the numeric representation of minority business enterprises ("MBEs") in certain industries.

According to the court, the Florida Statute enacted race-conscious and gender-conscious remedial programs to ensure minority participation in state contracts for the purchase of commodities and in construction contracts. The State created the Office of Supplier Diversity ("OSD") to assist MBEs to become suppliers of commodities, services and construction to the state government. The OSD had certain responsibilities, including adopting rules meant to assess whether state agencies have made good faith efforts to solicit business from MBEs, and to monitor whether contractors have made good faith efforts to comply with the objective of greater overall MBE participation.

The statute enumerated measures that contractors should undertake, such as minority-centered recruitment in advertising as a means of advancing the statute's purpose. The statute provided that each State agency is "encouraged" to spend 21 percent of the monies actually expended for construction contracts, 25 percent of the monies actually expended for architectural and engineering contracts, 24 percent of the monies actually expended for commodities and 50.5 percent of the monies actually expended for contractual services during the fiscal year for the purpose of entering into contracts with certified MBEs. The statute also provided that state agencies are allowed to allocate certain percentages for black Americans, Hispanic Americans and for American women, and the goals are broken down by construction contracts, architectural and engineering contracts, commodities and contractual services.

The State took the position that the spending goals were “precatory.” The court found that the plaintiffs had standing to maintain the action and to pursue prospective relief. The court held that the statute was unconstitutional based on the finding that the spending goals were not narrowly tailored to achieve a governmental interest. The court did not specifically address whether the articulated reasons for the goals contained in the statute had sufficient evidence, but instead found that the articulated reason would, “if true,” constitute a compelling governmental interest necessitating race-conscious remedies. Rather than explore the evidence, the court focused on the narrowly tailored requirement and held that it was not satisfied by the State.

The court found that there was no evidence in the record that the State contemplated race-neutral means to accomplish the objectives set forth in Section 287.09451 *et seq.*, such as “simplification of bidding procedures, relaxation of bonding requirements, training or financial aid for disadvantaged entrepreneurs of all races [which] would open the public contracting market to all those who have suffered the effects of past discrimination.” Florida A.G.C. Council, 303 F.Supp.2d at 1315, quoting Eng’g Contractors Ass’n, 122 F.3d at 928, quoting Croson, 488 U.S. at 509-10.

The court noted that defendants did not seem to disagree with the report issued by the State of Florida Senate that concluded there was little evidence to support the spending goals outlined in the statute. Rather, the State of Florida argued that the statute is “permissive.” The court, however, held that “there is no distinction between a statute that is precatory versus one that is compulsory when the challenged statute ‘induces an employer to hire with an eye toward meeting ... [a] numerical target.’ Florida A.G.C. Council, 303 F.Supp.2d at 1316.

The court found that the State applies pressure to State agencies to meet the legislative objectives of the statute extending beyond simple outreach efforts. The State agencies, according to the court, were required to coordinate their MBE procurement activities with the OSD, which includes adopting a MBE utilization plan. If the State agency deviated from the Utilization Plan in two consecutive and three out of five total fiscal years, then the OSD could review any and all solicitations and contract awards of the agency as deemed necessary until such time as the agency met its utilization plan. The court held that based on these factors, although alleged to be “permissive,” the statute textually was not.

Therefore, the court found that the statute was not narrowly tailored to serve a compelling governmental interest, and consequently violated the Equal Protection Clause of the Fourteenth Amendment.

15. Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore, 218 F. Supp. 2d 749 (D. Md. 2002)

This case is instructive because the court found the Executive Order of the Mayor of the City of Baltimore was precatory in nature (creating no legal obligation or duty) and contained no enforcement mechanism or penalties for noncompliance and imposed no substantial restrictions; the Executive Order announced goals that were found to be aspirational only.

The Associated Utility Contractors of Maryland, Inc. (“AUC”) sued the City of Baltimore challenging its ordinance providing for minority- and women-owned business enterprise (“MWBE”) participation in city contracts. Previously, an earlier City of Baltimore MWBE program was declared

unconstitutional. Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore, 83 F. Supp. 2d 613 (D. Md. 2000). The City adopted a new ordinance that provided for the establishment of MWBE participation goals on a contract-by-contract basis, and made several other changes from the previous MWBE program declared unconstitutional in the earlier case.

In addition, the Mayor of the City of Baltimore issued an Executive Order that announced a goal of awarding 35 percent of all City contracting dollars to MBE/WBEs. The court found this goal of 35 percent participation was aspirational only and the Executive Order contained no enforcement mechanism or penalties for noncompliance. The Executive Order also specified many “noncoercive” outreach measures to be taken by the City agencies relating to increasing participation of MBE/WBEs. These measures were found to be merely aspirational and no enforcement mechanism was provided.

The court addressed in this case only a motion to dismiss filed by the City of Baltimore arguing that the Associated Utility Contractors had no standing. The court denied the motion to dismiss holding that the association had standing to challenge the new MBE/WBE ordinance, although the court noted that it had significant issues with the AUC having representational standing because of the nature of the MBE/WBE plan and the fact the AUC did not have any of its individual members named in the suit. The court also held that the AUC was entitled to bring an as applied challenge to the Executive Order of the Mayor, but rejected it having standing to bring a facial challenge based on a finding that it imposes no requirement, creates no sanctions, and does not inflict an injury upon any member of the AUC in any concrete way. Therefore, the Executive Order did not create a “case or controversy” in connection with a facial attack. The court found the wording of the Executive Order to be precatory and imposing no substantive restrictions.

After this decision the City of Baltimore and the AUC entered into a settlement agreement and a dismissal with prejudice of the case. An order was issued by the court on October 22, 2003 dismissing the case with prejudice.

16. Kornhass Construction, Inc. v. State of Oklahoma, Department of Central Services, 140 F.Supp.2d 1232 (W.D. OK. 2001)

Plaintiffs, non-minority contractors, brought this action against the State of Oklahoma challenging minority bid preference provisions in the Oklahoma Minority Business Enterprise Assistance Act (“MBE Act”). The Oklahoma MBE Act established a bid preference program by which certified minority business enterprises are given favorable treatment on competitive bids submitted to the state. 140 F.Supp.2d at 1235–36. Under the MBE Act, the bids of non-minority contractors were raised by 5 percent, placing them at a competitive disadvantage according to the district court. *Id.* at 1235–1236.

The named plaintiffs bid on state contracts in which their bids were increased by 5 percent as they were non-minority business enterprises. Although the plaintiffs actually submitted the lowest dollar bids, once the 5 percent factor was applied, minority bidders became the successful bidders on certain contracts. 140 F.Supp. at 1237.

In determining the constitutionality or validity of the Oklahoma MBE Act, the district court was guided in its analysis by the Tenth Circuit Court of Appeals decision in Adarand Constructors, Inc.

v. Slater, 288 F.3d 1147 (10th Cir. 2000) (“*Adarand VII*”). The district court pointed out that in *Adarand VII*, the Tenth Circuit found compelling evidence of barriers to both minority business formation and existing minority businesses. *Id.* at 1238. In sum, the district court noted that the Tenth Circuit concluded that the Government had met its burden of presenting a strong basis in evidence sufficient to support its articulated, constitutionally valid, compelling interest. 140 F.Supp. 2d at 1239, citing *Adarand VII*, 228 F.3d 1147, 1174.

Compelling state interest. The district court, following *Adarand VII*, applied the strict scrutiny analysis, arising out of the Fourteenth Amendment’s Equal Protection Clause, in which a race-based affirmative action program withstands strict scrutiny only if it is narrowly tailored to serve a compelling governmental interest. *Id.* at 1239. The district court pointed out that it is clear from Supreme Court precedent, there may be a compelling interest sufficient to justify race-conscious affirmative action measures. *Id.* The Fourteenth Amendment permits race-conscious programs that seek both to eradicate discrimination by the governmental entity itself and to prevent the governmental entity from becoming a “passive participant” in a system of racial exclusion practiced by private businesses. *Id.* at 1240. Therefore, the district court concluded that both the federal and state governments have a compelling interest assuring that public dollars do not serve to finance the evil of private prejudice. *Id.*

The district court stated that a “mere statistical disparity in the proportion of contracts awarded to a particular group, standing alone, does not demonstrate the evil of private or public racial prejudice.” *Id.* Rather, the court held that the “benchmark for judging the adequacy of a state’s factual predicate for affirmative action legislation is whether there exists a strong basis in the evidence of the state’s conclusion that remedial action was necessary.” *Id.* The district court found that the Supreme Court made it clear that the state bears the burden of demonstrating a strong basis in evidence for its conclusion that remedial action was necessary by proving either that the state itself discriminated in the past or was “a passive participant” in private industry’s discriminatory practices. *Id.* at 1240, citing to *Associated General Contractors of Ohio, Inc. v. Drabik*, 214 F.3d 730, 735 (6th Cir. 2000) and *City of Richmond v. J.A. Croson Company*, 488 U.S. 469 at 486-492 (1989).

With this background, the State of Oklahoma stated that its compelling state interest “is to promote the economy of the State and to ensure that minority business enterprises are given an opportunity to compete for state contracts.” *Id.* at 1240. Thus, the district court found the State admitted that the MBE Act’s bid preference “is not based on past discrimination,” rather, it is based on a desire to “encourag[e] economic development of minority business enterprises which in turn will benefit the State of Oklahoma as a whole.” *Id.* In light of *Adarand VII*, and prevailing Supreme Court case law, the district court found that this articulated interest is not “compelling” in the absence of evidence of past or present racial discrimination. *Id.*

The district court considered testimony presented by Intervenors who participated in the case for the defendants and asserted that the Oklahoma legislature conducted an interim study prior to adoption of the MBE Act, during which testimony and evidence were presented to members of the Oklahoma Legislative Black Caucus and other participating legislators. The study was conducted more than 14 years prior to the case and the Intervenors did not actually offer any of the evidence to the court in this case. The Intervenors submitted an affidavit from the witness who serves as the Title VI Coordinator for the Oklahoma Department of Transportation. The court found that the affidavit

from the witness averred in general terms that minority businesses were discriminated against in the awarding of state contracts. The district court found that the Intervenor have not produced — or indeed even described — the evidence of discrimination. Id. at 1241. The district court found that it cannot be discerned from the documents which minority businesses were the victims of discrimination, or which racial or ethnic groups were targeted by such alleged discrimination. Id.

The court also found that the Intervenor's evidence did not indicate what discriminatory acts or practices allegedly occurred, or when they occurred. Id. The district court stated that the Intervenor did not identify "a single qualified, minority-owned bidder who was excluded from a state contract." Id. The district court, thus, held that broad allegations of "systematic" exclusion of minority businesses were not sufficient to constitute a compelling governmental interest in remedying past or current discrimination. Id. at 1242. The district court stated that this was particularly true in light of the "State's admission here that the State's governmental interest was not in remedying past discrimination in the state competitive bidding process, but in 'encouraging economic development of minority business enterprises which in turn will benefit the State of Oklahoma as a whole.'" Id. at 1242.

The court found that the State defendants failed to produce any admissible evidence of a single, specific discriminatory act, or any substantial evidence showing a pattern of deliberate exclusion from state contracts of minority-owned businesses. Id. at 1241 - 1242, footnote 11.

The district court also noted that the Sixth Circuit Court of Appeals in Drabik rejected Ohio's statistical evidence of underutilization of minority contractors because the evidence did not report the actual use of minority firms; rather, they reported only the use of those minority firms that had gone to the trouble of being certified and listed by the state. Id. at 1242, footnote 12. The district court stated that, as in Drabik, the evidence presented in support of the Oklahoma MBE Act failed to account for the possibility that some minority contractors might not register with the state, and the statistics did not account for any contracts awarded to businesses with minority ownership of less than 51 percent, or for contracts performed in large part by minority-owned subcontractors where the prime contractor was not a certified minority-owned business. Id.

The district court found that the MBE Act's minority bidding preference was not predicated upon a finding of discrimination in any particular industry or region of the state, or discrimination against any particular racial or ethnic group. The court stated that there was no evidence offered of actual discrimination, past or present, against the specific racial and ethnic groups to whom the preference was extended, other than an attempt to show a history of discrimination against African Americans. Id. at 1242.

Narrow tailoring. The district court found that even if the State's goals could not be considered "compelling," the State did not show that the MBE Act was narrowly tailored to serve those goals. The court pointed out that the Tenth Circuit in Adarand VII identified six factors the court must consider in determining whether the MBE Act's minority preference provisions were sufficiently narrowly tailored to satisfy equal protection: (1) the availability of race-neutral alternative remedies; (2) limits on the duration of the challenged preference provisions; (3) flexibility of the preference provisions; (4) numerical proportionality; (5) the burden on third parties; and (6) over- or under-inclusiveness. Id. at 1242-1243.

First, in terms of race-neutral alternative remedies, the court found that the evidence offered showed, at most, that nominal efforts were made to assist minority-owned businesses prior to the adoption of the MBE Act's racial preference program. *Id.* at 1243. The court considered evidence regarding the Minority Assistance Program, but found that to be primarily informational services only, and was not designed to actually assist minorities or other disadvantaged contractors to obtain contracts with the State of Oklahoma. *Id.* at 1243. In contrast to this "informational" program, the court noted the Tenth Circuit in Adarand VII favorably considered the federal government's use of racially neutral alternatives aimed at disadvantaged businesses, including assistance with obtaining project bonds, assistance with securing capital financing, technical assistance, and other programs designed to assist start-up businesses. *Id.* at 1243 citing Adarand VII, 228 F.3d at 1178-1179.

The district court found that it does not appear from the evidence that Oklahoma's Minority Assistance Program provided the type of race-neutral relief required by the Tenth Circuit in Adarand VII, in the Supreme Court in the Croson decision, nor does it appear that the Program was racially neutral. *Id.* at 1243. The court found that the State of Oklahoma did not show any meaningful form of assistance to new or disadvantaged businesses prior to the adoption of the MBE Act, and thus, the court found that the state defendants had not shown that Oklahoma considered race-neutral alternative means to achieve the state's goal prior to adoption of the minority bid preference provisions. *Id.* at 1243.

In a footnote, the district court pointed out that the Tenth Circuit has recognized racially neutral programs designed to assist *all* new or financially disadvantaged businesses in obtaining government contracts tend to benefit minority-owned businesses, and can help alleviate the effects of past and present-day discrimination. *Id.* at 1243, footnote 15 citing Adarand VII.

The court considered the evidence offered of post-enactment efforts by the State to increase minority participation in State contracting. The court found that most of these efforts were directed toward encouraging the participation of certified minority business enterprises, "and are thus not racially neutral. This evidence fails to demonstrate that the State employed race-neutral alternative measures prior to or after adopting the Minority Business Enterprise Assistance Act." *Id.* at 1244. Some of the efforts the court found were directed toward encouraging the participation of certified minority business enterprises and thus not racially neutral, included mailing vendor registration forms to minority vendors, telephoning and mailing letters to minority vendors, providing assistance to vendors in completing registration forms, assuring the vendors received bid information, preparing a minority business directory and distributing it to all state agencies, periodically mailing construction project information to minority vendors, and providing commodity information to minority vendors upon request. *Id.* at 1244, footnote 16.

In terms of durational limits and flexibility, the court found that the "goal" of 10 percent of the state's contracts being awarded to certified minority business enterprises had never been reached, or even approached, during the thirteen years since the MBE Act was implemented. *Id.* at 1244. The court found the defendants offered no evidence that the bid preference was likely to end at any time in the foreseeable future, or that it is otherwise limited in its duration. *Id.* Unlike the federal programs at issue in Adarand VII, the court stated the Oklahoma MBE Act has no inherent time limit, and no provision for disadvantaged minority-owned businesses to "graduate" from preference

eligibility. Id. The court found the MBE Act was not limited to those minority-owned businesses which are shown to be economically disadvantaged. Id.

The court stated that the MBE Act made no attempt to address or remedy any actual, demonstrated past or present racial discrimination, and the MBE Act's duration was not tied in any way to the eradication of such discrimination. Id. Instead, the court found the MBE Act rests on the "questionable assumption that 10 percent of all state contract dollars should be awarded to certified minority-owned and operated businesses, without any showing that this assumption is reasonable." Id. at 1244.

By the terms of the MBE Act, the minority preference provisions would continue in place for five years after the goal of 10 percent minority participation was reached, and thus the district court concluded that the MBE Act's minority preference provisions lacked reasonable durational limits. Id. at 1245.

With regard to the factor of "numerical proportionality" between the MBE Act's aspirational goal and the number of existing available minority-owned businesses, the court found the MBE Act's 10 percent goal was not based upon demonstrable evidence of the availability of minority contractors who were either qualified to bid or who were ready, willing and able to become qualified to bid on state contracts. Id. at 1246–1247. The court pointed out that the MBE Act made no attempt to distinguish between the four minority racial groups, so that contracts awarded to members of all of the preferred races were aggregated in determining whether the 10 percent aspirational goal had been reached. Id. at 1246. In addition, the court found the MBE Act aggregated all state contracts for goods and services, so that minority participation was determined by the total number of dollars spent on state contracts. Id.

The court stated that in Adarand VII, the Tenth Circuit rejected the contention that the aspirational goals were required to correspond to an actual finding as to the number of existing minority-owned businesses. Id. at 1246. The court noted that the government submitted evidence in Adarand VII, that the effects of past discrimination had excluded minorities from entering the construction industry, and that the number of available minority subcontractors reflected that discrimination. Id. In light of this evidence, the district court said the Tenth Circuit held that the existing percentage of minority-owned businesses is "not necessarily an absolute cap" on the percentage that a remedial program might legitimately seek to achieve. Id. at 1246, citing Adarand VII, 228 F.3d at 1181.

Unlike Adarand VII, the court found that the Oklahoma State defendants did not offer "substantial evidence" that the minorities given preferential treatment under the MBE Act were prevented, through past discrimination, from entering any particular industry, or that the number of available minority subcontractors in that industry reflects that discrimination. 140 F.Supp.2d at 1246. The court concluded that the Oklahoma State defendants did not offer any evidence of the number of minority-owned businesses doing business in any of the many industries covered by the MBE Act. Id. at 1246–1247.

With regard to the impact on third parties factor, the court pointed out the Tenth Circuit in Adarand VII stated the mere possibility that innocent parties will share the burden of a remedial program is itself insufficient to warrant the conclusion that the program is not narrowly tailored. Id. at 1247. The district court found the MBE Act's bid preference provisions prevented non-minority

businesses from competing on an equal basis with certified minority business enterprises, and that in some instances plaintiffs had been required to lower their intended bids because they knew minority firms were bidding. *Id.* The court pointed out that the 5 percent preference is applicable to *all* contracts awarded under the state’s Central Purchasing Act with no time limitation. *Id.*

In terms of the “under- and over-inclusiveness” factor, the court observed that the MBE Act extended its bidding preference to several racial minority groups without regard to whether each of those groups had suffered from the effects of past or present racial discrimination. *Id.* at 1247. The district court reiterated the Oklahoma State defendants did not offer any evidence at all that the minority racial groups identified in the Act had actually suffered from discrimination. *Id.*

Second, the district court found the MBE Act’s bidding preference extends to all contracts for goods and services awarded under the State’s Central Purchasing Act, without regard to whether members of the preferred minority groups had been the victims of past or present discrimination within that particular industry or trade. *Id.*

Third, the district court noted the preference extends to all businesses certified as minority-owned and controlled, without regard to whether a particular business is economically or socially disadvantaged, or has suffered from the effects of past or present discrimination. *Id.* The court thus found that the factor of over-inclusiveness weighs against a finding that the MBE Act was narrowly tailored. *Id.*

The district court in conclusion found that the Oklahoma MBE Act violated the Constitution’s Fifth Amendment guarantee of equal protection and granted the plaintiffs’ Motion for Summary Judgment.

17. Associated Utility Contractors of Maryland, Inc. v. The Mayor and City Council of Baltimore, 83 F. Supp. 2d 613 (D. Md. 2000)

The court held unconstitutional the City of Baltimore’s “affirmative action” program, which had construction subcontracting “set-aside” goals of 20 percent for MBEs and 3 percent for WBEs. The court held there was no data or statistical evidence submitted by the City prior to enactment of the Ordinance. There was no evidence showing a disparity between MBE/WBE availability and utilization in the subcontracting construction market in Baltimore. The court enjoined the City Ordinance.

18. Webster v. Fulton County, 51 F. Supp. 2d 1354 (N.D. Ga. 1999), *a’ff’d per curiam* 218 F.3d 1267 (11th Cir. 2000)

This case is instructive as it is another instance in which a court has considered, analyzed, and ruled upon a race-, ethnicity- and gender-conscious program, holding the local government MBE/WBE-type program failed to satisfy the strict scrutiny constitutional standard. The case also is instructive in its application of the Engineering Contractors Association case, including to a disparity analysis, the burdens of proof on the local government, and the narrowly tailored prong of the strict scrutiny test.

In this case, plaintiff Webster brought an action challenging the constitutionality of Fulton County’s (the “County”) minority and female business enterprise program (“MBE/FBE”) program. 51 F.

Supp. 2d 1354, 1357 (N.D. Ga. 1999). [The district court first set forth the provisions of the MBE/FBE program and conducted a standing analysis at 51 F. Supp. 2d at 1356-62].

The court, citing Engineering Contractors Association of S. Florida, Inc. v. Metro. Engineering Contractors Association, 122 F.3d 895 (11th Cir. 1997), held that “[e]xplicit racial preferences may not be used except as a ‘last resort.’” Id. at 1362-63. The court then set forth the strict scrutiny standard for evaluating racial and ethnic preferences and the four factors enunciated in Engineering Contractors Association, and the intermediate scrutiny standard for evaluating gender preferences. Id. at 1363. The court found that under Engineering Contractors Association, the government could utilize both post-enactment and pre-enactment evidence to meet its burden of a “strong basis in evidence” for strict scrutiny, and “sufficient probative evidence” for intermediate scrutiny. Id.

The court found that the defendant bears the initial burden of satisfying the aforementioned evidentiary standard, and the ultimate burden of proof remains with the challenging party to demonstrate the unconstitutionality of the MBE/FBE program. Id. at 1364. The court found that the plaintiff has at least three methods “to rebut the inference of discrimination with a neutral explanation: (1) demonstrate that the statistics are flawed; (2) demonstrate that the disparities shown by the statistics are not significant; or (3) present conflicting statistical data.” Id., citing Eng’g Contractors Ass’n, 122 F.3d at 916.

[The district court then set forth the Engineering Contractors Association opinion in detail.]

The court first noted that the Eleventh Circuit has recognized that disparity indices greater than 80 percent are generally not considered indications of discrimination. Id. at 1368, citing Eng’g Contractors Assoc., 122 F.3d at 914. The court then considered the County’s pre-1994 disparity study (the “Brimmer-Marshall Study”) and found that it failed to establish a strong basis in evidence necessary to support the MBE/FBE program. Id. at 1368.

First, the court found that the study rested on the inaccurate assumption that a statistical showing of underutilization of minorities in the marketplace as a whole was sufficient evidence of discrimination. Id. at 1369. The court cited City of Richmond v. J.A. Croson Co., 488 U.S. 496 (1989) for the proposition that discrimination must be focused on contracting by the entity that is considering the preference program. Id. Because the Brimmer-Marshall Study contained no statistical evidence of discrimination by the County in the award of contracts, the court found the County must show that it was a “passive participant” in discrimination by the private sector. Id. The court found that the County could take remedial action if it had evidence that prime contractors were systematically excluding minority-owned businesses from subcontracting opportunities, or if it had evidence that its spending practices are “exacerbating a pattern of prior discrimination that can be identified with specificity.” Id. However, the court found that the Brimmer-Marshall Study contained no such data. Id.

Second, the Brimmer-Marshall study contained no regression analysis to account for relevant variables, such as firm size. Id. at 1369-70. At trial, Dr. Marshall submitted a follow-up to the earlier disparity study; however, the court found the study had the same flaw in that it did not contain a regression analysis. Id. The court thus concluded that the County failed to present a “strong basis in evidence” of discrimination to justify the County’s racial and ethnic preferences. Id.

The court next considered the County's post-1994 disparity study. Id. at 1371. The study first sought to determine the availability and utilization of minority- and female-owned firms. Id. The court explained:

Two methods may be used to calculate availability: (1) bid analysis; or (2) bidder analysis. In a bid analysis, the analyst counts the number of bids submitted by minority or female firms over a period of time and divides it by the total number of bids submitted in the same period. In a bidder analysis, the analyst counts the number of minority or female firms submitting bids and divides it by the total number of firms which submitted bids during the same period.

Id. The court found that the information provided in the study was insufficient to establish a firm basis in evidence to support the MBE/FBE program. Id. at 1371-72. The court also found it significant to conduct a regression analysis to show whether the disparities were either due to discrimination or other neutral grounds. Id. at 1375-76.

The plaintiff and the County submitted statistical studies of data collected between 1994 to 1997. Id. at 1376. The court found that the data were potentially skewed due to the operation of the MBE/FBE program. Id. Additionally, the court found that the County's standard deviation analysis yielded non-statistically significant results (noting the Eleventh Circuit has stated that scientists consider a finding of two standard deviations significant). Id. (internal citations omitted).

The court considered the County's anecdotal evidence, and quoted Engineering Contractors Association for the proposition that "[a]necdotal evidence can play an important role in bolstering statistical evidence, but that only in the rare case will anecdotal evidence suffice standing alone." Id., quoting Eng'g Contractors Ass'n, 122 F.3d at 907. The Brimmer-Marshall Study contained anecdotal evidence. Id. at 1379. Additionally, the County held hearings but after reviewing the tape recordings of the hearings, the court concluded that only two individuals testified to discrimination by the County; one of them complained that the County used the MBE/FBE program to only benefit African Americans. Id. The court found the most common complaints concerned barriers in bonding, financing, and insurance and slow payment by prime contractors. Id. The court concluded that the anecdotal evidence was insufficient in and of itself to establish a firm basis for the MBE/FBE program. Id.

The court also applied a narrow tailoring analysis of the MBE/FBE program. "The Eleventh Circuit has made it clear that the essence of this inquiry is whether racial preferences were adopted only as a 'last resort.'" Id. at 1380, citing Eng'g Contractors Assoc., 122 F.3d at 926. The court cited the Eleventh Circuit's four-part test and concluded that the County's MBE/FBE program failed on several grounds. First, the court found that a race-based problem does not necessarily require a race-based solution. "If a race-neutral remedy is sufficient to cure a race-based problem, then a race-conscious remedy can never be narrowly tailored to that problem." Id., quoting Eng'g Contractors Ass'n, 122 F.3d at 927. The court found that there was no evidence of discrimination by the County. Id. at 1380.

The court found that even though a majority of the Commissioners on the County Board were African American, the County had continued the program for decades. Id. The court held that the County had not seriously considered race-neutral measures:

There is no evidence in the record that any Commissioner has offered a resolution during this period substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity. There is no evidence in the record of any proposal by the staff of Fulton County of substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity. There has been no evidence offered of any debate within the Commission about substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity Id.

The court found that the random inclusion of ethnic and racial groups who had not suffered discrimination by the County also mitigated against a finding of narrow tailoring. Id. The court found that there was no evidence that the County considered race-neutral alternatives as an alternative to race-conscious measures nor that race-neutral measures were initiated and failed. Id. at 1381. The court concluded that because the MBE/FBE program was not adopted as a last resort, it failed the narrow tailoring test. Id.

Additionally, the court found that there was no substantial relationship between the numerical goals and the relevant market. Id. The court rejected the County's argument that its program was permissible because it set "goals" as opposed to "quotas," because the program in Engineering Contractors Association also utilized "goals" and was struck down. Id.

Per the MBE/FBE program's gender-based preferences, the court found that the program was sufficiently flexible to satisfy the substantial relationship prong of the intermediate scrutiny standard. Id. at 1383. However, the court held that the County failed to present "sufficient probative evidence" of discrimination necessary to sustain the gender-based preferences portion of the MBE/FBE program. Id.

The court found the County's MBE/FBE program unconstitutional and entered a permanent injunction in favor of the plaintiff. Id. On appeal, the Eleventh Circuit affirmed per curiam, stating only that it affirmed on the basis of the district court's opinion. Webster v. Fulton County, Georgia, 218 F.3d 1267 (11th Cir. 2000).

19. Associated Gen. Contractors v. Drabik, 50 F. Supp. 2d 741 (S.D. Ohio 1999)

In this decision, the district court reaffirmed its earlier holding that the State of Ohio's MBE program of construction contract awards is unconstitutional. The court cited to F. Buddie Contracting v. Cuyahoga Community College, 31 F. Supp. 2d 571 (N.D. Ohio 1998), holding a similar local Ohio program unconstitutional. The court repudiated the Ohio Supreme Court's holding in Ritchey Produce, 707 N.E. 2d 871 (Ohio 1999), which held that the State's MBE program as applied to the state's purchase of non-construction-related goods and services was constitutional. The court found the evidence to be insufficient to justify the MBE program. The

court held that the program was not narrowly tailored because there was no evidence that the State had considered a race-neutral alternative.

This opinion underscored that governments must show four factors to demonstrate narrow tailoring: (1) the necessity for the relief and the efficacy of alternative remedies, (2) flexibility and duration of the relief, (3) relationship of numerical goals to the relevant labor market, and (4) impact of the relief on the rights of third parties. The court held the Ohio MBE program failed to satisfy this test.

20. Phillips & Jordan, Inc. v. Watts, 13 F. Supp. 2d 1308 (N.D. Fla. 1998)

This case is instructive because it addressed a challenge to a state and local government MBE/FBE-type program and considered the requisite evidentiary basis necessary to support the program. In Phillips & Jordan, the district court for the Northern District of Florida held that the Florida Department of Transportation's ("FDOT") program of "setting aside" certain highway maintenance contracts for African American- and Hispanic-owned businesses violated the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution. The parties stipulated that the plaintiff, a non-minority business, had been excluded in the past and may be excluded in the future from competing for certain highway maintenance contracts "set aside" for business enterprises owned by Hispanic and African American individuals. The court held that the evidence of statistical disparities was insufficient to support the Florida DOT program.

The district court pointed out that Florida DOT did not claim that it had evidence of intentional discrimination in the award of its contracts. The court stated that the essence of FDOT's claim was that the two year disparity study provided evidence of a disparity between the proportion of minorities awarded FDOT road maintenance contracts and a portion of the minorities "supposedly willing and able to do road maintenance work," and that FDOT did not itself engage in any racial or ethnic discrimination, so FDOT must have been a passive participant in "somebody's" discriminatory practices.

Since it was agreed in the case that FDOT did not discriminate against minority contractors bidding on road maintenance contracts, the court found that the record contained insufficient proof of discrimination. The court found the evidence insufficient to establish acts of discrimination against African American- and Hispanic-owned businesses.

The court raised questions concerning the choice and use of the statistical pool of available firms relied upon by the disparity study. The court expressed concern about whether it was appropriate to use Census data to analyze and determine which firms were available (qualified and/or willing and able) to bid on FDOT road maintenance contracts.

Recent State Court Decisions

21. Cleveland Constr., Inc. v. City of Cincinnati, 169 Ohio App. 3d 627, 864 N.E.2d 116 (2006), cert. denied 128 S. Ct. 379 (U.S. 2007)

On appeal from Cleveland Construction, Inc. v. City of Cincinnati, WL 4880918, Case No. A042683 (Ohio Court of Common Pleas, July 13, 2005 and August 29, 2005) (at Section V(C)(2a.), *infra*), the Ohio Court of Appeals reversed the trial court's entry of a directed verdict against Cleveland Construction on the issue of lost profits, remanded the case for a new trial on the issue of

liability and damages under 42 U.S.C. § 1983, and affirmed the trial court in all other respects. 864 N.E.2d 116, 133 (Ohio App. 2006).

On appeal, both parties below raised multiple enumerations of error with the trial court's decision. In the decision below, the trial court ruled that the city's SBE Program created constitutionally impermissible race- and gender-based classifications. (See 2005 Decision, at Section V(C)(2a.), *infra*). In its fourth enumeration of error, the city argued that its SBE Program should not be subject to strict scrutiny (for race-based classification) or intermediate scrutiny (for gender-based classification). The city argued that its SBE Program did not create race- or gender-based classifications because the city merely gathered availability estimates "for information purposes only" and bidders were required only to document their good faith efforts at obtaining minority- and women-owned business participation. The Court of Appeals rejected that argument holding that rigid quotas or set-asides are not a prerequisite to a finding of a racial classification: "[w]here regulations pressure or encourage contractors to hire minority subcontractors, courts must apply strict scrutiny." 864 N.E.2d at 126. The court noted that in *Adarand I*, although the challenged regulations did not require contractors to hire minority subcontractors, they offered a financial incentive to do so, and the regulations were thus subject to strict scrutiny. *Id.* at 127, citing *Adarand Constructors v. Pena*, 515 U.S. 200, 224 (1995).

The Court of Appeals determined that it had to look beyond the SBE Program's "ostensibly neutral labels such as 'outreach program' and 'participation goals'" to determine whether the SBE Program imposed racial classifications. *Id.* at 127. The court found that under the SBE Program, bidders were required to use good faith efforts to promote opportunities for minority- and women-owned businesses to the extent of their availability as determined by the city, and to submit detailed descriptions of those good faith efforts. The court held that "[w]here the city's SBE program required documentation of a bidder's specific efforts to achieve the participation of minority subcontractors to the extent of their availability as predetermined by the city, the program undeniably pressured bidders to implement racial preferences. Therefore, the program's rules must be subject to strict scrutiny." *Id.* at 127. The court held that to the extent the SBE Program pressured contractors to utilize female-owned subcontractors, that portion was subject to intermediate scrutiny. Because the city conceded below that its SBE Program could not survive either standard of heightened scrutiny, the court affirmed the trial court's finding holding unconstitutional those portions of the SBE Program causing bidders to use racial- or gender-based preferences. The court also overruled the city's enumeration of error over the trial court's award of prevailing party attorneys' fees to the plaintiff.

The Court of Appeals reversed the trial court's entry of a directed verdict for the city on the plaintiff's claim for lost profit damages. The court confirmed that under Ohio law, a disappointed bidder cannot recover lost profit damages when a municipality violates competitive-bidding laws. But, under 42 U.S.C. § 1983, a disappointed bidder may recover their lost profits as damages; the court cited to *Adarand*, *W.H. Scott Construction Co. v. Jackson*, and *Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County, Fla.* in support of that proposition. The court reversed the entry of a directed verdict and remanded to the trial court for a new trial on the issue of Section 1983 liability and damages.

Finally, the Court of Appeals affirmed the trial court's ruling that the named city officials sued in their individual capacities were entitled to qualified immunity. The court determined that due to

complex nature of the issues, the city officials could not have reasonably known that their conduct was unconstitutional (required in order to overcome a qualified immunity defense).

The city subsequently applied for certiorari to the United States Supreme Court. The Supreme Court denied certiorari on October 9, 2007. 128 S. Ct. 379 (Oct. 9, 2007).

22. Cleveland Constr., Inc. v. City of Cincinnati, Case No. A042683, WL 4880918 (Ohio Court of Common Pleas, July 13, 2005 and August 29, 2005)

This case is instructive as it addresses the validity of the City of Cincinnati's program involving contracting with MBE/WBEs, information that a city may gather as to MBE/FBE participation, information that a city may track as to MBE/WBE participation, and the type of legislation the local or state governments may consider adopting. *Cleveland Construction, Inc.* (the "plaintiff") challenged the City of Cincinnati's (the "City") Small Business Enterprise Program (the "Program"), and a related SBE Subcontracting Outreach Program which applied to City-funded construction projects valued in excess of \$100,000. Case No. A0402638 (Ohio Common Pleas Court, July 13, 2005) at 5. The Program required prime contractors to subcontract a minimum percentage of their bid (20% or greater on some construction contracts) to qualified available minority subcontractors. Id.

The City stipulated that it lacked the necessary factual basis to withstand a strict scrutiny analysis, or even an intermediate scrutiny analysis, of its Program. Id. at 10-11. The court then considered whether the Program imposed classifications subject to such analyses. Id. The court found that "the law does not prohibit governmental entities from recording statistics relating to race or gender, or from tracking the progress of groups as identified by such categories, or from seeking to ascertain whether any impermissible, discriminatory barriers are hampering the advancement of individuals within groups as defined by race or gender." Id. at 12. Accordingly, the court found that the City could use MBE/WBE annual participation goals in conjunction with such a tracking program, and other outreach efforts, as long as such efforts included no "further mechanism to promote or effectuate or encourage others to meet such goals in any particular context." Id. (internal citations omitted).

However, the court found that where outreach efforts operate as "a *sub rosa* preference — that is, where their administration 'indisputably pressures' contractors to hire minority subcontractors — courts must apply strict scrutiny." Id. at 12-13. The court found that the Program contained a number of race- and gender-classification provisions and "indisputably pressures" contractors to recruit minority subcontractors, including requisite documentation of good faith outreach efforts and potential investigation of recruitment efforts by the Office of Contract Compliance; accordingly, the Program was subject to strict scrutiny. Id. at 13-14. Because the City conceded that the Program could not survive a strict scrutiny analysis, the court found the Program facially unconstitutional and ordered the City to take prompt action to remove all such unconstitutional provisions. Id. at 15. However, the court found the plaintiff was unable to demonstrate that the unconstitutional aspects of the Program caused him to lose the contract award at issue. Id. at 18.

F. Recent Decisions Involving the Federal DBE Program and Federally Funded Projects in Other Jurisdictions

There are several recent and pending cases involving challenges to the United States Federal DBE Program and its implementation by the states and their governmental entities for federally funded projects, similar to the Indiana DOT. To the extent the Indiana agencies and universities are recipients of federal funds, these cases could have a significant impact on the nature and provisions of their contracting and procurement on federally funded projects, including and relating to the utilization of DBEs. In addition, these cases provide an instructive analysis of the recent application of the strict scrutiny test to MBE/WBE- and DBE-type programs.

1. Western States Paving Co. v. Washington State DOT, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006)

This case out of the Ninth Circuit struck down a state's implementation of the Federal DBE Program for failure to pass constitutional muster. In Western States, the Ninth Circuit held that the State of Washington's implementation of the Federal DBE Program was unconstitutional because it did not satisfy the narrow tailoring element of the constitutional test. The Ninth Circuit held that the State must present its own evidence of past discrimination within its own boundaries in order to survive constitutional muster and could not merely rely upon data supplied by Congress. The United States Supreme Court denied certiorari. The analysis in the decision also is instructive in particular as to the application of the narrowly tailored prong of the strict scrutiny test.

Plaintiff Western States Paving Co. ("plaintiff") was a white male-owned asphalt and paving company. 407 F.3d 983, 987 (9th Cir. 2005). In July of 2000, plaintiff submitted a bid for a project for the City of Vancouver; the project was financed with federal funds provided to the Washington State DOT ("WSDOT") under the Transportation Act for the 21st Century ("TEA-21"). Id.

Congress enacted TEA-21 in 1991 and after multiple renewals, it was set to expire on May 31, 2004. Id. at 988. TEA-21 established minimum minority-owned business participation requirements (10%) for certain federally-funded projects. Id. The regulations require each state accepting federal transportation funds to implement a DBE program that comports with the TEA-21. Id. TEA-21 indicates the 10 percent DBE utilization requirement is "aspirational," and the statutory goal "does not authorize or require recipients to set overall or contract goals at the 10 percent level, or any other particular level, or to take any special administrative steps if their goals are above or below 10 percent." Id.

TEA-21 sets forth a two-step process for a state to determine its own DBE utilization goal: (1) the state must calculate the relative availability of DBEs in its local transportation contracting industry (one way to do this is to divide the number of ready, willing and able DBEs in a state by the total number of ready, willing and able firms); and (2) the state is required to "adjust this base figure upward or downward to reflect the proven capacity of DBEs to perform work (as measured by the volume of work allocated to DBEs in recent years) and evidence of discrimination against DBEs obtained from statistical disparity studies." Id. at 989 (citing regulation). A state is also permitted to consider discrimination in the bonding and financing industries and the present effects of past discrimination. Id. (citing regulation). TEA-21 requires a generalized, "undifferentiated" minority

goal and a state is prohibited from apportioning their DBE utilization goal among different minority groups (e.g., between Hispanics, blacks, and women). Id. at 990 (citing regulation).

“A state must meet the maximum feasible portion of this goal through race- [and gender-] neutral means, including informational and instructional programs targeted toward all small businesses.” Id. (citing regulation). Race- and sex-conscious contract goals must be used to achieve any portion of the contract goals not achievable through race- and gender-neutral measures. Id. (citing regulation). However, TEA-21 does not require that DBE participation goals be used on every contract or at the same level on every contract in which they are used; rather, the overall effect must be to “obtain that portion of the requisite DBE participation that cannot be achieved through race- [and gender-] neutral means.” Id. (citing regulation).

A prime contractor must use “good faith efforts” to satisfy a contract’s DBE utilization goal. Id. (citing regulation). However, a state is prohibited from enacting rigid quotas that do not contemplate such good faith efforts. Id. (citing regulation).

Under the TEA-21 minority utilization requirements, the City set a goal of 14 percent minority participation on the first project plaintiff bid on; the prime contractor thus rejected plaintiff’s bid in favor of a higher bidding minority-owned subcontracting firm. Id. at 987. In September of 2000, plaintiff again submitted a bid on project financed with TEA-21 funds and was again rejected in favor of a higher bidding minority-owned subcontracting firm. Id. The prime contractor expressly stated that he rejected plaintiff’s bid due to the minority utilization requirement. Id.

Plaintiff filed suit against the WSDOT, Clark County, and the City, challenging the minority preference requirements of TEA-21 as unconstitutional both facially and as applied. Id. The district court rejected both of plaintiff’s challenges. The district court held the program was facially constitutional because it found that Congress had identified significant evidence of discrimination in the transportation contracting industry and the TEA-21 was narrowly tailored to remedy such discrimination. Id. at 988. The district court rejected the as-applied challenge concluding that Washington’s implementation of the program comported with the federal requirements and the state was not required to demonstrate that its minority preference program independently satisfied strict scrutiny. Id. Plaintiff appealed to the Ninth Circuit Court of Appeals. Id.

The Ninth Circuit considered whether the TEA-21, which authorizes the use of race- and gender-based preferences in federally funded transportation contracts, violated equal protection, either on its face or as applied by the State of Washington.

The court applied a strict scrutiny analysis to both the facial and as-applied challenges to TEA-21. Id. at 990-91. The court did not apply a separate intermediate scrutiny analysis to the gender-based classifications because it determined that it “would not yield a different result.” Id. at 990, n. 6.

Facial challenge (Federal Government). The court first noted that the federal government has a compelling interest in “ensuring that its funding is not distributed in a manner that perpetuates the effects of either public or private discrimination within the transportation contracting industry.” Id. at 991, citing City of Richmond v. J.A. Croson Co., 488 U.S. 469, 492 (1989) and Adarand Constructors, Inc. v. Slater (“Adarand VII”), 228 F.3d 1147, 1176 (10th Cir. 2000). The court found that “[b]oth statistical and anecdotal evidence are relevant in identifying the existence of

discrimination.” *Id.* at 991. The court found that although Congress did not have evidence of discrimination against minorities in every state, such evidence was unnecessary for the enactment of nationwide legislation. *Id.* However, citing both the Eighth and Tenth Circuits, the court found that Congress had ample evidence of discrimination in the transportation contracting industry to justify TEA-21. *Id.* The court also found that because TEA-21 set forth flexible race-conscious measures to be used only when race-neutral efforts were unsuccessful, the program was narrowly tailored and thus satisfied strict scrutiny. *Id.* at 992-93. The court accordingly rejected plaintiff’s facial challenge. *Id.*

As-applied challenge (State of Washington). Plaintiff alleged TEA-21 was unconstitutional as-applied because there was no evidence of discrimination in Washington’s transportation contracting industry. *Id.* at 995. The State alleged that it was not required to independently demonstrate that its application of TEA-21 satisfied strict scrutiny. *Id.* The United States intervened to defend TEA-21’s facial constitutionality, and “unambiguously conceded that TEA-21’s race conscious measures can be constitutionally applied only in those states where the effects of discrimination are present.” *Id.* at 996; see also *Br. for the United States* at 28 (April 19, 2004) (“DOT’s regulations ... are designed to assist States in ensuring that race-conscious remedies are limited to *only* those jurisdictions where discrimination or its effects are a problem and *only* as a last resort when race-neutral relief is insufficient.” (emphasis in original)).

The court found that the Eighth Circuit was the only other court to consider an as-applied challenge to TEA-21 in *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d 964 (8th Cir. 2003), *cert. denied* 124 S. Ct. 2158 (2004). *Id.* at 996. The Eighth Circuit did not require Minnesota and Nebraska to identify a compelling purpose for their programs independent of Congress’s nationwide remedial objective. *Id.* However, the Eighth Circuit did consider whether the states’ implementation of TEA-21 was narrowly tailored to achieve Congress’s remedial objective. *Id.* The Eighth Circuit thus looked to the states’ independent evidence of discrimination because “to be narrowly tailored, a *national* program must be limited to those parts of the country where its race-based measures are demonstrably needed.” *Id.* (internal citations omitted). The Eighth Circuit relied on the states’ statistical analyses of the availability and capacity of DBEs in their local markets conducted by outside consulting firms to conclude that the states satisfied the narrow tailoring requirement. *Id.* at 997.

The court concurred with the Eighth Circuit and found that Washington did not need to demonstrate a compelling interest for its DBE program, independent from the compelling nationwide interest identified by Congress. *Id.* However, the court determined that the district court erred in holding that mere compliance with the federal program satisfied strict scrutiny. *Id.* Rather, the court held that whether Washington’s DBE program was narrowly tailored was dependent on the presence or absence of discrimination in Washington’s transportation contracting industry. *Id.* at 997-98. “If no such discrimination is present in Washington, then the State’s DBE program does not serve a remedial purpose; it instead provides an unconstitutional windfall to minority contractors solely on the basis of their race or sex.” *Id.* at 998. The court held that a Sixth Circuit decision to the contrary, *Tennessee Asphalt Co. v. Farris*, 942 F.2d 969, 970 (6th Cir. 1991), misinterpreted earlier case law. *Id.* at 997, n. 9.

The court found that moreover, even where discrimination is present in a state, a program is narrowly tailored only if it applies only to those minority groups who have actually suffered

discrimination. Id. at 998, citing Croson, 488 U.S. at 478. The court also found that in Monterey Mechanical Co. v. Wilson, 125 F.3d 702, 713 (9th Cir. 1997), it had “previously expressed similar concerns about the haphazard inclusion of minority groups in affirmative action programs ostensibly designed to remedy the effects of discrimination.” Id. In Monterey Mechanical, the court held that “the overly inclusive designation of benefited minority groups was a ‘red flag signaling that the statute is not, as the Equal Protection Clause requires, narrowly tailored.’” Id., citing Monterey Mechanical, 125 F.3d at 714. The court found that other courts are in accord. Id. at 998-99, citing Builders Ass’n of Greater Chi. v. County of Cook, 256 F.3d 642, 647 (7th Cir. 2001); Associated Gen. Contractors of Ohio, Inc. v. Drabik, 214 F.3d 730, 737 (6th Cir. 2000); O’Donnell Constr. Co. v. District of Columbia, 963 F.2d 420, 427 (D.C. Cir. 1992). Accordingly, the court found that each of the principal minority groups benefited by Washington’s DBE program must have suffered discrimination within the State. Id. at 999.

The court found that Washington’s program closely tracked the sample USDOT DBE program. Id. WSDOT calculated its DBE participation goal by first calculating the availability of ready, willing and able DBEs in the State (dividing the number of transportation contracting firms in the Washington State Office of Minority, Women and Disadvantaged Business Enterprises Directory by the total number of transportation contracting firms listed in the Census Bureau’s Washington database, which equaled 11.17%). Id. WSDOT then upwardly adjusted the 11.17 percent base figure to 14 percent “to account for the proven capacity of DBEs to perform work, as reflected by the volume of work performed by DBEs [during a certain time period].” Id. Although DBEs performed 18 percent of work on State projects during the prescribed time period, Washington set the final adjusted figure at 14 percent because TEA-21 reduced the number of eligible DBEs in Washington by imposing more stringent certification requirements. Id. at 999, n. 11. WSDOT did not make an adjustment to account for discriminatory barriers in obtaining bonding and financing. Id. WSDOT similarly did not make any adjustment to reflect present or past discrimination “because it lacked any statistical studies evidencing such discrimination.” Id.

WSDOT then determined that it needed to achieve 5 percent of its 14 percent goal through race-conscious means based on a 9 percent DBE participation rate on state-funded contracts that did not include affirmative action components (i.e., 9% participation could be achieved through race-neutral means). Id. at 1000. The USDOT approved WSDOT goal-setting program and the totality of its 2000 DBE program. Id.

Washington conceded that it did not have statistical studies to establish the existence of past or present discrimination. Id. It argued, however, that it had evidence of discrimination because minority-owned firms had the capacity to perform 14 percent of the State’s transportation contracts in 2000 but received only 9 percent of the subcontracting funds on contracts that did not include an affirmative actions component. Id. The court found that the State’s methodology was flawed because the 14 percent figure was based on the earlier 18 percent figure, discussed supra, which included contracts with affirmative action components. Id. The court concluded that the 14 percent figure did not accurately reflect the performance capacity of DBEs in a race-neutral market. Id. The court also found the State conceded as much to the district court. Id.

The court held that a disparity between DBE performance on contracts with an affirmative action component and those without “does not provide any evidence of discrimination against DBEs.” Id.

The court found that the only evidence upon which Washington could rely was the disparity between the proportion of DBE firms in the State (11.17%) and the percentage of contracts awarded to DBEs on race-neutral grounds (9%). Id. However, the court determined that such evidence was entitled to “little weight” because it did not take into account a multitude of other factors such as firm size. Id.

Moreover, the court found that the minimal statistical evidence was insufficient evidence, standing alone, of discrimination in the transportation contracting industry. Id. at 1001. The court found that WSDOT did not present any anecdotal evidence. Id. The court rejected the State’s argument that the DBE applications themselves constituted evidence of past discrimination because the applications were not properly in the record, and because the applicants were not required to certify that they had been victims of discrimination in the contracting industry. Id. Accordingly, the court held that because the State failed to proffer evidence of discrimination within its own transportation contracting market, its DBE program was not narrowly tailored to Congress’s compelling remedial interest. Id. at 1002-03.

The court affirmed the district court’s grant on summary judgment to the United States regarding the facial constitutionality of TEA-21, reversed the grant of summary judgment to Washington on the as-applied challenge, and remanded to determine the State’s liability for damages.

The dissent argued that where the State complied with TEA-21 in implementing its DBE program, it was not susceptible to an as-applied challenge.

2. Western States Paving Co. v. Washington DOT, US DOT & FHWA, 2006 WL 1734163 (W.D. Wash. June 23, 2006) (unpublished opinion)

This case was before the district court pursuant to the Ninth Circuit’s remand order in Western States Paving Co. v. Washington DOT, US DOT, and FHWA, 407 F.3d 983 (9th Cir. 2005), cert. denied, 546 U.S. 1170 (2006). In this decision, the district court adjudicated cross Motions for Summary Judgment on plaintiff’s claim for injunction and for damages under 42 U.S.C. §§1981, 1983, and §2000d.

Because the Washington Department of Transportation (“WSDOT”) voluntarily discontinued its DBE program after the Ninth Circuit decision, supra, the district court dismissed plaintiff’s claim for injunctive relief as moot. The court found “it is absolutely clear in this case that WSDOT will not resume or continue the activity the Ninth Circuit found unlawful in Western States,” and cited specifically to the informational letters WSDOT sent to contractors informing them of the termination of the program.

Second, the court dismissed Western States’ claims under 42 U.S.C. §§ 1981, 1983, and 2000d against Clark County and the City of Vancouver holding neither the City or the County acted with the requisite discriminatory intent. The court held the County and the City were merely implementing the WSDOT’s unlawful DBE program and their actions in this respect were involuntary and required no independent activity. The court also noted that the County and the City were not parties to the precise discriminatory actions at issue in the case, which occurred due to the conduct of the “State defendants.” Specifically, the WSDOT — and not the County or the City — developed the DBE program without sufficient anecdotal and statistical and evidence, and

improperly relied on the affidavits of contractors seeking DBE certification “who averred that they had been subject to ‘general societal discrimination.’”

Third, the court dismissed plaintiff’s 42 U.S.C. §§ 1981 and 1983 claims against WSDOT, finding them barred by the Eleventh Amendment sovereign immunity doctrine. However, the court allowed plaintiff’s 42 U.S.C. §2000d claim to proceed against WSDOT because it was not similarly barred. The court held that Congress had conditioned the receipt of federal highway funds on compliance with Title VI (42 U.S.C. § 2000d et seq.) and the waiver of sovereign immunity from claims arising under Title VI. Section 2001 specifically provides that “a State shall not be immune under the Eleventh Amendment of the Constitution of the United States from suit in Federal court for a violation of ... Title VI.” The court held that this language put the WSDOT on notice that it faced private causes of action in the event of noncompliance.

The court held that WSDOT’s DBE program was not narrowly tailored to serve a compelling government interest. The court stressed that discriminatory intent is an essential element of a plaintiff’s claim under Title VI. The WSDOT argued that even if sovereign immunity did not bar plaintiff’s §2000d claim, WSDOT could be held liable for damages because there was no evidence that WSDOT staff knew of or consciously considered plaintiff’s race when calculating the annual utilization goal. The court held that since the policy was not “facially neutral” — and was in fact “specifically race conscious” — any resulting discrimination was therefore intentional, whether the reason for the classification was benign or its purpose remedial. As such, WSDOT’s program was subject to strict scrutiny.

In order for the court to uphold the DBE program as constitutional, WSDOT had to show that the program served a compelling interest and was narrowly tailored to achieve that goal. The court found that the Ninth Circuit had already concluded that the program was not narrowly tailored and the record was devoid of any evidence suggesting that minorities currently suffer or have suffered discrimination in the Washington transportation contracting industry. The court therefore denied WSDOT’s Motion for Summary Judgment on the §2000d claim. The remedy available to Western States remains for further adjudication and the case is currently pending.

3. Sherbrooke Turf, Inc. v. Minnesota DOT, and Gross Seed Company v. Nebraska Department of Road, 345 F.3d 964 (8th Cir. 2003), cert. denied, 541 U.S. 1041 (2004)

This case is instructive in its analysis of state DOT DBE-type programs and their evidentiary basis and implementation. This case also is instructive in its analysis of the narrowly tailored requirement for state DBE programs. In upholding the challenged Federal DBE Program at issue in this case, the Eighth Circuit emphasized the race-, ethnicity- and gender-neutral elements, the ultimate flexibility of the Program, and the fact the Program was tied closely only to labor markets with identified discrimination.

In Sherbrooke Turf, Inc. v. Minnesota DOT, and Gross Seed Company v. Nebraska Department of Road, the U.S. Court of Appeals for the Eighth Circuit upheld the constitutionality of the Federal DBE Program (49 C.F.R. Part 26). The court held the Federal Program was narrowly tailored to remedy a compelling governmental interest. The court also held the federal regulations governing the states’ implementation of the Federal DBE Program were narrowly tailored, and the state DOT’s

implementation of the Federal DBE Program was narrowly tailored to serve a compelling government interest.

Sherbrooke and Gross Seed both contended that the Federal DBE Program on its face and as applied in Minnesota and Nebraska violated the Equal Protection component of the Fifth Amendment's Due Process Clause. The Eighth Circuit engaged in a review of the Federal DBE Program and the implementation of the Program by the Minnesota DOT and the Nebraska Department of Roads under a strict scrutiny analysis and held that the Federal DBE Program was valid and constitutional and that the Minnesota DOT's and Nebraska DOR's implementation of the Program also was constitutional and valid. Applying the strict scrutiny analysis, the court first considered whether the Federal DBE Program established a compelling governmental interest, and found that it did. It concluded that Congress had a strong basis in evidence to support its conclusion that race-based measures were necessary for the reasons stated by the Tenth Circuit in Adarand, 228 F. 3d at 1167-76. Although the contractors presented evidence that challenged the data, they failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to participation in highway contracts. Thus, the court held they failed to meet their ultimate burden to prove that the DBE Program is unconstitutional on this ground.

Finally, Sherbrooke and Gross Seed argued that the Minnesota DOT and Nebraska DOR must independently satisfy the compelling governmental interest test aspect of strict scrutiny review. The government argued, and the district courts' below agreed, that participating states need not independently meet the strict scrutiny standard because under the DBE Program the state must still comply with the DOT regulations. The Eighth Circuit held that this issue was not addressed by the Tenth Circuit in Adarand. The Eighth Circuit concluded that neither side's position is entirely sound.

The court rejected the contention of the contractors that their facial challenges to the DBE Program must be upheld unless the record before Congress included strong evidence of race discrimination in construction contracting in Minnesota and Nebraska. On the other hand, the court held a valid race-based program must be narrowly tailored, and to be narrowly tailored, a national program must be limited to those parts of the country where its race-based measures are demonstrably needed to the extent that federal government delegates this tailoring function, as a state's implementation becomes relevant to a reviewing court's strict scrutiny. Thus, the court left the question of state implementation to the narrow tailoring analysis.

The court held that a reviewing court applying strict scrutiny must determine if the race-based measure is narrowly tailored, that is, whether the means chosen to accomplish the government's asserted purpose are specifically and narrowly framed to accomplish that purpose. The contractors have the ultimate burden of establishing that the DBE Program is not narrowly tailored. Id. The compelling interest analysis focused on the record before Congress; the narrow-tailoring analysis looks at the roles of the implementing highway construction agencies.

For determining whether a race-conscious remedy is narrowly tailored, the court looked at factors such as the efficacy of alternative remedies, the flexibility and duration of the race-conscious remedy, the relationship of the numerical goals to the relevant labor market, and the impact of the remedy on third parties. Id. Under the DBE Program, a state receiving federal highway funds must, on an

annual basis, submit to DOT an overall goal for DBE participation in its federally-funded highway contracts. See, 49 C.F.R. § 26.45(f)(1). The overall goal “must be based on demonstrable evidence” as to the number of DBEs who are ready, willing, and able to participate as contractors or subcontractors on federally-assisted contracts. 49 C.F.R. § 26.45(b). The number may be adjusted upward to reflect the state’s determination that more DBEs would be participating absent the effects of discrimination, including race-related barriers to entry. See, 49 C.F.R. § 26.45(d).

The state must meet the “maximum feasible portion” of its overall goal by race-neutral means and must submit for approval a projection of the portion it expects to meet through race-neutral means. See, 49 C.F.R. § 26.45(a), (c). If race-neutral means are projected to fall short of achieving the overall goal, the state must give preference to firms it has certified as DBEs. However, such preferences may not include quotas. 49 C.F.R. § 26.45(b). During the course of the year, if a state determines that it will exceed or fall short of its overall goal, it must adjust its use of race-conscious and race-neutral methods “[t]o ensure that your DBE program continues to be narrowly tailored to overcome the effects of discrimination.” 49 C.F.R. § 26.51(f).

Absent bad faith administration of the program, a state’s failure to achieve its overall goal will not be penalized. See, 49 C.F.R. § 26.47. If the state meets its overall goal for two consecutive years through race-neutral means, it is not required to set an annual goal until it does not meet its prior overall goal for a year. See, 49 C.F.R. § 26.51(f)(3). In addition, DOT may grant an exemption or waiver from any and all requirements of the Program. See, 49 C.F.R. § 26.15(b).

Like the district courts below, the Eighth Circuit concluded that the DOT regulations, on their face, satisfy the Supreme Court’s narrowing tailoring requirements. First, the regulations place strong emphasis on the use of race-neutral means to increase minority business participation in government contracting. 345 F. 3d at 972. Narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, but it does require serious good faith consideration of workable race-neutral alternatives. 345 F. 3d at 971, citing Grutter v. Bollinger, 539 U.S. 306.

Second, the revised DBE Program has substantial flexibility. A state may obtain waivers or exemptions from any requirements and is not penalized for a good faith effort to meet its overall goal. In addition, the Program limits preferences to small businesses falling beneath an earnings threshold, and any individual whose net worth exceeds \$750,000.00 cannot qualify as economically disadvantaged. See, 49 C.F.R. § 26.67(b). Likewise, the DBE program contains built-in durational limits. 345 F. 3d at 972. A State may terminate its DBE program if it meets its annual overall goal through race-neutral means for two consecutive years. Id.; 49 C.F.R. § 26.51(f)(3).

Third, the court found, the USDOT has tied the goals for DBE participation to the relevant labor markets. The regulations require states to set overall goals based upon the likely number of minority contractors that would have received federal assisted highway contracts but for the effects of past discrimination. See, 49 C.F.R. § 26.45(c)-(d)(Steps 1 and 2). Though the underlying estimates may be inexact, the exercise requires the states to focus on establishing realistic goals for DBE participation in the relevant contracting markets. Id. at 972.

Finally, Congress and DOT have taken significant steps, the court held, to minimize the race-base nature of the DBE Program. Its benefits are directed at all small business owned and controlled by the socially and economically disadvantaged. While TEA-21 creates a rebuttable presumption that

members of certain racial minorities fall within that class, the presumption is rebuttable, wealthy minority owners and wealthy minority-owned firms are excluded, and certification is available to persons who are not presumptably disadvantaged that demonstrate actual social and economic disadvantage. Thus, race is made relevant in the Program, but it is not a determinative factor. 345 F. 3d at 973. For these reasons, the court agreed with the district courts that the revised DBE Program is narrowly tailored on its face.

Sherbrooke and Gross Seed also argued that the DBE Program as applied in Minnesota and Nebraska is not narrowly tailored. Under the Federal Program, states set their own goals, based on local market conditions; their goals are not imposed by the federal government nor do recipients have to tie them to any uniform national percentage. 345 F. 3d at 973, citing 64 Fed. Reg. at 5102.

The court analyzed what Minnesota and Nebraska did in connection with their implementation of the Federal DBE Program. Minnesota DOT commissioned a disparity study of the highway contracting market in Minnesota. The study group determined that DBEs made up 11.4 percent of the prime contractors and subcontractors in a highway construction market. Of this number 0.6 percent were minority-owned and 10.8 percent women-owned. Based upon its analysis of business formation statistics, the consultant estimated that the number of participating minority-owned business would be 34 percent higher in a race-neutral market. Therefore, the consultant adjusted its DBE availability figure from 11.4 percent to 11.6 percent. Based on the study, Minnesota DOT adopted an overall goal of 11.6 percent DBE participation for federally-assisted highway projects. Minnesota DOT predicted that it would need to meet 9 percent of that overall goal through race- and gender-conscious means, based on the fact DBE participation in state highway contracts dropped from 10.25 percent in 1998 to 2.25 percent in 1999 when its previous DBE Program was suspended by the injunction by the district court in an earlier decision in Sherbrooke. Minnesota DOT required each prime contract bidder to make a good faith effort to subcontract a prescribe portion of the project to DBEs, and determined that portion based on several individualized factors, including the availability of DBEs in the extent of subcontracting opportunities on the project.

The contractor presented evidence attacking the reliability of the data in the study, but it failed to establish that better data were available or that Minnesota DOT was otherwise unreasonable in undertaking this thorough analysis and relying on its results. Id. The precipitous drop in DBE participation when no race-conscious methods were employed, the court concluded, supports Minnesota DOT's conclusion that a substantial portion of its overall goal could not be met with race-neutral measures. Id. On that record, the court agreed with the district court that the revised DBE Program serves a compelling government interest and is narrowly tailored on its face and as applied in Minnesota.

In Nebraska, the Nebraska DOR commissioned a disparity study also to review availability and capability of DBE firms in the Nebraska highway construction market. The availability study found that between 1995 and 1999, when Nebraska followed the mandatory 10 percent set-aside requirement, 9.95 percent of all available and capable firms were DBEs, and DBE firms received 12.7 percent of the contract dollars on federally assisted projects. After apportioning part of this DBE contracting to race-neutral contracting decisions, Nebraska DOR set an overall goal of 9.95 percent DBE participation and predicted that 4.82 percent of this overall goal would have to be achieved by race-and-gender conscious means. The Nebraska DOR required that prime contractors make a good

faith effort to allocate a set portion of each contract's funds to DBE subcontractors. The Eighth Circuit concluded that Gross Seed, like Sherbrooke, failed to prove that the DBE Program is not narrowly tailored as applied in Nebraska. Therefore, the court affirmed the district courts' decisions in Gross Seed and Sherbrooke. (See district court opinions discussed infra).

4. Sherbrooke Turf, Inc. v. Minnesota DOT, 2001 WL 1502841, No. 00-CV-1026 (D. Minn. 2001) (unpublished opinion), aff'd 345 F.3d 964 (8th Cir. 2003)

Sherbrooke involved a landscaping service contractor owned and operated by Caucasian males. The contractor sued the Minnesota Department of Transportation claiming the Federal DBE provisions of the Transportation Equity Act for the 21st Century ("TEA-21") are unconstitutional. Sherbrooke challenged the "federal affirmative action programs," the USDOT implementing regulations, and the Minnesota DOT's participation in the DBE Program. The United States Department of Transportation and the Federal Highway Administration intervened as Federal defendants in the case. Sherbrooke, 2001 WL 1502841 at *1.

The United States District Court in Sherbrooke relied substantially on the Tenth Circuit Court of Appeals decision in Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000), in holding that the Federal DBE Program is constitutional. The district court addressed the issue of "random inclusion" of various groups as being within the program in connection with whether the Federal DBE Program is "narrowly tailored." The court held that Congress cannot enact a national program to remedy discrimination without recognizing classes of people whose history has shown them to be subject to discrimination and allowing states to include those people in its DBE program.

The court held that the Federal DBE Program attempts to avoid the "potentially invidious effects of providing blanket benefits to minorities" in part,

by restricting a state's DBE preference to identified groups actually appearing in the target state. In practice, this means Minnesota can only certify members of one or another group as potential DBEs if they are present in the local market. This minimizes the chance that individuals — simply on the basis of their birth — will benefit from Minnesota's DBE program. If a group is not present in the local market, or if they are found in such small numbers that they cannot be expected to be able to participate in the kinds of construction work TEA-21 covers, that group will not be included in the accounting used to set Minnesota's overall DBE contracting goal.

Sherbrooke, 2001 WL 1502841 at *10 (D. Minn.).

The court rejected plaintiff's claim that the Minnesota DOT must independently demonstrate how its program comports with Croson's strict scrutiny standard. The court held that the "Constitution calls out far different requirements when a state implements a federal affirmative action program, as opposed to those occasions when a state or locality initiates the program." Id. at *11 (emphasis added). The court ruled in a footnote that TEA-21, being a federal program, "relieves the state of any burden to independently carry the strict scrutiny burden." Id. at *11 n.3. The court held states that

establish DBE programs under TEA-21 and 49 C.F.R. Part 26 are implementing a congressionally required program and not establishing a local one. As such, the court concluded that the state need not independently prove its DBE program meets the strict scrutiny standard. *Id.*

5. Gross Seed Co. v. Nebraska Department of Roads, Civil Action File No. 4:00CV3073 (D. Neb. May 6, 2002), aff'd 345 F. 3d 964 (8th Cir. 2003)

The United States District Court for the District of Nebraska held in Gross Seed Co. v. Nebraska (with the United States DOT and Federal Highway Administration as Interveners), that the Federal DBE Program (codified at 49 C.F.R. Part 26) is constitutional. The court also held that the Nebraska Department of Roads (“NDOR”) DBE Program adopted and implemented solely to comply with the Federal DBE Program is “approved” by the court because the court found that 49 C.F.R. Part 26 and TEA-21 were constitutional.

The court concluded, similar to the court in Sherbrooke Turf, that the State of Nebraska did not need to independently establish that its program met the strict scrutiny requirement because the Federal DBE Program satisfied that requirement, and was therefore constitutional. The court did not engage in a thorough analysis or evaluation of the NDOR Program or its implementation of the Federal DBE Program. The court points out that the NDOR Program is adopted in compliance with the Federal DBE Program, and that the USDOT approved the use of NDOR’s proposed DBE goals for fiscal year 2001, pending completion of USDOT’s review of those goals. Significantly, however, the court in its findings does note that the NDOR established its overall goals for fiscal year 2001 based upon an independent availability/disparity study.

The court upheld the constitutionality of the Federal DBE Program by finding the evidence presented by the federal government and the history of the federal legislation are sufficient to demonstrate that past discrimination does exist “in the construction industry” and that racial and gender discrimination “within the construction industry” is sufficient to demonstrate a compelling interest in individual areas, such as highway construction. The court held that the Federal DBE Program was sufficiently “narrowly tailored” to satisfy strict scrutiny analysis based again on the evidence submitted by the federal government as to the Federal DBE Program.

6. Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000) cert. granted then dismissed as improvidently granted sub nom. Adarand Constructors, Inc. v. Mineta, 532 U.S. 941, 534 U.S. 103 (2001)

This is the Adarand decision by the United States Court of Appeals for the Tenth Circuit, which was on remand from the earlier Supreme Court decision applying the strict scrutiny analysis to any constitutional challenge to the Federal DBE Program. See Adarand Constructors, Inc. v. Pena, 515 U.S. 200 (1995). The decision of the Tenth Circuit in this case was considered by the United States Supreme Court, after that court granted certiorari to consider certain issues raised on appeal. The Supreme Court subsequently dismissed the writ of certiorari “as improvidently granted” without reaching the merits of the case. The court did not decide the constitutionality of the Federal DBE Program as it applies to state DOTs or local governments.

The Supreme Court held that the Tenth Circuit had not considered the issue before the Supreme Court on certiorari, namely whether a race-based program applicable to direct federal contracting is constitutional. This issue is distinguished from the issue of the constitutionality of the United States

DOT DBE Program as it pertains to procurement of federal funds for highway projects let by states, and the implementation of the Federal DBE Program by state DOTs. Therefore, the Supreme Court held it would not reach the merits of a challenge to federal laws relating to direct federal procurement.

Turning to the Tenth Circuit decision in Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10th Cir. 2000), the Tenth Circuit upheld in general the facial constitutionality of the Federal DBE Program. The court found that the federal government had a compelling interest in not perpetuating the effects of racial discrimination in its own distribution of federal funds and in remediating the effects of past discrimination in government contracting, and that the evidence supported the existence of past and present discrimination sufficient to justify the Federal DBE Program. The court also held that the Federal DBE Program is “narrowly tailored,” and therefore upheld the constitutionality of the Federal DBE Program.

It is significant to note that the court in determining the Federal DBE Program is “narrowly tailored” focused on the current regulations, 49 C.F.R. Part 26, and in particular § 26.1(a), (b), and (f). The court pointed out that the federal regulations instruct recipients as follows:

[y]ou must meet the maximum feasible portion of your overall goal by using race-neutral means of facilitating DBE participation, 49 C.F.R. § 26.51(a)(2000); see also 49 C.F.R. § 26.51(f)(2000) (if a recipient can meet its overall goal through race-neutral means, it must implement its program without the use of race-conscious contracting measures), and enumerate a list of race-neutral measures, see 49 C.F.R. § 26.51(b)(2000). The current regulations also outline several race-neutral means available to program recipients including assistance in overcoming bonding and financing obstacles, providing technical assistance, establishing programs to assist start-up firms, and other methods. See 49 C.F.R. § 26.51(b). We therefore are dealing here with revisions that emphasize the continuing need to employ non-race-conscious methods even as the need for race-conscious remedies is recognized. 228 F.3d at 1178-1179.

In considering whether the Federal DBE Program is narrowly tailored, the court also addressed the argument made by the contractor that the program is over- and under-inclusive for several reasons, including that Congress did not inquire into discrimination against each particular minority racial or ethnic group. The court held that insofar as the scope of inquiry suggested was a particular state’s construction industry alone, this would be at odds with its holding regarding the compelling interest in Congress’s power to enact nationwide legislation. Id. at 1185-1186. The court held that because of the “unreliability of racial and ethnic categories and the fact that discrimination commonly occurs based on much broader racial classifications,” extrapolating findings of discrimination against the various ethnic groups “is more a question of nomenclature than of narrow tailoring.” Id. The court found that the “Constitution does not erect a barrier to the government’s effort to combat discrimination based on broad racial classifications that might prevent it from enumerating particular ethnic origins falling within such classifications.” Id.

Finally, the Tenth Circuit did not specifically address a challenge to the letting of federally-funded construction contracts by state departments of transportation. The court pointed out that plaintiff Adarand “conceded that its challenge in the instant case is to ‘the federal program, implemented by federal officials,’ and not to the letting of federally-funded construction contracts by state agencies.” 228 F.3d at 1187. The court held that it did not have before it a sufficient record to enable it to evaluate the separate question of Colorado DOT’s implementation of race-conscious policies. *Id.* at 1187-1188.

7. Geod Corporation v. New Jersey Transit Corporation, et. seq. ____ F.Supp. 2d ____, 2009 WL 2595607 (D.N.J. August 20, 2009)

Plaintiffs Geod Corporation and its officers, who are white males, sued the New Jersey Transit Corporation (“NJT”) and state officials seeking a declaration that NJT’s DBE program was unconstitutional and in violation of the United States 5th and 14th Amendment to the United States Constitution and the Constitution of the State of New Jersey, and seeking a permanent injunction against NJT for enforcing or utilizing its DBE program. The NJT’s DBE program was implemented in accordance with the Federal DBE program and the Transportation Equity Act for the 21st century (“TEA-21”) and 49 C.F.R. Part 26.

The parties filed cross Motions for Summary Judgment. The plaintiff Geod challenged the constitutionality of NJT’s DBE program for multiple reasons, including alleging NJT could not justify establishing a program using race and sex based preferences; the NJT’s disparity study did not provide a sufficient factual predicate to justify the DBE Program; NJT’s statistical evidence did not establish discrimination; NJT did not have anecdotal data evidencing a “strong basis in evidence” of discrimination which justified a race- and sex-based program; NJT’s program was not narrowly tailored and over-inclusive; NJT could not show an exceedingly persuasive justification for gender preferences; and that NJT’s program was not narrowly tailored because race neutral alternatives existed. In opposition, NJT filed a Motion for Summary Judgment asserting that its DBE program was narrowly tailored because it fully complied with the requirements of the Federal DBE program and TEA-21.

Compelling interest. The district court held that states and their agencies are entitled to adopt the federal governments’ compelling interest in enacting TEA-21 and its implementing regulations. 2009 WL 2595607 at *4. The court stated that plaintiff’s argument that NJT cannot establish the need for its DBE program was a “red herring, which is unsupported.” The plaintiff did not question the constitutionality of the compelling interest of the Federal DBE program. The court held that all states “inherit the federal governments’ compelling interest in establishing a DBE program.” *Id.*

The court found that establishing a DBE program “is not contingent upon a state agency demonstrating a need for same, as the federal government has already done so.” *Id.* The court concluded that this reasoning rendered plaintiff’s assertions that NJT’s disparity study did not have sufficient factual predicate for establishing its DBE program, and that no exceedingly persuasive justification was found to support gender based preferences, as without merit. *Id.* The court held that NJT does not need to justify establishing its DBE program, as it has already been justified by the legislature. *Id.*

NJT's DBE program as applied. The court noted that both plaintiff's and defendant's arguments were based on an alleged split in the Federal Circuit Courts of Appeal. Plaintiff Geod relies on Western States Paving Company v. Washington State DOT, 407 F.3d 983(9th Cir. 2005) for the proposition that an as-applied challenge to the constitutionality of a particular DBE program requires a demonstration by the recipient of federal funds that the program is narrowly tailored. Id. at *5. In contrast, the NJT relied primarily on Northern Contracting, Inc. v. State of Illinois, 473 F.3d 715 (7th Cir. 2007) for the proposition that if a DBE program complies with TEA-21, it is narrowly tailored. Id.

The court viewed the various Federal Circuit Court of Appeals decisions as fact specific determinations which have lead to the parties distinguishing cases without any substantive difference in the application of law. Id.

The court reviewed the decisions by the Ninth Circuit in Western States Paving and the Seventh Circuit of Northern Contracting. In Western States Paving, the district court stated that the Ninth Circuit held for a DBE program to pass constitutional muster, it must be narrowly tailored; specifically, the recipient of federal funds must evidence past discrimination in the relevant market in order to utilize race conscious DBE goals. Id. at *5. The Ninth Circuit, according to district court, made a fact specific determination as to whether the DBE program complied with TEA-21 in order to decide if the program was narrowly tailored to meet the federal regulation's requirements. The district court stated that the requirement that a recipient must evidence past discrimination "is nothing more than a requirement of the regulation." Id.

The court stated that the Seventh Circuit in Northern Contracting held a recipient must demonstrate that its program is narrowly tailored, and that generally a recipient is insulated from this sort of constitutional attack absent a showing that the state exceeded its federal authority. Id., citing Northern Contracting, 473 F.3d at 721. The district court held that implicit in Northern Contracting is the fact one may challenge the constitutionality of a DBE program, as it is applied, to the extent that the program exceeds its federal authority. Id.

The court, therefore, concluded that it must determine first whether NJT's DBE program complies with TEA-21, then whether NJT exceeded its federal authority in its application of its DBE program. In other words, the district court stated it must determine whether the NJT DBE program complies with TEA-21 in order to determine whether the program, as implemented by NJT, is narrowly tailored. Id.

The court pointed out that the Eighth Circuit Court of Appeals in Sherbrook Turf, Inc. v. Minnesota DOT, 345 F.3d 964 (8th Cir. 2003) found Minnesota's DBE program was narrowly tailored because it was in compliance with TEA-21's requirements. The Eighth Circuit in Sherbrook, according to the district court, analyzed the application of Minnesota's DBE program to ensure compliance with TEA-21's requirements to ensure that the DBE program implemented by Minnesota DOT was narrowly tailored. Id. at *5.

The court held that TEA-21 delegates to each state that accepts federal transportation funds the responsibility of implementing a DBE program that comports with TEA-21. In order to comport with TEA-21, the district court stated a recipient must (1) determine an appropriate DBE participation goal, (2) examine all evidence and evaluate whether an adjustment, if any, is needed to

arrive at their goal, and (3) if the adjustment is based on continuing effects of past discrimination, provide demonstrable evidence that is logically and directly related to the effect for which the adjustment is sought. *Id.* at *6, citing Western States Paving Company, 407 F.3d at 983, 988.

Determination of DBE goal. First, the district court stated a recipient of federal funds must determine, at the local level, the figure that would constitute an appropriate DBE involvement goal, based on their relative availability of DBEs. *Id.* at *6, citing 49 C.F.R. § 26.45(c). In this case, the court found that NJT did determine a base figure for the relative availability of DBEs, which accounted for demonstrable evidence of local market conditions and was designed to be rationally related to the relative availability of DBEs. *Id.* The court pointed out that NJT conducted a disparity study; and the disparity study utilized NJT's DBE lists from fiscal years 1995-1999 and Census Data to determine its base DBE goal. The district court noted that the plaintiffs' argument that the data used in the disparity study were stale was without merit and had no basis in law. The court found that the disparity study took into account the primary industries, primary geographic market, and race-neutral alternatives, then adjusted its goal to encompass these characteristics. *Id.* at *6.

The court stated that the use of DBE directories and Census data are what the legislature intended for state agencies to utilize in making a base DBE goal determination. *Id.* Also, the court stated that "perhaps more importantly, NJT's DBE goal was approved by the USDOT every year from 2002 until 2008." *Id.* at *6. Thus, the court found NJT appropriately determined their DBE availability, which was approved by the USDOT, pursuant to 49 C.F.R. § 26.45(c). *Id.* at *6. The court held that NJT demonstrated its overall DBE goal is based on demonstrable evidence of the availability of ready, willing, and able DBEs relative to all businesses ready, willing, and able to participate in DOT assisted contracts and reflects its determination of the level of DBE participation it would expect absent the effects of discrimination. *Id.*

Also of significance, the court pointed out that plaintiffs did not provide any evidence that NJT did not set a DBE goal based upon 49 C.F. § 26.45(c). The court thus held that genuine issues of material fact remain only as to whether a reasonable jury may find that the method used by NJT to determine its DBE goal was sufficiently narrowly tailored. *Id.* at *6.

NJT's adjustment of its DBE goal. The district court pointed out that to determine what adjustment to make the disparity study examined qualitative data such as focus groups on the pre-qualification status of DBEs, working with prime contractors, securing credit, and its effect on DBE participation, as well as procurement officer interviews to analyze, and compare and contrast their relationships with non-DBE vendors and DBE vendors. *Id.* at *7. This qualitative information was then compared to DBE bids and DBE goals for each year in question. NJT's adjustment to its DBE goal also included an analysis of the overall disparity ratio, as well as, DBE utilization based on race, gender and ethnicity. *Id.* A decomposition analysis was also performed. *Id.*

The court concluded that NJT provided evidence that it, at a minimum, examined the current capacity of DBEs to perform work in its DOT-assisted contracting program, as measured by the volume of work DBEs have performed in recent years, as well as utilizing the disparity study itself. The court pointed out there were two methods specifically approved by 49 C.F.R. § 26.45(d). *Id.*

The court also found that NJT took into account race-neutral measures to ensure that the greatest percentage of DBE participation was achieved through race- and gender-neutral means. The district court concluded that “critically,” plaintiffs failed to provide evidence of another, more perfect, method that could have been utilized to adjust NJT’s DBE goal. *Id.* at *7. The court held that genuine issues of material fact remain only as to whether NJT’s adjustment to its DBE goal is sufficiently narrowly tailored and thus constitutional. *Id.*

Effects of past discrimination. NJT, the court found, adjusted its DBE goal to account for the effects of past discrimination, noting the disparity study took into account the effects of past discrimination in the pre-qualification process of DBEs. *Id.* at *7. The court quoted the disparity study as stating that it found non-trivial and statistically significant measures of discrimination in contract amounts awarded during the study period. *Id.* at *8.

The court found, however, that what was “gravely critical” about the finding of the past effects of discrimination is that it only took into account six groups including American Indian, Hispanic, Asian, blacks, women and “unknown,” but did not include an analysis of past discrimination for the ethnic group “Iraqi,” which is now a group considered to be a DBE by the NJT. *Id.* Because the disparity report included a category entitled “unknown,” the court held a genuine issue of material fact remains as to whether “Iraqi” is legitimately within NJT’s defined DBE groups and whether a demonstrable finding of discrimination exists for Iraqis. Therefore, the court denied both plaintiffs’ and defendants’ Motions for Summary Judgment as to the constitutionality of NJT’s DBE program.

Qualified immunity and Title VI. The court also held that because the law was not clearly established at the time NJT established its DBE program to comply with TEA-21, the individual state defendants were entitled to qualified immunity and their Motion for Summary Judgment as to the state officials was granted. The court, in addition, held that plaintiff’s Title VI claims were dismissed because the individual defendants were not recipients of federal funds, and that the NJT as an instrumentality of the State of New Jersey is entitled to sovereign immunity. Therefore, the court held that the plaintiff’s claims based on the violation of 42 U.S.C. § 1983 were dismissed and NJT’s Motion for Summary Judgment was granted as to that claim.

8. Klaver Construction, Inc. v. Kansas DOT, 211 F. Supp. 2d 1296 (D. Kan. 2002)

This is another case that involved a challenge to the USDOT Regulations that implement TEA-21 (49 C.F.R. Part 26), in which the plaintiff contractor sought to enjoin the Kansas Department of Transportation (“DOT”) from enforcing its DBE Program on the grounds that it violates the Equal Protection Clause under the Fourteenth Amendment. This case involves a direct constitutional challenge to racial and gender preferences in federally-funded state highway contracts. This case concerned the constitutionality of the Kansas DOT’s implementation of the Federal DBE Program, and the constitutionality of the gender-based policies of the federal government and the race- and gender-based policies of the Kansas DOT. The court granted the federal and state defendants’ (USDOT and Kansas DOT) Motions to Dismiss based on lack of standing. The court held the contractor could not show the specific aspects of the DBE Program that it contends are unconstitutional have caused its alleged injuries.

G. Recent Decisions and Authorities Involving Federal Procurement That May Impact Indiana MBE/WBE and Disadvantaged Business Programs

1. Rothe Development Corp. v. U.S. Department of Defense, 545 F.3d 1023 (Fed. Cir. 2008)

Although this case does not involve the Federal DBE Program (49 C.F.R. Part 26), it is an analogous case that may impact the legal analysis and law related to the validity of programs implemented by recipients of federal funds, including the Federal DBE Program. Additionally, it underscores the requirement that race-, ethnic- and gender-based programs of any nature must be supported by substantial evidence. In Rothe, an unsuccessful bidder on a federal defense contract brought suit alleging that the application of an evaluation preference, pursuant to a federal statute, to a small disadvantaged bidder (SDB) to whom a contract was awarded, violated the Equal Protection clause of the U.S. Constitution. The federal statute challenged is Section 1207 of the National Defense Authorization Act of 1987 and as reauthorized in 2003. The statute provides a goal that 5 percent of the total dollar amount of defense contracts for each fiscal year would be awarded to small businesses owned and controlled by socially and economically disadvantaged individuals. 10 U.S.C. § 2323. Congress authorized the DOD to adjust bids submitted by non-socially and economically disadvantaged firms upwards by 10 percent (the “Price Evaluation Adjustment Program” or “PEA”).

The district court held the federal statute, as reauthorized in 2003, was constitutional on its face. The court held the 5 percent goal and the PEA program as reauthorized in 1992 and applied in 1998 was unconstitutional. The basis of the decision was that Congress considered statistical evidence of discrimination that established a compelling governmental interest in the reauthorization of the statute and PEA program in 2003. Congress had not documented or considered substantial statistical evidence that the DOD discriminated against minority small businesses when it enacted the statute in 1992 and reauthorized it in 1998. The plaintiff appealed the decision.

The Federal Circuit found that the “analysis of the facial constitutionality of an act is limited to evidence before Congress prior to the date of reauthorization.” 413 F.3d 1327 (Fed. Cir. 2005)(affirming in part, vacating in part, and remanding 324 F. Supp. 2d 840 (W.D. Tex. 2004). The court limited its review to whether Congress had sufficient evidence in 1992 to reauthorize the provisions in 1207. The court held that for evidence to be relevant to a strict scrutiny analysis, “the evidence must be proven to have been before Congress prior to enactment of the racial classification.” The Federal Circuit held that the district court erred in relying on the statistical studies without first determining whether the studies were before Congress when it reauthorized section 1207. The Federal Circuit remanded the case and directed the district court to consider whether the data presented was so outdated that it did not provide the requisite strong basis in evidence to support the reauthorization of section 1207.

On August 10, 2007 the Federal District Court for the Western District of Texas in Rothe Development Corp. v. U.S. Dept. of Defense, 499 F.Supp.2d 775 (W.D.Tex. Aug 10, 2007) issued its Order on remand from the Federal Circuit Court of Appeals decision in Rothe, 413 F.3d 1327 (Fed Cir. 2005). The district court upheld the constitutionality of the 2006 Reauthorization of Section 1207 of the National Defense Authorization Act of 1987 (10 USC § 2323), which permits the U.S. Department of Defense to provide preferences in selecting bids submitted by small

businesses owned by socially and economically disadvantaged individuals (“SDBs”). The district court found the 2006 Reauthorization of the 1207 Program satisfied strict scrutiny, holding that Congress had a compelling interest when it reauthorized the 1207 Program in 2006, that there was sufficient statistical and anecdotal evidence before Congress to establish a compelling interest, and that the reauthorization in 2006 was narrowly tailored.

The district court, among its many findings, found certain evidence before Congress was “stale,” that the plaintiff (Rothe) failed to rebut other evidence which was not stale, and that the decisions by the Eighth, Ninth and Tenth Circuits in the decisions in Concrete Works, Adarand Constructors, Sherbrooke Turf and Western States Paving (discussed above and below) were relevant to the evaluation of the facial constitutionality of the 2006 Reauthorization.

2007 Order of the District Court (499 F.Supp. 2d 775). In the Section 1207 Act, Congress set a goal that 5 percent of the total dollar amount of defense contracts for each fiscal year would be awarded to small businesses owned and controlled by socially and economically disadvantaged individuals. In order to achieve that goal, Congress authorized the DOD to adjust bids submitted by non-socially and economically disadvantaged firms up to 10 percent (the “Price Evaluation Adjustment Program” or “PEA”) 10 U.S.C. § 2323(e)(3). Rothe, 499 F.Supp.2d. at 782. Plaintiff Rothe did not qualify as an SDB because it was owned by a Caucasian female. Although Rothe was technically the lowest bidder on a DOD contract, its bid was adjusted upward by 10 percent, and a third party, who qualified as a SDB, became the “lowest” bidder and was awarded the contract. Id. Rothe claims that the 1207 Program is facially unconstitutional because it takes race into consideration in violation of the Equal Protection component of the Due Process Clause of the Fifth Amendment. Id. at 782-83. The district court’s decision only reviewed the facial constitutionality of the 2006 Reauthorization of the 2007 Program.

The district court initially rejected six legal arguments made by Rothe regarding strict scrutiny review based on the rejection of the same arguments by the Eighth, Ninth, and Tenth Circuit Courts of Appeal in the Sherbrooke Turf, Western States Paving, Concrete Works, Adarand VII cases, and the Federal Circuit Court of Appeal in Rothe. Rothe at 825-833.

The district court discussed and cited the decisions in Adarand VII (2000), Sherbrooke Turf (2003), and Western States Paving (2005), as holding that Congress had a compelling interest in eradicating the economic roots of racial discrimination in highway transportation programs funded by federal monies, and concluding that the evidence cited by the government, particularly that contained in *The Compelling Interest* (a.k.a. the *Appendix*), more than satisfied the government’s burden of production regarding the compelling interest for a race-conscious remedy. Rothe at 827. Because the Urban Institute Report, which presented its analysis of 39 state and local disparity studies, was cross-referenced in the *Appendix*, the district court found the courts in Adarand VII, Sherbrooke Turf, and Western States Paving, also relied on it in support of their compelling interest holding. Id. at 827.

The district court also found that the Tenth Circuit decision in Concrete Works IV, 321 F.3d 950 (10th Cir. 2003), established legal principles that are relevant to the court’s strict scrutiny analysis. First, Rothe’s claims for declaratory judgment on the racial constitutionality of the earlier 1999 and 2002 Reauthorizations were moot. Second, the government can meet its burden of production without conclusively proving the existence of past or present racial discrimination. Third, the government may establish its own compelling interest by presenting evidence of its own direct

participation in racial discrimination or its passive participation in private discrimination. Fourth, once the government meets its burden of production, Rothe must introduce “credible, particularized” evidence to rebut the government’s initial showing of the existence of a compelling interest. Fifth, Rothe may rebut the government’s statistical evidence by giving a race-neutral explanation for the statistical disparities, showing that the statistics are flawed, demonstrating that the disparities shown are not significant or actionable, or presenting contrasting statistical data. Sixth, the government may rely on disparity studies to support its compelling interest, and those studies may control for the effect that pre-existing affirmative action programs have on the statistical analysis. Id. at 829-32.

Based on Concrete Works IV, the district court did not require the government to conclusively prove that there is pervasive discrimination in the relevant market, that each presumptively disadvantaged group suffered equally from discrimination, or that private firms intentionally and purposefully discriminated against minorities. The court found that the inference of discriminatory exclusion can arise from statistical disparities. Id. at 830-31.

The district court held that Congress had a compelling interest in the 2006 Reauthorization of the 1207 Program, which was supported by a strong basis in the evidence. The court relied in significant part upon six state and local disparity studies that were before Congress prior to the 2006 Reauthorization of the 1207 Program. The court based this evidence on its finding that Senator Kennedy had referenced these disparity studies, discussed and summarized findings of the disparity studies, and Representative Cynthia McKinney also cited the same six disparity studies that Senator Kennedy referenced. The court stated that based on the content of the floor debate, it found that these studies were put before Congress prior to the date of the Reauthorization of Section 1207. Id. at 838.

The district court found that these six state and local disparity studies analyzed evidence of discrimination from a diverse cross-section of jurisdictions across the United States, and “they constitute prima facie evidence of a nation-wide pattern or practice of discrimination in public and private contracting.” Id. at 838-39. The court found that the data used in these six disparity studies is not “stale” for purposes of strict scrutiny review. Id. at 839. The court disagreed with Rothe’s argument that all the data was stale (data in the studies from 1997 through 2002), “because this data was the most current data available at the time that these studies were performed.” Id. The court found that the governmental entities should be able to rely on the most recently available data so long as that data is reasonably up-to-date. Id. The court declined to adopt a “bright-line rule for determining staleness.” Id.

The court referred to the reliance by the Ninth Circuit and the Eighth Circuit on the *Appendix* to affirm the constitutionality of the United States Department of Transportation MBE [now DBE] Program, and rejected five years as a bright-line rule for considering whether data is “stale.” Id. at n.86. The court also stated that it “accepts the reasoning of the *Appendix*, which the court found stated that for the most part “the federal government does business in the same contracting markets as state and local governments. Therefore, the evidence in state and local studies of the impact of discriminatory barriers to minority opportunity in contracting markets throughout the country is relevant to the question whether the federal government has a compelling interest to take remedial action in its own procurement activities.” Id. at 839, quoting 61 Fed.Reg. 26042-01, 26061 (1996).

The district court also discussed additional evidence before Congress that it found in Congressional Committee Reports and Hearing Records. *Id.* at 865-71. The court noted SBA Reports that were before Congress prior to the 2006 Reauthorization. *Id.* at 871.

The district court found that the data contained in the *Appendix*, the Benchmark Study, and the Urban Institute Report was “stale,” and the court did not consider those reports as evidence of a compelling interest for the 2006 Reauthorization. *Id.* at 872-75. The court stated that the Eighth, Ninth and Tenth Circuits relied on the *Appendix* to uphold the constitutionality of the Federal DBE Program, citing to the decisions in *Sherbrooke Turf*, *Adarand VII*, and *Western States Paving*. *Id.* at 872. The court pointed out that although it does not rely on the data contained in the *Appendix* to support the 2006 Reauthorization, the fact the Eighth, Ninth, and Tenth Circuits relied on this data to uphold the constitutionality of the Federal DBE Program as recently as 2005, convinced the court that a bright-line staleness rule is inappropriate. *Id.* at 874.

Although the court found that the data contained in the *Appendix*, the Urban Institute Report, and the Benchmark Study was stale for purposes of strict scrutiny review regarding the 2006 Reauthorization, the court found that Rothe introduced no concrete, particularized evidence challenging the reliability of the methodology or the data contained in the six state and local disparity studies, and other evidence before Congress. The court found that Rothe failed to rebut the data, methodology or anecdotal evidence with “concrete, particularized” evidence to the contrary. *Id.* at 875. The district court held that based on the studies, the government had satisfied its burden of producing evidence of discrimination against African Americans, Asian Americans, Hispanic Americans, and Native Americans in the relevant industry sectors. *Id.* at 876.

The district court found that Congress had a compelling interest in reauthorizing the 1207 Program in 2006, which was supported by a strong basis of evidence for remedial action. *Id.* at 877. The court held that the evidence constituted prima facie proof of a nationwide pattern or practice of discrimination in both public and private contracting, that Congress had sufficient evidence of discrimination throughout the United States to justify a nationwide program, and the evidence of discrimination was sufficiently pervasive across racial lines to justify granting a preference to all five purportedly disadvantaged racial groups. *Id.*

The district court also found that the 2006 Reauthorization of the 1207 Program was narrowly tailored and designed to correct present discrimination and to counter the lingering effects of past discrimination. The court held that the government’s involvement in both present discrimination and the lingering effects of past discrimination was so pervasive that the Department of Defense and Department of Air Force had become passive participants in perpetuating it. *Id.* The court stated it was law of the case and could not be disturbed on remand that the Federal Circuit in *Rothe III* had held that the 1207 Program was flexible in application, limited in duration and it did not unduly impact on the rights of third parties. *Id.*, quoting *Rothe III*, 262 F.3d at 1331.

The district court thus conducted a narrowly tailored analysis that reviewed three factors:

1. The efficacy of race-neutral alternatives;
2. Evidence detailing the relationship between the stated numerical goal of 5 percent and the relevant market; and
3. Over- and under-inclusiveness.

Id. The court found that Congress examined the efficacy of race-neutral alternatives prior to the enactment of the 1207 Program in 1986 and that these programs were unsuccessful in remedying the effects of past and present discrimination in the federal procurement. Id. The court concluded that Congress had attempted to address the issues through race-neutral measures, discussed those measures, and found that Congress' adoption of race-conscious provisions were justified by the ineffectiveness of such race-neutral measures in helping minority-owned firms overcome barriers. Id. The court found that the government seriously considered and enacted race-neutral alternatives, but these race-neutral programs did not remedy the widespread discrimination that affected the federal procurement sector, and that Congress was not required to implement or exhaust every conceivable race-neutral alternative. Id. at 880. Rather, the court found that narrow tailoring requires only "serious, good faith consideration of workable race-neutral alternatives." Id.

The district court also found that the 5 percent goal was related to the minority business availability identified in the six state and local disparity studies. Id. at 881. The court concluded that the 5 percent goal was aspirational, not mandatory. Id. at 882. The court then examined and found that the regulations implementing the 1207 Program were not over-inclusive for several reasons.

November 4, 2008 decision by the Federal Circuit Court of Appeals. On November 4, 2008, the Federal Circuit Court of Appeals reversed the judgment of the district court in part, and remanded with instructions to enter a judgment (1) denying Rothe any relief regarding the facial constitutionality of Section 1207 as enacted in 1999 or 2002, (2) declaring that Section 1207 as enacted in 2006 (10 U.S.C. § 2323) is facially unconstitutional, and (3) enjoining application of Section 1207 (10 U.S.C. § 2323).

The Federal Circuit Court of Appeals held that Section 1207, on its face, as reenacted in 2006, violated the Equal Protection component of the Fifth Amendment right to due process. The court found that because the statute authorized the Department of Defense to afford preferential treatment on the basis of race, the court applied strict scrutiny, and because Congress did not have a "strong basis in evidence" upon which to conclude that the Department of Defense was a passive participant in pervasive, nationwide racial discrimination — at least not on the evidence produced by the Department of Defense and relied on by the district court in this case — Section 1207 failed to meet this strict scrutiny test. 545 F.3d at 1050.

Strict scrutiny framework. The Federal Circuit Court of Appeals recognized that the Supreme Court has held a government may have a compelling interest in remedying the effects of past or present racial discrimination. 545 F.3d at 1036. The court cited the decision in Croson, 488 U.S. at 492, that it is "beyond dispute that any public entity, state or federal, has a compelling interest in assuring

that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of private prejudice.” 545 F.3d. at 1036, quoting Croson, 488 U.S. at 492.

The court held that before resorting to race-conscious measures, the government must identify the discrimination to be remedied, public or private, with some specificity, and must have a strong basis of evidence upon which to conclude that remedial action is necessary. 545 F.3d at 1036, quoting Closon, 488 U.S. at 500, 504. Although the party challenging the statute bears the ultimate burden of persuading the court that it is unconstitutional, the Federal Circuit stated that the government first bears a burden to produce strong evidence supporting the legislature’s decision to employ race-conscious action. 545 F.3d at 1036.

Even where there is a compelling interest supported by strong basis in evidence, the court held the statute must be narrowly tailored to further that interest. *Id.* The court noted that a narrow tailoring analysis commonly involves six factors: (1) the necessity of relief; (2) the efficacy of alternative, race-neutral remedies; (3) the flexibility of relief, including the availability of waiver provisions; (4) the relationship with the stated numerical goal to the relevant labor market; (5) the impact of relief on the rights of third parties; and (6) the overinclusiveness or underinclusiveness of the racial classification. *Id.*

Compelling interest – strong basis in evidence. The Federal Circuit pointed out that the statistical and anecdotal evidence relied upon by the district court in its ruling below included six disparity studies of state or local contracting. The Federal Circuit also pointed out that the district court found that the data contained in the Appendix, the Urban Institute Report, and the Benchmark Study were stale for purposes of strict scrutiny review of the 2006 Authorization, and therefore, the district court concluded that it would not rely on those three reports as evidence of a compelling interest for the 2006 reauthorization of the 1207 Program. 545 F.3d 1023, citing to Rothe VI, 499 F.Supp. 2d at 875. Since the Department of Defense did not challenge this finding on appeal, the Federal Circuit stated that it would not consider the Appendix, the Urban Institute Report, or the Department of Commerce Benchmark Study, and instead determined whether the evidence relied on by the district court was sufficient to demonstrate a compelling interest. *Id.*

Six state and local disparity studies. The Federal Circuit found that disparity studies can be relevant to the compelling interest analysis because, as explained by the Supreme Court in Croson, “[w]here there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by [a] locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.” 545 F.3d at 1037-1038, quoting Croson, 488 U.S.C. at 509. The Federal Circuit also cited to the decision by the Fifth Circuit Court of Appeals in W.H. Scott Constr. Co. v. City of Jackson, 199 F.3d 206 (5th Cir. 1999) that given Croson’s emphasis on statistical evidence, other courts considering equal protection challenges to minority-participation programs have looked to disparity indices, or to computations of disparity percentages, in determining whether Croson’s evidentiary burden is satisfied. 545 F.3d at 1038, quoting W.H. Scott, 199 F.3d at 218.

The Federal Circuit noted that a disparity study is a study attempting to measure the difference- or disparity- between the number of contracts or contract dollars actually awarded minority-owned businesses in a particular contract market, on the one hand, and the number of contracts or contract

dollars that one would expect to be awarded to minority-owned businesses given their presence in that particular contract market, on the other hand. 545 F.3d at 1037.

Staleness. The Federal Circuit declined to adopt a per se rule that data more than five years old is stale per se, which rejected the argument put forth by Rothe. 545 F.3d at 1038. The court pointed out that the district court noted other circuit courts have relied on studies containing data more than five years old when conducting compelling interest analyses, citing to Western States Paving v. Washington State Department of Transportation, 407 F.3d 983, 992 (9th Cir. 2005) and Sherbrooke Turf, Inc. v. Minnesota Department of Transportation, 345 F.3d 964, 970 (8th Cir. 2003)(relying on the Appendix, published in 1996).

The Federal Circuit agreed with the district court that Congress “should be able to rely on the most recently available data so long as that data is reasonably up-to-date.” 545 F.3d at 1039. The Federal Circuit affirmed the district court’s conclusion that the data analyzed in the six disparity studies was not stale at the relevant time because the disparity studies analyzed data pertained to contracts awarded as recently as 2000 or even 2003, and because Rothe did not point to more recent, available data. *Id.*

Before Congress. The Federal Circuit found that for evidence to be relevant in the strict scrutiny analysis, it “must be proven to have been before Congress prior to enactment of the racial classification.” 545 F.3d at 1039, quoting Rothe V, 413 F.3d at 1338. The Federal Circuit had issues with determining whether the six disparity studies were actually before Congress for several reasons, including that there was no indication that these studies were debated or reviewed by members of Congress or by any witnesses, and because Congress made no findings concerning these studies. 545 F.3d at 1039-1040. However, the court determined it need not decide whether the six studies were put before Congress, because the court held in any event that the studies did not provide a substantially probative and broad-based statistical foundation necessary for the strong basis in evidence that must be the predicate for nation-wide, race-conscious action. *Id.* at 1040.

The court did note that findings regarding disparity studies are to be distinguished from formal findings of discrimination by the Department of Defense “which Congress was emphatically not required to make.” *Id.* at 1040, footnote 11 (emphasis in original). The Federal Circuit cited the Dean v. City of Shreveport case that the “government need not incriminate itself with a formal finding of discrimination prior to using a race-conscious remedy.” 545 F.3d at 1040, footnote 11 quoting Dean v. City of Shreveport, 438 F.3d 448, 445 (5th Cir. 2006).

Methodology. The Federal Circuit found that there were methodological defects in the six disparity studies. The court found that the objections to the parameters used to select the relevant pool of contractors was one of the major defects in the studies. 545 F.3d at 1040-1041.

The court stated that in general, “[a] disparity ratio less than 0.80” — i.e., a finding that a given minority group received less than 80 percent of the expected amount — “indicates a relevant degree of disparity,” and “might support an inference of discrimination.” 545 F.3d at 1041, quoting the district court opinion in Rothe VI, 499 F.Supp. 2d at 842; and citing Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County, 122 F.3d 895, 914 (11th Cir. 1997). The court noted that this disparity ratio attempts to calculate a ratio between the expected contract amount of a given race/gender group and the actual contract amount received by that group. 545 F.3d at 1041.

The court considered the availability analysis, or benchmark analysis, which is utilized to ensure that only those minority-owned contractors who are qualified, willing and able to perform the prime contracts at issue are considered when performing the denominator of a disparity ratio. 545 F.3d at 1041. The court cited to an expert used in the case that a “crucial question” in disparity studies is to develop a credible methodology to estimate this benchmark share of contracts minorities would receive in the absence of discrimination and the touchstone for measuring the benchmark is to determine whether the firm is ready, willing, and able to do business with the government. 545 F.3d at 1041-1042.

The court concluded the contention by Rothe, that the six studies misapplied this “touchstone” of Croson and erroneously included minority-owned firms that were deemed willing or potentially willing and able, without regard to whether the firm was qualified, was not a defect that substantially undercut the results of four of the six studies, because “the bulk of the businesses considered in these studies were identified in ways that would tend to establish their qualifications, such as by their presence on city contract records and bidder lists.” 545 F.3d at 1042. The court noted that with regard to these studies available prime contractors were identified via certification lists, willingness survey of chamber membership and trade association membership lists, public agency and certification lists, utilized prime contractor, bidder lists, county and other government records and other type lists. *Id.*

The court stated it was less confident in the determination of qualified minority-owned businesses by the two other studies because the availability methodology employed in those studies, the court found, appeared less likely to have weeded out unqualified businesses. *Id.* However, the court stated it was more troubled by the failure of five of the studies to account officially for potential differences in size, or “relative capacity,” of the business included in those studies. 545 F.3d at 1042-1043.

The court noted that qualified firms may have substantially different capacities and thus might be expected to bring in substantially different amounts of business even in the absence of discrimination. 545 F.3d at 1043. The Federal Circuit referred to the Eleventh Circuit explanation similarly that because firms are bigger, bigger firms have a bigger chance to win bigger contracts, and thus one would expect the bigger (on average) non-MWBE firms to get a disproportionately higher percentage of total construction dollars awarded than the smaller MWBE firms. 545 F.3d at 1043 quoting Engineering Contractors Association, 122 F.3d at 917. The Federal Circuit pointed out its issues with the studies accounting for the relative sizes of contracts awarded to minority-owned businesses, but not considering the relative sizes of the businesses themselves. *Id.* at 1043.

The court noted that the studies measured the availability of minority-owned businesses by the percentage of firms in the market owned by minorities, instead of by the percentage of total marketplace capacity those firms could provide. *Id.* The court said that for a disparity ratio to have a significant probative value, the same time period and metric (dollars or numbers) should be used in measuring the utilization and availability shares. 545 F.3d at 1044, n. 12.

The court stated that while these parameters relating to the firm size may have ensured that each minority-owned business in the studies met a capacity threshold, these parameters did not account for the relative capacities of businesses to bid for more than one contract at a time, which failure rendered the disparity ratios calculated by the studies substantially less probative on their own, of the likelihood of discrimination. *Id.* at 1044. The court pointed out that the studies could have

accounted for firm size even without changing the disparity ratio methodologies by employing regression analysis to determine whether there was a statistically significant correlation between the size of a firm and the share of contract dollars awarded to it. 545 F.3d at 1044 citing Engineering Contractors Association, 122 F.3d at 917. The court noted that only one of the studies conducted this type of regression analysis, which included the independent variables of a firm-age of a company, owner education level, number of employees, percent of revenue from the private sector and owner experience for industry groupings. *Id.* at 1044-1045.

The court stated, to “be clear,” that it did not hold that the defects in the availability and capacity analyses in these six disparity studies render the studies wholly unreliable for any purpose. *Id.* at 1045. The court said that where the calculated disparity ratios are low enough, the court does not foreclose the possibility that an inference of discrimination might still be permissible for some of the minority groups in some of the studied industries in some of the jurisdictions. *Id.* The court recognized that a minority-owned firm’s capacity and qualifications may themselves be affected by discrimination. *Id.* The court held, however, that the defects it noted detracted dramatically from the probative value of the six studies, and in conjunction with their limited geographic coverage, rendered the studies insufficient to form the statistical core of the strong basis and evidence required to uphold the statute. *Id.*

Geographic coverage. The court pointed out that whereas municipalities must necessarily identify discrimination in the immediate locality to justify a race-based program, the court does not think that Congress needs to have had evidence before it of discrimination in all 50 states in order to justify the 1207 program. *Id.* The court stressed, however, that in holding the six studies insufficient in this particular case, “we do not necessarily disapprove of decisions by other circuit courts that have relied, directly or indirectly, on municipal disparity studies to establish a federal compelling interest.” 545 F.3d at 1046. The court stated in particular, the Appendix relied on by the Ninth and Tenth Circuits in the context of certain race-conscious measures pertaining to federal highway construction, references the Urban Institute Report, which itself analyzed over 50 disparity studies and relied for its conclusions on over 30 of those studies, a far broader basis than the six studies provided in this case. *Id.*

Anecdotal evidence. The court held that given its holding regarding statistical evidence, it did not review the anecdotal evidence before Congress. The court did point out, however, that there was not evidence presented of a single instance of alleged discrimination by the Department of Defense in the course of awarding a prime contract, or to a single instance of alleged discrimination by a private contractor identified as the recipient of a prime defense contract. 545 F.3d at 1049. The court noted this lack of evidence in the context of the opinion in Croson that if a government has become a passive participant in a system of racial exclusion practiced by elements of the local construction industry, then that government may take affirmative steps to dismantle the exclusionary system. 545 F.3d at 1048, citing Croson, 488 U.S. at 492.

The Federal Circuit pointed out that the Tenth Circuit in Concrete Works noted the City of Denver offered more than dollar amounts to link its spending to private discrimination, but instead provided testimony from minority business owners that general contractors who use them in city construction projects refuse to use them on private projects, with the result that Denver had paid tax dollars to

support firms that discriminated against other firms because of their race, ethnicity and gender. 545 F.3d at 1049, quoting Concrete Works, 321 F.3d at 976-977.

In concluding, the court stated that it stressed its holding was grounded in the particular items of evidence offered by the Department of Defense, and “should not be construed as stating blanket rules, for example about the reliability of disparity studies. As the Fifth Circuit has explained, there is no ‘precise mathematical formula to assess the quantum of evidence that rises to the Croson ‘strong basis in evidence’ benchmark.” 545 F.3d at 1049, quoting W.H. Scott Constr. Co., 199 F.3d at 218 n.11.

Narrowly tailoring. The Federal Circuit only made two observations about narrowly tailoring, because it held that Congress lacked the evidentiary predicate for a compelling interest. First, it noted that the 1207 Program was flexible in application, limited in duration, and that it did not unduly impact on the rights of third parties. 545 F.3d at 1049. Second, the court held that the absence of strongly probative statistical evidence makes it impossible to evaluate at least one of the other narrowly tailoring factors. Without solid benchmarks for the minority groups covered by the Section 1207, the court said it could not determine whether the 5 percent goal is reasonably related to the capacity of firms owned by members of those minority groups — i.e., whether that goal is comparable to the share of contracts minorities would receive in the absence of discrimination.” 545 F.3d at 1049-1050.

2. Dynalantic Corp. v. United States Dept. of Defense, 503 F. Supp. 2d 262 (D.D.C. 2007)

Dynalantic Corp. involves a recent challenge to the Department of Defense’s (“DOD”) utilization of the Small Business Administration’s (“SBA”) 8(a) Business Development Program (the “8(a) Program”). In its Order of August 23, 2007, the district court denied both parties’ Motions for Summary Judgment because there was no information in the record regarding the evidence before Congress supporting its 2006 reauthorization of the program in question; the court directed the parties to propose future proceedings to supplement the record. 503 F. Supp. 2d 262, 263 (D.D.C. 2007).

The court first explained that the 8(a) Program sets a goal that no less than 5 percent of total prime federal contract and subcontract awards for each fiscal year be awarded to socially and economically disadvantaged individuals. Id. Each federal government agency is required to establish its own goal for contracting but the goals are not mandatory and there is no sanction for failing to meet the goal. Upon application and admission into the 8(a) Program, small businesses owned and controlled by disadvantaged individuals are eligible to receive technological, financial, and practical assistance, and support through preferential award of government contracts. For the past few years, the 8(a) Program was the primary preferential treatment program the DOD used to meet its 5 percent goal. Id. at 264.

This case arose from a Navy contract that the DOD decided to award exclusively through the 8(a) Program. The plaintiff owned a small company that would have bid on the contract but for the fact it was not a participant in the 8(a) Program. After multiple judicial proceedings the D.C. Circuit dismissed the plaintiff’s action for lack of standing but granted the plaintiff’s motion to enjoin the contract procurement pending the appeal of the dismissal order. The Navy cancelled the proposed procurement but the D.C. Circuit allowed the plaintiff to circumvent the mootness argument by

amending its pleadings to raise a facial challenge to the 8(a) program as administered by the SBA and utilized by the DOD. The D.C. Circuit held the plaintiff had standing because of the plaintiff's inability to compete for DOD contracts reserved to 8(a) firms, the injury was traceable to the race-conscious component of the 8(a) Program, and the plaintiff's injury was imminent due to the likelihood the government would in the future try to procure another contract under the 8(a) Program for which the plaintiff was ready, willing, and able to bid. Id. at 264-65.

On remand, the plaintiff amended its complaint to challenge the constitutionality of the 8(a) Program and sought an injunction to prevent the military from awarding any contract for military simulators based upon the race of the contractors. Id. at 265. The district court first held that the plaintiff's complaint could be read only as a challenge to the DOD's implementation of the 8(a) Program [pursuant to 10 U.S.C. § 2323] as opposed to a challenge to the program as a whole. Id. at 266. The parties agreed that the 8(a) Program uses race-conscious criteria so the district court concluded it must be analyzed under the strict scrutiny constitutional standard. The court found that in order to evaluate the government's proffered "compelling government interest," the court must consider the evidence that Congress considered at the point of authorization or reauthorization to ensure that it had a strong basis in evidence of discrimination requiring remedial action. The court cited to Western States Paving in support of this proposition. Id. The court concluded that because the DOD program was reauthorized in 2006, the court must consider the evidence before Congress in 2006.

The court cited to the recent Rothe decision as demonstrating that Congress considered significant evidentiary materials in its reauthorization of the DOD program in 2006, including six recently published disparity studies. The court held that because the record before it in the present case did not contain information regarding this 2006 evidence before Congress, it could not rule on the parties' Motions for Summary Judgment. The court denied both motions and directed the parties to propose future proceedings in order to supplement the record. Id. at 267.

3. "Federal Procurement After Adarand" (USCCR Report September, 2005)

In September of 2005, the United States Commission on Civil Rights (the "Commission") issued its report entitled "Federal Procurement After Adarand" setting forth its findings pertaining to federal agencies' compliance with the constitutional standard enunciated in Adarand. United States Commission on Civil Rights: Federal Procurement After Adarand (Sept. 2005), available at <http://www.usccr.gov>, citing Adarand, 515 U.S. at 237-38. The following is a brief summary of the report.

In 1995, the United States Supreme Court decided Adarand Constructors, Inc. v. Peña, 515 U.S. 200 (1995), which set forth the constitutional standard for evaluating race-conscious programs in federal contracting. The Commission states in its report that the court in Adarand held that racial classifications imposed by federal, state and local governments are subject to strict scrutiny and the burden is upon the government entity to show that the racial classification is the least restrictive way to serve a "compelling public interest;" the government program must be narrowly tailored to meet that interest. The court held that narrow tailoring requires, among other things, that "agencies must first consider race-neutral alternatives before using race conscious measures." [p. ix]

Scope and methodology of the Commission’s report. The purpose of the Commission’s study was to examine the race-neutral programs and strategies implemented by agencies to meet the requirements set forth in Adarand. Accordingly, the study considered the following questions:

- Do agencies seriously consider workable race-neutral alternatives, as required by Adarand?
- Do agencies sufficiently promote and participate in race-neutral practices such as mentor-protégé programs, outreach, and financial and technical assistance?
- Do agencies employ and disclose to each other specific best practices for consideration of race-neutral alternatives?
- How do agencies measure the effects of race-neutral programs on federal contracting?
- What race-neutral mechanisms exist to ensure government contracting is not discriminatory?

The Commission’s staff conducted background research, reviewing government documents, federal procurement and economic data, federal contracting literature, and pertinent statutes, regulations and court decisions. The Commission selected seven agencies to study in depth and submitted interrogatories to assess the agencies’ procurement methods. The agencies selected for evaluation procure relatively large amounts of goods and services, have high numbers of contracts with small businesses, SDBs, or HUBZone firms, or play a significant support or enforcement role: the Small Business Administration (SBA), and the Departments of Defense (DOD), Transportation (DOT), Education (DOEd), Energy (DOEn), Housing and Urban Development (HUD), and State (DOS).

The report did not evaluate existing disparity studies or assess the validity of data suggesting the persistence of discrimination. It also did not seek to identify whether, or which, aspects of the contracting process disparately affect minority-owned firms.

Findings and recommendations. The Commission concluded that “among other requirements, agencies must consider race-neutral strategies before adopting any that allow eligibility based, even in part, on race.” [p. ix] The Commission further found “that federal agencies have not complied with their constitutional obligation, according to the Supreme Court, to narrowly tailor programs that use racial classifications by considering race-neutral alternatives to redress discrimination.” [p. ix]

The Commission found that “agencies have largely failed to apply the Supreme Court’s requirements, or [the U.S. Department of Justice’s (“DOJ”)] guidelines, to their contracting programs.” [p. 70] The Commission found that agencies “have not seriously considered race-neutral alternatives, relying instead on SBA-run programs, without developing new initiatives or properly assessing the results of existing programs.” [p. 70]

The Commission identified four elements that underlie “serious consideration” of race-neutral efforts, ensure an inclusive and fair race-neutral system, and tailor race-conscious programs to meet a documented need: “Element 1: Standards — Agencies must develop policy, procedures, and statistical standards for evaluating race-neutral alternatives; Element 2: Implementation — Agencies must develop or identify a wide range of race-neutral approaches, rather than relying on only one or two generic government-wide programs; Element 3: Evaluation — Agencies must measure the

effectiveness of their chosen procurement strategies based on established empirical standards and benchmarks; Element 4: Communication — Agencies should communicate and coordinate race-neutral practices to ensure maximum efficiency and consistency government-wide.” [p. xi]

The Commission found that “despite the requirements that Adarand imposed, federal agencies fail to consider race-neutral alternatives in the manner required by the Supreme Court’s decision.” [p. xiii] The Commission also concluded that “[a]gencies engage in few race-neutral strategies designed to make federal contracting more inclusive, but do not exert the effort associated with serious consideration that the Equal Protection Clause requires. Moreover, they do not integrate race-neutral strategies into a comprehensive procurement approach for small and disadvantaged businesses.” [p. xiii]

Serious consideration [P. 71]

Finding: Most agencies could not demonstrate that they consider race-neutral alternatives before resorting to race-conscious programs. Due to the lack of specific guidance from the DOJ, “agencies appear to give little thought to their legal obligations and disagree both about what the law requires and about the legal ramifications of their actions.”

Recommendation: Agencies must adopt and follow guidelines to ensure consideration of race-neutral alternatives, which system could include: (1) identifying and evaluating a wide range of alternatives; (2) articulating the underlying facts that demonstrate whether race-neutral plans work; (3) collecting empirical research to evaluate success; (4) ensuring such assessments are based on current, competent and comprehensive data; (5) periodically reviewing race conscious plans to determine their continuing need; and (6) establishing causal relationships before concluding that a race-neutral plan is ineffective. Best practices could include: (1) statistical standards by which agencies would determine when to abandon race race-conscious efforts; (2) ongoing data collection, including racial and ethnic information, by which agencies would assess effectiveness; and (3) policies for reviewing what constitutes disadvantaged status and the continued necessity for strategies to increase inclusiveness.

Antidiscrimination policy and enforcement [P. 72]

Finding: The federal government lacks an appropriate framework for enforcing nondiscrimination in procurement. Limited causes of action are available to contractors and subcontractors, but the most accessible mechanisms are restricted to procedural complaints about bidding processes.

Recommendation: The enactment of legislation expressly prohibiting discrimination based on race, color, religion, sex, national origin, age, and disability, in federal contracting and procurement. Such legislation should include protections for both contractors and subcontractors and establish clear sanctions, remedies and compliance standards. Enforcement authority should be delegated to each agency with contracting capabilities.

Finding: Most agencies do not have policies or procedures to prevent discrimination in contracting. Generally, agencies are either unaware of or confused about whether federal law protects government contractors from discrimination.

Recommendation: The facilitation of agency development and implementation of civil rights enforcement policies for contracting. Agencies must establish strong enforcement systems to provide individuals a means to file and resolve complaints of discriminatory conduct. Agencies must also adopt clear compliance review standards and delegate authority for these functions to a specific, high-level component. Once agencies adopt nondiscrimination policies, they should conduct regular compliance reviews of prime and other large contract recipients, such as state and local agencies. Agencies should widely publicize complaint procedures, include them with bid solicitations, and codify them in acquisition regulations. Civil rights personnel in each agency should work with procurement officers to ensure that contractors understand their rights and responsibilities and implement additional policies upon legislative action.

Finding: Agencies generally employ systems for reviewing compliance with subcontracting goals made at the bidding stage, but do not establish norms for the number of reviews they will conduct, nor the frequency with which they will do so.

Recommendation: Good faith effort policies should be rooted in race-neutral outreach. Agencies should set standards for and carry out regular on-site audits and formal compliance reviews of SDB subcontracting plans to make determinations of contractors' good faith efforts to achieve established goals. Agencies should develop and disseminate clear regulations for what constitutes a good faith effort, specific to individual procurement goals and procedures. Agencies should also require that all prime contractors be subject to audits, and require prime contractors to demonstrate all measures taken to ensure equal opportunity for SDBs to compete, paying particular attention to contractors that have not achieved goals expressed in their offers.

Ongoing review [P. 73]

Finding: Narrow tailoring requires regular review of race-conscious programs to determine their continued necessity and to ensure that they are focused enough to serve their intended purpose. However, no agency reported policies, procedures, or statistical standards for when to use race-conscious instead of race-neutral strategies, nor had agencies established procedures to reassess presumptions of disadvantage.

Recommendation: Agencies must engage in regular, systematic reviews (perhaps biennial) of race-conscious programs, including those that presume race-based disadvantage. They should develop and document clear policies, standards and justifications for when race-conscious programs are in effect. Agencies should develop and implement standards for the quality of data they collect and use to analyze race-conscious and race-neutral programs and apply these criteria when deciding effectiveness. Agencies should also evaluate whether race-neutral alternatives could reasonably generate the same or similar outcomes, and should implement such alternatives whenever possible.

Data and measurement [P. 73-75]

Finding: Agencies have neither conducted race disparity studies nor collected empirical data to assess the effects of procurement programs on minority-owned firms.

Recommendation: Agencies should conduct regular benchmark studies which should be tailored to each agency's specific contracting needs; and the results of the studies should be used in setting procurement goals.

Finding: The current procurement data does not evaluate the effectiveness or continuing need for race-neutral and/or race-conscious programs.

Recommendation: A task force should determine what data is necessary to implement narrow tailoring and assess whether (1) race-conscious programs are still necessary, and (2) the extent to which race-neutral strategies are effective as an alternative to race-conscious programs.

Finding: Agencies do not assess the effectiveness of individual race-neutral strategies (e.g., whether contract unbundling is a successful race-neutral strategy).

Recommendation: Agencies should measure the success of race-neutral strategies independently so they can determine viability as alternatives to race-conscious measures (e.g., agencies could track the number and dollar value of contracts broken apart, firms to which smaller contracts are awarded, and the effect of such efforts on traditionally excluded firms).

Communication and collaboration [P. 75]

Finding: Agencies do not communicate effectively with each other about efforts to strengthen procurement practices (e.g., there is no exchange of race-neutral best practices).

Recommendation: Agencies should engage in regular meetings with each other to share information and best practices, coordinate outreach, and develop measurement strategies.

Outreach [P. 76]

Finding: Even though agencies engage in outreach efforts, there is little evidence that their efforts to reach small and disadvantaged businesses are successful. They do not produce planning or reporting documents on outreach activities, nor do they apply methods for tracking activities, expenditures, or the number and types of beneficiaries.

Recommendation: Widely broadcast information on the Internet and in popular media is only one of several steps necessary for a comprehensive and effective outreach program. Agencies can use a variety of formats — conferences, meetings, forums, targeted media, Internet, printed materials, ad campaigns, and public service announcements — to reach appropriate audiences. In addition, agencies should capitalize on technological capabilities, such as listservs, text messaging, audio subscription services, and new technologies associated with portable listening devices, to circulate information about contracting opportunities. Agencies should include outreach in budget and planning documents, establish goals for conducting outreach activities, track the events and diversity of the audience, and train staff in outreach strategies and skills.

Conclusion. The Commission found that 10 years after the Supreme Court’s Adarand decision, federal agencies have largely failed to narrowly tailor their reliance on race-conscious programs and have failed to seriously consider race-neutral decisions that would effectively redress discrimination. Although some agencies employ some race-neutral strategies, the agencies fail “to engage in the basic activities that are the hallmarks of serious consideration,” including program evaluation, outcomes measurement, reliable empirical research and data collection, and periodic review.

The Commission found that most federal agencies have not implemented “even the most basic race-neutral strategy to ensure equal access, i.e., the development, dissemination, and enforcement of clear, effective antidiscrimination policies. Significantly, most agencies do not provide clear recourse for contractors who are victims of discrimination or guidelines for enforcement.”

One Commission member, Michael Yaki, filed an extensive Dissenting Statement to the Report. [pp. 79-170]. This Dissenting Statement by Commissioner Yaki was referred to and discussed by the district court in Rothe Development Corp. v. US DOD, 499 F.Supp.2d 775, 864-65 (W.D. Tex. August 10, 2007), reversed on appeal, Rothe, 545 F.3d 1023 (Fed.Cir 2008), (see discussion of Rothe above at Section VII, 1.). In his dissent, Commissioner Yaki criticized the Majority Opinion, including noting that his statistical data was “deleted” from the original version of the draft Majority Opinion that was received by all Commissioners. The district court in Rothe considered the data discussed by Yaki.

APPENDIX C.

General Approach to Utilization Data Collection and Analysis

BBC studied both prime contracts and subcontracts that the Indiana Department of Administration (IDOA), Indiana Department of Transportation (INDOT) and each state educational institution (SEI) awarded during the study period.¹ To determine which procurements to include in its analyses, BBC made the following considerations.²

Overview of Utilization Data Collection and Analysis

For IDOA, INDOT and each SEI, BBC collected information on construction, professional services, goods and support services contracts, including data on subcontracts.

Data collection. The study team collected basic information about procurements that IDOA, INDOT and each SEI awarded during the study period.

Procurement number and name of vendor. BBC requested information for each procurement such as procurement number and vendor name (including unique vendor number if possible).

Award date. BBC obtained award date for each procurement. The study period included fiscal years 2007, 2008 and 2009. Thus, BBC examined procurements that IDOA, INDOT and each SEI awarded between July 1, 2006 and June 30, 2009.

Procurement amount. The study team requested award amount or other information on the size of each state and SEI procurement. BBC determined procurement amounts based on the data that IDOA, INDOT and each SEI provided for different procurement types. For most procurements, the study team used the total amount at the time of award (including change orders and amendments). For other procurements, the study team used the total amount paid during the study period.

For purposes of the utilization and disparity analysis, the study team examined procurements worth \$5,000 or more for each entity. The study team chose \$5,000 as its analysis threshold because IDOA, INDOT and SEIs typically made purchases worth less than \$5,000 through procurement cards (p-cards) or through other informal purchasing methods.

Description of the work or product. BBC requested information regarding the type of good or service that each agency and SEI procured to help determine the primary line of work, or “subindustry,” of the vendor.

¹ Together, IDOA and INDOT contracts are referred to as “state” contracts.

² Unless otherwise noted, “contracts” and “procurements” are used interchangeably in this report.

Funding source. BBC obtained information on funding source from procurement data. Because federal funding accounted for a small proportion of procurement dollars for IDOA and the SEIs, BBC did not make a distinction between federally- and non-federally-funded procurements for those entities. BBC analyzed federally-funded construction and professional services procurements separately from state-funded construction and professional services procurements for INDOT, because Federal Highway Administration (FHWA) funding accounts for a substantial proportion of INDOT's construction and professional services spend and because INDOT implements the Federal DBE Program for those contracts.³

MBE/WBE/DBE contract goals. The study team examined procurements regardless of whether MBE/WBE/DBE goals might have applied.

Location of the work. Because many of the entities participating in the disparity study have multiple locations (e.g., campuses located in different regions of the state), BBC requested information to identify location of work, especially for construction and professional services contracts that pertained to specific sites.

Subcontractor dollars. When a procurement included subcontractor participation and subcontractor data were available, BBC examined dollars going to the prime contractor and any dollars going to subcontractors, which included materials suppliers for certain contracts.⁴ The study team calculated subcontractor dollars as the total procurement amount (at the time of award) committed or budgeted for each listed subcontractor. BBC calculated prime contractor dollars as the total procurement amount less the sum of dollars committed to listed subcontractors.⁵

IDOA and the SEIs did not have complete information on subcontracts. For large contracts likely to have subcontracts, BBC contacted prime contractors directly to compile information such as:

- Name of subcontractor;
- Description of work;
- Subcontractor address and phone number;
- Amount budgeted for or committed to subcontractor; and
- Amount paid to subcontractor as of June 30, 2009.

³ BBC used information from INDOT to determine whether a contract contained FHWA dollars. INDOT considered a procurement to be federally-funded if it included at least \$1 of FHWA funding.

⁴ Unless otherwise noted, "subcontractors" and "suppliers" are used interchangeably in this report.

⁵ In the few cases where payment data were more complete than award data, BBC used the amount paid to each subcontractor as of June 30, 2009. When the study team used payment amounts, it calculated prime contract dollars as the total paid amount to the prime contractor as of June 30, 2009 less the sum of dollars paid to listed subcontractors.

Types of procurements included in the utilization and disparity analysis. In total, BBC examined 321,411 procurements (not including subcontracts) that IDOA, INDOT and SEIs awarded during the study period, representing \$41 billion. A portion of those procurements were suitable for analysis in the disparity study, depending on procurement type and the prime contractor’s specific area of work specialization (“subindustry”).

Determination of work type for each contract and subcontract. For each examined procurement, BBC classified the prime contractor’s and subcontractors’ primary areas of work into distinct subindustries, which the study team then grouped into one of four larger industries: construction, professional services (including architecture and engineering), goods and support services. For example, the study team classified a number of firms into the subindustries of “building construction” and “plumbing and HVAC,” both of which were then grouped in the industry of “construction.”

BBC classified prime contractors and subcontractors into 97 distinct subindustries based on information that the study team obtained from:

- Business lists purchased from Dun & Bradstreet;
- Each entity’s procurement and vendor data;
- Telephone surveys with prime contractors and subcontractors;
- State agency and SEI review; and
- Other research on prime contractors and subcontractors (e.g., Internet research).

Once the study team classified prime contractors and subcontractors into subindustries and aggregated total subindustry procurement dollars across the participating state agencies and SEIs, BBC identified subindustries that would not be included in the study, for one of four reasons:

1. The subindustry is not typically included in a disparity study.
2. The subindustry reflected a national market.
3. The subindustry reflected a relatively small dollar volume.
4. The procurements could not be classified into a subindustry.

1. Subindustries not typically included in a disparity study. The study team identified and excluded procurements belonging to one of the following subindustries that BBC does not typically include in a disparity study.

- **Government, not-for-profit organizations or associations**, which represent organizations that are not “owned”;
- **Educational, social or medical services**, which represent markets that are dominated by public and not-for-profit organizations;

- **Utilities, waste management and broadcast and communications services**, which typically represent government-regulated industries (often regulated monopolies);
- **Banking and insurance**, which typically represent national or international markets and often involve payments that do not fit the definition of a “procurement”;
- **Real estate transactions**, which typically represent real property purchases or leases;
- **Legal services**, which often include large payments for real property purchases, leases or legal settlements; and
- **Computers, software and publishing**, which are produced and distributed by a single national or international source and are typically subject to copyright laws.

Figure C-1 shows total procurement dollars across the participating state agencies and SEIs for each of the subindustries not typically included in a disparity study.

Figure C-1.
Combined IDOA, INDOT and SEI procurement dollars for
subindustries not typically included in disparity studies,
July 1, 2006 – June 30, 2009

| Subindustry | Total dollars (in thousands) |
|--|---------------------------------|
| Government | \$13,832,666 |
| Medical, psychological and dental services | \$7,767,642 |
| Educational services and schools | \$3,275,286 |
| Banking | \$3,129,475 |
| Associations and non-profits | \$1,220,539 |
| Social services | \$322,949 |
| Legal services | \$223,622 |
| Utilities and waste management | \$167,812 |
| Real estate services | \$162,172 |
| Broadcast and communication services | \$144,705 |
| Computers and computer equipment | \$113,343 |
| Software | \$92,070 |
| Insurance | \$82,011 |
| Horse tracks | \$70,289 |
| Child care | \$39,429 |
| Publishing | \$24,255 |
| Transit operations | \$6,238 |
| Airports | \$2,939 |
| Total | \$30,677,441 |

Source: BBC Research & Consulting.

2. Subindustries that reflect national markets. Case law related to MBE/WBE programs requires utilization and availability analyses to focus on the “relevant geographic market area” (see Appendix B). In accordance with those laws, BBC identified and excluded procurements in subindustries for which IDOA, INDOT and SEIs awarded the majority of procurement dollars to firms outside of Indiana, thus reflecting national markets. Figure C-2 presents total procurement dollars for each of the subindustries that the study team excluded from its analyses because less than 50 percent of those dollars went to firms that were located in Indiana.⁶

Figure C-2.
Combined IDOA, INDOT and SEI procurement dollars for
subindustries for which work primarily went to firms outside the
relevant geographic market area (outside Indiana),
July 1, 2006 – June 30, 2009

| Subindustry | Total dollars (in thousands) |
|---|---------------------------------|
| Scientific and medical equipment | \$122,066 |
| Other goods | \$107,338 |
| Biological and medical products | \$26,641 |
| Clothing | \$5,353 |
| Leasing and rental services | \$4,787 |
| Musical instruments | \$3,092 |
| School and classroom equipment and supplies | \$2,590 |
| Fine art | \$1,951 |
| Transportation equipment | \$1,423 |
| Total | \$275,240 |

Source: BBC Research & Consulting.

Additional analyses indicated that the procurements that the participating state agencies and SEIs made in the subindustries shown in Figure C-2 were awarded to firms from all across the country and not just to firms located in states that border Indiana. Consistent with that overall trend, there was no evidence that the SEIs located closest to Indiana’s borders — Vincennes University and the University of Southern Indiana — awarded substantial procurement dollars to firms located just across state lines.

⁶ The study team coded each firm that the participating state agencies and SEIs utilized as having an Indiana location if the firm had a billing, sales or other office address within the state.

3. Subindustries that reflect relatively small dollar volume. The study team sought to examine subindustries for which procurement dollars were substantial across all participating state agencies and SEIs. Figure C-3 shows the subindustries — and corresponding procurement dollars — that BBC excluded from its analyses because they reflected relatively small dollar amounts.⁷

Figure C-3.
Combined IDOA, INDOT
and SEI procurement
dollars for subindustries
excluded because of small
dollar amounts, July 1,
2006 – June 30, 2009

Source:
 BBC Research & Consulting.

| Subindustry | Total dollars (in thousands) |
|----------------------------|---------------------------------|
| Other services | \$74,504 |
| Retail stores | \$30,453 |
| Repair services | \$15,599 |
| Sports | \$5,663 |
| Mail or messenger services | \$6,566 |
| Total | \$132,785 |

4. Procurements that could not be classified. BBC was unable to collect subindustry information for 6,052 utilized firms across the nine participating entities, accounting for \$206 million, or less than 1 percent, of total procurement dollars. Because BBC could not accurately determine subindustries for those firms, the study team excluded the procurements that those firms were awarded from the final analyses.

Subindustries included in the final analyses. Figure C-4 lists the 64 subindustries included in BBC’s final analyses and the total procurement dollars that each subindustry represented across IDOA, INDOT and SEIs. Together, those subindustries accounted for over \$10 billion, or 24 percent, of total procurement dollars during the study period.

⁷ “Other services” is comprised of several, disparate types of services.

Figure C-4.
Combined IDOA, INDOT and SEI procurement dollars for subindustries
included in final analyses, July 1, 2006 – June 30, 2009

| Subindustry | Total dollars (in thousands) |
|--|---------------------------------|
| Highway, street and bridge construction | \$3,013,989 |
| Building construction | \$885,293 |
| Business services and consulting | \$860,325 |
| Engineering | \$691,553 |
| Excavation | \$650,819 |
| IT and data services | \$411,376 |
| Asphalt | \$255,038 |
| Electrical work | \$220,943 |
| Food and concessions | \$192,072 |
| Architectural and design services | \$184,307 |
| Other building construction | \$164,354 |
| Other construction services | \$137,658 |
| Construction materials | \$123,987 |
| Water, sewer, and utility lines | \$121,999 |
| Computer systems and services | \$121,327 |
| Other construction materials | \$120,740 |
| Environmental services and transportation planning | \$106,862 |
| Industrial equipment and machinery | \$103,597 |
| Plumbing and HVAC | \$98,209 |
| Electrical equipment and supplies | \$98,208 |
| Communications equipment | \$90,375 |
| Automobiles | \$89,771 |
| Furniture | \$88,752 |
| Finance consulting and accounting | \$86,849 |
| Petroleum and petroleum products | \$85,716 |
| Vehicle parts and supplies | \$82,372 |
| Trucking, hauling and storage | \$81,297 |
| Human resources and job training services | \$80,502 |
| Advertising, marketing and public relations | \$66,258 |
| Concrete work | \$61,753 |
| Masonry, drywall and stonework | \$61,714 |
| Printing and copying | \$55,612 |
| Roofing | \$45,103 |

Figure C-4. (continued)
Combined IDOA, INDOT and SEI procurement dollars for subindustries
included in final analyses, July 1, 2006 – June 30, 2009

| Subindustry | Total dollars (in thousands) |
|---|---------------------------------|
| Residential construction | \$42,874 |
| Testing services | \$42,558 |
| Painting | \$41,331 |
| Laboratory equipment | \$41,011 |
| Heavy construction equipment rental | \$27,947 |
| Coal and other minerals | \$27,148 |
| Research services | \$26,449 |
| Office equipment | \$26,111 |
| Surveying and mapmaking | \$20,639 |
| Concrete and related products | \$20,605 |
| Cleaning and janitorial services | \$20,573 |
| Office supplies | \$19,960 |
| Tools | \$18,054 |
| Insulation and waterproofing | \$17,098 |
| Elevator installation, repair and equipment | \$15,339 |
| Ceiling and floor contractor | \$13,759 |
| Industrial chemicals | \$11,021 |
| Wrecking and demolition | \$10,829 |
| Cleaning and janitorial supplies | \$10,500 |
| Security guard services | \$9,497 |
| Uniforms and linens | \$8,912 |
| Floor coverings | \$8,501 |
| Restaurant and hotel equipment | \$8,221 |
| Athletic goods | \$7,871 |
| Security services | \$6,893 |
| Construction management | \$6,413 |
| Law enforcement equipment and supplies | \$5,821 |
| Landscape architecture | \$2,836 |
| Tires and inner tubes | \$2,051 |
| Foundation work | \$1,204 |
| Agricultural services | \$789 |
| Total | \$10,061,543 |

Source: BBC Research & Consulting.

In addition, Figure C-5 presents the procurement dollars that each agency and SEI spent during the study period in each of the four study industries — construction, professional services, goods and support services.

Figure C-5.
Procurement dollars (in thousands) for IDOA, INDOT and SEIs, by procurement area,
July 1, 2006 – June 30, 2009

| State agency | Construction | Professional services | Goods | Support services |
|--------------------------------|--------------------|-----------------------|------------------|------------------|
| Ball State University | \$154,405 | \$40,754 | \$30,564 | \$1,680 |
| IDOA | \$456,101 | \$1,422,139 | \$436,781 | \$75,295 |
| Indiana State University | \$93,083 | \$15,675 | \$13,844 | \$1,625 |
| Indiana University | \$440,588 | \$143,196 | \$120,234 | \$19,979 |
| INDOT | \$4,474,360 | \$894,203 | \$123,221 | \$53,053 |
| Ivy Tech Community College | \$96,013 | \$39,933 | \$38,915 | \$13,467 |
| Purdue University | \$434,406 | \$134,116 | \$118,774 | \$7,909 |
| University of Southern Indiana | \$78,730 | \$11,632 | \$25,592 | \$1,045 |
| Vincennes University | \$31,608 | \$6,604 | \$11,409 | \$609 |
| Total | \$6,259,295 | \$2,708,252 | \$919,335 | \$174,661 |

Source: BBC Research & Consulting.

Vendor information, including race/ethnicity/gender of ownership. In addition to collecting procurement and subcontract data from each entity, the study team obtained names, addresses, phone numbers and other information about the vendors that performed the work. BBC obtained contact information from vendor data that each agency/SEI maintains in its data systems as well as from the subcontract data collection effort.

BBC used name and contact information to obtain additional data about utilized vendors from business lists that the study team purchased from Dun & Bradstreet and from telephone interviews that the study team completed with prime contractors and subcontractors. From these two sources, BBC obtained the following information about utilized vendors:

- Primary line of work or subindustry;
- MBE/WBE status;
- Race/ethnicity/gender of ownership;
- Firm size;
- Year in which the firm was established; and
- Additional contact information.

The study team also used information from MBE/WBE/DBE certification lists to obtain information about each firm's MBE/WBE status and race/ethnicity/gender of ownership. BBC used the following certification lists:

- State of Indiana MBE/WBE certification list;
- City of Indianapolis MBE/WBE certification list; and
- INDOT DBE certification list.

BBC reviewed the information collected for contractors and vendors (including subcontractors) with staff from each entity before proceeding with the utilization, availability, disparity and case study analyses.

Differences from utilization reports developed by the IDOA, INDOT and SEIs. The State of Indiana requires state agencies and SEIs to submit annual reports detailing their MBE/WBE utilization during the previous year. Each agency and SEI reports the dollars that they spent with MBE/WBE firms in construction, professional services, goods and support services.

The way in which MBE/WBE utilization is calculated for annual utilization reports varies substantially from entity to entity. As a result, there may be several important differences in how each state agency and SEI calculates its MBE/WBE utilization and how BBC did so for the purposes of the disparity study.

Excluded subindustries. Only a portion of the procurements that participating state agencies and SEIs awarded during the study period were suitable for the analysis in the disparity study. BBC excluded several procurements based on subindustry, including those that are not typically included in a disparity study (e.g., not-for-profit organizations and legal services) and those that reflect national markets (e.g., scientific and medical equipment and software). It is possible that many of those procurements were included in each entity's calculation of its MBE/WBE utilization during the study period.

Procurement amounts. The study team used award amount to represent the value of most of the procurements included in the disparity study. By contrast, state agencies and SEIs typically use paid-to-date amounts. The value of procurements and the proportion of dollars that went to MBE/WBEs may vary based on whether they are calculated using award amounts or paid-to-date amounts.

MBE/WBE certified firms. To calculate MBE/WBE/DBE utilization for annual utilization reports, state agencies and SEIs typically consider only those firms that are certified as such through the State of Indiana (or through INDOT for DBE utilization on federally-funded contracts). To calculate MBE/WBE utilization for the disparity study, BBC considered all minority and women-owned firms, regardless of whether they were certified with the State of Indiana or INDOT.⁸

⁸ In Chapter 5, BBC presents utilization and disparity analyses for all minority and women-owned firms considered together and separately for MBE/WBE/DBE certified firms and firms that meet the financial qualifications for DBE certification.

Subcontractor data. During the study period, most of the participating state agencies and SEIs tracked subcontractor participation only for MBE/WBE firms.⁹ For those entities, information about non-MBE/WBE subcontractors was not reflected in annual utilization reports to the State of Indiana. For example, if an MBE/WBE prime contractor used non-MBE/WBE subcontractors, the amounts paid to those subcontractors would be attributed to the prime contractor when calculating MBE/WBE utilization for an annual report.

As part of the disparity study, BBC collected subcontract information for both MBE/WBE and non-MBE/WBE subcontractors, and that information was reflected in the study team's measures of MBE/WBE utilization.

Differences from the previous disparity study. The State of Indiana last completed a disparity study in 2006.¹⁰ The method that BBC used to complete the present study differed in several key ways from the method that Bucher + Christian used in the 2006 study.

Excluded subindustries. Both Bucher + Christian and BBC excluded certain procurements based on subindustry, including those that are not typically included in a disparity study. However, there were certain subindustries that BBC excluded from its analyses that Bucher + Christian included (e.g., medical services). Similarly, there were certain subindustries that BBC included in its analyses that Bucher + Christian excluded (e.g., office equipment and furniture).

Procurement amounts. When possible, the study team used award amount to represent the value of the procurements included in the disparity study. By contrast, Bucher + Christian based its analyses primarily on data from the State of Indiana's GEAC System, which contains payment data pertaining to procurements that IDOA awarded during the study period. The value of procurements and the proportion of dollars of each procurement that went to MBE/WBEs may vary substantially based on whether they are calculated using award amounts or paid amounts.

Subcontractor data. As part of the disparity study, BBC collected subcontract information for both MBE/WBE and non-MBE/WBE subcontractors, and that information was reflected in the study team's measures of MBE/WBE utilization. Bucher + Christian collected only MBE/WBE subcontract information when available and used statistical adjustments when that information was not available.

Participating entities. This disparity study includes data from state agencies that Bucher + Christian did not include (e.g., Department of Child Services and Department of Education). Similarly, the Bucher + Christian study included data from state agencies that this study does not include (e.g., Gaming Commission and Airport Authority). In addition, BBC included complete utilization and disparity analyses for each SEI in the State of Indiana — Ball State University, Indiana State University, Indiana University, Ivy Tech Community College, Purdue University, University of Southern Indiana and Vincennes University.

⁹ As part of the Federal DBE Program, INDOT maintained both MBE/WBE and non-MBE/WBE subcontract information for the construction and professional services contracts that it awarded during the study period.

¹⁰ Bucher + Christian Consulting, Inc. 2006. *Statistical Analysis of Utilization of State Contracts for the State of Indiana*. Prepared for the Indiana Department of Administration.

Data Collection for Each Entity

The balance of Appendix C describes data collection specific to each entity participating in the disparity study.

Indiana Department of Administration. BBC requested information for each construction, professional services, goods and support services procurement that IDOA and other state agencies awarded during the study period.¹¹ IDOA produced reports from its data systems that provided the requested procurement information. The reports were based on two systems that included overlapping data.

- **Public Works database.** The Public Works database — a Microsoft Access database that the Public Works Department maintains — contained contract data pertaining to construction and maintenance contracts as well as architectural and engineering contracts that IDOA and other state agencies awarded during the study period.
- **GEAC System.** The GEAC System contained payment data pertaining to construction, professional services, goods and support services procurements that IDOA awarded during the study period.
- **ISCBA contract reports.** The Indiana Stadium and Convention Building Authority (ISCBA) provided reports that included data about contracts that it awarded during the study period in connection with two large construction projects — building Lucas Oil Stadium and the Indiana Convention Center.

For each report, IDOA advised the study team on how to use the provided data, including how to identify unique bid opportunities and how to aggregate procurement dollar amounts. Because data for certain procurements appeared in multiple data sources, IDOA worked with BBC to link data between the Public Works database and the GEAC system so the study team could avoid over-counting dollars.

Subcontract data. Because IDOA did not maintain complete information about subcontracts for the procurements that it awarded during the study period, BBC worked with IDOA staff to request subcontract data directly from prime contractors. With the assistance of IDOA staff, the study team began by identifying construction and professional services contracts that were determined to have likely included subcontractor participation.¹² For each of those contracts, BBC contacted the prime contractor via U.S. mail and requested the following information about each subcontractor — regardless of MBE/WBE status — that the prime contractor used:

- Name of subcontractor;
- Description of work;

¹¹ As explained in Chapter 1, BBC's utilization and disparity analyses for IDOA include state agencies for which IDOA tracks and administers contracting and procurement data. For a complete list of state agencies included with IDOA's data, see Figure 1-1.

¹² IDOA staff determined that goods and support services procurements that were awarded during the study period were unlikely to have included subcontractor participation.

- Subcontractor address and phone number;
- Amount budgeted for or committed to subcontractor; and
- Amount paid to subcontractor as of June 30, 2009.

The study team contacted 196 prime contractors in connection with 272 procurements, representing 91 percent of the construction and professional services dollars that the study team included in IDOA's utilization analysis. BBC received complete subcontract information for 225 of the 272 procurements (83%) about which it inquired.

Case study data. To complete case studies of MBE/WBE participation in IDOA's bid process during the study period, BBC examined bid tabulations for a sample of the procurements included in the utilization analysis.

IDOA maintained bid tabulations for many of the procurements it awarded in fiscal years 2007, 2008 and 2009. BBC randomly selected 100 public works procurements to be included in IDOA's case study analysis, stratified by procurement area, procurement size and year of award.¹³ BBC successfully collected bid tabulations for 80 of those procurements.

Agency review. After BBC collected procurement and vendor data, the study team compiled the information into tables submitted to IDOA for review. BBC used IDOA feedback to finalize procurement and vendor data.

Indiana Department of Transportation. INDOT produced reports from its data systems to provide the procurement information that the study team requested. The reports were based on several systems that included overlapping data.

- **Transport System.** The Transport System contained contract data pertaining to construction contracts that INDOT awarded during the study period.
- **Professional Services Contracting System.** The Professional Services Contracting System (PSCS) contained contract data pertaining to professional services contracts — including architecture and engineering — that INDOT awarded during the study period.
- **PeopleSoft System.** The PeopleSoft System contained purchase order data pertaining to construction, professional services, goods and support services procurements that INDOT awarded between July 1, 2007 and June 30, 2009.
- **Advantage System.** The Advantage System contained purchase order data pertaining to construction, professional services, goods and support services procurements that INDOT awarded between July 1, 2006 and June 30, 2007.

¹³ Bid tabulation data were only available for construction and design contracts.

For each report, INDOT advised the study team on how to use the provided data, including how to identify unique bid opportunities and how to aggregate procurement dollar amounts. In addition, because PeopleSoft and Advantage included data pertaining to contracts included in Transport and PSCS, INDOT provided BBC with information that linked data in the purchase order systems to data in the contract systems. That information allowed the study team to exclude purchase order data from PeopleSoft and Advantage for contracts that were already being included from Transport and PSCS to avoid over-counting dollars.

Subcontract data. INDOT maintained complete subcontract information for the construction and professional services contracts that it awarded during the study period.¹⁴ In addition to contract data, the Transport System and PSCS also included the following information about corresponding subcontracts:

- Name of subcontractor;
- Description of work;
- Subcontractor address and phone number; and
- Amount budgeted for subcontractor.

Case study data. To complete a case study analysis of MBE/WBE participation in INDOT's bid process during the study period, BBC examined bid tabulations for a sample of the procurements that the study team included in the utilization analysis.

INDOT maintained bid tabulations for many of the procurements that it awarded in fiscal years 2007, 2008 and 2009. BBC randomly selected 64 construction and professional services procurements to be included in INDOT's case study analysis, stratified by procurement area, procurement size and year of award. BBC successfully collected bid tabulations for 47 — or 73 percent — of those procurements.¹⁵

Agency review. After BBC collected procurement and vendor data, the study team compiled the information into tables that it submitted to INDOT for review. BBC used INDOT feedback to finalize procurement and vendor data.

Ball State University. Ball State University (BSU) produced reports from its data systems that provided the procurement information that the study team requested. The reports were based on two systems — the Contractor database and the FRS system. Information about a particular procurement appeared in only one system.

- **Contractor database.** The Contractor database — a Microsoft Access database that BSU maintains — contained contract data pertaining to construction contracts and architectural and engineering contracts that BSU awarded during the study period.

¹⁴ INDOT staff determined that other professional services (not including architecture and engineering) and goods and support services procurements that were awarded during the study period were unlikely to have included subcontractor participation.

¹⁵ BBC did not obtain bid tabulation data for goods and support services contracts.

- **FRS System.** The FRS System contained payment data pertaining to construction, professional services and goods and support services procurements that BSU awarded during the study period.

For each report, BSU advised the study team on how to use the provided data, including how to identify unique bid opportunities and how to aggregate procurement dollar amounts.

Subcontract data. Because BSU did not maintain complete information about subcontracts for any of the procurements that it awarded during the study period, BBC worked with BSU staff to request subcontract data directly from prime contractors. For each construction and architectural and engineering contract awarded during the study period, BSU staff mailed a written request to the prime contractor that asked for the following information about each subcontractor (regardless of MBE/WBE status) that the prime contractor used:¹⁶

- Name of subcontractor;
- Description of work;
- Subcontractor address and phone number;
- Amount budgeted for or committed to subcontractor; and
- Amount paid to subcontractor as of June 30, 2009.

BSU contacted 57 prime contractors in connection with 94 procurements, representing all of the construction and architectural dollars that the study team included in BSU's utilization analysis. BSU received complete subcontract information for 70 of the 94 procurements (74%) about which it inquired.

Case study data. To complete a case study analysis of MBE/WBE participation in BSU's bid process during the study period, BBC examined bid tabulations for a sample of the procurements included in the utilization analysis.

BSU maintained bid tabulations for the procurements that it awarded in fiscal years 2007, 2008 and 2009. BBC successfully collected bid tabulations for 250 BSU procurements.¹⁷

Agency review. After BBC collected procurement and vendor data, the study team compiled the information into tables that it submitted to BSU for review. BBC used BSU feedback to finalize procurement and vendor data.

Indiana State University. ISU produced a report from its Banner system that provided the procurement information that the study team requested. ISU advised the study team on how to use the provided data, including how to identify unique bid opportunities and how to aggregate procurement dollar amounts.

¹⁶ BSU staff determined that other professional services (not including architecture and engineering) and goods and support services procurements that were awarded during the study period were unlikely to have included subcontractor participation.

¹⁷ Bid tabulation data were not available for design contracts.

Subcontract data. Because ISU did not maintain complete information about subcontracts for its procurements during the study period, BBC worked with ISU staff to request subcontract data directly from prime contractors. For each procurement that ISU awarded during the study period, ISU staff contacted the prime contractor via email and requested the following information about each subcontractor — regardless of MBE/WBE status — that the prime contractor used:

- Name of subcontractor;
- Subcontractor address and phone number; and
- Amount budgeted for or committed to subcontractor.

Case study data. To complete a case study analysis of MBE/WBE participation in ISU's bid process during the study period, BBC examined bid tabulations for a sample of procurements that the study team included in the utilization analysis.

ISU maintained bid tabulations for many of the procurements that it awarded in fiscal years 2007, 2008 and 2009. BBC randomly selected 120 procurements to be included in ISU's case study analysis, stratified by procurement area, procurement size and year of award. BBC successfully collected bid tabulations for all 120 of those procurements.

Agency review. After BBC collected procurement and vendor data, the study team compiled the information into tables that it submitted to ISU for review. BBC used ISU feedback to finalize procurement and vendor data.

Indiana University. Indiana University (IU) produced reports from two systems that included overlapping data — the Maintenance Management System (MMS) and the Epic System.

- **Maintenance Management System.** MMS contained contract data pertaining to construction and architectural and engineering contracts that IU awarded during the study period.
- **Epic System.** The Epic System contained purchase order data pertaining to construction, professional services (including architecture and engineering), goods and support services procurements that IU awarded during the study period.

For each report, IU advised the study team on how to use the provided data, including how to identify unique bid opportunities and how to aggregate procurement dollar amounts. In addition, because both data systems included data pertaining to the same construction and architecture and engineering procurements, IU provided BBC with information that linked contract data in MMS to purchase order data in the Epic System. That information allowed the study team to exclude purchase order data from the Epic System for contracts that were already being included from the MMS system to avoid over-counting dollars.

Subcontract data. IU maintained complete subcontract information for the architecture and engineering contracts that it awarded in fiscal years 2007, 2008 and 2009. However, it did not maintain subcontract information for any other procurement areas.

Architecture and engineering. IU maintained subcontract information for the architecture and engineering contracts that it awarded during the study period in its hardcopy contract files. IU provided the study team with electronic scans of those files. Each contract file included the following information about corresponding subcontracts:

- Name of subcontractor;
- Description of work;
- Subcontractor address and phone number; and
- Amount budgeted for subcontractor.

Construction. BBC worked with IU staff to request subcontract data directly from prime contractors for construction contracts. The study team began by identifying construction procurements worth \$100,000 or more.¹⁸

Using the \$100,000 threshold, IU contacted 117 prime contractors in connection with 217 procurements, representing 99 percent of the construction dollars that the study team included in IU's utilization analysis. IU received complete subcontract information for 188 of the 217 procurements (87%) about which it inquired.

Case study data. To complete a case study analysis of MBE/WBE participation in IU's bid process during the study period, BBC examined bid tabulations for a sample of the procurements that the study team included in the utilization analysis.

IU maintained bid tabulations for many of the procurements that it awarded in fiscal years 2007, 2008 and 2009. BBC randomly selected 97 procurements to be included in IU's case study analysis, stratified by procurement area, procurement size and year of award.¹⁹ BBC successfully collected bid tabulations for all 97 of those procurements.

Agency review. After BBC collected procurement and vendor data, the study team compiled the information into tables that it submitted to IU for review. BBC used IU feedback to finalize procurement and vendor data.

Ivy Tech Community College. Ivy Tech Community College (Ivy Tech) produced reports from its data systems that provided the procurement information that the study team requested. The reports were based on two systems that included overlapping data — a contracts list from hardcopy data files and the Banner System.

- **Contracts list.** Ivy Tech used its hardcopy data files to compile a list of construction and architecture and engineering contracts that were awarded during the study period.

¹⁸ IU staff identified other professional services (not including architecture and engineering) and goods and support services procurements that were likely to have included subcontractor participation. For those procurements, IU staff contacted prime contractors requested subcontractor information and provided the study team with the data that prime contractors submitted.

¹⁹ Bid tabulation data were not available for design contracts.

- **Banner System.** The Banner System contained purchase order and invoice data pertaining to construction, professional services (including architecture and engineering) and goods and support services procurements that Ivy Tech awarded during the study period.

For each report, Ivy Tech advised the study team on how to use the provided data, including how to identify unique bid opportunities and how to aggregate procurement dollar amounts. In addition, because both data systems included data pertaining to the same construction and architectural and engineering procurements, Ivy Tech provided BBC with information that linked contract data in the contracts list to purchase order and invoice data in the Banner System. That information allowed the study team to exclude data from the Banner System for contracts that were already being included from the contracts list to avoid over-counting dollars.

Subcontract data. Ivy Tech used the same construction management firm to manage the large public works projects that it awarded during the study period. BBC worked with Ivy Tech staff to request subcontractor data from the construction management firm for contracts related to large public works projects. Those projects represented the vast majority of the construction and architectural and engineering dollars that the study team included in Ivy Tech's utilization analysis.

The contract management firm was able to provide the following information about each subcontractor — regardless of MBE/WBE status — that the prime contractor used for each contract:

- Name of subcontractor;
- Subcontractor address and phone number; and
- Amount budgeted for or committed to subcontractor.

In addition, Ivy Tech's regional campuses were able to provide subcontractor data for some relatively small renovation contracts that they awarded during the study period.

Case study data. To complete a case study analysis of MBE/WBE participation in Ivy Tech's bid process during the study period, BBC examined bid tabulations for a sample of the procurements that the study team included in the utilization analysis. Ivy Tech maintained bid tabulations for the procurements it awarded in connection with each of its large public works projects and was able to provide those data to the study team (62 procurements).²⁰

Agency review. After BBC collected procurement and vendor data, the study team compiled the information into tables that it submitted to Ivy Tech for review. BBC used Ivy Tech feedback to finalize procurement and vendor data.

²⁰ Bid tabulation data were not available for goods and support services contracts and were available for one professional services contract.

Purdue University. Purdue University (Purdue) produced reports from its data systems that provided the procurement information that the study team requested. The reports were based on various data systems, depending on procurement area. Information about a particular procurement appeared in only one system.

- **Construction Project Tracking System.** The Construction Project Tracking System (CPTS) contained contract data pertaining to construction procurements that Purdue awarded during the study period.
- **FE Log.** FE Log contained contract data pertaining to professional services procurements — including architecture and engineering — that Purdue awarded during the study period.
- **SRM.** SRM contained purchase order data pertaining to goods and support services purchases that Purdue made between February 7, 2007 and June 30, 2009.²¹
- **Ariba.** Ariba contained purchase order data pertaining to goods and support services purchases that Purdue made between July 1, 2006 and February 6, 2007.
- **Maximo.** Maximo contained purchase order data pertaining to certain goods and support services purchases that Purdue's General Stores Department made between July 1, 2006 and February 6, 2007.²²

For each report, Purdue advised the study team on how to use the provided data, including how to identify unique bid opportunities and how to aggregate contract and payment dollar amounts.

Subcontract data. Because Purdue did not maintain complete information about subcontracts for the procurements that it awarded during the study period, BBC worked with Purdue staff to request subcontract data directly from prime contractors. With the assistance of Purdue staff, the study team identified construction and professional services contracts that were determined to have likely included subcontractor participation.²³ For each of those contracts, BBC contacted the prime contractor via U.S. mail and requested the following information about each subcontractor — regardless of MBE/WBE status — that the prime contractor used:

- Name of subcontractor;
- Description of work;
- Subcontractor address and phone number;

²¹ In addition to purchase order amounts, the SRM system included data on the amount paid through June 30, 2009 for procurements included in the system. Purdue staff identified a small number of procurements for which payment data was a better representation of procurement size than purchase order amount.

²² Data for purchases that the General Stores Department made after February 6, 2007 appeared in SRM.

²³ PU staff determined that other professional services (not including architecture and engineering) and goods and support services procurements that were awarded during the study period were unlikely to have included subcontractor participation.

- Amount budgeted for or committed to subcontractor; and
- Amount paid to subcontractor as of June 30, 2009.

The study team contacted 166 prime contractors in connection with 401 procurements, representing 86 percent of the construction and professional services dollars that the study team included in Purdue's utilization analysis. BBC received complete subcontract information for 258 of the 401 procurements (64%) about which it inquired.

Case study data. To complete a case study analysis of MBE/WBE participation in PU's bid process during the study period, BBC examined bid tabulations for a sample of the procurements that the study team included in the utilization analysis.

Purdue maintained bid tabulations for many of the procurements that it awarded in fiscal years 2007, 2008 and 2009. BBC randomly selected 90 procurements to be included in Purdue's case study analysis, stratified by procurement area, procurement size and year of award. BBC successfully collected bid tabulations for 87 — or 97 percent — of those procurements.

In addition, Purdue maintained information about which firms they short-listed for design contracts it awarded during the study period worth more than \$2 million. Purdue was able to provide those data to the study team (30 procurements).

Agency review. After BBC collected procurement and vendor data, the study team compiled the information into tables that it submitted to Purdue for review. BBC used Purdue feedback to finalize procurement and vendor data.

University of Southern Indiana. University of Southern Indiana (USI) produced reports from its data systems that provided the procurement information that the study team requested. The reports were based on two data sources that included overlapping data — a contracts list from hardcopy data files and the Banner System.

- **Contracts list.** USI used its hardcopy data files to compile a list of construction and professional services contracts that were awarded during the study period.
- **Banner System.** The Banner System contained purchase order and invoice data pertaining to construction, professional services, goods and support services procurements that USI awarded during the study period.

For each report, USI advised the study team on how to use the provided data, including how to identify unique bid opportunities and how to aggregate procurement dollar amounts. Because both systems included data pertaining to the same construction and professional services procurements, USI provided BBC with information that linked contract data in the contracts list to payment data in the Banner System. That information allowed the study team to exclude purchase order and invoice data from the Banner System for contracts that were already being included from the contracts list to avoid over counting dollars.

Subcontract data. Because USI did not maintain complete information about subcontracts for any of the procurements that it awarded during the study period, BBC worked with USI staff to request subcontract data directly from prime contractors. For each construction and professional services contract awarded during the study period, USI staff contacted the prime contractor via U.S. mail to request information about each subcontractor utilized in the USI contract.

USI contacted 38 prime contractors in connection with 73 procurements, representing all of the construction and professional services dollars that the study team included in USI's utilization analysis. USI received complete subcontract information for 55 of the 73 procurements (75%) about which it inquired.

Case study data. To complete a case study analysis of MBE/WBE participation in USI's bid process during the study period, BBC examined bid tabulations for a sample of the procurements that the study team included in the utilization analysis.

USI maintained bid tabulations for many of the procurements that it awarded in fiscal years 2007, 2008 and 2009. BBC randomly selected 120 procurements to be included in USI's case study analysis, stratified by procurement area, procurement size and year of award. BBC successfully collected bid tabulations for 115 — or 96 percent — of those procurements.²⁴

Agency review. After BBC collected procurement and vendor data, the study team compiled the information into tables that it submitted to USI for review. BBC used USI feedback to finalize procurement and vendor data.

Vincennes University. Vincennes University (VU) produced reports from its data systems that provided the procurement information that the study team requested. The reports were based on two sources that included overlapping data — a contracts list from hardcopy data files and the Banner System.

- **Contracts list.** VU used its hardcopy data files to compile a list of construction and professional services —including architecture and engineering — contracts that were awarded during the study period.
- **Banner System.** The Banner System contained purchase order and invoice data pertaining to construction, professional services and goods and support services procurements that VU awarded during the study period.

For each report, VU advised the study team on how to use the provided data, including how to identify unique bid opportunities and how to aggregate procurement dollar amounts. Because both data systems included data pertaining to the same construction and professional services procurements, VU provided BBC with information that linked contract data in the contracts list to purchase order and invoice data in the Banner System. That information allowed the study team to exclude data from the Banner System for contracts that were already being included from the contracts list to avoid over-counting dollars.

²⁴ Bid tabulation data were not available for design contracts.

Subcontract data. Because VU did not maintain complete information about subcontracts for any of the procurements that it awarded during the study period, BBC worked with VU staff to request subcontract data directly from prime contractors. With the assistance of VU staff, the study team began by identifying construction and professional services contracts that were determined to have likely included subcontractor participation.²⁵ For each construction and professional services contract awarded during the study period, BBC contacted the prime contractor via U.S. mail and requested information about each subcontractor.

BBC contacted 59 prime contractors in connection with 134 procurements, representing 84 percent of the construction and professional services dollars that the study team included in VU's utilization analysis. The study team received complete subcontract information for 105 of the 134 procurements (78%) about which it inquired.

Case study data. To complete a case study analysis of MBE/WBE participation in VU's bid process during the study period, BBC examined bid tabulations for a sample of the procurements that the study team included in the utilization analysis.

VU maintained bid tabulations for many of the procurements that it awarded in fiscal years 2007, 2008 and 2009. BBC randomly selected 109 procurements to be included in VU's case study analysis, stratified by procurement area, procurement size and year of award. BBC successfully collected bid tabulations for all of those procurements.

Agency review. After BBC collected procurement and vendor data, the study team compiled the information into tables that it submitted to VU for review. BBC used VU feedback to finalize procurement and vendor data.

²⁵ VU staff determined that goods and support services procurements that were awarded during the study period were unlikely to have included subcontractor participation.

APPENDIX D.

Collection of Availability Information

Appendix D describes the study team’s analysis of MBE/WBE availability for contracts that the Indiana Department of Administration (IDOA), the Indiana Department of Transportation (INDOT) and state educational institutions (SEIs) awarded between July 1, 2006 and June 30, 2009. Together, IDOA and INDOT contracts are referred to as “state” contracts or procurements.

Appendix D expands on the analysis presented in Chapter 5 by explaining:

- A. Overall approach to collecting availability information;
- B. Development of business establishments list;
- C. Development of interview instrument;
- D. Interview execution and performance;
- E. Additional considerations; and
- F. Availability estimates by region and MSA.

A. Overall Approach to Collecting Availability Information

BBC contracted with the Survey Research Center at IUPUI (SRC) to conduct telephone interviews with business establishments in Indiana. Business establishments that SRC interviewed were those:

- Identified in Dun & Bradstreet Marketplace (D&B) as doing work in fields closely related to the types of construction, professional services, goods and support services that the study team examined in the utilization analysis; and
- With locations in Indiana.

Note that D&B does not require firms to pay a fee to be included in its Marketplace listings — it is completely free to listed firms. D & B Marketplace is accepted as the most comprehensive and complete source of business listings in the nation. Rather than drawing a sample of listings from the D&B database, the study team attempted to contact every listing in relevant industry codes. SRC attempted to reach 31,842 business listings and found that 6,720 listings were non-working or wrong numbers.

SRC successfully contacted 12,296 business establishments, about one-half of the establishments with valid phone listings. More than 3,200 establishments that were successfully contacted indicated they were not interested in discussing their firms' availability for IDOA, INDOT or SEI contracts. More than 9,000 firms completed interviews about firm characteristics, their interest and qualifications for state and SEI work and other topics. After screening for qualifications, interest in future contracts and subcontracts, and other factors, BBC identified 3,997 firms that were available for IDOA, INDOT or SEI procurements awarded during the study period.

B. Development of List of Business Establishments

BBC developed a list of business establishments to contact for availability interviews from D&B information. BBC determined business specializations related to the types of construction, professional services, goods and support services work examined in the disparity study. The study team then identified 8-digit D&B industry codes that best corresponded to those contracts and subcontracts and collected information about Indiana firms that D&B listed as having their primary lines of business within those industry specializations.

The study team did not expect every Indiana firm in the selected industry specializations to be available for state or SEI work. In fact, for some industries, BBC anticipated that relatively few firms would perform that type of work for the state or SEIs. In the same vein, the study team did not design the research effort so that every firm possibly performing construction, professional services, goods and support services work would be called as part of the interviews. To do so would have required including work types that are only marginally related to those industries. In addition, some firms within the core lines of work that the interviews encompassed were either missing from the D&B database or may not have responded to the interview effort.

For the above reasons, the interview database does not include all firms possibly available for state and SEI work in Indiana. The study team's goal was to develop, with a high degree of precision, unbiased estimates of the relative availability of MBE/WBEs among firms doing business in Indiana within the lines of work principally involved in state and SEI contracting.

Identifying the relevant subindustries for IDOA, INDOT and SEI contracting. BBC determined the types of firms involved with state and SEI contracting by reviewing IDOA, INDOT and SEI prime contract and subcontract dollars that went to different types of businesses during the study period. Appendix C describes the study team's collection and analysis of state and SEI prime contract and subcontract data for the study period.

D&B has developed 8-digit industry codes that provide more precise definitions of firm specializations than the 4-digit SIC codes or the NAICS codes that the federal government has prepared. Figure D-1 on the following page lists industry codes within construction, professional services, goods and support services for which BBC purchased lists of firms to contact as part of the availability interview process. The study team grouped those industry codes into distinct subindustries, which are also shown in Figure D-1.

Determining list of establishments to be contacted. BBC purchased information about each Indiana business establishment that:

- D&B listed within the industry codes presented in Figure D-1; and
- Had a phone number listed in the D&B database.

BBC purchased information on 31,842 business establishments to be contacted as part of the availability interviews. This total included 16,727 construction establishments, 8,311 professional services establishments and 6,804 goods and support services establishments.

Because D&B organizes its database by “business establishment” and not by “firm,” BBC purchased business listings in that fashion. Therefore, multiple Indiana locations for a single firm were obtained in the list of establishments to be called. The study team attempted to contact each establishment by telephone. BBC’s method for consolidating information for multiple establishments for a firm into a single record are described later in this appendix.

Figure D-1.
Construction, professional services, goods and support services subindustries included in the
disparity study availability interviews

| Industry code | Industry description | Industry code | Industry description |
|--------------------------------------|---|-------------------------------|---|
| Construction | | | |
| Asphalt | | Concrete work | |
| 1499-0700 | Asphalt mining and bituminous stone quarrying | 1771-0000 | Concrete work |
| 2951-0000 | Asphalt paving mixtures and blocks | 1771-0100 | Stucco, gunite, and grouting contractors |
| 2951-0201 | Asphalt and asphaltic paving mixtures (not from refineries) | 1771-0101 | Exterior concrete stucco contractor |
| 2952-0000 | Asphalt felts and coatings | 1771-0103 | Gunite contractor |
| | | 1771-0200 | Curb and sidewalk contractors |
| | | 1771-0201 | Curb construction |
| | | 1771-0202 | Sidewalk contractor |
| | | 1771-9901 | Concrete pumping |
| | | 1771-9902 | Concrete repair |
| | | 1771-9903 | Flooring contractor |
| | | 1771-9905 | Patio construction, concrete |
| | | 1791-9902 | Concrete reinforcement, placing of |
| | | 1791-9907 | Precast concrete structural framing or panels, placing of |
| | | 1799-0207 | Glazing of concrete surfaces |
| Building construction | | Construction materials | |
| 1541-0000 | Industrial buildings and warehouses | 1411-0000 | Dimension stone |
| 1541-9905 | Industrial buildings, new construction, nec | 1411-0100 | Limestone and marble dimension stone |
| 1541-9908 | Prefabricated building erection, industrial | 1411-0104 | Limestone, dimension-quarrying |
| 1541-9909 | Renovation, remodeling and repairs: industrial buildings | 1411-0200 | Granite dimension stone |
| 1541-9910 | Steel building construction | 1422-0000 | Crushed and broken limestone |
| 1541-9912 | Warehouse construction | 1422-0100 | Limestones, ground |
| 1542-0000 | Nonresidential construction, nec | 1422-0103 | Lime rock, ground |
| 1542-0100 | Commercial and office building contractors | 1422-9902 | Cement rock, crushed and broken-quarrying |
| 1542-0101 | Commercial and office building, new construction | 1423-0000 | Crushed and broken granite |
| 1542-0102 | Commercial and office buildings, prefabricated erection | 1429-0000 | Crushed and broken stone, nec |
| 1542-0103 | Commercial and office buildings, renovation and repair | 1429-0100 | Igneous rock, crushed and broken-quarrying |
| 1542-0301 | Garage construction | 1429-0103 | Trap rock, crushed and broken-quarrying |
| 1542-0400 | Specialized public building contractors | 1429-9905 | Grits mining (crushed stone) |
| 1542-0403 | Hospital construction | 1429-9906 | Marble, crushed and broken-quarrying |
| 1542-0406 | School building construction | 1442-0000 | Construction sand and gravel |
| 1542-9901 | Custom builders, non-residential | 1442-0100 | Sand mining |
| 1542-9902 | Design and erection, combined: non-residential | 1442-0101 | Common sand mining |
| 1542-9903 | Institutional building construction | 1442-0102 | Construction sand mining |
| 1629-9905 | Power plant construction | 1442-0200 | Gravel and pebble mining |
| 1791-9904 | Exterior wall system installation | 1442-0201 | Gravel mining |
| | | 3441-0000 | Fabricated structural metal |
| | | 3441-0200 | Fabricated structural metal for bridges |
| | | 3441-0201 | Bridge sections, prefabricated, highway |
| | | 3441-9901 | Building components, structural steel |
| | | 3441-9903 | Expansion joints (structural shapes), iron or steel |
| | | 3441-9906 | Joists, open web steel: long-span series |
| | | | |
| Ceiling and floor contractor | | | |
| 1752-0000 | Floor laying and floor work, nec | | |
| 1752-9901 | Access flooring system installation | | |
| 1752-9903 | Carpet laying | | |
| 1752-9904 | Ceramic floor tile installation | | |
| 1752-9905 | Linoleum installation | | |
| 1752-9906 | Resilient floor laying | | |
| 1752-9907 | Vinyl floor tile and sheet installation | | |
| 1752-9908 | Wood floor installation and refinishing | | |
| 1771-0102 | Grouting work | | |
| Concrete and related products | | | |
| 3272-0000 | Concrete products, nec | | |
| 3272-0303 | Concrete products, precast, nec | | |
| 3272-9904 | Prestressed concrete products | | |
| 3273-0000 | Ready-mixed concrete | | |

Figure D-1. (continued)
Construction, professional services, goods and support services fields included in the disparity study availability interviews

| Industry code | Industry description | Industry code | Industry description |
|--|--|--|---|
| Construction (continued) | | | |
| Electrical equipment and supplies | | Electrical work | |
| 3612-0109 | Transformers, except electric | 1711-0403 | Solar energy contractor |
| 3613-0213 | Switchgear and switchgear accessories, nec | 1731-0000 | Electrical work |
| 3621-9902 | Generator sets: gasoline, diesel, or dual-fuel | 1731-0100 | Electric power systems contractors |
| 3625-0200 | Industrial electrical relays and switches | 1731-0103 | Standby or emergency power specialization |
| 3625-9904 | Control equipment, electric | 1731-0104 | Switchgear and related devices installation |
| 3674-0000 | Semiconductors and related devices | 1731-0200 | Electronic controls installation |
| 3674-0103 | Light emitting diodes | 1731-0201 | Computerized controls installation |
| 3825-0000 | Instruments to measure electricity | 1731-0202 | Energy management controls |
| 3993-0102 | Scoreboards, electric | 1731-0203 | Environmental system control installation |
| 5063-0000 | Electrical apparatus and equipment | 1731-0300 | Communications specialization |
| 5063-0100 | Transformers and transmission equipment | 1731-0302 | Fiber optic cable installation |
| 5063-0103 | Power transmission equipment, electric | 1731-0303 | Sound equipment specialization |
| 5063-0104 | Transformers, electric | 1731-0304 | Telephone and telephone equipment installation |
| 5063-0200 | Electrical fittings and construction materials | 1731-0305 | Voice, data, and video wiring contractor |
| 5063-0202 | Cable conduit | 1731-0400 | Safety and security specialization |
| 5063-0203 | Circuit breakers | 1731-0401 | Access control systems specialization |
| 5063-0205 | Electrical construction materials | 1731-0402 | Closed circuit television installation |
| 5063-0206 | Electrical supplies, nec | 1731-0403 | Fire detection and burglar alarm systems specialization |
| 5063-0216 | Switchboards | 1731-9902 | Computer installation |
| 5063-0217 | Switches, except electronic, nec | 1731-9903 | General electrical contractor |
| 5063-0220 | Wiring devices | 1731-9904 | Lighting contractor |
| 5063-0300 | Wire and cable | | |
| 5063-0302 | Building wire and cable | Excavation | |
| 5063-0303 | Control and signal wire and cable, including coaxial | 1794-0000 | Excavation work |
| 5063-0304 | Electronic wire and cable | 1794-9901 | Excavation and grading, building construction |
| 5063-0500 | Electric alarms and signaling equipment | | |
| 5063-0501 | Alarm systems, nec | Floor coverings | |
| 5063-0502 | Burglar alarm systems | 5023-0400 | Floor coverings |
| 5063-0503 | Fire alarm systems | 5023-0401 | Carpets |
| 5063-0504 | Signaling equipment, electrical | 5023-0402 | Floor cushion and padding |
| 5063-0600 | Batteries | 5023-0403 | Resilient floor coverings: tile or sheet |
| 5063-0601 | Batteries, dry cell | 5023-0404 | Rugs |
| 5063-0602 | Storage batteries, industrial | 5023-0405 | Wood flooring |
| 5063-9901 | Antennas, receiving, satellite dishes | | |
| 5063-9903 | Generators | Foundation work | |
| 5063-9904 | Motor controls, starters and relays: electric | 1741-0100 | Foundation and retaining wall construction |
| 5063-9905 | Motors, electric | 1741-0101 | Foundation building |
| | | 1771-9904 | Foundation and footing contractor |
| Elevator installation, repair and equipment | | Heavy construction equipment rental | |
| 1791-9903 | Elevator front installation, metal | 7353-0000 | Heavy construction equipment rental |
| 1796-9901 | Elevator installation and conversion | 7353-0102 | Oil well drilling equipment, rental or leasing |
| 3534-0000 | Elevators and moving stairways | 7353-9901 | Cranes and aerial lift equipment, rental or leasing |
| 3534-0100 | Elevators and equipment | 7353-9902 | Earth moving equipment, rental or leasing |
| 5084-0803 | Elevators | | |

Figure D-1. (continued)
Construction, professional services, goods and support services fields included in the disparity study availability interviews

| Industry code | Industry description | Industry code | Industry description |
|--|---|-------------------------------------|--|
| Construction (continued) | | | |
| Highway, street and bridge construction | | Other building construction | |
| 1611-0000 | Highway and street construction | 1711-0401 | Mechanical contractor |
| 1611-0200 | Surfacing and paving | 1711-0402 | Process piping contractor |
| 1611-0202 | Concrete construction: roads, highways, sidewalks, etc. | 1761-9901 | Architectural sheet metal work |
| 1611-0203 | Grading | 1761-9902 | Ceilings, metal: erection and repair |
| 1611-0204 | Highway and street paving contractor | 1761-9903 | Sheet metal work, nec |
| 1611-0205 | Resurfacing contractor | 1761-9904 | Siding contractor |
| 1611-9901 | General contractor, highway and street construction | 1791-0000 | Structural steel erection |
| 1611-9902 | Highway and street maintenance | 1791-9905 | Iron work, structural |
| 1622-0000 | Bridge, tunnel, and elevated highway construction | 1791-9908 | Smoke stacks, steel: installation and maintenance |
| 1622-9901 | Bridge construction | 1791-9909 | Storage tanks, metal: erection |
| 1622-9902 | Highway construction, elevated | 1795-9903 | Dismantling steel oil tanks |
| 1622-9903 | Tunnel construction | 1796-0000 | Installing building equipment |
| 1771-0300 | Driveway, parking lot, and blacktop contractors | 1799-0100 | Athletic and recreation facilities construction |
| 1771-0301 | Blacktop (asphalt) work | 1799-0102 | Court construction, indoor athletic |
| 1771-0302 | Driveway contractor | | |
| 1771-0303 | Parking lot construction | | |
| Insulation and waterproofing | | Other construction materials | |
| 1742-0200 | Acoustical and insulation work | 2851-0000 | Paints and allied products |
| 1742-0201 | Acoustical and ceiling work | 3089-0307 | Fences, gates, and accessories: plastics |
| 1742-0203 | Insulation, buildings | 3354-0102 | Coils, rod, extruded, aluminum |
| 1799-0200 | Coating, caulking, and weather, water, and fireproofing | 3494-0000 | Valves and pipe fittings, nec |
| 1799-0201 | Caulking (construction) | 3564-0105 | Filters, air: furnaces, air conditioning equipment, etc. |
| 1799-0202 | Coating of concrete structures with plastic | 3585-0000 | Refrigeration and heating equipment |
| 1799-0203 | Coating of metal structures at construction site | 3585-0100 | Air conditioning equipment, complete |
| 1799-0204 | Corrosion control installation | 3669-0103 | Fire detection systems, electric |
| 1799-0205 | Dampproofing | 5051-0214 | Pipe and tubing, steel |
| 1799-0206 | Fireproofing buildings | 5063-0400 | Lighting fixtures |
| 1799-0208 | Insulation of pipes and boilers | 5063-0401 | Light bulbs and related supplies |
| 1799-0209 | Waterproofing | 5063-0402 | Lighting fittings and accessories |
| | | 5063-0403 | Lighting fixtures, commercial and industrial |
| | | 5063-0404 | Lighting fixtures, residential |
| | | 5074-0300 | Plumbing fittings and supplies |
| Masonry, drywall and stonework | | 5075-0000 | Warm air heating and air conditioning |
| 1741-0000 | Masonry and other stonework | 5075-0100 | Air conditioning and ventilation equipment and supplies |
| 1741-9901 | Bricklaying | 5075-0101 | Air conditioning equipment, except room units, nec |
| 1741-9902 | Chimney construction and maintenance | 5075-0102 | Air filters |
| 1741-9903 | Concrete block masonry laying | 5075-0105 | Compressors, air conditioning |
| 1741-9904 | Drain tile installation | 5075-0107 | Dehumidifiers, except portable |
| 1741-9905 | Marble masonry, exterior construction | 5075-0108 | Dust collecting equipment |
| 1741-9906 | Refractory or acid brick masonry | 5075-0109 | Fans, heating and ventilation equipment |
| 1741-9907 | Stone masonry | 5075-0111 | Ventilating equipment and supplies |
| 1741-9908 | Tuckpointing or restoration | 5075-0200 | Warm air heating equipment and supplies |
| 1742-0000 | Plastering, drywall, and insulation | 5075-0201 | Electrical heating equipment |
| 1742-0100 | Plaster and drywall work | 5075-0202 | Furnaces, heating: electric |
| 1742-0101 | Drywall | 5075-0205 | Thermostats |
| 1742-0104 | Plastering, plain or ornamental | | |
| 1742-0105 | Stucco work, interior | | |
| 1752-9902 | Asphalt tile installation | | |

Figure D-1. (continued)
Construction, professional services, goods and support services fields included in the disparity study availability interviews

| Industry code | Industry description | Industry code | Industry description |
|--|--|--|---|
| Construction (continued) | | | |
| Other construction services | | Painting | |
| 1611-0100 | Highway signs and guardrails | 1721-0000 | Painting and paper hanging |
| 1611-0101 | Guardrail construction, highways | 1721-0200 | Commercial painting |
| 1611-0102 | Highway and street sign installation | 1721-0300 | Industrial painting |
| 1611-9903 | Highway reflector installation | | |
| 1711-0300 | Sprinkler contractors | Residential construction | |
| 1711-0301 | Fire sprinkler system installation | 1522-0104 | Dormitory construction |
| 1711-0302 | Irrigation sprinkler system installation | 1522-0106 | Multi-family dwelling construction, nec |
| 1781-0000 | Water well drilling | 1522-0107 | Multi-family dwellings, new construction |
| 1781-9902 | Servicing, water wells | 1522-0201 | Remodeling, multi-family dwellings |
| 1799-0700 | Parking facility equipment and maintenance | | |
| 1799-0801 | Asbestos removal and encapsulation | Water, sewer, and utility lines | |
| Plumbing and HVAC | | 1623-0000 | Water, sewer, and utility lines |
| 1711-0000 | Plumbing, heating, air-conditioning | 1623-0101 | Gas main construction |
| 1711-0100 | Boiler and furnace contractors | 1623-0103 | Oil and gas pipeline construction |
| 1711-0101 | Boiler maintenance contractor | 1623-0201 | Cable laying construction |
| 1711-0102 | Boiler setting contractor | 1623-0203 | Telephone and communication line construction |
| 1711-0103 | Heating systems repair and maintenance | 1623-0300 | Water and sewer line construction |
| 1711-0104 | Hydronics heating contractor | 1623-0301 | Aqueduct construction |
| 1711-0200 | Plumbing contractors | 1623-0302 | Sewer line construction |
| 1711-0400 | Heating and air conditioning contractors | 1623-0303 | Water main construction |
| 1711-0404 | Ventilation and duct work contractor | 1623-9901 | Electric power line construction |
| 1711-0405 | Warm air heating and air conditioning contractor | 1623-9903 | Pipe laying construction |
| 1711-9901 | Refrigeration contractor | 1623-9904 | Pipeline construction, nsk |
| 7623-9901 | Air conditioning repair | 1623-9906 | Underground utilities contractor |
| | | 4613-0000 | Refined petroleum pipelines |
| Roofing | | Wrecking and demolition | |
| 1761-0000 | Roofing, siding, and sheetmetal work | 1795-0000 | Wrecking and demolition work |
| 1761-0100 | Roofing and gutter work | 1795-9901 | Concrete breaking for streets and highways |
| 1761-0101 | Gutter and downspout contractor | 1795-9902 | Demolition, buildings and other structures |
| 1761-0102 | Roof repair | 1799-0503 | Construction site cleanup |
| 1761-0103 | Roofing contractor | | |
| 1761-0104 | Skylight installation | | |
| Professional services | | | |
| Advertising, marketing and public relations | | Computer systems and services | |
| 7311-0000 | Advertising agencies | 7373-0300 | Computer system selling services |
| 7319-9902 | Media buying service | 7373-0301 | Turnkey vendors, computer systems |
| 8743-0000 | Public relations services | 7373-0302 | Value-added resellers, computer systems |
| 8743-9903 | Public relations and publicity | 7376-0000 | Computer facilities management |
| Architectural and design services | | 7379-0000 | Computer related services, nec |
| 8712-0000 | Architectural services | 7379-0100 | Computer related maintenance services |
| | | 7379-0105 | Computer data escrow service |
| | | 7379-0200 | Computer related consulting services |
| Business services and consulting | | 7379-0201 | Computer hardware requirements analysis |
| 8741-0100 | Business management | Construction management | |
| 8742-0400 | Industry specialist consultants | 8741-9902 | Construction management |
| 8748-0000 | Business consulting, nec | 8742-0402 | Construction project management consultant |
| 8748-0202 | Economic consultant | | |

Figure D-1. (continued)
Construction, professional services, goods and support services fields included in the disparity study availability interviews

| Industry code | Industry description | Industry code | Industry description |
|---|--|-------------------------------|--|
| Professional services (continued) | | | |
| Engineering | | IT and data services | |
| 8711-0000 | Engineering services | 7371-0000 | Computer programming services |
| 8711-0202 | Mechanical engineering | 7371-0100 | Custom computer programming services |
| 8711-0400 | Construction and civil engineering | 7371-0101 | Computer software systems analysis and design, custom |
| 8711-0401 | Building construction consultant | 7371-0200 | Computer software writing services |
| 8711-0402 | Civil engineering | 7371-0201 | Computer code authors |
| 8711-0404 | Structural engineering | 7371-0202 | Computer software writers, freelance |
| 8711-9901 | Acoustical engineering | 7371-0300 | Computer software development and applications |
| 8711-9903 | Consulting engineer | 7371-0301 | Computer software development |
| 8711-9905 | Electrical or electronic engineering | 7371-0302 | Software programming applications |
| 8712-0101 | Architectural engineering | 7373-0000 | Computer integrated systems design |
| 8748-0400 | Systems analysis and engineering consulting services | 7373-0100 | Systems software development services |
| Environmental services and transportation planning | | 7373-0101 | Computer systems analysis and design |
| 0711-9906 | Soil testing services | 7373-0102 | Systems engineering, computer related |
| 8711-0101 | Pollution control engineering | 7373-0200 | Systems integration services |
| 8711-9906 | Energy conservation engineering | 7373-0201 | Local area network (LAN) systems integrator |
| 8731-0302 | Environmental research | 7373-0202 | Office computer automation systems integration |
| 8733-0201 | Archeological expeditions | 7373-0400 | Computer-aided system services |
| 8742-0410 | Transportation consultant | 7373-0401 | Computer-aided design (CAD) systems service |
| 8744-9904 | Environmental remediation | 7373-0402 | Computer-aided engineering (CAE) systems service |
| 8748-0200 | Urban planning and consulting services | 7373-0403 | Computer-aided manufacturing (CAM) systems service |
| 8748-0203 | Industrial development planning | 7374-9902 | Data processing service |
| 8748-0204 | Traffic consultant | 7379-0202 | Data processing consultant |
| 8748-9905 | Environmental consultant | 7379-0203 | Online services technology consultants |
| 8999-0700 | Earth science services | 8742-9905 | Management information systems consultant |
| 8999-0701 | Geological consultant | 8748-0401 | Systems analysis or design |
| Human resources and job training services | | 8748-0402 | Systems engineering consultant, ex. computer or professional |
| 7361-0000 | Employment agencies | Landscape architecture | |
| 7361-0204 | Nurses' registry | 0781-0000 | Landscape counseling and planning |
| 8249-0102 | Vocational apprentice training | 0781-0201 | Landscape architects |
| 8249-0200 | Business training services | Research services | |
| 8331-0000 | Job training and related services | 8731-0100 | Biological research |
| 8331-0100 | Job training services | 8731-0200 | Commercial physical research |
| 8742-0206 | Training and development consultant | 8731-0201 | Chemical laboratory, except testing |
| Surveying and mapmaking | | 8731-9902 | Medical research, commercial |
| 7389-0800 | Mapmaking services | 8732-0000 | Commercial nonphysical research |
| 7389-0801 | Mapmaking or drafting, including aerial | 8732-0100 | Market analysis, business, and economic research |
| 8713-0000 | Surveying services | 8732-0101 | Business analysis |
| Testing services | | 8732-0102 | Business economic service |
| 7389-0200 | Inspection and testing services | 8732-0103 | Business research service |
| 8734-0000 | Testing laboratories | 8732-0104 | Economic research |
| 8734-0300 | Pollution testing | 8732-0105 | Market analysis or research |
| 8734-0301 | Hazardous waste testing | 8732-0106 | Merger, acquisition, and reorganization research |
| 8734-9909 | Soil analysis | 8732-0108 | Research services, except laboratory |
| 8748-0102 | Testing service, educational or personnel | 8732-0109 | Survey service: marketing, location, etc. |
| | | 8732-0200 | Commercial sociological and educational research |
| | | 8732-0201 | Educational research |
| | | 8734-0200 | Product testing laboratories |
| | | 8734-9911 | Water testing laboratory |

Figure D-1. (continued)
Construction, professional services, goods and support services fields included in the disparity study availability interviews

| Industry code | Industry description | Industry code | Industry description |
|---|--|---|--|
| Goods | | | |
| Athletic goods | | Furniture | |
| 5091-0000 | Sporting and recreation goods | 2522-0000 | Office furniture, except wood |
| 5091-0200 | Golf and skiing equipment and supplies | 2522-0102 | Chairs, office: padded or plain: except wood |
| 5091-0202 | Skiing equipment | 2531-0000 | Public building and related furniture |
| 5091-0500 | Fitness equipment and supplies | 2531-0100 | School furniture |
| 5941-0400 | Exercise equipment | 2531-9908 | Picnic tables or benches, park |
| Automobiles | | 3821-0000 | Laboratory apparatus and furniture |
| 5511-9901 | Automobiles, new and used | 5021-0100 | Office and public building furniture |
| Cleaning and janitorial supplies | | 5021-0106 | Office furniture, nec |
| 2844-0000 | Toilet preparations | 5021-0107 | Public building furniture, nec |
| 5087-0300 | Cleaning and maintenance equipment and supplies | 5021-0109 | School desks |
| Coal and other minerals | | 5021-0110 | Theater seats |
| 1221-0000 | Bituminous coal and lignite-surface mining | 5021-0200 | Household furniture |
| 1221-0103 | Strip mining, bituminous | 5021-0202 | Dressers |
| 5052-0201 | Coal | 5021-0203 | Juvenile furniture |
| Communications equipment | | 5021-0205 | Tables, occasional |
| 3651-9901 | Electronic kits for home assembly: radio, TV, phonograph | 5021-0301 | Beds |
| 3661-0100 | Telephones and telephone apparatus | 5021-0303 | Mattresses |
| 3661-9908 | Fiber optics communications equipment | 5021-0304 | Waterbeds |
| 5064-0000 | Electrical appliances, television and radio | 5021-9901 | Bookcases |
| 5065-0200 | Communication equipment | 5021-9902 | Chairs |
| 5065-0204 | Intercommunication equipment, electronic | 5021-9904 | Outdoor and lawn furniture, nec |
| 5065-0400 | Radio and television equipment and parts | 5021-9905 | Racks |
| 5065-0409 | Video equipment, electronic | 5021-9906 | Shelving |
| 5099-0500 | Video and audio equipment | 5021-9907 | Unfinished furniture |
| Food and concessions | | 5712-9904 | Office furniture |
| 2051-0202 | Cakes, bakery: except frozen | Industrial equipment and machinery | |
| 2086-0000 | Bottled and canned soft drinks | 3492-9903 | Hose and tube fittings and assemblies, hydraulic/pneumatic |
| 2099-0000 | Food preparations, nec | 3533-9903 | Oil field machinery and equipment |
| 5113-0201 | Cups, disposable plastic and paper | 3564-0200 | Blowers and fans |
| 5141-0000 | Groceries, general line | 3823-0400 | Industrial process measurement equipment |
| 5141-9901 | Food brokers | 5082-0102 | Road construction and maintenance machinery |
| 5148-0000 | Fresh fruits and vegetables | 5084-0706 | Pollution control equipment, air (environmental) |
| 5149-0000 | Groceries and related products, nec | 5084-0805 | Pumps and pumping equipment, nec |
| 5411-9904 | Grocery stores, chain | Laboratory equipment | |
| 5812-0201 | Concessionaire | 3821-0104 | Clinical laboratory instruments, except medical and dental |
| 5812-9906 | Contract food services | 3826-0000 | Laboratory analytical instruments |
| 5963-0200 | Food services, direct sales | 5049-0103 | Laboratory equipment, except medical or dental |
| Industrial chemicals | | Law enforcement equipment and supplies | |
| 2813-0000 | Industrial gases | 3999-1201 | Badges, metal: policemen, firemen, etc. |
| 3312-0100 | Chemicals and other products derived from coking | 5049-9903 | Law enforcement equipment and supplies |
| 5169-0207 | Industrial gases | 5099-0102 | Firearms, except sporting |

Figure D-1. (continued)
Construction, professional services, goods and support services fields included in the disparity study availability interviews

| Industry code | Industry description | Industry code | Industry description |
|---|---|---------------------------------------|--|
| Goods (continued) | | | |
| Office supplies | | Office equipment | |
| 2621-0000 | Paper mills | 5044-0000 | Office equipment |
| 2671-0000 | Paper; coated and laminated packaging | 5044-0101 | Accounting machines, excl. machine program readable type |
| 2672-0000 | Paper; coated and laminated, nec | 5044-0102 | Adding machines |
| 2782-0000 | Blankbooks and loose-leaf binders | 5044-0103 | Cash registers |
| 3955-9902 | Print cartridges for laser and other computer printers | 5044-0200 | Copying equipment |
| 5111-9901 | Fine paper | 5044-0203 | Duplicating machines |
| 5111-9902 | Printing paper | 5044-0204 | Microfilm equipment |
| 5112-0000 | Stationery and office supplies | 5044-0205 | Micrographic equipment |
| 5112-0103 | Writing ink | 5044-0207 | Photocopy machines |
| 5112-0200 | Social stationery and greeting cards | 5044-0301 | Dictating machines |
| 5112-0201 | Greeting cards | 5044-0401 | Addressing machines |
| 5112-0202 | Stationery | 5044-0402 | Mailing machines |
| 5112-0300 | Albums, scrapbooks and binders | 5044-9902 | Check writing, signing, and endorsing machines |
| 5112-0301 | Albums (photo) and scrapbooks | 5044-9903 | Vaults and safes |
| 5112-0400 | Computer and photocopying supplies | 7699-2002 | Office equipment and accessory customizing |
| 5112-0401 | Computer paper | | |
| 5112-0402 | Data processing supplies | Restaurant and hotel equipment | |
| 5112-0404 | Photocopying supplies | 5046-0306 | Restaurant equipment and supplies, nec |
| 5112-0405 | Laser printer supplies | | |
| 5112-0500 | Office filing supplies | Tires and inner tubes | |
| 5112-0501 | File cards | 3011-0000 | Tires and inner tubes |
| 5112-9902 | Business forms | | |
| 5112-9904 | Envelopes | Tools | |
| 5112-9905 | Inked ribbons | 3545-0000 | Machine tool accessories |
| 5112-9906 | Manifold business forms | 3699-0202 | Laser welding, drilling, and cutting equipment |
| 5112-9907 | Office supplies, nec | 5072-0100 | Bolts, nuts, and screws |
| 5112-9908 | Sales and receipt books | | |
| 5943-9902 | Office forms and supplies | Uniforms and linens | |
| | | 5699-0102 | Uniforms |
| | | 7213-0000 | Linen supply |
| Petroleum and petroleum products | | Vehicle parts and supplies | |
| 1311-0100 | Crude petroleum and natural gas production | 3999-9945 | Wheelchair lifts |
| 1311-0101 | Crude petroleum production | 5531-0103 | Automotive parts |
| 5172-0000 | Petroleum product wholesalers, except bulk stations/terminals | | |
| 5172-0203 | Gasoline | | |
| 5172-9905 | Petroleum brokers | | |
| Support services | | | |
| Agricultural services | | Printing and copying | |
| 0711-9901 | Fertilizer application services | 2752-0100 | Offset and photolithographic printing |
| 0721-0302 | Crop dusting services | 2752-0101 | Offset printing |
| 0723-0201 | Corn drying services | 2759-0602 | Letterpress printing |
| | | 3993-9904 | Displays, paint process |
| Security guard services | | 5199-1001 | Decals |
| 7381-0104 | Protective services, guard | 7389-1706 | Printing broker |
| | | 7389-9962 | Printers' services: folding, collating, etc. |

Figure D-1. (continued)
Construction, professional services, goods and support services fields included in the disparity study availability interviews

| Industry code | Industry description | Industry code | Industry description |
|---|---|--------------------------------------|---------------------------------------|
| Support services (continued) | | | |
| Cleaning and janitorial services | | Trucking, hauling and storage | |
| 7217-0000 | Carpet and upholstery cleaning | 4212-0200 | Liquid transfer services |
| 7217-0100 | Carpet and upholstery cleaning on customer premises | 4212-0201 | Liquid haulage, local |
| 7217-0101 | Carpet and furniture cleaning on location | 4212-0202 | Petroleum haulage, local |
| 7217-0102 | Upholstery cleaning on customer premises | 4212-9904 | Draying, local: without storage |
| 7349-0000 | Building maintenance services, nec | 4212-9905 | Dump truck haulage |
| 7349-0100 | Building and office cleaning services | 4212-9907 | Hazardous waste transport |
| 7349-0101 | Building cleaning service | 4212-9908 | Heavy machinery transport, local |
| 7349-0102 | Building maintenance, except repairs | 4212-9912 | Steel hauling, local |
| 7349-0103 | Hospital housekeeping | 4213-9902 | Building materials transport |
| 7349-0104 | Janitorial service, contract basis | 4213-9904 | Heavy hauling, nec |
| 7349-0105 | Lighting maintenance service | 4213-9905 | Heavy machinery transport |
| 7349-0106 | Office cleaning or charring | 4213-9906 | Household goods transport |
| 7349-0107 | School custodian, contract basis | 4213-9907 | Less-than-truckload (LTL) |
| 7349-0108 | Service station cleaning and degreasing | 4213-9908 | Liquid petroleum transport, non-local |
| 7349-0200 | Building component cleaning service | 4213-9909 | Mobile homes transport |
| 7349-0201 | Acoustical tile cleaning service | 4215-9903 | Package delivery, vehicular |
| 7349-0202 | Air duct cleaning | | |
| 7349-0203 | Chimney cleaning | | |
| 7349-0204 | Floor waxing | | |
| 7349-0205 | Exhaust hood or fan cleaning | | |
| 7349-9901 | Chemical cleaning services | | |
| 7349-9902 | Cleaning service, industrial or commercial | | |
| 7349-9903 | Maid services, contract or fee basis | | |
| 7349-9904 | Telephone booth cleaning and maintenance | | |
| 7349-9905 | Window blind cleaning | | |
| 7349-9906 | Window cleaning | | |

C. Development of Interview Instrument

The study team drafted a telephone interview instrument to collect business information from construction, professional services, goods and support services firms.¹ IDOA staff reviewed the interview guide before the study team used it in the field. As an example, the interview guide that BBC used with construction establishments is provided in Figure D-8 at the end of this appendix. The study team modified the questionnaire slightly for each industry in order to use terms commonly used in those fields. For example, the words “prime consultant” and “subconsultant” were substituted for “prime contractor” and “subcontractor” when interviewing professional services firms.

BBC developed a fax and email version of the questionnaire for firms that were initially contacted by telephone but that preferred to complete the questionnaire in hard copy format. Those firms returned completed questionnaires to the study team via fax or e-mail.

Interview structure. The availability questionnaire included the following sections. Note that each section was asked of all firms. Interviewers did not know ownership status (i.e., race/ethnicity/gender of owners) when calling a firm.

Identification of purpose. The interviews began by identifying the State of Indiana as the survey sponsor and describing the purpose of the study (e.g., “developing a list of companies involved in construction, maintenance or design work on a wide range of public projects”).

Verification of correct firm name. The interviewer verified that he or she had reached the correct business, and if not, inquired about the correct contact information for that business. When the firm name was not correct, interviewers asked if the respondent knew how to contact the company. The BBC study team followed up with the desired company based on the new contact information (see areas “X” and “Y” of the Availability Questionnaire in Figure D-8).

Verification of for-profit business status. The interviewer asked whether the organization was a for-profit business as opposed to a government or not-for-profit entity (Question A2). Interviewers continued the interview with firms that responded “yes” to this question.

Confirmation of main line of business. Firms confirmed their primary line of business according to D&B (Question A3). If D&B’s industry classification was incorrect, firms described their primary line of business (Question A4). After the interview was complete, BBC coded new information on primary line of business into appropriate 8-digit industry codes.

Sole location or multiple locations. Because the study team interviewed business establishments and not firms, business owners and managers were asked if their firm had other locations (Question A5), and whether their establishment was an affiliate or subsidiary of another firm (Questions A8 and A9).

¹ BBC used similar questionnaires in several previous availability analyses in other states.

Past bids or work with government agencies, public colleges and in the private sector. The interviewer asked about bids for or work on past government, public college and private sector contracts. For construction and professional services firms, these questions were asked both in terms of prime contracts and subcontracts (Questions B1 through B12).

Qualifications and interest in future transportation work. Firm representatives were asked about their qualifications and interest in future work with government agencies and public colleges. For construction and professional services firms, these questions were asked both in terms of prime contractor participation and subcontractor participation (Questions B13 through B16).

Geographic areas. The interviewer asked a series of questions about the geographic areas in which firms could work. The geographic areas included metropolitan statistical areas of the state that corresponded to Northern, Central and Southern Indiana (Questions C1 through C4). Figure 1-2 in Chapter 1 presents a map of the regions and metropolitan statistical areas included in the disparity study.

Year firm established. The interviewer asked firms to identify the approximate year that the firm was established (Question D1).

Largest contracts. The study team asked firms to identify the value of the largest contract on which they had bid or been awarded in Indiana in the past five years. For construction and professional services firms, these questions were asked both in terms of prime contracts and subcontracts (Questions D2 through D4).

Ownership. Firms were asked whether they were at least 51 percent owned and controlled by women and/or minorities. If firms indicated that they were minority-owned, they were also asked about the race/ethnicity of ownership (Questions E1 through E3).

Business size. Several interview questions probed firms about their size in terms of 2008 revenue and number of employees. For firms with multiple establishments, this area of questions also asked about revenue and number of employees across all locations (Questions F1 through F6). The study team confirmed that information through several other data sources, including:

- State of Indiana MBE/WBE certification list;
- City of Indianapolis MBE/WBE certification list;
- INDOT DBE certification list;
- IDOA bidders list;
- IDOA, INDOT and SEI vendor data; and
- Small Business Administration 8(a) certification list.

When information about race/ethnicity or gender of ownership conflicted between sources, BBC reconciled that information through follow up telephone calls with the firm.

Comments about the marketplace and doing business with the state and SEIs. Near the end of the interview, the interviewer asked a series of questions concerning general insights on the marketplace and state contracting practices. This set of questions was introduced with the following statement: “Finally, we’re interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences in Indiana within the past five years as we ask you these questions.” (see Question G1a through G1j)

The interview also included an open-ended question about the Indiana marketplace: “Finally, what general thoughts or insights do you have on starting or expanding a business in your industry or winning contracts with state agencies or public colleges as a prime or subcontractor?” (see Question G2)

Contact information. The interview concluded by collecting complete contact information for the establishment and the individual who completed the interview (Questions H1 through H6).

D. Interview Execution and Responses

BBC held planning sessions with SRC executives and training sessions with SRC interviewers prior to conducting the availability interviews. SRC programmed and conducted the interviews via telephone and periodically provided data reports. To minimize non-response, BBC instructed SRC to make at least five attempts to successfully reach a person at each phone number.

BBC instructed SRC to identify and interview an available company representative such as the owner, manager, chief financial officer or other key official who could provide accurate and detailed responses to the questions included in the interview.

The interviews were conducted in late 2009 and early 2010.

Performance. The interview process began with a large number of D&B business listings for organizations in Indiana in certain lines of work related to construction, professional services, goods and support services. At the end of the availability analysis process, firms that reported being qualified and interested in working with government agencies or public colleges in Indiana and had bid on or performed related work were included in the database used for the availability analysis.

Figure D-2 on the following page shows the steps between the beginning set of 31,842 establishments and the 12,296 establishments that the study team was able to successfully contact for availability interviews.

Non-working or wrong phone numbers. Some of the business listings that the study team purchased from D&B and that SRC attempted to contact were:

- Non-working phone numbers (6,363 listings); or
- Wrong numbers for the desired businesses (357 listings).

Some non-working phone and wrong numbers reflected firms going out of business or changing their names and phone numbers between the time that D&B listed them in its database and the time that the study team attempted to contact them.

Working phone numbers. Figure D-2 also presents the final disposition of the 25,122 business establishments with working phone numbers that SRC attempted to contact. For some of those business listings, SRC:

- Could not reach anyone after a minimum of five phone calls at different times of the day and on different days of the week (11,254 listings);
- Could not reach a responsible staff member after a minimum of five phone calls at different times of the day on different days of the week (1,020 listings);
- Could not conduct the interview due to language barriers (interviews were only conducted in English; 39 listings);
- Upon request from the business, sent a hardcopy fax or e-mail availability interview but did not ultimately receive a completed interview (513 establishments).

In sum, the study team successfully contacted 12,296 business establishments, or 49 percent of business establishments with valid phone listings.

Figure D-2.
Disposition of attempts to interview D&B business listings

Note:
* After multiple attempts to complete interview.

Source:
BBC Research & Consulting from 2009–2010 Availability Interviews.

| | Number of firms | Percent of business listings |
|--|-----------------|------------------------------|
| Beginning list | 31,842 | |
| Less non-working phone numbers | 6,363 | |
| Less wrong number/business | 357 | |
| Unique business listings with working phone numbers | 25,122 | 100.0 % |
| Less no answer * | 11,254 | 44.8 |
| Less could not reach responsible staff member * | 1,020 | 4.1 |
| Less language barrier | 39 | 0.2 |
| Less unreturned fax/email | 513 | 2.0 |
| Establishments successfully contacted | 12,296 | 48.9 % |

Establishments not interested in discussing availability for state and SEI work. Figure D-3 shows that of the 12,296 business establishments that the study team successfully contacted, 3,227 establishments were not interested in discussing availability for state or SEI work. About three-fourths (74%) of successfully-contacted business establishments completed interviews about firm characteristics (9,069 establishments).

Firms available for state and SEI work. The study team only deemed a portion of the business establishments that completed availability interviews as available for the construction, professional services, goods or support services contracts that IDOA, INDOT or SEIs awarded during the study period. Figure D-3 presents the number of business establishments that completed availability interviews but that the study team excluded from the availability analysis for various reasons.

- Of the establishments that completed an availability interview, 3,417 indicated that they were an organization other than a for-profit business. Non-profit and public sector organizations were not included in the availability analysis. The interview ended when a respondent reported that his or her establishment was not a for-profit business.
- Prior to analyzing results, BBC excluded 181 establishments that indicated that they were involved in construction, professional services, goods or support services work but reported main lines of work that were outside the scope of the study.
- A number of individual establishments of multi-location firms completed the interview. Prior to analyzing results, BBC collapsed responses from these multiple establishments into a single response (described below), which reduced the number of establishments by 167.
- The study team excluded 1,037 firms from the availability analysis that reported not having bid on or been awarded contracts in Indiana within the past five years.
- BBC excluded an additional 270 establishments from the availability analysis because they reported not being interested in either prime contracting or subcontracting opportunities with IDOA, INDOT or SEIs.

After these exclusions, the interview effort produced a database of 3,997 firms for the availability analysis.

Figure D-3.
Screening of completed business telephone interviews for possible inclusion in the availability analysis

Note:

*Six hundred and twenty-eight of these firms were not included in the availability marketplace analysis (Appendix H), because they did not respond to question D2 or D4 on the availability survey.

Source:

BBC Research & Consulting from 2009-2010 Availability Interviews.

| | Number of firms |
|--|-----------------|
| Establishments successfully contacted | 12,296 |
| Less establishments not interested in discussing availability for State/SEI work | 3,227 |
| Establishments that completed interviews about firm characteristics | 9,069 |
| Less not a business | 3,417 |
| Less line of work outside scope | 181 |
| Less multiple establishments | 167 |
| Firms available for State/SEI work | 5,304 |
| Less no past bid/award | 1,037 |
| Less no interest in future work | 270 |
| Firms possibly available for State/SEI work included in BBC analysis* | 3,997 |

Coding responses from multi-location firms. Multiple responses from different establishments operating under the same firm name were combined into a single, summary case according to the following rules:

- If any of the establishments reported bidding or working on a contract within a particular industry, the study team considered the firm to have bid or worked on a contract in that industry.
- The roles of work (prime contractor or subcontractor) that establishments reported were combined into a single variable, again corresponding to the appropriate industry. For example, if one establishment reported that it works as a prime contractor and another establishment reported that it works as a subcontractor, then the study team would have considered the firm available for both prime contracts and subcontracts.
- If any establishment said that it was interested and able to work within any of the three geographic regions and any of the 15 metropolitan statistical areas (see part C of the interview instrument in Figure D-8), then the study team considered the firm to be available for work in those geographic locations.
- Except when there was a large discrepancy among the individual responses in a set of establishments' self-reported founding dates, BBC used the median founding date that the establishments provided. In cases of large discrepancies, BBC followed-up with the firm to obtain accurate founding date information.
- The largest contract on which a firm bid or worked was equivalent to the largest contract reported by any of its establishments. The study team determined firm revenue in a similar manner.
- The study team determined the number of employees for firms with multiple completed interviews by calculating the mode or the mean response of multiple establishments.
- BBC coded firms with multiple completed interviews as women- or minority-owned if the majority of multiple establishments indicated such status.

E. Additional Considerations

The study team explored several possible limitations in its approach to estimating relative availability, particularly as they relate to INDOT's implementation of the Federal DBE program. These additional considerations include:

- Not providing a count of all firms available for state and SEI work;
- Not using MBE/WBE or DBE directories, prequalification lists or bidders lists;
- Using Dun & Bradstreet lists as the sample frame;
- Selection of specific industries;
- Non-response bias; and
- Reliability of answers to interview questions.

Not providing a count of all firms available for state and SEI work. The purpose of the availability interviews was to estimate the percentage of firms available for state and SEI work that are minority- and women-owned. The interviews did not provide a comprehensive listing of every firm available for state and SEI work and should not be used in that way. Federal courts have approved the interview approach that BBC used in this study (for example, see the Seventh Circuit decision in *Northern Contracting* in Appendix C). USDOT guidance on goal-setting also recommends an interview approach to measure availability for implementation of the Federal DBE Program.²

Not using MBE/WBE or DBE directories, prequalification lists or bidders lists. USDOT guidance for determining relative availability of DBEs recommends dividing the number of firms in an agency's DBE directory by the total number of firms in the marketplace, as reported in U.S. Census data. As another option, the USDOT suggests using a list of prequalified firms or a bidders list to analyze the relative availability of DBEs for an agency's contracts and subcontracts.

There are several reasons why the study team rejected those approaches when measuring availability for INDOT as well as for IDOA and SEIs.

- Dividing a simple count of certified DBEs or certified MBE/WBEs by a U.S. Census count of total firms does not provide the data on firm characteristics the study team desired for this disparity study. For example, the interviews provide data on individual firms' qualifications, bid capacity and interest in state and SEI work, which allowed the study team to take a more refined approach to measuring availability.
- As mentioned previously, IDOA, INDOT and SEIs do not maintain comprehensive prequalification lists for firms across industries.

The methodology applied in this study takes a "custom census" approach and adds several layers of refinement to precisely measure MBE/WBE availability. Court cases involving state implementation of the Federal DBE Program have approved the use of a "custom census" approach to measuring availability (for example, see the Seventh Circuit decision on *Northern Contracting* in Appendix C).

Using Dun & Bradstreet lists as the sample frame. BBC began its "custom census" approach to measuring availability with D&B Marketplace business lists. D&B does not require firms to pay a fee to be included in its Marketplace listings — it is completely free to listed firms. D&B provides the most comprehensive private database of business listings in the United States. Even so, the database does not include all establishments operating in Indiana:

- There can be a lag between formation of a new business and inclusion in D&B, meaning that the newest firms are underrepresented in the sample frame. Based on information from BBC's interview effort, newly formed firms are more likely to be minority- or women-owned, suggesting that MBE/WBEs might be slightly underrepresented in the final database of interviewed firms.

² USDOT. *Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program* (<http://osdbu.dot.gov/?TabId=133>)

- Although D&B includes home-based businesses, these businesses are more difficult to identify and are thus somewhat less likely than other businesses to be included in the D&B database. Small, home-based businesses are more likely than large firms to be minority- or women-owned, which again suggests that MBEs and WBEs might be slightly underrepresented in the final availability data set.

BBC is not able to quantify how much, if any, underrepresentation of minority- and women-owned firms exists in the final availability database. BBC does conclude, however, that any such underrepresentation would be minor and not have a meaningful effect on disparity analyses. There are also no substitute business listings that would better address these issues than D&B Marketplace.

Selection of specific industries. Defining an industry based on specific industry codes (e.g., NAICS, SIC or D&B industry codes) is a standard step when analyzing an economic sector. Government and private sector economic data are typically organized according to these industry codes. As with any such research, there are limitations when choosing the specific D&B codes to define sets of establishments to be interviewed. For example, it was not possible for BBC to include all firms possibly related to construction, professional services, goods and support services contracts without conducting interviews with nearly every firm in Indiana.

In addition, some D&B codes are imprecise and overlap with other business specialties, and D&B does not maintain an 8-digit level of detail for each firm in its database. Some businesses span several types of work, even at the 4-digit level of specificity. This overlap can make classifying firms into a single line of business difficult and imprecise. When firm owners and managers were asked to identify primary lines of business, they often gave broad answers. For these reasons, BBC collapsed many of the industry codes into broader subindustries to more accurately classify firms in the availability database.

Non-response bias. An analysis of non-response bias considers whether firms that were not successfully interviewed are different from those that were successfully interviewed and included in the final data set. There are opportunities for non-response bias in any survey effort. The study team considered the potential for non-response bias due to:

- Research sponsorship;
- Work specializations; and
- Language barriers.

Research sponsorship and introduction. Interviewers introduced themselves by identifying the State of Indiana as the interview sponsor because firms may be less likely to answer somewhat sensitive business questions if the interviewer was unable to identify the sponsor. In past interview efforts — particularly those related to availability studies for other states — BBC has found that identifying the sponsor substantially increases businesses' willingness to participate. The response rate that the study team observed in this study is consistent with that notion — nearly three-fourths of the 12, 296 firms that BBC successfully contacted completed an availability interview.

Work specializations. Businesses in highly-mobile fields, such as trucking, may be more difficult to reach for availability interviews than firms more likely to work out of a fixed office (e.g., engineering

firms). This suggests that response rates may differ by business specialization. Simply counting all interviewed firms across work specializations to determine overall MBE/WBE availability would lead to estimates that were biased in favor of work specializations that included firms that could be easily contacted by telephone.

Work specialization as a potential source of non-response bias in the BBC availability analysis is minimal because the availability analysis compares firms within particular work fields before determining an MBE/WBE availability figure. In other words, the potential for trucking firms to be less likely to complete an interview is less important, because MBE/WBE trucking firms completing interviews are compared with other trucking firms and not to all firms across all specializations. In this example, work specialization would be a source of non-response bias only if particular subsets of trucking firms were less likely than other subsets to be easily contacted by telephone.

Language barriers. State and SEI contracting documents are in English and are not in other languages. The study team made the decision to only include businesses able to complete the interview in English in the availability analysis to eliminate language barriers as a potential explanation for any differences in outcomes observed between MBE/WBEs and majority-owned firms. Firms unable to complete the interviews due to language barriers represented 0.2 percent of the business list.

Response reliability. Firm owners and managers were asked questions that may be difficult to answer, including firm revenues and employment. For that reason, the study team prompted them with D&B information for their establishment and asked them to confirm that information or provide more accurate estimates. Further, respondents were typically not asked to give absolute figures for difficult questions such as firm revenue and number of employees. Rather, they were given ranges of dollar figures or employment levels.

BBC explored reliability by analyzing consistency of interview responses for the firm revenue and firm employment questions. BBC found interview responses to these questions to be internally consistent. That is, firms tended to report revenue figures consistent with their employment levels.

F. Availability Estimates by Region and MSA

BBC calculated availability estimates by region of Indiana — Northern, Central and Southern — and by metropolitan statistical areas (MSAs) of the state. The method that BBC used to calculate those availability estimates differs considerably from the method that BBC used to calculate availability estimates individually for each agency and SEI participating in the study.

The availability estimates by region and by MSA were calculated for illustrative purposes only. They were not used in BBC's disparity analyses, nor should they be compared directly to the availability estimates presented in Chapter 5, which were calculated using a "custom census" approach that was tailored to the contracts of each participating agency/SEI.

Availability by region. Figure D-4 presents MBE/WBE availability by region of Indiana — Northern, Central or Southern. Availability estimates for each region reflects the availability of MBE/WBEs for IDOA, INDOT and SEI procurements combined *if those procurements had all originated from the region*. For example, the availability estimates shown for the Northern region

reflect MBE/WBE availability if all the state and SEI contracts that were examined in the study had originated in the Northern part of Indiana (which they did not).

Figure D-4.
Availability of firms for IDOA, INDOT and SEI procurement across region, July 2006–June 2009, by race, ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) | | | | Total |
|-----------------------------------|---|-----------------------|---------------|------------------|---------------|
| | Construction | Professional services | Goods | Support services | |
| Northern region | | | | | |
| African American-owned | 1.0 % | 2.8 % | 2.3 % | 7.9 % | 1.2 % |
| Asian-Pacific American-owned | 0.1 | 2.2 | 1.1 | 1.4 | 0.3 |
| Subcontinent Asian American-owned | 0.4 | 2.7 | 0.1 | 0.1 | 0.6 |
| Hispanic American-owned | 0.2 | 0.9 | 1.9 | 14.8 | 0.5 |
| Native American-owned | 0.7 | 0.6 | 0.0 | 0.4 | 0.7 |
| Total MBE | 2.5 % | 9.2 % | 5.4 % | 24.5 % | 3.3 % |
| WBE (white women-owned) | <u>9.3</u> | <u>10.4</u> | <u>8.9</u> | <u>13.6</u> | <u>9.4</u> |
| Total MBE/WBE | 11.8 % | 19.6 % | 14.3 % | 38.2 % | 12.7 % |
| Central region | | | | | |
| African American-owned | 1.7 % | 2.3 % | 1.7 % | 6.0 % | 1.9 % |
| Asian-Pacific American-owned | 0.2 | 2.1 | 2.6 | 0.7 | 1.1 |
| Subcontinent Asian American-owned | 0.7 | 3.0 | 0.1 | 0.0 | 1.4 |
| Hispanic American-owned | 0.2 | 1.0 | 2.1 | 3.5 | 0.7 |
| Native American-owned | 0.5 | 0.4 | 0.1 | 1.1 | 0.4 |
| Total MBE | 3.4 % | 8.7 % | 6.5 % | 11.3 % | 5.7 % |
| WBE (white women-owned) | <u>8.2</u> | <u>17.3</u> | <u>10.9</u> | <u>22.3</u> | <u>11.9</u> |
| Total MBE/WBE | 11.5 % | 26.0 % | 17.4 % | 33.6 % | 17.5 % |
| Southern region | | | | | |
| African American-owned | 1.4 % | 3.0 % | 1.0 % | 7.9 % | 1.7 % |
| Asian-Pacific American-owned | 0.5 | 3.2 | 0.7 | 0.5 | 0.9 |
| Subcontinent Asian American-owned | 0.8 | 2.6 | 0.1 | 0.0 | 1.0 |
| Hispanic American-owned | 0.2 | 0.8 | 1.8 | 1.2 | 0.5 |
| Native American-owned | 1.3 | 0.6 | 0.0 | 0.8 | 1.1 |
| Total MBE | 4.3 % | 10.2 % | 3.5 % | 10.4 % | 5.2 % |
| WBE (white women-owned) | <u>8.1</u> | <u>13.3</u> | <u>8.5</u> | <u>24.9</u> | <u>9.1</u> |
| Total MBE/WBE | 12.4 % | 23.5 % | 12.0 % | 35.3 % | 14.3 % |

Note: See Figures K-21 through K-35 in Appendix K for the North, Central and South regions.
 Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from 2009/2010 Availability Survey.

Availability for Northern MSAs. Figure D-5 presents MBE/WBE availability by MSA in the Northern region of Indiana. As with availability by region, the availability for each MSA reflects the availability of MBE/WBEs for IDOA, INDOT and SEI procurements combined if those procurements had all originated from a particular MSA. For example, the availability estimates shown for the Michigan City-La Porte MSA reflect MBE/WBE availability if all the state and SEI contracts that were examined in the study had originated in that MSA (which they did not).

Figure D-5.
Availability of firms for IDOA, INDOT and SEI procurement across MSAs in the Northern region, July 2006–June 2009, by race, ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) | | | | Total |
|-----------------------------------|---|-----------------------|---------------|------------------|---------------|
| | Construction | Professional services | Goods | Support services | |
| Michigan City-La Porte | | | | | |
| African American-owned | 2.1 % | 2.5 % | 1.7 % | 5.6 % | 2.2 % |
| Asian-Pacific American-owned | 0.3 | 2.2 | 3.0 | 0.7 | 1.1 |
| Subcontinent Asian American-owned | 0.7 | 2.9 | 0.1 | 0.0 | 1.2 |
| Hispanic American-owned | 0.6 | 0.8 | 2.2 | 4.2 | 0.9 |
| Native American-owned | 1.1 | 0.5 | 0.0 | 1.1 | 0.8 |
| Total MBE | 4.9 % | 8.8 % | 7.0 % | 11.5 % | 6.3 % |
| WBE (white women-owned) | <u>10.5</u> | <u>16.6</u> | <u>9.0</u> | <u>18.8</u> | <u>12.1</u> |
| Total MBE/WBE | 15.4 % | 25.4 % | 16.1 % | 30.4 % | 18.4 % |
| South Bend-Mishawaka | | | | | |
| African American-owned | 1.6 % | 2.5 % | 1.7 % | 5.5 % | 1.9 % |
| Asian-Pacific American-owned | 0.3 | 2.2 | 3.0 | 0.6 | 1.1 |
| Subcontinent Asian American-owned | 0.7 | 2.9 | 0.1 | 0.0 | 1.3 |
| Hispanic American-owned | 0.6 | 0.8 | 2.2 | 4.3 | 0.9 |
| Native American-owned | 1.1 | 0.4 | 0.0 | 1.1 | 0.8 |
| Total MBE | 4.3 % | 8.8 % | 7.0 % | 11.4 % | 5.9 % |
| WBE (white women-owned) | <u>10.2</u> | <u>16.9</u> | <u>8.7</u> | <u>19.4</u> | <u>12.1</u> |
| Total MBE/WBE | 14.6 % | 25.7 % | 15.8 % | 30.8 % | 17.9 % |
| Gary-Hammond-East Chicago | | | | | |
| African American-owned | 2.2 % | 2.5 % | 1.7 % | 5.4 % | 2.3 % |
| Asian-Pacific American-owned | 0.2 | 2.2 | 3.0 | 0.6 | 1.0 |
| Subcontinent Asian American-owned | 0.8 | 3.0 | 0.1 | 0.0 | 1.3 |
| Hispanic American-owned | 0.7 | 0.8 | 2.3 | 4.3 | 0.9 |
| Native American-owned | 1.2 | 0.4 | 0.0 | 1.1 | 0.9 |
| Total MBE | 5.1 % | 8.9 % | 7.2 % | 11.4 % | 6.4 % |
| WBE (white women-owned) | <u>10.3</u> | <u>16.4</u> | <u>9.1</u> | <u>19.8</u> | <u>12.0</u> |
| Total MBE/WBE | 15.5 % | 25.4 % | 16.3 % | 31.2 % | 18.5 % |
| Fort Wayne | | | | | |
| African American-owned | 1.6 % | 2.4 % | 1.7 % | 5.3 % | 1.9 % |
| Asian-Pacific American-owned | 0.3 | 2.2 | 2.9 | 0.6 | 1.0 |
| Subcontinent Asian American-owned | 0.7 | 2.9 | 0.1 | 0.0 | 1.2 |
| Hispanic American-owned | 0.3 | 0.8 | 2.1 | 4.3 | 0.7 |
| Native American-owned | 1.0 | 0.4 | 0.1 | 1.0 | 0.8 |
| Total MBE | 4.0 % | 8.7 % | 6.9 % | 11.3 % | 5.6 % |
| WBE (white women-owned) | <u>11.1</u> | <u>16.7</u> | <u>8.5</u> | <u>20.7</u> | <u>12.5</u> |
| Total MBE/WBE | 15.1 % | 25.4 % | 15.3 % | 32.0 % | 18.2 % |
| Elkhart-Goshen | | | | | |
| African American-owned | 1.6 % | 2.5 % | 1.8 % | 5.5 % | 1.9 % |
| Asian-Pacific American-owned | 0.3 | 2.2 | 3.0 | 0.6 | 1.1 |
| Subcontinent Asian American-owned | 0.7 | 3.0 | 0.1 | 0.0 | 1.3 |
| Hispanic American-owned | 0.6 | 0.8 | 2.1 | 4.2 | 0.8 |
| Native American-owned | 1.0 | 0.4 | 0.0 | 1.0 | 0.8 |
| Total MBE | 4.3 % | 8.9 % | 7.0 % | 11.4 % | 5.9 % |
| WBE (white women-owned) | <u>10.5</u> | <u>17.0</u> | <u>8.6</u> | <u>19.6</u> | <u>12.3</u> |
| Total MBE/WBE | 14.8 % | 25.9 % | 15.6 % | 31.0 % | 18.1 % |

Note: See Figures K-21 through K-35 in Appendix K for the North, Central and South regions.
 Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from 2009/2010 Availability Survey.

Availability for Central MSAs. Figure D-6 presents MBE/WBE availability by MSA in the Central region of Indiana. The availability for each MSA reflects the availability of MBE/WBEs for IDOA, INDOT and SEI procurements combined if those procurements had all originated from a particular MSA. For example, the availability estimates shown for the Lafayette MSA reflect MBE/WBE availability if all the state and SEI contracts that were examined in the study had originated in that MSA (which they did not).

Figure D-6.
Availability of firms for IDOA, INDOT and SEI procurement across MSAs in the Central region,
July 2006–June 2009, by race, ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) | | | | Total |
|-----------------------------------|---|-----------------------|---------------|------------------|---------------|
| | Construction | Professional services | Goods | Support services | |
| Lafayette | | | | | |
| African American-owned | 1.5 % | 2.4 % | 1.5 % | 6.6 % | 1.8 % |
| Asian-Pacific American-owned | 0.2 | 2.3 | 2.8 | 0.7 | 1.0 |
| Subcontinent Asian American-owned | 0.7 | 2.7 | 0.1 | 0.0 | 1.2 |
| Hispanic American-owned | 0.3 | 1.0 | 2.0 | 4.0 | 0.7 |
| Native American-owned | 0.6 | 0.4 | 0.0 | 1.0 | 0.5 |
| Total MBE | 3.4 % | 8.9 % | 6.3 % | 12.3 % | 5.3 % |
| WBE (white women-owned) | <u>10.0</u> | <u>16.4</u> | <u>11.0</u> | <u>22.2</u> | <u>12.0</u> |
| Total MBE/WBE | 13.4 % | 25.3 % | 17.4 % | 34.5 % | 17.3 % |
| Anderson | | | | | |
| African American-owned | 1.4 % | 2.4 % | 1.5 % | 5.9 % | 1.8 % |
| Asian-Pacific American-owned | 0.2 | 2.3 | 2.8 | 0.7 | 1.0 |
| Subcontinent Asian American-owned | 0.7 | 2.9 | 0.1 | 0.0 | 1.2 |
| Hispanic American-owned | 0.3 | 1.0 | 2.0 | 4.0 | 0.7 |
| Native American-owned | 0.7 | 0.4 | 0.0 | 1.0 | 0.6 |
| Total MBE | 3.4 % | 9.0 % | 6.5 % | 11.6 % | 5.3 % |
| WBE (white women-owned) | <u>7.3</u> | <u>16.4</u> | <u>10.8</u> | <u>22.7</u> | <u>10.3</u> |
| Total MBE/WBE | 10.7 % | 25.5 % | 17.3 % | 34.3 % | 15.6 % |
| Kokomo | | | | | |
| African American-owned | 1.5 % | 2.4 % | 1.6 % | 6.4 % | 1.8 % |
| Asian-Pacific American-owned | 0.2 | 2.3 | 2.8 | 0.7 | 1.0 |
| Subcontinent Asian American-owned | 0.7 | 2.8 | 0.1 | 0.0 | 1.2 |
| Hispanic American-owned | 0.3 | 1.0 | 2.0 | 4.0 | 0.7 |
| Native American-owned | 0.6 | 0.4 | 0.0 | 1.0 | 0.5 |
| Total MBE | 3.4 % | 8.9 % | 6.4 % | 12.2 % | 5.3 % |
| WBE (white women-owned) | <u>9.6</u> | <u>16.5</u> | <u>9.1</u> | <u>23.7</u> | <u>11.6</u> |
| Total MBE/WBE | 13.0 % | 25.4 % | 15.5 % | 35.8 % | 16.9 % |
| Muncie | | | | | |
| African American-owned | 1.5 % | 2.4 % | 1.5 % | 6.3 % | 1.8 % |
| Asian-Pacific American-owned | 0.2 | 2.3 | 2.8 | 0.7 | 1.0 |
| Subcontinent Asian American-owned | 0.7 | 2.9 | 0.1 | 0.0 | 1.2 |
| Hispanic American-owned | 0.3 | 1.0 | 2.0 | 4.0 | 0.7 |
| Native American-owned | 0.7 | 0.4 | 0.0 | 1.0 | 0.6 |
| Total MBE | 3.5 % | 9.0 % | 6.4 % | 12.1 % | 5.4 % |
| WBE (white women-owned) | <u>7.5</u> | <u>16.4</u> | <u>9.8</u> | <u>23.2</u> | <u>10.4</u> |
| Total MBE/WBE | 11.0 % | 25.5 % | 16.3 % | 35.3 % | 15.8 % |
| Terre Haute | | | | | |
| African American-owned | 1.4 % | 2.4 % | 1.5 % | 6.5 % | 1.8 % |
| Asian-Pacific American-owned | 0.2 | 2.3 | 2.8 | 0.7 | 1.0 |
| Subcontinent Asian American-owned | 0.7 | 2.8 | 0.1 | 0.0 | 1.2 |
| Hispanic American-owned | 0.1 | 0.9 | 2.0 | 4.0 | 0.6 |
| Native American-owned | 0.7 | 0.4 | 0.1 | 1.0 | 0.6 |
| Total MBE | 3.3 % | 8.8 % | 6.4 % | 12.3 % | 5.2 % |
| WBE (white women-owned) | <u>8.3</u> | <u>16.7</u> | <u>10.9</u> | <u>23.1</u> | <u>11.0</u> |
| Total MBE/WBE | 11.5 % | 25.5 % | 17.2 % | 35.4 % | 16.2 % |

Figure D-6. (continued)
Availability of firms for IDOA, INDOT and SEI procurement across MSAs in the Central region, July 2006–June 2009, by race, ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) | | | | Total |
|-----------------------------------|---|-----------------------|---------------|------------------|---------------|
| | Construction | Professional services | Goods | Support services | |
| Indianapolis-Carmel | | | | | |
| African American-owned | 1.6 % | 2.4 % | 1.6 % | 5.8 % | 1.9 % |
| Asian-Pacific American-owned | 0.2 | 2.3 | 2.8 | 0.7 | 1.0 |
| Subcontinent Asian American-owned | 0.6 | 2.9 | 0.1 | 0.0 | 1.2 |
| Hispanic American-owned | 0.3 | 1.0 | 2.0 | 4.0 | 0.7 |
| Native American-owned | 0.6 | 0.4 | 0.1 | 1.0 | 0.5 |
| Total MBE | 3.5 % | 9.0 % | 6.5 % | 11.5 % | 5.3 % |
| WBE (white women-owned) | <u>8.9</u> | <u>16.5</u> | <u>10.2</u> | <u>22.1</u> | <u>11.3</u> |
| Total MBE/WBE | 12.4 % | 25.4 % | 16.7 % | 33.5 % | 16.6 % |

Note: See Figures K-21 through K-35 in Appendix K for the North, Central and South regions.
 Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from 2009/2010 Availability Survey.

Availability for Southern MSAs. Figure D-7 presents MBE/WBE availability by MSA in the Southern region of Indiana. The availability for each MSA reflects the availability of MBE/WBEs for IDOA, INDOT and SEI procurements combined if those procurements had all originated from a particular MSA. For example, the availability estimates shown for the Vincennes MSA reflect MBE/WBE availability if all the state and SEI contracts that were examined in the study had originated in that MSA (which they did not).

Figure D-7.
Availability of firms for IDOA, INDOT and SEI procurement across MSAs in the Southern region,
July 2006–June 2009, by race, ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) | | | | Total |
|-----------------------------------|---|-----------------------|---------------|------------------|---------------|
| | Construction | Professional services | Goods | Support services | |
| Vincennes | | | | | |
| African American-owned | 1.7 % | 2.6 % | 1.5 % | 9.4 % | 2.0 % |
| Asian-Pacific American-owned | 0.3 | 2.3 | 0.3 | 0.7 | 0.9 |
| Subcontinent Asian American-owned | 0.8 | 2.8 | 0.1 | 0.0 | 1.3 |
| Hispanic American-owned | 0.1 | 0.7 | 2.8 | 4.2 | 0.6 |
| Native American-owned | 0.8 | 0.4 | 0.2 | 1.1 | 0.7 |
| Total MBE | 3.8 % | 8.9 % | 4.9 % | 15.4 % | 5.4 % |
| WBE (white women-owned) | <u>8.5</u> | <u>16.9</u> | <u>9.2</u> | <u>21.4</u> | <u>11.0</u> |
| Total MBE/WBE | 12.2 % | 25.9 % | 14.1 % | 36.8 % | 16.5 % |
| Evansville | | | | | |
| African American-owned | 1.7 % | 2.6 % | 1.6 % | 9.4 % | 2.1 % |
| Asian-Pacific American-owned | 0.3 | 2.3 | 0.3 | 0.7 | 0.9 |
| Subcontinent Asian American-owned | 0.8 | 2.8 | 0.1 | 0.0 | 1.3 |
| Hispanic American-owned | 0.1 | 0.7 | 2.9 | 4.2 | 0.6 |
| Native American-owned | 0.9 | 0.4 | 0.1 | 1.1 | 0.7 |
| Total MBE | 3.9 % | 8.9 % | 4.9 % | 15.3 % | 5.6 % |
| WBE (white women-owned) | <u>7.8</u> | <u>17.0</u> | <u>8.3</u> | <u>21.8</u> | <u>10.5</u> |
| Total MBE/WBE | 11.7 % | 25.9 % | 13.3 % | 37.1 % | 16.1 % |
| Columbus | | | | | |
| African American-owned | 1.6 % | 2.6 % | 1.5 % | 9.3 % | 2.0 % |
| Asian-Pacific American-owned | 0.3 | 2.3 | 2.9 | 0.6 | 1.1 |
| Subcontinent Asian American-owned | 0.7 | 2.8 | 0.1 | 0.1 | 1.2 |
| Hispanic American-owned | 0.3 | 0.9 | 2.4 | 4.1 | 0.7 |
| Native American-owned | 0.8 | 0.4 | 0.1 | 1.0 | 0.6 |
| Total MBE | 3.7 % | 9.0 % | 6.8 % | 15.2 % | 5.6 % |
| WBE (white women-owned) | <u>8.3</u> | <u>16.8</u> | <u>10.0</u> | <u>20.3</u> | <u>10.9</u> |
| Total MBE/WBE | 12.0 % | 25.8 % | 16.8 % | 35.5 % | 16.6 % |
| Bloomington | | | | | |
| African American-owned | 1.6 % | 2.6 % | 1.5 % | 9.3 % | 2.0 % |
| Asian-Pacific American-owned | 0.3 | 2.3 | 2.9 | 0.7 | 1.1 |
| Subcontinent Asian American-owned | 0.7 | 2.8 | 0.1 | 0.1 | 1.2 |
| Hispanic American-owned | 0.1 | 0.8 | 2.4 | 4.1 | 0.6 |
| Native American-owned | 0.8 | 0.4 | 0.1 | 1.0 | 0.7 |
| Total MBE | 3.6 % | 8.9 % | 6.9 % | 15.2 % | 5.5 % |
| WBE (white women-owned) | <u>8.1</u> | <u>16.8</u> | <u>9.1</u> | <u>20.7</u> | <u>10.8</u> |
| Total MBE/WBE | 11.7 % | 25.7 % | 15.9 % | 35.9 % | 16.3 % |

Note: See Figures K-21 through K-35 in Appendix K for the North, Central and South regions.

Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from 2009/2010 Availability Survey.

Summary

“Custom census” approaches to availability that begin with D&B data have been reviewed positively by federal courts. The study team’s methodology for analyzing MBE/WBE availability took the standard custom census approach as a starting point and added several layers of additional screening when determining whether firms are available for state and SEI construction work.

The study team attempted to complete interviews with all Indiana firms that, according to D&B, had a primary line of business within select industry codes related to construction, professional services, goods and support services. (There was no “sampling” from the sample frame in preparing the list of firms to be interviewed.) The study team attempted to contact 31,842 business listings, 6,720 of which were found to be invalid listings. A relatively high proportion of the remaining establishments were successfully contacted, and more than 9,000 business establishments completed availability interviews.

BBC examined several potential sources of non-response bias. It is possible that MBEs and WBEs were somewhat under-represented in the final database of available firms. However, BBC concludes that this potential under-representation of MBE/WBEs does not substantially affect the analyses.

Figure D-8. Interview Instrument [Construction]

Hello. My name is [*interviewer name*] from the Survey Research Center at IUPUI. We are calling on behalf of the State of Indiana including the Indiana Department of Administration, Indiana Department of Transportation, and public colleges across the state.

We are developing a list of companies involved in construction, maintenance, and design on a wide range of public projects ranging from building and parking facilities to tunnels, bridges and roads. With whom can I speak to get the information we need from your firm?

[AFTER REACHING AN APPROPRIATELY SENIOR STAFF MEMBER, THE INTERVIEWER SHOULD RE-INTRODUCE THE PURPOSE OF THE SURVEY AND BEGIN WITH QUESTIONS]

X1. I have a few basic questions about your company and the type of work you do. Can you confirm that this is [*firm name*]?

1=RIGHT COMPANY – SKIP TO A1

2=NOT RIGHT COMPANY – SKIP TO Y1

3=REFUSE TO GIVE INFORMATION – TERMINATE

Y1. Can you give me any information about [*firm name*]?

1=Yes, same owner doing business under a different name – SKIP TO Y4

2=Yes, can give information about named company – SKIP TO Y2

3=Company bought/sold/changed ownership – SKIP TO Y4

4=No, does not have information – TERMINATE

5=Refused to give information – TERMINATE

Y1. ENTER NEW NAME

1=VERBATIM

Y2. Can you give me the phone number of [*firm name*]?

(ENTER UPDATED PHONE OF NAMED COMPANY)

1=VERBATIM

Y3. Can you give me the complete address or city for [*firm name*]?

(NOTE TO INTERVIEWER - RECORD IN THE FOLLOWING FORMAT:

. STREET ADDRESS

. CITY

. STATE

. ZIP)

1=VERBATIM

Y4. And what is the new name of the business that used to be [*firm name*]?

(ENTER UPDATED NAME)

1=VERBATIM

Y5. Can you give me the name of the owner or manager of the new business?

(ENTER UPDATED NAME)

1=VERBATIM

Y6. Can I have a telephone number for them?

(ENTER UPDATED PHONE)

1=VERBATIM

Y7. Can you give me the complete address or city for [*new firm name*]?

1=VERBATIM

Y8. Do you work for this new company?

1=YES - CONTINUE

2=NO – TERMINATE

A1. First, I want to confirm that your firm does work or provides materials related to construction, maintenance or design. Is this correct?

(NOTE TO INTERVIEWER – INCLUDES ANY WORK RELATED TO CONSTRUCTION, MAINTAINENCE OR DESIGN SUCH AS BUILDING AND PARKING FACILITIES, PAVING AND CONCRETE, TUNNELS, BRIDGES AND ROADS. IT ALSO INCLUDES DESIGN, ENGINEERING, PLANNING, ENVIRONMENTAL ASSESMENT OR RELATED PROFESSIONAL SERVICES.)

(NOTE TO INTERVIEWER - INCLUDES HAVING DONE WORK, TRYING TO SELL THIS WORK, OR PROVIDING MATERIALS)

1=Yes

2=No - TERMINATE

A2. Let me confirm that [*firm name / new firm name*] is a business, as opposed to a non-profit organization, a foundation or a government office. Is that correct?

1=Yes, a business

2=No, other - TERMINATE

A3. Let me also confirm what kind of business this is. The information we have from Dun & Bradstreet indicates that your main line of business is [*SIC Code description*]. Is this correct?

(NOTE TO INTERVIEWER - IF ASKED, DUN & BRADSTREET OR D&B, IS A COMPANY THAT COMPILES BUSINESS INFORMATION THROUGHOUT THE COUNTRY)

1=Yes – SKIP TO A5

2=No

98=(DON'T KNOW)

99=(REFUSED)

A4. What would you say is the main line of business at [*firm name / new firm name*]?

(ENTER VERBATIM RESPONSE)

1=VERBATIM

A5. Is this the sole location for your business, or do you have offices in other locations?

1=Sole location – SKIP TO A8

2=Have other locations

98=(DON'T KNOW)

99=(REFUSED)

A8. Is your company a subsidiary or affiliate of another firm?

- 1=Independent – SKIP TO B1
- 2=Subsidiary or affiliate of another firm
- 98=(DON'T KNOW)
- 99=(REFUSED)

A9. What is the name of your parent company?

- 1=ENTER NAME
- 98=(DON'T KNOW)
- 99=(REFUSED)

A9. ENTER NAME OF PARENT COMPANY

- 1=VERBATIM

B1. Next, I have a few questions about your company's role in construction, maintenance or design work. During the past five years, has your company submitted [*a bid || qualifications || a proposal*] or a price quote for any part of a contract for a state or local government agency or public college in Indiana?

- 1=Yes
- 2=No – SKIP TO B3
- 98=(DON'T KNOW) – SKIP TO B3
- 99=(REFUSED) – SKIP TO B3

B2. Were those [*bids || qualifications || proposals*] or price quotes to work as [*a prime contractor, a subcontractor, or as a supplier || a prime consultant or as a subconsultant*]?

- | | |
|-------------------------------|------------------------------------|
| 1=Prime contractor/consultant | 10=(Supplier and Trucker) |
| 2=Subcontractor/consultant | 11=(Prime and Trucker) |
| 3=Supplier (or manufacturer) | 12=(Sub and Trucker) |
| 4=Prime and Sub | 13=(Prime, Supplier, and Trucker) |
| 5=Sub and Supplier | 14=(Sub, Supplier, and Trucker) |
| 6=Prime and Supplier | 15=(Prime, Sub, and Trucker) |
| 7=Prime, Sub, and Supplier | 16=(Prime, Sub, Supplier, Trucker) |
| 8=Trucker | 98=(DON'T KNOW) |
| | 99=(REFUSED) |

B3. During the past five years, has your company received an award for work [as a prime contractor or as a subcontractor || as a prime consultant or as a subconsultant] for any part of a contract for a state or local government agency or public college in Indiana?

1=Yes

2=No – SKIP TO B9

98=(DON'T KNOW) – SKIP TO B9

99=(REFUSED) – SKIP TO B9

B4. Were those awards to work as [a prime contractor, a subcontractor, or as a supplier || a prime consultant or as a subconsultant]?

1=Prime contractor/consultant

2=Subcontractor/consultant

3=Supplier (or manufacturer)

4=Prime and Sub

5=Sub and Supplier

6=Prime and Supplier

7=Prime, Sub, and Supplier

8=Trucker

10=(Supplier and Trucker)

11=(Prime and Trucker)

12=(Sub and Trucker)

13=(Prime, Supplier, and Trucker)

14=(Sub, Supplier, and Trucker)

15=(Prime, Sub, and Trucker)

16=(Prime, Sub, Supplier, Trucker)

98=(DON'T KNOW)

99=(REFUSED)

B9. During the past five years, has your company submitted [a bid || qualifications, a proposal] or a price quote for any part of a private sector contract in Indiana?

1=Yes

2=No – SKIP TO B11

98=(DON'T KNOW) – SKIP TO B11

99=(REFUSED) – SKIP TO B11

B10. Were those [bids || proposals] or price quotes to work as [a prime contractor, a subcontractor, or as a supplier || a prime consultant or as a subconsultant]?

- | | |
|-------------------------------|------------------------------------|
| 1=Prime contractor/consultant | 10=(Supplier and Trucker) |
| 2=Subcontractor/consultant | 11=(Prime and Trucker) |
| 3=Supplier (or manufacturer) | 12=(Sub and Trucker) |
| 4=Prime and Sub | 13=(Prime, Supplier, and Trucker) |
| 5=Sub and Supplier | 14=(Sub, Supplier, and Trucker) |
| 6=Prime and Supplier | 15=(Prime, Sub, and Trucker) |
| 7=Prime, Sub, and Supplier | 16=(Prime, Sub, Supplier, Trucker) |
| 8=Trucker | 98=(DON'T KNOW) |
| | 99=(REFUSED) |

B11. During the past five years, has your company received an award for work as a [prime contractor or as a subcontractor || prime consultant or as a subconsultant] for any part of a private sector contract in Indiana?

- 1=Yes
- 2=No – SKIP TO B13
- 98=(DON'T KNOW) – SKIP TO B13
- 99=(REFUSED) – SKIP TO B13

B12 Were those awards to work as [a prime contractor, a subcontractor, or as a supplier? || a prime consultant or as a subconsultant?]

- | | |
|-------------------------------|------------------------------------|
| 1=Prime contractor/consultant | 10=(Supplier and Trucker) |
| 2=Subcontractor/consultant | 11=(Prime and Trucker) |
| 3=Supplier (or manufacturer) | 12=(Sub and Trucker) |
| 4=Prime and Sub | 13=(Prime, Supplier, and Trucker) |
| 5=Sub and Supplier | 14=(Sub, Supplier, and Trucker) |
| 6=Prime and Supplier | 15=(Prime, Sub, and Trucker) |
| 7=Prime, Sub, and Supplier | 16=(Prime, Sub, Supplier, Trucker) |
| 8=Trucker | 98=(DON'T KNOW) |
| | 99=(REFUSED) |

B13. Is your company qualified and interested in working with state or local government agencies in Indiana as a [*prime contractor* || *prime consultant*]?

1=Yes

4=No

98=(DON'T KNOW)

99=(REFUSED)

B14. Is your company qualified and interested in working with public colleges in Indiana as a [*prime contractor* || *prime consultant*]?

1=Yes

4=No

98=(DON'T KNOW)

99=(REFUSED)

B15. Is your company qualified and interested in working with state or local government agencies in Indiana as a [*subcontractor or supplier* || *subconsultant*]?

1=Yes

4=No

98=(DON'T KNOW)

99=(REFUSED)

B16. Is your company qualified and interested in working with public colleges in Indiana as a [*subcontractor or supplier* || *subconsultant*]?

1=Yes

4=No

98=(DON'T KNOW)

99=(REFUSED)

C1. I now want to ask you about the geographic area your company serves.

C1a. Could your company do work or serve customers in Northern Indiana?

NORTHERN INDIANA INCLUDES THE GARY, MICHIGAN CITY-LA PORTE, SOUTH BEND, ELKHART AND FORT WAYNE AREAS.

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1b. Could your company do work or serve customers in Central Indiana?

CENTRAL INDIANA INCLUDES THE INDIANAPOLIS, LAFAYETTE, KOKOMO, ANDERSON, MUNCIE AND TERRE HAUTE AREAS.

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C1c. Could your company do work or serve customers in Southern Indiana?

SOUTHERN INDIANA INCLUDES THE BLOOMINGTON, COLUMBUS, VINCENNES AND EVANSVILLE AREAS.

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C2. [IF "YES" TO C1a] Could your company serve all of Northern Indiana or only certain parts of the region?

(NOTE TO INTERVIEWER – REPEAT THE AREAS THAT MAKE UP NORTHERN INDIANA.)

1=All of the region – SKIP TO C3

2=Only parts of the region

98=(DON'T KNOW)

99=(REFUSED) – SKIP TO C3

C2a. Could your company serve the greater Gary area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C2b. Could your company serve the Michigan City-La Porte area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C2c. Could your company serve the South Bend area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C2d. Could your company serve the Elkhart area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C2e. Could your company serve the Fort Wayne area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C3. [IF "YES" TO C1b] Could your company serve all of Central Indiana or only certain parts of the region?

(NOTE TO INTERVIEWER –REPEAT THE AREAS THAT MAKE UP CENTRAL INDIANA.)

1=All of the region – SKIP TO C4

2=Only parts of the region

98=(DON'T KNOW)

99=(REFUSED) – SKIP TO C4

C3a. Could your company serve the Indianapolis area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C3b. Could your company serve the Lafayette area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C3c. Could your company serve the Kokomo area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C3d. Could your company serve the Anderson area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C3e. Could your company serve the Muncie area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C3f. Could your company serve the Terre Haute area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C4. [IF "YES" TO C1c] Could your company serve all of Southern Indiana or only certain parts of the region?

(NOTE TO INTERVIEWER –REPEAT THE AREAS THAT MAKE UP SOUTHERN INDIANA.)

1=All of the region – SKIP TO D1

2=Only parts of the region

98=(DON'T KNOW)

99=(REFUSED) – SKIP TO D1

C4a. Could your company serve the Bloomington area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C4b. Could your company serve the Columbus area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C4c. Could your company serve the Vincennes area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

C4d. Could your company serve the Evansville area?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

D1. About what year was your firm established?

(RECORD FOUR-DIGIT YEAR, e.g., '1977')

(9998 = DON'T KNOW)

(9999 = REFUSED)

1=NUMERIC (1600-2008)

D2. In rough dollar terms, what was the largest contract or subcontract your company was awarded in Indiana during the past five years?

(NOTE TO INTERVIEWER - INCLUDES CONTRACTS NOT YET COMPLETE)

(NOTE TO INTERVIEWER - READ CATEGORIES IF NECESSARY)

- | | |
|---|--|
| 1=\$100,000 or less | 7=More than \$10 million to \$20 million |
| 2=More than \$100,000 to \$500,000 | 8=\$20 million to \$100 million |
| 3=More than \$500,000 to \$1 million | 9=Greater than \$100 million |
| 4=More than \$1 million to \$2 million | 97=(NONE) |
| 5=More than \$2 million to \$5 million | 98=(DON'T KNOW) |
| 6=More than \$5 million to \$10 million | 99=(REFUSED) |

D3. Was this the largest contract or subcontract that your company [*bid* || *proposed*] on or submitted quotes for in Indiana during the past five years?

1=Yes – SKIP TO E1

2=No

98=(DON'T KNOW) – SKIP TO E1

99=(REFUSED) – SKIP TO E1

D4. What was the largest contract or subcontract that your company [*bid* || *proposed*] on or submitted quotes for in Indiana during the past five years?

(READ CATEGORIES IF NECESSARY)

- | | |
|---|--|
| 1=\$100,000 or less | 7=More than \$10 million to \$20 million |
| 2=More than \$100,000 to \$500,000 | 8=\$20 million to \$100 million |
| 3=More than \$500,000 to \$1 million | 9=Greater than \$100 million |
| 4=More than \$1 million to \$2 million | 97=(NONE) |
| 5=More than \$2 million to \$5 million | 98=(DON'T KNOW) |
| 6=More than \$5 million to \$10 million | 99=(REFUSE) |

E1. My next questions are about the ownership of the business. A business is defined as woman-owned if more than half — that is, 51 percent or more — of the ownership and control is by women. By this definition, is [firm name / new firm name] a woman-owned business?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

E2. A business is defined as minority-owned if more than half — that is, 51 percent or more — of the ownership and control is African American, Asian, Hispanic, Native American or another minority group. By this definition, is [firm name || new firm name] a minority-owned business?

1=Yes

2=No – SKIP TO E4

3=(OTHER GROUP - SPECIFY)

98=(DON'T KNOW)

99=(REFUSED)

E2. OTHER GROUP - SPECIFY

1=VERBATIM

E3. Would you say that the minority group ownership is mostly African American, Asian-Pacific American, Subcontinent Asian American, Hispanic American, or Native American?

1=African-American

2=Asian Pacific American (persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia(Kampuchea),Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong)

3=Hispanic American (persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race)

4=Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians)

5=Subcontinent Asian American (persons whose Origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka)

6=(OTHER - SPECIFY)

98=(DON'T KNOW)

99=(REFUSED)

E3. OTHER - SPECIFY

1=VERBATIM

F1. Dun & Bradstreet indicates that your company has about [number] employees working out of just your location. Is that a fairly accurate average thinking about all of 2008?

(NOTE TO INTERVIEWER - INCLUDES EMPLOYEES WHO WORK AT THAT LOCATION AND THOSE WHO WORK FROM THAT LOCATION)

1=Yes – SKIP TO F3

2=No

98=(DON'T KNOW)

99=(REFUSED) – SKIP TO F3

F2. About how many employees did you have working out of just your location, on average, over the course of last year?

(RECORD NUMBER OF EMPLOYEES)

1=NUMERIC (1-999999999)

F3. Dun & Bradstreet lists the annual gross revenue of your company, just considering your location, to be [dollar amount]. Is that accurate for 2008?

1=Yes – SKIP TO F5

2=No

98=(DON'T KNOW)

99=(REFUSED) – SKIP TO F5

F4. Roughly, what was the gross revenue of your company, just considering your location, in 2008? Would you say . . . (READ LIST)

1=Less than \$200,000

2=\$200,000 - \$499,999

3=\$500,000 - \$999,999

4=\$1 Million - \$2.49 Million

5=\$2.5 Million - \$4.9 Million

6=\$5 Million - \$9.9 Million

7=\$10 Million - \$24.9 Million

8=\$25 Million - \$49.9 Million

9=\$50 Million or more

98=(DON'T KNOW)

99=(REFUSED)

F5. For 2008, about how many employees did you have, on average, for all of your Indiana locations?

1=(ENTER RESPONSE)

98=(DON'T KNOW)

99=(REFUSED)

F5. RECORD NUMBER OF EMPLOYEES

1=VERBATIM

F6. Roughly, what was the gross revenue of your company, for all of your Indiana locations in 2008? Would you say . . . (READ LIST)

1=Less than \$200,000

7=\$10 Million - \$24.9 Million

2=\$200,000 - \$499,999

8=\$25 Million - \$49.9 Million

3=\$500,000 - \$999,999

9=\$50 Million or more

4=\$1 Million - \$2.49 Million

98=(DON'T KNOW)

5=\$2.5 Million - \$4.9 Million

99=(REFUSED)

6=\$5 Million - \$9.9 Million

G1. Finally, we're interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences in Indiana within the past five years as we ask you these questions.

G1a. Has your company experienced any difficulties in obtaining lines of credit or loans?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1b. Has your company obtained or tried to obtain a bond for a project?

1=Yes

2=No [SKIP TO G1d]

98=(Don't know) [SKIP TO G1d]

99=(Does not apply) [SKIP TO G1d]

G1c. Has your company had any difficulties obtaining bonds needed for a project?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1d. Have any insurance requirements on projects presented a barrier to bidding?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1e. Has the size of projects presented a barrier to bidding?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1f. Has your company experienced any difficulties learning about bid opportunities with state or local government agencies in Indiana?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1g. Has your company experienced any difficulties learning about bid opportunities with public colleges in Indiana?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1h. Has your company experienced any difficulties with learning about bid opportunities in the private sector in Indiana?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1i. Has your company experienced any difficulties learning about subcontracting opportunities?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G1j. Has your company experienced any difficulties receiving payment in a timely manner?

1=Yes

2=No

98=(Don't know)

99=(Does not apply)

G2. Finally, we're asking for general insights on starting and expanding a business in your industry or winning work with state agencies or public colleges as a prime or subcontractor. Do you have any thoughts to offer on these topics?

1=VERBATIM (PROBE FOR COMPLETE THOUGHTS)

97=(NOTHING/NONE/NO COMMENTS)

98=(DON'T KNOW)

99=(REFUSED)

G3. Would you be willing to participate in a follow-up interview about any of these issues?

1=Yes

2=No

98=(DON'T KNOW)

99=(REFUSED)

H1. Just a few last questions. What is your name and position at [*firm name / new firm name*]?

(RECORD FULL NAME)

1=VERBATIM

H2. What is your position?

1=Receptionist

2=Owner

3=Manager

4=CFO

5=CEO

6=Assistant to Owner/CEO

7=Sales manager

8=Office manager

9=President

9=(OTHER - SPECIFY)

99=(REFUSED)

H2. OTHER - SPECIFY

1=VERBATIM

H3. For purposes of receiving procurement information from the state agencies or public colleges involved with this survey, is your mailing address [*firm address*]:

1=Yes – SKIP TO H5

2=No

98=(DON'T KNOW)

99=(REFUSED)

H4. What mailing address should they use to get any materials to you?

1=VERBATIM

H5. What fax number could they use to fax any materials to you?

1=NUMERIC (1000000000-9999999999)

H6. What e-mail address could they use to get any materials to you?

1=ENTER E-MAIL

97=(NO EMAIL ADDRESS)

98=(DON'T KNOW)

99=(REFUSED)

H6. (RECORD EMAIL ADDRESS) (VERIFY ADDRESS LETTER BY LETTER: EXAMPLE: 'John@CRI-RESEARCH.COM' SHOULD BE VERIFIED AS: J-O-H-N-at-C-R-I-hyphen-R-E-S-E-A-R-C-H-dot-com)

1=VERBATIM

Thank you very much for your participation. If you have any questions, please contact Terrie Daniel at the Indiana Department of Administration. Her phone number is 317-233-6607. If you would like to contact her via email, her email address is tdaniel@idoa.IN.gov.

APPENDIX E.

Entry and Advancement in the Indiana Construction, Professional Services, Goods and Support Services Industries

Appendix E examines entry and advancement in the Indiana construction, professional services, goods and support services industries. Appendix F explores business formation; Appendix H considers the success of businesses. Related to both of these topics, an examination of access to capital can be found in Appendix G. Together, these appendices present an overview of marketplace conditions in the above Indiana industries, referred to as “study industries” in this report. Appendix I discusses data sources used in these appendices.

Introduction

After “decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry,” Congress found that discrimination had impeded the formation of qualified minority business enterprises in the United States.¹ BBC examined whether some of the barriers to entry found on a national level also appear in Indiana.

Business ownership often results from ascending the ranks within a particular industry. Some barriers affecting minorities and women may exist in the process of entry and advancement. This appendix uses 1980 and 2000 Census data and 2006-2008 American Community Survey (ACS) data to analyze education, employment and workplace advancement — all factors that can influence an individual’s likelihood of forming a business. Where possible, BBC used these data to separately examine each study industry, as entrance requirements and opportunities for advancement often differ across industries.

Representation of minorities among workers and business owners in Indiana. As a starting point, the study team examined how business owners in the state and nation differed from the entire labor force with respect to the representation of racial/ethnic minorities. Based on 2000 and 2006-2008 data for Indiana and the United States, Figure E-1 on the following page shows the demographics of the labor force, business owners and business owners in study industries. Results for 2006-2008 show the following:

- African Americans represented about 8 percent of Indiana workers, 4 percent of all business owners, and 4 percent of business owners in study industries;
- About 4 percent of workers and 3 percent of business owners were Hispanic American;

¹ *Sherbrooke Turf, Inc.*, 345 F.3d at 970, (citing *Adarand Constructors, Inc.*, 228 F.3d at 1167 – 76); *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005) at 992.

- Asian-Pacific Americans were about 1 percent of all workers and business owners but a much smaller proportion of business owners in study industries (0.3%). Subcontinent Asian Americans, Native Americans and other minority groups represented about 1 percent of Indiana workers and business owners.

Non-Hispanic whites represented about 85 percent of the Indiana workforce and more than 90 percent of business owners.

Representation of women among workers and business owners in Indiana. Figure E-1 also shows the representation of women in the labor force and among business owners in the state and nation. In 2006-2008, women made up about 47 percent of the Indiana labor force, 32 percent of all business owners and only 17 percent of those who owned firms in study industries.

Figure E-1.
Demographic distribution of workforce and business owners in Indiana and the U.S., 2000 and 2006-2008

| Indiana | | | | | | |
|-----------------------------|-----------------------------|--------------------------|-----------------------------------|------------------------|-------------------------------------|------------------------|
| | Workforce in all industries | | Business owners in all industries | | Business owners in study industries | |
| | 2000 (n=153,716) | 2006-08 (n=100,001) | 2000 (n=12,467) | 2006-08 (n=8,491) | 2000 (n=4,790) | 2006-08 (n=3,539) |
| Race/ethnicity | | | | | | |
| African American | 7.4 % | 8.1 % | 3.7 % ** | 4.1 % ** | 3.0 % ** | 3.6 % ** |
| Asian-Pacific American | 0.8 | 1.1 | 0.9 | 1.1 | 0.3 | 0.3 ** |
| Subcontinent Asian American | 0.3 | 0.4 | 0.4 | 0.4 | 0.1 | 0.1 ** |
| Hispanic American | 3.2 | 4.4 | 1.3 ** | 2.8 ** | 1.4 ** | 3.4 ** |
| Native American | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.6 |
| Other minority group | <u>0.1</u> | <u>0.1</u> | <u>0.1</u> | <u>0.2</u> | <u>0.1</u> | <u>0.0</u> ** |
| Total minority | 12.4 % | 14.7 % | 7.0 % ** | 9.2 % ** | 5.6 % ** | 8.1 % ** |
| Non-Hispanic white | <u>87.6</u> | <u>85.3</u> | <u>93.0</u> ** | <u>90.8</u> ** | <u>94.4</u> ** | <u>91.9</u> ** |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | |
| Female | 46.5 % | 46.6 % | 34.9 % ** | 31.9 % ** | 17.7 % ** | 16.7 % ** |
| Male | <u>53.5</u> | <u>53.4</u> | <u>65.1</u> ** | <u>68.1</u> ** | <u>82.3</u> ** | <u>83.3</u> ** |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| United States | | | | | | |
| | Workforce in all industries | | Business owners in all industries | | Business owners in study industries | |
| | 2000 (n=6,832,970) | 2006-08 (n=4,488,276) | 2000 (n=676,804) | 2006-08 (n=484,074) | 2000 (n=262,044) | 2006-08 (n=197,406) |
| Race/ethnicity | | | | | | |
| African American | 10.9 % | 11.6 % | 4.9 % ** | 5.6 % ** | 4.7 % ** | 5.3 % ** |
| Asian-Pacific American | 3.4 | 4.0 | 3.4 | 4.0 | 2.1 ** | 2.5 ** |
| Subcontinent Asian American | 0.7 | 1.0 | 0.7 | 1.0 | 0.4 ** | 0.6 ** |
| Hispanic American | 10.7 | 13.9 | 7.3 ** | 11.2 ** | 8.2 ** | 13.2 ** |
| Native American | 1.1 | 1.0 | 1.0 ** | 0.8 ** | 1.0 | 0.9 |
| Other minority group | <u>0.4</u> | <u>0.3</u> | <u>0.5</u> | <u>0.3</u> | <u>0.4</u> | <u>0.3</u> |
| Total minority | 27.3 % | 31.8 % | 17.7 % ** | 22.9 % ** | 16.9 % ** | 22.7 % ** |
| Non-Hispanic white | <u>72.7</u> | <u>68.2</u> | <u>82.3</u> ** | <u>77.1</u> ** | <u>83.1</u> ** | <u>77.3</u> ** |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | |
| Female | 46.5 % | 46.5 % | 33.6 % ** | 34.1 % ** | 18.6 % ** | 18.6 % ** |
| Male | <u>53.5</u> | <u>53.5</u> | <u>66.4</u> ** | <u>65.9</u> ** | <u>81.4</u> ** | <u>81.4</u> ** |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between all workers and business owners (or business owners in study industries) for the given race/ethnicity/gender group is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Construction Industry

BBC first examined the construction industry and how education, training, employment and advancement may affect business ownership outcomes for different race/ethnicity and gender groups in Indiana and the United States.

Education. Formal education beyond high school is not a prerequisite for most construction industry jobs. For this reason, the construction industry often attracts individuals who have lower levels of educational attainment. Figure E-2 shows educational attainment levels among workers in construction and all industries in Indiana and the United States.

Figure E-2.
Educational attainment in construction and all industries in Indiana and the U.S., 2000 and 2006-2008

| | Indiana | | | |
|----------------------------|---------------------|------------------------|-----------------------|--------------------------|
| | Construction | | All workers | |
| | 2000 (n= 10,455) | 2006-08 (n=6,738) | 2000 (n=153,716) | 2006-08 (n=100,001) |
| Less than high school | 21.5 % ** | 17.3 % ** | 15.2 % | 11.9 % |
| High school diploma | 44.8 ** | 45.6 ** | 34.5 | 33.3 |
| Some college | 25.6 ** | 27.7 ** | 29.8 | 30.9 |
| Four-year degree or higher | 8.0 ** | 9.4 ** | 20.5 | 23.8 |
| | United States | | | |
| | Construction | | All workers | |
| | 2000 (n=480,280) | 2006-08 (n=325,848) | 2000 (n=6,832,970) | 2006-08 (n=4,488,276) |
| Less than high school | 25.6 % ** | 22.9 % ** | 15.5 % | 12.4 % |
| High school diploma | 37.8 ** | 40.3 ** | 26.9 | 27.9 |
| Some college | 27.4 ** | 26.4 ** | 31.4 | 31.1 |
| Four-year degree or higher | 9.2 ** | 10.4 ** | 26.2 | 28.6 |

Note: ** Denotes that the difference in proportions between workers in the construction industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Most construction industry employees in Indiana have at most a high school education. Based on the 2000 Census, 45 percent of workers in construction were high school graduates with no post-secondary education, and 22 percent had not finished high school. Only 8 percent had a four-year college degree or higher. The pattern was similar in 2006-2008 ACS data, with those working in the construction industry generally having lower levels of education than the whole labor force.

In 2000, the percentage of African American (52%) and Native American (51%) workers with no formal education beyond high school did not differ substantially from that of non-Hispanic whites (49%). Hispanic Americans, however, represent a relatively large pool of Indiana workers with no post-secondary education. In 2000, seven in ten Hispanic American workers had no formal education beyond high school, compared with less than half of non-Hispanic whites. This difference did not change substantially between 2000 and 2006-2008.

Based on minimal educational requirements for entry-level jobs and the relatively limited education for many Hispanic Americans in Indiana, one would expect high representation of Hispanics in the Indiana construction industry.

Among those working in Indiana in 2006-2008, 50 percent of Asian-Pacific Americans and 71 percent of Subcontinent Asian Americans had at least a four-year college degree. In comparison, about 25 percent of non-Hispanic whites and only 12 percent of Hispanic Americans had a bachelor's degree or higher. Given their relatively high educational attainment, Asian-Pacific Americans and Subcontinent Asian Americans may have lower representation in construction relative to other minority groups.

In Indiana, female workers were just as likely as their male counterparts to have an education beyond high school. In 2000, 21 percent of men and 20 percent of women in the Indiana labor force had at least a four-year college degree. This difference had not changed substantially in 2006-2008, when about 23 percent of men and 24 percent of women had graduated from a four-year college program.

Training in the construction industry is largely on-the-job or through trade schools and apprenticeship programs. Entry-level jobs for workers out of high school are often as laborers, helpers or apprentices. Higher-skilled positions in the construction industry may require additional training through a technical or trade school or through an apprenticeship or other employer-provided training program. Such apprenticeship programs can be developed by employers, trade associations, trade unions and other groups. Workers often enter these programs from high school or a trade school. Apprenticeships have traditionally been three- to five-year programs that combine on-the-job training with classroom instruction.² Opportunities for these programs across race/ethnicity are discussed later in this appendix.

Employment. With educational attainment among minorities and women as a context, the study team examined employment in the Indiana construction industry. Using data from 1980, 2000 and 2006-2008, Figure E-3 compares the demographic composition of workers in the construction industry with that of the entire labor force in Indiana and the United States. Figure E-4 shows 2000 and 2006-2008 results for each region of the state (Northern, Central and Southern) that the study team considered as part of the study. For more detail about regions and MSAs considered in the study, see Figure 1-2 of Chapter 1.

About 12 percent of people working in the Indiana construction industry in 2006-2008 were minorities. This represents an increase from 2000, which is largely attributable to an increase in the number of Hispanic construction workers, as representation of other minority groups did not change substantially over this time. Of the people working in the Indiana construction industry in 2006-2008:

- 7 percent were Hispanic Americans;
- 4 percent were African Americans;
- About 1 percent were Native Americans; and

² Bureau of Labor Statistics, U.S. Department of Labor. 2010-11. "Construction." *Career Guide to Industries*. <http://www.bls.gov/oco/cg/cgs003.htm> (accessed May 24, 2010).

- Less than 1 percent were Asian-Pacific Americans, Subcontinent Asian Americans or from other minority groups.

Hispanic Americans made up a greater share of workers in construction than those in the full labor force, representing 7 percent of construction workers but only 4 percent of all workers in 2006-2008. In contrast, representation of African Americans and Asian-Pacific Americans in construction was lower than for the state workforce as a whole.

- In 2006-2008, about 4 percent of the construction labor force was African American, compared to 8 percent of all workers in Indiana. Large differences are evidence in Northern, Central and Southern Indiana (see Figure E-4). Average educational attainment of African Americans is consistent with requirements for construction jobs, so other factors may be behind the relatively low number of African American workers in this industry. A number of studies throughout the United States have argued that racial discrimination by construction unions has held down employment of African Americans in construction trades.³
- Asian-Pacific Americans made up less than 1 percent of the construction workforce but more than 1 percent of all workers in Indiana in 2006-2008. Above-average educational attainment levels for Asian-Pacific Americans compared to other minority groups may partially explain this difference.

Subcontinent Asian Americans also had lower representation in the construction industry than in the entire labor force, but the difference was small. The proportion of construction industry workers who were Native Americans or from other minority groups was very similar to their representation in the Indiana labor force as a whole.

Considering their representation in the entire Indiana labor force, relatively few women work in the Indiana construction industry. Women represented about 47 percent of the labor force in 2006-2008 but only about one-tenth of construction workers during this period (see Figure E-3). This pattern was also seen across regions of the state, as shown in Figure E-4.

Many of the patterns seen in the Indiana construction industry in 2000 and 2006-2008 were also evident in the United States during these years.

³ See, for example, Waldinger, Roger and Thomas Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics & Society*, 19(3).

Figure E-3.
Demographics of workers in construction and all industries in Indiana and the U.S., 1980, 2000
and 2006-2008

| | Indiana | | | | | |
|-----------------------------|---------------------|----------------------|------------------------|-----------------------|-----------------------|--------------------------|
| | Construction | | | All industries | | |
| | 1980 (n=7,108) | 2000 (n=10,455) | 2006-08 (n=6,738) | 1980 (n=128,377) | 2000 (n=153,716) | 2006-08 (n=100,001) |
| Race/ethnicity | | | | | | |
| African American | 4.1 % ** | 3.6 % ** | 4.0 % ** | 6.8 % | 7.4 % | 8.1 % |
| Asian-Pacific American | 0.0 | 0.2 ** | 0.4 ** | 0.3 | 0.8 | 1.1 |
| Subcontinent Asian American | 0.0 | 0.0 | 0.1 ** | 0.1 | 0.3 | 0.4 |
| Hispanic American | 0.8 ** | 3.6 | 6.7 ** | 1.3 | 3.2 | 4.4 |
| Native American | 0.1 | 0.7 | 0.7 | 0.2 | 0.6 | 0.6 |
| Other minority group | <u>0.0</u> | <u>0.1</u> | <u>0.1</u> | <u>0.0</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 5.1 % ** | 8.2 % ** | 11.9 % ** | 8.7 % | 12.4 % | 14.7 % |
| Non-Hispanic white | <u>94.9</u> ** | <u>91.8</u> ** | <u>88.1</u> ** | <u>91.3</u> | <u>87.6</u> | <u>85.3</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | |
| Female | 6.8 % ** | 10.5 % ** | 9.1 % ** | 41.9 % | 46.5 % | 46.6 % |
| Male | <u>93.2</u> ** | <u>89.5</u> ** | <u>90.9</u> ** | <u>58.1</u> | <u>53.5</u> | <u>53.4</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | United States | | | | | |
| | Construction | | | All industries | | |
| | 1980 (n=330,464) | 2000 (n= 480,280) | 2006-08 (n=325,848) | 1980 (n=5,287,471) | 2000 (n=6,832,970) | 2006-08 (n=4,488,276) |
| Race/ethnicity | | | | | | |
| African American | 7.4 % ** | 6.2 % ** | 5.9 % ** | 10.1 % | 10.9 % | 11.6 % |
| Asian-Pacific American | 0.7 ** | 1.3 ** | 1.5 ** | 1.5 | 3.4 | 4.0 |
| Subcontinent Asian American | 0.1 ** | 0.2 ** | 0.2 ** | 0.2 | 0.7 | 1.0 |
| Hispanic American | 5.9 ** | 15.0 ** | 23.4 ** | 5.7 | 10.7 | 13.9 |
| Native American | 0.8 ** | 1.5 ** | 1.2 ** | 0.5 | 1.1 | 1.0 |
| Other minority group | <u>0.1</u> | <u>0.4</u> | <u>0.3</u> | <u>0.1</u> | <u>0.4</u> | <u>0.3</u> |
| Total minority | 14.9 % ** | 24.5 % ** | 32.6 % ** | 18.1 % | 27.3 % | 31.8 % |
| Non-Hispanic white | <u>85.1</u> ** | <u>75.5</u> ** | <u>67.4</u> ** | <u>81.9</u> | <u>72.7</u> | <u>68.2</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 68.5 % |
| Gender | | | | | | |
| Female | 7.9 % ** | 9.9 % ** | 9.2 % ** | 42.2 % | 46.5 % | 46.5 % |
| Male | <u>92.1</u> ** | <u>90.1</u> ** | <u>90.8</u> ** | <u>57.8</u> | <u>53.5</u> | <u>53.5</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the construction industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure E-4.
Demographics of workers in construction and all industries
in Indiana regions, 2000 and 2006-2008

| | Northern | | | |
|------------------------|--------------------|----------------------|--------------------|-----------------------|
| | Construction | | All Industries | |
| | 2000 (n= 3,529) | 2006-08 (n=2,285) | 2000 (n=54,457) | 2006-08 (n=34,403) |
| Race/ethnicity | | | | |
| African American | 3.8 % ** | 3.5 % ** | 8.7 % | 9.0 % |
| Asian-Pacific American | 0.3 | 0.6 | 0.8 | 0.9 |
| Subcontinent Asian | 0.1 | 0.1 ** | 0.3 | 0.3 |
| Hispanic American | 4.6 | 7.8 | 5.6 | 7.1 |
| Native American | 0.8 | 0.9 | 0.7 | 0.7 |
| Other minority group | <u>0.2</u> | <u>0.1</u> | <u>0.2</u> | <u>0.1</u> |
| Total minority | 9.7 % ** | 13.1 % ** | 16.2 % | 18.2 % |
| Non-Hispanic white | <u>90.3</u> ** | <u>86.9</u> ** | <u>83.8</u> | <u>81.8</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 10.2 % ** | 9.3 % ** | 46.1 % | 46.1 % |
| Male | <u>89.8</u> ** | <u>90.7</u> ** | <u>53.9</u> | <u>53.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | Central | | | |
| | Construction | | All Industries | |
| | 2000 (n=4,280) | 2006-08 (n=2,993) | 2000 (n=62,795) | 2006-08 (n=44,049) |
| Race/ethnicity | | | | |
| African American | 4.9 % ** | 5.8 % ** | 8.8 % | 10.0 % |
| Asian-Pacific American | 0.2 | 0.2 ** | 0.9 | 1.3 |
| Subcontinent Asian | 0.0 | 0.1 ** | 0.3 | 0.5 |
| Hispanic American | 4.2 ** | 7.9 ** | 2.2 | 3.7 |
| Native American | 0.7 | 0.6 | 0.6 | 0.5 |
| Other minority group | <u>0.0</u> | <u>0.2</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 10.0 % ** | 14.8 % | 13.1 % | 16.2 % |
| Non-Hispanic white | <u>90.0</u> ** | <u>85.2</u> | <u>86.9</u> | <u>83.8</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 11.1 % ** | 9.0 % ** | 46.8 % | 47.1 % |
| Male | <u>88.9</u> ** | <u>91.0</u> ** | <u>53.2</u> | <u>52.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | Southern | | | |
| | Construction | | All Industries | |
| | 2000 (n=2,650) | 2006-08 (n=1,460) | 2000 (n=36,516) | 2006-08 (n=21,549) |
| Race/ethnicity | | | | |
| African American | 1.0 % ** | 0.9 % ** | 2.4 % | 2.8 % |
| Asian Pacific American | 0.2 | 0.3 ** | 0.7 | 0.9 |
| Subcontinent Asian | 0.0 | 0.0 ** | 0.2 | 0.3 |
| Hispanic American | 1.0 | 2.3 | 1.1 | 1.6 |
| Native American | 0.6 | 0.6 | 0.6 | 0.5 |
| Other minority group | <u>0.1</u> | <u>0.1</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 2.9 % ** | 4.2 % ** | 5.1 % | 6.1 % |
| Non-Hispanic white | <u>97.1</u> ** | <u>95.8</u> ** | <u>94.9</u> | <u>93.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 9.8 % ** | 9.2 % ** | 46.5 % | 46.5 % |
| Male | <u>90.2</u> ** | <u>90.8</u> ** | <u>53.5</u> | <u>53.5</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the construction industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Employment in Indiana MSAs. BBC also examined employment in the construction industry in Metropolitan Statistical Areas (MSAs). Figure E-5 shows the demographics of the construction industry labor force in different Indiana MSAs in 2000. Due to small sample sizes, BBC did not examine industry demographics at the MSA level for 2006-2008.

Relative to all Indiana industries, African Americans represented a smaller share of the construction workforce for each MSA except for Muncie. Differences were statistically significant for the Gary-Hammond-East Chicago MSA and the Evansville, Fort Wayne and Indianapolis MSAs.

Minorities represented a particularly small percentage of construction workers in some Indiana MSAs. In the Evansville, Kokomo and Terre Haute MSAs, minorities made up 3 percent or less of the construction labor force. The construction workforce in the Gary-Hammond-East Chicago and Indianapolis MSAs had the greatest share of minority workers (16% and 13% respectively).

In the Muncie MSA, minorities represented a similar share of workers in construction and all industries. In other MSAs, the construction industry had fewer minority workers compared to all industries. However, there was considerable variation between MSAs in this regard. For example, in the Gary-Hammond-East Chicago MSA, about 27 percent of all workers but only 17 percent of construction workers were minorities.

Between 44 percent and 49 percent of all workers were women in each Indiana MSA. The Bloomington MSA had the largest proportion of women construction workers (16%). In every other MSA, women represented at most 13 percent of construction workers.

Figure E-5.
Demographics of workers in construction and all industries in Indiana Metropolitan Statistical Areas, 2000

| | MSA | | | | | | | | | | | |
|-----------------------------|-----------------------|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------------|----------------|----------------------|----------------|
| | Bloomington | Gary-Hammond-East Chicago | Elkhart-Goshen | Evansville | Fort Wayne | Indianapolis | Kokomo | Lafayette | Louisville-Jefferson | Muncie | South Bend Mishawaka | Terre Haute |
| | Construction | | | | | | | | | | | |
| | (n=124) | (n=960) | (n=229) | (n=484) | (n=808) | (n=2,372) | (n=130) | (n=271) | (n=470) | (n=167) | (n=365) | (n=296) |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 1.8 % | 7.1 % ** | 1.9 % | 1.9 % ** | 1.7 % ** | 6.9 % ** | 0.9 % | 1.0 % | 1.5 % | 6.1 % | 7.3 % | 1.6 % |
| Asian-Pacific American | 1.1 | 0.1 | 0.3 | 0.2 | 0.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| Subcontinent Asian American | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 |
| Hispanic American | 1.8 | 7.6 | 4.4 | 0.5 | 4.7 | 5.4 ** | 0.2 | 4.7 | 1.9 | 0.8 | 3.0 | 1.3 |
| Native American | 0.0 | 0.6 | 0.8 | 0.6 | 0.8 | 0.6 | 0.0 | 2.3 | 1.7 | 1.4 | 0.6 | 0.0 |
| Other Minority | <u>0.0</u> | <u>0.4</u> | <u>0.0</u> | <u>0.0</u> | <u>0.1</u> | <u>0.0</u> | <u>0.0</u> | <u>0.3</u> | <u>0.3</u> | <u>0.0</u> | <u>0.0</u> | <u>0.0</u> |
| Total minority | 4.7 % | 16.0 % ** | 7.3 % ** | 3.2 % ** | 8.0 % ** | 13.3 % ** | 1.1 % ** | 8.3 % | 5.4 % | 8.3 % | 11.4 % | 2.8 % |
| Non-Hispanic white | <u>95.3</u> | <u>84.0</u> ** | <u>92.7</u> ** | <u>96.8</u> ** | <u>92.0</u> ** | <u>86.7</u> ** | <u>98.9</u> ** | 91.7 | <u>94.6</u> | <u>91.7</u> | <u>88.6</u> | <u>97.2</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | | | | | | | |
| Female | 15.5 ** | 10.6 ** | 10.7 ** | 10.6 ** | 12.0 ** | 11.9 ** | 9.8 ** | 10.5 ** | 11.1 ** | 10.6 ** | 12.6 ** | 9.6 ** |
| Male | <u>84.5</u> ** | <u>89.4</u> ** | <u>89.3</u> ** | <u>89.4</u> ** | <u>88.0</u> ** | <u>88.1</u> ** | <u>90.2</u> ** | <u>89.5</u> ** | <u>88.9</u> ** | <u>89.4</u> ** | <u>87.4</u> ** | <u>90.4</u> ** |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | All industries | | | | | | | | | | | |
| | (n=2,609) | (n=13,396) | (n=4,248) | (n=6,288) | (n=12,648) | (n=33,615) | (n=2,480) | (n=4,679) | (n=6,005) | (n=2,855) | (n=6,372) | (n=4,025) |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 3.1 % | 17.3 % | 5.1 % | 4.8 % | 7.2 % | 12.4 % | 4.8 % | 1.7 % | 3.8 % | 6.0 % | 10.2 % | 3.8 % |
| Asian-Pacific American | 2.2 | 0.7 | 1.0 | 0.5 | 0.9 | 1.0 | 0.4 | 2.8 | 0.5 | 0.5 | 1.2 | 0.8 |
| Subcontinent Asian American | 0.6 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 1.4 | 0.1 | 0.3 | 0.3 | 0.2 |
| Hispanic American | 1.3 | 9.4 | 8.6 | 0.7 | 3.2 | 2.4 | 1.0 | 4.5 | 1.6 | 1.1 | 4.0 | 1.0 |
| Native American | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.6 | 0.7 | 0.9 | 1.0 | 0.4 | 0.7 | 0.5 |
| Other Minority | <u>0.1</u> | <u>0.3</u> | <u>0.1</u> | <u>0.1</u> | <u>0.1</u> | <u>0.1</u> | <u>0.0</u> | <u>0.2</u> | <u>0.1</u> | <u>0.2</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 8.0 % | 28.5 % | 15.6 % | 6.8 % | 12.4 % | 16.9 % | 6.9 % | 11.5 % | 7.1 % | 8.6 % | 16.6 % | 6.4 % |
| Non-Hispanic white | <u>92.0</u> | <u>71.5</u> | <u>84.4</u> | <u>93.2</u> | <u>87.6</u> | <u>83.1</u> | <u>93.1</u> | 88.5 | <u>92.9</u> | <u>91.4</u> | <u>83.4</u> | <u>93.6</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | | | | | | | |
| Female | 48.8 % | 46.7 | 44.9 | 47.6 | 46.6 | 47.3 | 43.9 | 46.5 | 46.7 | 47.2 | 47.7 | 45.9 |
| Male | <u>51.2</u> | <u>53.3</u> | <u>55.1</u> | <u>52.4</u> | <u>53.4</u> | <u>52.7</u> | <u>56.1</u> | <u>53.5</u> | <u>53.3</u> | <u>52.8</u> | <u>52.3</u> | <u>54.1</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the construction industry and all industries is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Importance of unions in entering the construction industry. Labor scholars characterize construction as a historically volatile industry sensitive to business cycles, making the presence of labor unions important for stability and job security within the industry.⁴ The temporary nature of construction work often results in uncertain job prospects, and the high turnover of laborers presents a disincentive for construction companies to invest in training. Some scholars claim that constant turnover has lent itself to informal recruitment practices and nepotism, compelling laborers to tap social networks for training and work. They credit the importance of social networks with the high degree of ethnic segmentation in the construction industry.⁵ Unable to integrate themselves into traditionally white social networks, African Americans face long-standing historical barriers preventing entry into the industry.⁶

Construction unions aim to provide a reliable source of labor for employers and to preserve job opportunities for workers by formalizing the recruitment process, coordinating training and apprenticeships, enforcing standards of work, and mitigating wage competition. The unionized sector of construction would seemingly be the best road for African American and other under-represented groups into the industry. However, researchers have identified that discrimination by trade unions has historically prevented minorities from obtaining employment in skilled trades.⁷ Past papers have identified many different forms of discrimination. For example:

- Unions have used admissions criteria that adversely affect minorities. Federal courts ruled in the 1970s that standardized testing requirements unfairly disadvantaged minority applicants who had less exposure to testing, and that requirements that new union members have relatives in the union perpetuated the effects of past discrimination.⁸
- Of those minority individuals who are admitted to unions, a disproportionately low number are admitted into apprenticeship programs coordinated by unions. Apprenticeship programs are important means of producing skilled construction laborers, and the reported exclusion of African Americans from these programs has severely limited their access to skilled occupations in the construction industry.⁹
- Although formal training and apprenticeship programs exist within unions, most training of union members takes place informally through social networking. Nepotism occurs in both the unionized and non-unionized sector of construction, and this favors a white-dominated status quo.¹⁰

⁴ Applebaum, Herbert. 1999. *Construction Workers, U.S.A.* Westport: Greenwood Press.

⁵ Waldinger, Roger and Thomas Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics & Society*, 19(3).

⁶ Feagin, Joe R. and Nikitah Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems*. 41(4): 562-584.

⁷ U.S. Department of Justice. 1996. Proposed Reforms to Affirmative Action in Federal Procurement. 61 FR 26042.

⁸ Ibid. See *United States v. Iron Workers Local 86* (1971), *Sims v. Sheet Metal Workers International Association* (1973), and *United States v. International Association of Bridge, Structural and Ornamental Iron Workers* (1971).

⁹ Applebaum, Herbert. 1999. *Construction Workers, U.S.A.* Westport: Greenwood Press.

¹⁰ Ibid. 299. A high percentage of skilled workers reported having a father or relative in the same trade. However, the author suggests this may not be indicative of current trends.

- Traditionally white unions have been successful in resisting policies designed to increase African American participation in training programs. The political strength of unions in resisting affirmative action in construction has hindered the advancement of African Americans in the industry.¹¹
- Discriminatory practices in employee referral procedures, including apportioning work based on seniority, have precluded minority union members from having the same access to construction work as their white counterparts.¹²
- According to testimony from African American union members, even when unions implement meritocratic mechanisms of apportioning employment to laborers, white workers are often allowed to circumvent procedures and receive preference for construction jobs.¹³

However, these historical observations may not be indicative of current dynamics in construction unions. For example, the 2007 Current Population Survey (CPS) data indicate that union membership for African Americans and non-Hispanic whites to be similar.¹⁴ The CPS asked participants “Are you a member of a labor union or of an employee association similar to a union?” CPS data show union membership for African Americans in construction to be 11 percent and non-Hispanic whites to be 12 percent (not a statistically significant difference). On the other hand, based on these national data, only 7 percent of Hispanic Americans are union members.

A recent study on the presence of African Americans and Hispanic Americans in apprenticeship programs may help explain the high proportion of Hispanics in the construction industry despite low union memberships. Two types of apprenticeship programs are available, joint programs (run by a combination of a union and one or more employers) and non-joint programs (run solely by one or more employers). Using 1989-1995 data from the U.S. Department of Labor, the study found that the probability of an African American being an apprentice in a joint program was 8 percent higher than in a non-joint program.

On the other hand, Hispanic Americans’ odds of being in a non-joint program were 7 percent higher than in a joint program.¹⁵ These data suggest that Hispanic Americans may be more likely than African Americans to enter the construction industry without the support of a union. Thus, one reason that Hispanic Americans represent a large portion of the construction workers may be that their participation is less hindered by possible union discrimination.

¹¹ Waldinger and Bailey. 1991. “The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction.”

¹² U.S. Department of Justice. 1996. Proposed Reforms to Affirmative Action in Federal Procurement. 61 FR 26042. See *United Steelworkers of America v. Weber* (1979) and *Taylor v. United States Department of Labor* (1982).

¹³ Feagin and Imani. 1994. “Racial Barriers to African American Entrepreneurship: An Exploratory Study.” *Social Problems*. 41(4): 562-584.

¹⁴ 2006 Current Population Survey (CPS), U.S. Census Bureau and Bureau of Labor Statistics.

¹⁵ Bilginsoy, Cihan. 2005. “How Unions Affect Minority Representation in Building Trades Apprenticeship Programs.” *Journal of Labor Research*, 57(1).

Advancement in the Indiana construction industry. To research opportunities for advancement in the Indiana construction industry, the study team examined the representation of minorities and women in different construction occupations, as defined by the U.S. Bureau of Labor Statistics.¹⁶

Race and ethnic composition of construction occupations. Figure E-6 shows the demographics of construction workers and those of particular construction occupations in 2000. The study team selected these occupations to measure minority and female representation among workers in entry-level positions (e.g., construction laborers), specific skilled occupations (e.g., electricians) and higher-ranking occupations (e.g., first-line supervisors). Similar statistics are not presented for 2006-2008 due to smaller sample sizes.

In 2000, minorities comprised about 8 percent of the construction workforce. However, there were large differences in the demographic composition of workers in different construction occupations. Minorities made up a relatively larger share of workers in the following occupations:

- Construction laborers (15%);
- Cement masons, concrete finishers and terrazzo workers (12%); and
- Drivers, sales workers and truck drivers (10%).

Other occupations had lower minority representation compared to the Indiana construction industry as a whole:

- Iron and steel workers (6%);
- First-line supervisors and managers of construction trades and extraction workers (5%);
- Miscellaneous equipment operators (4%); and
- Dredge, excavating and loading machine operators (0% of the sample).

Most minorities working in the Indiana construction industry in 2000 were Hispanic Americans or African Americans, and these two groups represented a large share of all minorities in each of the construction occupations examined.

Representation of Hispanic Americans and African Americans was greater among construction laborers and other entry-level occupations than among first-line supervisors.

- Hispanic Americans made up about 8 percent of construction laborers but only 2 percent of first-line supervisors in 2000.
- African Americans represented about 6 percent of construction laborers but only 2 percent of first-line supervisors.

¹⁶ Bureau of Labor Statistics, U.S. Department of Labor. 2001. "Standard Occupational Classification Major Groups." http://www.bls.gov/soc/soc_majo.htm (accessed May 20, 2010).

Figure E-6.
Demographics of all construction workers and selected occupations in Indiana, 2000

| | All construction occupations (n=10,455) | Construction laborers (n=1,404) | Cement masons, concrete finishers and terazzo workers (n=122) | Drivers, sales workers and truck drivers (n=253) | Iron and steel workers (n=92) | Electricians (n=659) | Miscellaneous equipment operators (n=341) | Dredge, excavating and loading machine operators (n=69) | First-line supervisors (n=812) |
|-----------------------|--|------------------------------------|--|---|----------------------------------|-------------------------|--|--|-----------------------------------|
| Race/ethnicity | | | | | | | | | |
| African American | 3.6 % | 5.8 % | 6.3 % | 6.3 % | 3.2 % | 3.3 % | 2.0 % | 0.0 % | 2.4 % |
| Hispanic American | 3.6 | 7.8 ** | 5.0 | 3.2 | 1.5 | 1.7 | 2.0 | 0.0 | 1.5 |
| Other minority group | 1.1 | 0.9 | 0.2 | 0.9 | 0.9 | 2.3 | 0.4 | 0.0 | 0.7 |
| Total minority | 8.2 % | 14.6 % | 11.6 % | 10.4 % | 5.7 % | 7.3 % | 4.4 % | 0.0 % | 4.5 % |
| Non-Hispanic white | 91.8 | 85.4 ** | 88.4 | 89.6 | 94.3 | 92.7 | 95.6 | 100.0 | 95.5 |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | | | | |
| Female | 10.5 % | 4.3 % ** | 1.0 % | 4.3 % ** | 0.0 % | 1.3 % ** | 1.8 % ** | 0.0 % | 2.6 % |
| Male | 89.5 | 95.7 ** | 99.0 | 95.7 ** | 100.0 | 98.7 ** | 98.2 ** | 100.0 | 97.4 |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between all workers in the construction industry and those in specific occupations is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Women in construction trades. Figure E-6 also compares the representation of women in the construction workforce with their representation in specific construction occupations. Overall, 11 percent of workers in the Indiana construction industry were women in 2000.

Women had relatively low representation in each of the occupations examined in Figure E-6. For example, women comprised only 4 percent of construction laborers and 3 percent of first-line supervisors in 2000. Women working in the industry are more likely than men to have administrative or support roles: about 54 percent of all women working in the Indiana construction industry in 2000 were in office and administrative support occupations, and women represented approximately 88 percent of workers in those occupations.¹⁷

Percentage of minorities and women in construction who are managers. To further assess the opportunity for advancement for minorities and women, the study team examined differences between demographic groups in the proportion that were managers in the construction industry.

Figure E-7 shows the percentage of construction workers that reported being a construction manager in 2000 and 2006-2008.

Figure E-7.
Percentage of construction workers who worked as a manager in Indiana and the U.S., 2000 and 2006-2008

Note:

** Denotes that the difference in proportions between the minority group and non-Hispanic whites (or between females and males) for the given Census/ACS year is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from the 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

| Indiana | 2000 | 2006-08 | Sample size | |
|-----------------------|----------|----------|-------------|---------|
| | | | 2000 | 2006-08 |
| Race/ethnicity | | | | |
| African American | 3.0 % | 4.7 % | 303 | 178 |
| Asian American | 3.9 | 12.4 | 24 | 25 |
| Hispanic American | 1.5 | 3.7 ** | 328 | 367 |
| Native American | 5.1 | 12.8 | 73 | 56 |
| Non-Hispanic white | 6.6 | 7.6 | 9,719 | 6,108 |
| Gender | | | | |
| Female | 2.9 % ** | 3.6 % ** | 1,059 | 651 |
| Male | 6.6 | 7.6 | 9,400 | 6,087 |
| United States | 2000 | 2006-08 | Sample size | |
| | | | 2000 | 2006-08 |
| Race/ethnicity | | | | |
| African American | 3.1 % ** | 4.7 % ** | 26,752 | 15,372 |
| Asian American | 7.9 | 9.8 | 6,471 | 5,490 |
| Hispanic American | 2.5 ** | 3.0 ** | 66,531 | 58,547 |
| Native American | 4.6 ** | 6.3 ** | 7,640 | 4,463 |
| Non-Hispanic white | 7.5 | 9.9 | 371,152 | 241,237 |
| Gender | | | | |
| Female | 4.1 % ** | 5.9 % ** | 46,791 | 33,461 |
| Male | 6.7 | 8.1 | 433,678 | 292,387 |

¹⁷ Workers in “office and administrative support occupations” include those with an occupation code between 500 and 593. More information regarding occupations can be found on IPUMS website: <http://usa.ipums.org/usa/>.

In 2000, about 7 percent of non-Hispanic whites in the Indiana construction industry were managers. A smaller proportion of minorities than non-Hispanic whites were managers.

- About 4 percent of Asian Americans and 3 percent of African Americans working in the Indiana construction industry were managers in 2000;
- Fewer than 2 percent of Hispanic Americans were managers; and
- About 5 percent of Native Americans were managers.

In 2006-2008, the percentage of African Americans and Hispanic Americans who were construction managers in Indiana remained below that of non-Hispanic whites.

- About 4 percent of Hispanic American construction workers were managers in 2006-2008, compared to 8 percent of non-Hispanic whites (a statistically significant difference).
- Five percent of African Americans were construction managers in 2006-2008.

Some minority construction workers were more likely in later years than in 2000 to be managers. Roughly 12 percent of Asian Americans and 13 percent of Native Americans working in the Indiana construction industry were managers in 2006-2008 (however, these statistics are based on relatively small sample sizes).

Construction managers working in Indiana had, on average, more education than other workers. About 26 percent of managers had at least a bachelor's degree. Disparities in college education for African Americans and Hispanic Americans compared with non-Hispanic whites may explain some of the differences in advancement to manager level for these groups.

Female construction workers were less likely than their male counterparts to be managers in 2000 and 2006-2008. About 4 percent of women in the Indiana construction industry were managers compared to 8 percent of men in 2006-2008.

Professional Services Industry

BBC next examined how education and employment may influence ownership opportunities for different race/ethnicity and gender groups in the professional services industry. Professional services include architectural and engineering services, computer system design and data processing services, advertising services, and a range of management, scientific and technical services. A detailed definition of this study industry is provided in Appendix I.

Education. In contrast to the construction industry, lack of educational attainment may preclude workers' entry into the professional services industry, as many occupations require at least a four-year college degree. Barriers to such education, therefore, can restrict employment opportunities, advancement and ultimately business ownership; different rates in obtaining this level of educational attainment could, in part, explain relative differences in business ownership rates across race/ethnicity and gender groups in professional services.¹⁸

Figure E-8 shows the percentage of workers in professional services and all industries by level of educational attainment, in Indiana and the United States.

Figure E-8.
Educational attainment in professional services and all industries in Indiana and the U.S., 2000 and 2006-2008

| | Indiana | | | |
|----------------------------|-----------------------|------------------------|-----------------------|--------------------------|
| | Professional Services | | All workers | |
| | 2000 (n=2,886) | 2006-08 (n=2,326) | 2000 (n=153,716) | 2006-08 (n=100,001) |
| Less than high school | 3.8 % ** | 2.2 % ** | 15.2 % | 11.9 % |
| High school diploma | 16.0 ** | 13.2 ** | 34.5 | 33.3 |
| Some college | 30.3 | 28.0 ** | 29.8 | 30.9 |
| Four-year degree or higher | 50.0 ** | 56.6 ** | 20.5 | 23.8 |
| | United States | | | |
| | Professional Services | | All workers | |
| | 2000 (n=233,911) | 2006-08 (n=177,928) | 2000 (n=6,832,970) | 2006-08 (n=4,488,276) |
| Less than high school | 3.1 % ** | 1.9 % ** | 15.5 % | 12.4 % |
| High school diploma | 10.3 ** | 9.7 ** | 26.9 | 27.9 |
| Some college | 28.3 ** | 25.2 ** | 31.4 | 31.1 |
| Four-year degree or higher | 58.4 ** | 63.1 ** | 26.2 | 28.6 |

Note: ** Denotes that the difference in proportions between workers in the professional services industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Compared to workers in all industries, those in professional services had, on average, greater levels of educational attainment. Based on 2000 Census data, one-half of individuals working in professional services in Indiana had at least a four-year college degree. In 2006-2008, an even larger proportion (57%) were college graduates. In each year, substantially fewer workers in all industries — 21 percent in 2000 and 24 percent in 2006-2008 — had a bachelor's degree or higher.

¹⁸ Feagin, Joe R. and Nikitah Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems*. 42 (4): 562-584.

The educational requirements of the professional services industry may be a barrier for some minority groups. Among workers in the whole Indiana labor force in 2000 and 2006-2008, the percentage of African Americans, Hispanic Americans and Native Americans with a four-year degree or higher was substantially lower than that of non-Hispanic whites. Based on 2006-2008 data, about 16 percent of African Americans and Native Americans and 12 percent of Hispanic Americans working in Indiana had at least a bachelor's degree. For comparison, about 25 percent of non-Hispanic whites had this level of educational attainment. Based on these results, one would expect these minority groups to have lower representation among professional services workers than among all workers in Indiana.

Considering the relatively large proportion of Asian-Pacific Americans (50%) and Subcontinent Asian Americans (71%) with a four-year college degree in Indiana, one would expect these groups to have greater representation in the professional services industry than the entire Indiana workforce.

Women did not differ substantially from men in the percentage that completed college. In Indiana, about 24 percent of women and 23 percent of men had at least a bachelor's degree in 2006-2008. Based on overall education levels, one might expect representation of women in the Indiana professional services industry to be similar to that of men.

Additional indices of high school educational attainment. Because attending college generally precedes employment in the professional services industry, the study team examined additional information on the educational achievement of minority high school students in Indiana. Universities evaluate prospective students based on a number of factors, including high school achievement and standardized test scores. One such test, the American College Testing (ACT) assessment, measures educational attainment in four subject areas: English, Mathematics, Reading, and Science. The same organization that administers the ACT also measures "college readiness" using a benchmark score — the minimum score needed in each subject area to indicate a 50 percent chance of obtaining a "B" or higher or a 75 percent chance of obtaining a "C" or higher in corresponding college-level courses. Each year, ACT publishes its findings in state-specific reports, which include the percent of students that met the college readiness benchmark score by race and ethnicity.

Using these benchmark scores, BBC created an attainment index for minority students by measuring scores for each group against those of non-Hispanic white students. For example, about 5 percent of African American students in Indiana met the ACT benchmark score for Science, compared to about 33 percent of non-Hispanic white students. BBC created an "index" for African American college readiness by dividing 5 by 33 percent, and then multiplying by 100, yielding an index value of 15. This score indicates that African Americans met the college readiness benchmark score for science at approximately 15 percent of the rate observed for non-Hispanic white students. Hispanic American students in Indiana had a college readiness index of 52 when measured against non-Hispanic white students in this subject area.

As shown in Figure E-9, 2005-2006 high school attainment indices in different subject areas ranged from 11 to 47 for African American students in Indiana. Indices for Hispanic American students ranged from 52 to 73.

Figure E-9 also shows indices based on ACT composite scores, which are calculated from raw scores received on the test to ensure comparability in scores across years. Using the same indexing method, Figure E-9 also presents average freshman graduation rates and dropout rates for different racial and ethnic groups among high school students in Indiana.

Figure E-9.
Indices of high school achievement for African Americans, Asian Americans, Hispanic Americans and non-Hispanic whites in Indiana, 2005-2006 (white=100)

| Indiana | African American | Asian American | Hispanic American | Native American | Non-Hispanic white |
|---|------------------|----------------|-------------------|-----------------|--------------------|
| ACT college readiness benchmark index for: | | | | | |
| English | 47 | 105 | 73 | 92 | 100 |
| Math | 23 | 142 | 62 | 88 | 100 |
| Reading | 40 | 103 | 69 | 106 | 100 |
| Science | 15 | 136 | 52 | 70 | 100 |
| All four | 11 | 144 | 52 | 85 | 100 |
| ACT composite score | 78 | 109 | 89 | 96 | 100 |
| Average freshman graduation rate | 73 | 127 | 89 | 89 | 100 |
| High school dropout rate | 200 | 68 | 192 | 136 | 100 |

Note: Data for college readiness are from the graduating class of 2006, and data for graduation rates and dropout rates are from 2005-2006. The average freshman graduation rate (AFGR) is an estimate of the percentage of the entering high school freshman class graduating in four years. For a more detailed explanation, visit the United States Department of Education website.

Source: BBC Research & Consulting from ACT. *ACT High School Profile Report*. Indiana, 2006 & U.S. Department of Education, Common Core of Data. *Public School Graduates and Dropouts from the Common Core of Data; School Year 2005-2006*.

Notable indices for African Americans students in Indiana included:

- Meeting the ACT college readiness benchmark score for Math at 23 percent of the rate for non-Hispanic white students;
- Meeting the ACT college readiness benchmark score in all four subject areas at 11 percent of the rate for non-Hispanic white students; and
- Having a high school dropout rate that was 200 percent of that found for non-Hispanic white students.

African American students in Indiana generally performed better on humanities-oriented subject areas of the ACT. In terms of the college readiness benchmark score, the smallest disparity between African Americans and non-Hispanic whites was in English (index score of 47).

There were also disparities in college readiness and high school achievement for Hispanic American students in Indiana when measuring their scores against those of non-Hispanic white students. As shown in Figure E-9, Hispanic American students met the college readiness benchmark scores in Math and Science at rates of about 62 percent and 52 percent, respectively, compared to those of non-Hispanic whites. For those in the graduating class of 2006, Hispanic Americans had a high school dropout rate comparable to that of African Americans — roughly double the rate observed for non-Hispanic white students.

A larger proportion of Native Americans than non-Hispanic whites met the college readiness benchmark score on the Reading section of the ACT. However, this was the only achievement index for which Native Americans performed as well as non-Hispanic whites. On the Science section of the ACT, about 70 percent as many Native American students met the college readiness benchmark score as non-Hispanic white students.

Asian American students, on the other hand, had higher rates of college readiness in all subjects on the ACT, compared to non-Hispanic whites. They also had higher graduation rates and lower high school dropout rates.

Disparities in high school educational attainment are important for explaining the relatively low number of African Americans and Hispanic Americans who have college degrees in Indiana. In addition to attending college in fewer numbers, Hispanic Americans and African Americans who attended college in the state were less likely to graduate compared to non-Hispanic whites. While the graduation rate for non-Hispanic whites was about 57 percent in 2009, only about 49 percent of Hispanic Americans and 36 percent of African Americans graduated from a four-year college after attending.¹⁹ National studies consider the extent to which large disparities in the quality of education caused these differences in educational outcomes for minority high school students, but these studies are not reviewed here.

Employment. With education achievement as background, the study team turned to employment, examining the demographic composition of the professional services industry in Indiana and the nation.

Figure E-10 compares the race/ethnicity and gender of professional services workers with those of the entire labor force in Indiana and the U.S. in 1980, 2000 and 2006-2008. Figure E-11 shows results at the regional level in 2000 and 2006-2008.

In 2000 and 2006-2008, about one-tenth of workers in the Indiana professional services industry were minorities. In contrast to the construction industry, where the relative number of minorities increased between 2000 and 2006-2008, the professional services industry did not experience a substantial change in demographic composition during this time. Of those working in the Indiana professional services industry in 2006-2008:

- 5 percent were African Americans;
- 2 percent were Hispanic Americans;
- 2 percent were Subcontinent Asian Americans; and
- 1 percent were Asian-Pacific American.

Native Americans and other minorities together comprised less than one percent of professional services workers in 2006-2008.

¹⁹ Complete College America. "The Alliance of States: Indiana." 2009. <http://www.completecollege.org> (accessed May 21, 2010).

Only Asian-Pacific Americans and Subcontinent Asian Americans had greater representation in professional services than among all Indiana workers in 2000 and 2006-2008. In 2006-2008, less than 1 percent of workers in all industries, but nearly 2 percent of those in the professional services industry, were Subcontinent Asian Americans. Higher levels of education among these groups may partly explain their higher representation in professional services.

In 2006-2008, some minority groups were relatively under-represented among professional services workers in Indiana. (Similar patterns were also found in each Indiana region, as shown in Figure E-11.)

- There were relatively fewer African Americans working in professional services, compared to all industries. About 8 percent of workers in all industries but only 5 percent in professional services were African Americans.
- Hispanic Americans represented approximately 4 percent of the entire Indiana labor force but less than 2 percent of workers in professional services.

These disparities may partially result from lower average levels of education among Hispanic Americans and African Americans.

Compared to their representation among all workers in Indiana, relatively few women work in the professional services industry. In 2006-2008, women represented about 35 percent of professional services workers in Indiana, but nearly one-half of all workers. This pattern was also found in the Northern, Central and Southern Indiana regions (see Figure E-11).

Figure E-10.
Demographic distribution of workers in professional services and all industries in Indiana and the U.S., 1980, 2000 and 2006-2008

| | Indiana | | | | | |
|-----------------------------|-----------------------|---------------------|------------------------|-----------------------|-----------------------|--------------------------|
| | Professional Services | | | All industries | | |
| | 1980 (n=1,168) | 2000 (n=2,886) | 2006-08 (n=2,326) | 1980 (n=128,377) | 2000 (n=153,716) | 2006-08 (n=100,001) |
| Race/ethnicity | | | | | | |
| African American | 3.7 % ** | 5.1 % ** | 4.8 % ** | 6.8 % | 7.4 % | 8.1 % |
| Asian-Pacific American | 0.3 | 1.6 | 1.4 | 0.3 | 0.8 | 1.1 |
| Subcontinent Asian American | 0.3 | 1.5 ** | 1.8 ** | 0.1 | 0.3 | 0.4 |
| Hispanic American | 1.1 | 2.0 ** | 1.8 ** | 1.3 | 3.2 | 4.4 |
| Native American | 0.2 | 0.5 | 0.3 | 0.2 | 0.6 | 0.6 |
| Other minority group | <u>0.0</u> | <u>0.3</u> | <u>0.0</u> ** | <u>0.0</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 5.6 % ** | 10.9 % | 10.2 % ** | 8.7 % | 12.4 % | 14.7 % |
| Non-Hispanic white | <u>94.4</u> ** | <u>89.1</u> | <u>89.8</u> ** | <u>91.3</u> | <u>87.6</u> | <u>85.3</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | |
| Female | 41.3 % | 37.2 % ** | 34.5 % ** | 41.9 % | 46.5 % | 46.6 % |
| Male | <u>58.7</u> | <u>62.8</u> ** | <u>65.5</u> ** | <u>58.1</u> | <u>53.5</u> | <u>53.4</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | United States | | | | | |
| | Professional Services | | | All industries | | |
| | 1980 (n=101,185) | 2000 (n=233,911) | 2006-08 (n=177,928) | 1980 (n=5,287,471) | 2000 (n=6,832,970) | 2006-08 (n=4,488,276) |
| Race/ethnicity | | | | | | |
| African American | 5.0 % ** | 5.9 % ** | 6.3 % ** | 10.1 % | 10.9 % | 11.6 % |
| Asian-Pacific American | 2.1 ** | 5.2 ** | 6.0 ** | 1.5 | 3.4 | 4.0 |
| Subcontinent Asian American | 0.6 ** | 2.7 ** | 4.1 ** | 0.2 | 0.7 | 1.0 |
| Hispanic American | 3.4 ** | 5.3 ** | 6.5 ** | 5.7 | 10.7 | 13.9 |
| Native American | 0.4 ** | 0.7 ** | 0.7 ** | 0.5 | 1.1 | 1.0 |
| Other minority group | <u>0.1</u> ** | <u>0.4</u> | <u>0.3</u> | <u>0.1</u> | <u>0.4</u> | <u>0.3</u> |
| Total minority | 11.6 % ** | 20.2 % ** | 23.7 % ** | 18.1 % | 27.3 % | 31.8 % |
| Non-Hispanic white | <u>88.4</u> ** | <u>79.8</u> ** | <u>76.3</u> ** | <u>81.9</u> | <u>72.7</u> | <u>68.2</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 68.5 % |
| Gender | | | | | | |
| Female | 37.0 % ** | 37.5 % ** | 35.9 % ** | 42.2 % | 46.5 % | 46.5 % |
| Male | <u>63.0</u> ** | <u>62.5</u> ** | <u>64.1</u> ** | <u>57.8</u> | <u>53.5</u> | <u>53.5</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the professional services industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure E-11.
Demographics of workers in professional services and all industries
in Indiana regions, 2000 and 2006-2008

| | Northern | | | |
|------------------------|-----------------------|----------------------|--------------------|-----------------------|
| | Professional Services | | All Industries | |
| | 2000 (n= 943) | 2006-08 (n=572) | 2000 (n=54,457) | 2006-08 (n=34,403) |
| Race/ethnicity | | | | |
| African American | 6.1 % | 6.1 % ** | 8.7 % | 9.0 % |
| Asian-Pacific American | 1.6 | 1.0 | 0.8 | 0.9 |
| Subcontinent Asian | 1.6 | 1.3 | 0.3 | 0.3 |
| Hispanic American | 3.8 | 3.8 ** | 5.6 | 7.1 |
| Native American | 0.5 | 0.1 ** | 0.7 | 0.7 |
| Other minority group | <u>0.3</u> | <u>0.0</u> ** | <u>0.2</u> | <u>0.1</u> |
| Total minority | 13.9 % | 12.3 % ** | 16.2 % | 18.2 % |
| Non-Hispanic white | <u>86.1</u> | <u>87.7</u> ** | <u>83.8</u> | <u>81.8</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 39.2 % ** | 35.4 % ** | 46.1 % | 46.1 % |
| Male | <u>60.8</u> ** | <u>64.6</u> ** | <u>53.9</u> | <u>53.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | Central | | | |
| | Professional Services | | All Industries | |
| | 2000 (n=1,439) | 2006-08 (n=1,327) | 2000 (n=62,795) | 2006-08 (n=44,049) |
| Race/ethnicity | | | | |
| African American | 5.7 % ** | 4.9 % ** | 8.8 % | 10.0 % |
| Asian-Pacific American | 1.6 | 1.6 | 0.9 | 1.3 |
| Subcontinent Asian | 1.7 | 2.3 ** | 0.3 | 0.5 |
| Hispanic American | 1.6 | 1.5 ** | 2.2 | 3.7 |
| Native American | 0.5 | 0.5 | 0.6 | 0.5 |
| Other minority group | <u>0.2</u> | <u>0.0</u> ** | <u>0.1</u> | <u>0.1</u> |
| Total minority | 11.2 % | 10.8 % ** | 13.1 % | 16.2 % |
| Non-Hispanic white | <u>88.8</u> | <u>89.2</u> ** | <u>86.9</u> | <u>83.8</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 36.2 % ** | 34.7 % ** | 46.8 % | 47.1 % |
| Male | <u>63.8</u> ** | <u>65.3</u> ** | <u>53.2</u> | <u>52.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | Southern | | | |
| | Professional Services | | All Industries | |
| | 2000 (n=506) | 2006-08 (n=427) | 2000 (n=36,516) | 2006-08 (n=21,549) |
| Race/ethnicity | | | | |
| African American | 1.2 % | 2.7 % | 2.4 % | 2.8 % |
| Asian-Pacific American | 1.5 | 1.1 | 0.7 | 0.9 |
| Subcontinent Asian | 0.8 | 1.2 | 0.2 | 0.3 |
| Hispanic American | 0.1 | 0.1 ** | 1.1 | 1.6 |
| Native American | 0.6 | 0.2 | 0.6 | 0.5 |
| Other minority group | <u>0.3</u> | <u>0.0</u> ** | <u>0.1</u> | <u>0.1</u> |
| Total minority | 4.5 % | 5.3 % | 5.1 % | 6.1 % |
| Non-Hispanic white | <u>95.5</u> | <u>94.7</u> | <u>94.9</u> | <u>93.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 36.8 % ** | 32.6 % ** | 46.5 % | 46.5 % |
| Male | <u>63.2</u> ** | <u>67.4</u> ** | <u>53.5</u> | <u>53.5</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the professional services industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure E-12.
Demographics of workers in professional services and all industries in Indiana Metropolitan Statistical Areas, 2000

| | MSA | | | | | | | | | | | |
|-------------------------------|-----------------------|--|------------------------------|-----------------------|-----------------------|---------------------------|------------------|----------------------|-------------------------------------|------------------|------------------------------------|-----------------------|
| | Bloomington (n=55) | Gary- Hammond- East Chicago (n=312) | Elkhart- Goshen (n=40) | Evansville (n=133) | Fort Wayne (n=285) | Indianapolis (n=1,067) | Kokomo (n=41) | Lafayette (n=100) | Louisville- Jefferson (n=100) | Muncie (n=39) | South Bend Mishawaka (n=143) | Terre Haute (n=39) |
| Professional Services | | | | | | | | | | | | |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 2.2 % | 10.3 % ** | 2.5 % | 1.3 % | 2.7 % ** | 6.7 % ** | 0.0 % | 2.4 % | 0.9 % | 0.0 % | 6.1 % | 2.4 % |
| Asian-Pacific American | 1.0 | 0.9 | 6.0 | 1.0 | 1.7 | 1.4 | 0.0 | 2.6 | 2.6 | 4.5 | 1.4 | 0.0 |
| Subcontinental Asian American | 0.0 | 2.2 | 4.5 | 0.0 | 1.6 | 1.7 | 0.0 | 4.9 | 1.6 | 0.0 | 0.6 | 0.0 |
| Hispanic American | 0.0 | 7.1 | 1.5 | 0.0 | 1.4 | 1.8 | 0.0 | 1.0 | 0.0 | 0.0 | 2.9 | 2.7 |
| Native American | 2.5 | 0.0 | 0.0 | 0.0 | 0.7 | 0.4 | 0.0 | 0.0 | 0.0 | 6.6 | 0.2 | 0.0 |
| Other Minority | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 |
| Total minority | 5.6 % | 20.7 % | 14.5 % | 2.3 % | 8.1 % | 12.2 % ** | 0.0 % | 10.9 % | 5.1 % | 11.1 % | 12.0 % | 5.1 % |
| Non-Hispanic white | 94.4 | 79.3 | 85.5 | 97.7 | 91.9 | 87.8 ** | 100.0 | 89.1 | 94.9 | 88.9 | 88.0 | 94.9 |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | | | | | | | |
| Female | 35.3 | 40.8 | 36.2 | 37.1 | 33.4 ** | 36.3 ** | 35.4 | 38.4 | 36.0 | 38.1 | 42.9 | 25.6 |
| Male | 64.7 | 59.2 | 63.8 | 62.9 | 66.6 ** | 63.7 ** | 64.6 | 61.6 | 64.0 | 61.9 | 57.1 | 74.4 |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| All industries | | | | | | | | | | | | |
| | (n=2,609) | (n=13,396) | (n=4,248) | (n=6,288) | (n=12,648) | (n=3,3615) | (n=2,480) | (n=4,679) | (n=6,005) | (n=2,855) | (n=6,372) | (n=4,025) |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 3.1 % | 17.3 % | 5.1 % | 4.8 % | 7.2 % | 12.4 % | 4.8 % | 1.7 % | 3.8 % | 6.0 % | 10.2 % | 3.8 % |
| Asian-Pacific American | 2.2 | 0.7 | 1.0 | 0.5 | 0.9 | 1.0 | 0.4 | 2.8 | 0.5 | 0.5 | 1.2 | 0.8 |
| Subcontinental Asian American | 0.6 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 1.4 | 0.1 | 0.3 | 0.3 | 0.2 |
| Hispanic American | 1.3 | 9.4 | 8.6 | 0.7 | 3.2 | 2.4 | 1.0 | 4.5 | 1.6 | 1.1 | 4.0 | 1.0 |
| Native American | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.6 | 0.7 | 0.9 | 1.0 | 0.4 | 0.7 | 0.5 |
| Other Minority | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 |
| Total minority | 8.0 % | 28.5 % | 15.6 % | 6.8 % | 12.4 % | 16.9 % | 6.9 % | 11.5 % | 7.1 % | 8.6 % | 16.6 % | 6.4 % |
| Non-Hispanic white | 92.0 | 71.5 | 84.4 | 93.2 | 87.6 | 83.1 | 93.1 | 88.5 | 92.9 | 91.4 | 83.4 | 93.6 |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | | | | | | | |
| Female | 48.8 % | 46.7 | 44.9 | 47.6 | 46.6 | 47.3 | 43.9 | 46.5 | 46.7 | 47.2 | 47.7 | 45.9 |
| Male | 51.2 | 53.3 | 55.1 | 52.4 | 53.4 | 52.7 | 56.1 | 53.5 | 53.3 | 52.8 | 52.3 | 54.1 |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the professional services industry and all industries is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa>.

Employment in Indiana MSAs. Figure E-12 shows the demographic composition of workers in professional services and all industries across Indiana MSAs. BBC did not examine demographics at the MSA level in 2006-2008 due to smaller sample sizes.

There was substantial variation between Indiana MSAs in the proportion of professional services workers that were minorities in 2000. In the Gary-Hammond-East Chicago MSA, for example, nearly 21 percent of professional services workers were minorities, while minority representation among professional services workers in the Kokomo MSA was negligible.

In all but one Indiana MSA, the professional services industry employed relatively fewer minorities than the entire labor force. For example, minorities were 12 percent of professional services workers in the Indianapolis MSA, but represented 17 percent of all workers. Only the Muncie MSA had a greater proportion of minorities in professional services than in all industries (11% vs. 9%).

Advancement in the Indiana professional services industry. BBC also examined the representation of minorities and women in various professional services occupations — specifically, engineers and architects, computer scientists and management analysts.

Racial and ethnic composition of professional services occupations. Figure E-13 shows the demographic composition of all workers and workers in selected occupations in the Indiana professional services industry. In 2000, more than 90 percent of people working as engineers, architects or management analysts in the Indiana professional services industry were non-Hispanic whites. About 86 percent of computer scientists were non-Hispanic whites — a smaller percentage compared to their representation across all occupations in the industry (90%).

Figure E-13.
Demographics of all professional services workers and selected occupations in Indiana, 2000

Note:

** Denotes that the difference in proportions between all workers in the professional services industry and those in specific occupations is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

| | All professional services (n=2,886) | Engineers and architects (n=302) | Computer scientists (n=415) | Management analysts (n=163) |
|-----------------------------|--|-------------------------------------|--------------------------------|--------------------------------|
| Race/ethnicity | | | | |
| African American | 5.1 % | 0.3 % ** | 5.4 % | 3.6 % |
| Asian-Pacific American | 1.6 | 1.9 | 1.3 | 2.2 |
| Subcontinent Asian American | 1.5 | 3.3 | 5.1 | 0.0 |
| Hispanic American | 2.0 | 2.1 | 2.4 | 2.3 |
| Native American | 0.5 | 0.6 | 0.3 | 0.0 |
| Other minority group | <u>0.3</u> | <u>0.0</u> | <u>0.0</u> | <u>0.5</u> |
| Total minority | 10.9 % | 8.2 % | 14.5 % | 8.6 % |
| Non-Hispanic white | <u>89.1</u> | <u>91.8</u> | <u>85.5</u> | <u>91.4</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 37.2 % | 6.5 % ** | 18.9 % ** | 26.5 % |
| Male | <u>62.8</u> | <u>93.5</u> ** | <u>81.1</u> ** | <u>73.5</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

With the exception of Asian-Pacific Americans and Subcontinent Asian Americans, each minority group had lower representation among engineers and architects than among all professional services workers. In 2000, less than 1 percent of engineers and architects, but 5 percent of all professional services workers, were African Americans (a statistically significant difference).

Compared to their representation among all workers in the industry, Subcontinent Asian Americans were a larger percentage of computer scientists. Hispanic Americans had similar representation across occupations: about 2 percent of workers in professional services and each of the occupations examined were Hispanic Americans.

Women in professional services occupations. While women were 37 percent of all individuals working in the Indiana professional services industry, they represented 19 percent of computer scientists and only 7 percent of engineers and architects (both statistically significant differences). Although the difference was smaller, women also made up a smaller percentage of management analysts — about 27 percent.

Goods Industry

The study team next examined how difference race/ethnicity and gender groups differ with respect to entry and advancement in the goods industry. The goods industry includes the wholesale trade and selected manufacturing industries. Appendix I provides a detailed definition of this industry.

Education. A relatively large portion of goods industry workers have at most a high school diploma. Similar to construction, the goods industry does not appear to require workers to have a formal education beyond high school. Figure E-14 shows educational attainment levels among goods industry workers and the entire labor force in Indiana and the United States.

Figure E-14.
Educational attainment in goods and all industries in Indiana and the U.S., 2000 and 2006-2008

| | Indiana | | | |
|----------------------------|---------------------|------------------------|-----------------------|--------------------------|
| | Goods | | All workers | |
| | 2000 (n=15,525) | 2006-08 (n=8,753) | 2000 (n=153,716) | 2006-08 (n=100,001) |
| Less than high school | 14.7 % | 12.0 % | 15.2 % | 11.9 % |
| High school diploma | 42.6 ** | 40.5 ** | 34.5 | 33.3 |
| Some college | 27.6 ** | 28.8 ** | 29.8 | 30.9 |
| Four-year degree or higher | 15.1 ** | 18.8 ** | 20.5 | 23.8 |
| | United States | | | |
| | Goods | | All workers | |
| | 2000 (n=578,652) | 2006-08 (n=329,489) | 2000 (n=6,832,970) | 2006-08 (n=4,488,276) |
| Less than high school | 16.3 % ** | 12.9 % ** | 15.5 % | 12.4 % |
| High school diploma | 32.3 ** | 32.9 ** | 26.9 | 27.9 |
| Some college | 30.4 ** | 29.8 ** | 31.4 | 31.1 |
| Four-year degree or higher | 21.0 ** | 24.4 ** | 26.2 | 28.6 |

Note: ** Denotes that the difference in proportions between workers in the goods industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

As shown in Figure E-14, most workers in the Indiana goods industry did not have a four-year college degree in 2000 or 2006-2008. In 2000, about 15 percent of goods industry workers had a bachelor's or higher degree, compared to 21 percent of workers in all Indiana industries. However, about 88 percent of goods industry workers had at least a high school degree, a similar percentage to that seen across all industries. These results may indicate that educational requirements for entry into the goods industry are no greater than average requirements across all industries.

For most minority groups, a majority of workers had at least a high school diploma. However, a substantial portion of Hispanic American workers in the state had less than a high school education in 2006-2008, which may affect opportunities for advancement among Hispanic American workers in this industry.

High levels of educational attainment among Asian-Pacific Americans and Subcontinent Asian Americans in Indiana may mean that these groups may have relatively low representation in the industry.

As women have similar educational attainment levels as men in Indiana, education alone should not be a barrier to women entering into the goods industry. Factors apart from education, however, may influence employment of women in the goods industry.

Employment. The study team examined employment for different race/ethnicity and gender groups in the goods industry. Based on data from 1980, 2000 and 2006-2008, Figure E-15 compares the demographic distribution of the goods industry with that of the whole labor force in Indiana and the United States. Figure E-16 shows the demographics of goods industry workers in Indiana regions.

About one-tenth of workers in the Indiana goods industry in 2000 were minorities. In 2006-2008, minority groups represented about 13 percent of the industry workforce. As in the construction industry, representation of Hispanic Americans increased while that of other minority groups did not change substantially between 2000 and 2006-2008. Among workers in the Indiana goods industry in 2006-2008:

- 6 percent were African Americans;
- 6 percent were Hispanic Americans; and
- 1 percent was Asian-Pacific American.

Subcontinent Asian Americans, Native Americans and other minority groups together comprised less than one percent of the Indiana goods industry labor force.

Among minority groups, only Hispanic Americans had greater representation in the goods industry than in the entire Indiana labor force. In 2006-2008, about 6 percent of goods industry workers, but only 4 percent of all workers, were Hispanic Americans. In contrast, African Americans were a smaller percentage of goods industry workers than all workers.

Each of the other minority groups — including Asian-Pacific Americans, Subcontinent Asian Americans, Native Americans and other minorities — were similarly represented in the goods industry and all industries.

Taking into account their representation among all workers in the state, relatively few women work in the Indiana goods industry. Women made up nearly one-half of the labor force in 2000 and 2006-2008 but less than one-third of goods industry workers in each period.

With respect to race/ethnicity and gender, similar patterns were found in Northern and Southern Indiana in 2006-2008. In the Central Indiana region, however, minorities comprised a similar share of goods workers as all workers (see Figure E-16).

Figure E-15.
Demographic distribution of workers in goods and all industries in Indiana and the U.S., 1980, 2000 and 2006-2008

| | Indiana | | | | | |
|-----------------------------|---------------------|---------------------|------------------------|-----------------------|-----------------------|--------------------------|
| | Goods | | | All industries | | |
| | 1980 (n=18,458) | 2000 (n=15,525) | 2006-08 (n=8,753) | 1980 (n=128,377) | 2000 (n=153,716) | 2006-08 (n=100,001) |
| Race/ethnicity | | | | | | |
| African American | 4.7 % ** | 5.0 % ** | 5.5 % ** | 6.8 % | 7.4 % | 8.1 % |
| Asian-Pacific American | 0.3 | 0.8 | 0.9 | 0.3 | 0.8 | 1.1 |
| Subcontinent Asian American | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 | 0.4 |
| Hispanic American | 0.9 ** | 3.8 | 5.7 ** | 1.3 | 3.2 | 4.4 |
| Native American | 0.1 | 0.5 | 0.4 | 0.2 | 0.6 | 0.6 |
| Other minority group | <u>0.0</u> | <u>0.1</u> | <u>0.2</u> | <u>0.0</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 6.2 % ** | 10.4 % ** | 13.0 % ** | 8.7 % | 12.4 % | 14.7 % |
| Non-Hispanic white | <u>93.8</u> ** | <u>89.6</u> ** | <u>87.0</u> ** | <u>91.3</u> | <u>87.6</u> | <u>85.3</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | |
| Female | 32.8 % ** | 31.8 % ** | 29.5 % ** | 41.9 % | 46.5 % | 46.6 % |
| Male | <u>67.2</u> ** | <u>68.2</u> ** | <u>70.5</u> ** | <u>58.1</u> | <u>53.5</u> | <u>53.4</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | United States | | | | | |
| | Goods | | | All industries | | |
| | 1980 (n=611,057) | 2000 (n=578,652) | 2006-08 (n=329,489) | 1980 (n=5,287,471) | 2000 (n=6,832,970) | 2006-08 (n=4,488,276) |
| Race/ethnicity | | | | | | |
| African American | 8.2 % ** | 8.2 % ** | 8.3 % ** | 10.1 % | 10.9 % | 11.6 % |
| Asian-Pacific American | 1.4 ** | 4.1 ** | 4.7 ** | 1.5 | 3.4 | 4.0 |
| Subcontinent Asian American | 0.2 | 0.8 | 1.0 | 0.2 | 0.7 | 1.0 |
| Hispanic American | 6.5 ** | 12.1 ** | 15.2 ** | 5.7 | 10.7 | 13.9 |
| Native American | 0.4 ** | 0.9 ** | 0.8 ** | 0.5 | 1.1 | 1.0 |
| Other minority group | <u>0.1</u> ** | <u>0.4</u> | <u>0.2</u> | <u>0.1</u> | <u>0.4</u> | <u>0.3</u> |
| Total minority | 16.8 % ** | 26.4 % ** | 30.2 % ** | 18.1 % | 27.3 % | 31.8 % |
| Non-Hispanic white | <u>83.2</u> ** | <u>73.6</u> ** | <u>69.8</u> ** | <u>81.9</u> | <u>72.7</u> | <u>68.2</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 68.5 % |
| Gender | | | | | | |
| Female | 29.5 % ** | 30.3 % ** | 29.1 % ** | 42.2 % | 46.5 % | 46.5 % |
| Male | <u>70.5</u> ** | <u>69.7</u> ** | <u>70.9</u> ** | <u>57.8</u> | <u>53.5</u> | <u>53.5</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the goods industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure E-16.
Demographics of workers in goods and all industries in Indiana
regions, 2000 and 2006-2008

| | Northern | | | |
|------------------------|--------------------|----------------------|--------------------|-----------------------|
| | Goods | | All Industries | |
| | 2000 (n= 5,568) | 2006-08 (n=3,278) | 2000 (n=54,457) | 2006-08 (n=34,403) |
| Race/ethnicity | | | | |
| African American | 5.0 % ** | 4.9 % ** | 8.7 % | 9.0 % |
| Asian-Pacific American | 0.8 | 0.8 | 0.8 | 0.9 |
| Subcontinent Asian | 0.2 | 0.2 | 0.3 | 0.3 |
| Hispanic American | 7.2 ** | 8.4 ** | 5.6 | 7.1 |
| Native American | 0.6 | 0.8 | 0.7 | 0.7 |
| Other minority group | <u>0.2</u> | <u>0.2</u> | <u>0.2</u> | <u>0.1</u> |
| Total minority | 14.0 % ** | 15.3 % ** | 16.2 % | 18.2 % |
| Non-Hispanic white | <u>86.0</u> ** | <u>84.7</u> ** | <u>83.8</u> | <u>81.8</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 31.8 % ** | 29.7 % ** | 46.1 % | 46.1 % |
| Male | <u>68.2</u> ** | <u>70.3</u> ** | <u>53.9</u> | <u>53.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | Central | | | |
| | Goods | | All Industries | |
| | 2000 (n=5,698) | 2006-08 (n=3,391) | 2000 (n=62,795) | 2006-08 (n=44,049) |
| Race/ethnicity | | | | |
| African American | 6.9 % ** | 8.2 % ** | 8.8 % | 10.0 % |
| Asian-Pacific American | 1.1 | 1.2 | 0.9 | 1.3 |
| Subcontinent Asian | 0.3 | 0.4 | 0.3 | 0.5 |
| Hispanic American | 2.2 | 5.7 ** | 2.2 | 3.7 |
| Native American | 0.5 | 0.3 ** | 0.6 | 0.5 |
| Other minority group | <u>0.0</u> | <u>0.1</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 11.0 % ** | 15.8 % | 13.1 % | 16.2 % |
| Non-Hispanic white | <u>89.0</u> ** | <u>84.2</u> | <u>86.9</u> | <u>83.8</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 31.8 % ** | 29.2 % ** | 46.8 % | 47.1 % |
| Male | <u>68.2</u> ** | <u>70.8</u> ** | <u>53.2</u> | <u>52.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | Southern | | | |
| | Goods | | All Industries | |
| | 2000 (n=4,265) | 2006-08 (n=2,084) | 2000 (n=36,516) | 2006-08 (n=21,549) |
| Race/ethnicity | | | | |
| African American | 2.0 % | 2.1 % | 2.4 % | 2.8 % |
| Asian-Pacific American | 0.3 | 0.6 | 0.7 | 0.9 |
| Subcontinent Asian | 0.3 | 0.1 ** | 0.2 | 0.3 |
| Hispanic American | 1.2 | 1.4 | 1.1 | 1.6 |
| Native American | 0.5 | 0.1 ** | 0.6 | 0.5 |
| Other minority group | <u>0.0</u> | <u>0.2</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 4.2 % | 4.5 % ** | 5.1 % | 6.1 % |
| Non-Hispanic white | <u>95.8</u> | <u>95.5</u> ** | <u>94.9</u> | <u>93.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 31.8 % ** | 29.7 % ** | 46.5 % | 46.5 % |
| Male | <u>68.2</u> ** | <u>70.3</u> ** | <u>53.5</u> | <u>53.5</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the goods industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure E-17.
Demographics of workers in goods and all industries in Indiana Metropolitan Statistical Areas, 2000

| | MSA | | | | | | | | | | | |
|-------------------------------|-----------------------|---------------------------|----------------|------------|------------|--------------|-----------|-----------|----------------------|-----------|----------------------|-------------|
| | Bloomington | Gary-Hammond-East Chicago | Elkhart-Goshen | Evansville | Fort Wayne | Indianapolis | Kokomo | Lafayette | Louisville-Jefferson | Muncie | South Bend Mishawaka | Terre Haute |
| | Goods | | | | | | | | | | | |
| | (n=103) | (n=904) | (n=627) | (n=487) | (n=1,521) | (n=2,943) | (n=267) | (n=411) | (n=674) | (n=202) | (n=619) | (n=261) |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 4.0 % | 11.2 % ** | 5.3 % | 2.9 % | 4.5 % ** | 9.2 % ** | 5.4 % | 1.3 % | 3.2 % | 6.1 % | 6.3 % | 5.0 % |
| Asian Pacific American | 1.7 | 0.5 | 1.1 | 0.0 | 1.2 | 1.5 | 0.5 | 1.1 | 0.6 | 0.0 | 0.7 | 2.2 |
| Subcontinental Asian American | 0.0 | 0.2 | 0.1 | 0.0 | 0.4 | 0.2 | 0.5 | 1.3 | 0.0 | 0.7 | 0.2 | 0.0 |
| Hispanic American | 0.0 | 11.6 | 17.1 ** | 0.7 | 2.5 | 1.9 | 0.8 | 5.8 | 2.2 | 2.4 | 5.5 | 0.8 |
| Native American | 0.0 | 1.0 | 0.1 | 0.7 | 0.5 | 0.5 | 0.0 | 0.7 | 0.5 | 0.5 | 0.7 | 0.2 |
| Other Minority | 0.0 | 0.6 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.2 | 0.0 |
| Total minority | 5.6 % | 25.2 % | 23.6 % ** | 4.6 % | 9.1 % | 13.3 % ** | 7.2 % | 10.1 % | 6.6 % | 10.2 % | 13.5 % | 8.2 % |
| Non-Hispanic white | 94.4 | 74.8 | 76.4 ** | 95.4 | 90.9 | 86.7 ** | 92.8 | 89.9 | 93.4 | 89.8 | 86.5 | 91.8 |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | | | | | | | |
| Female | 27.1 ** | 25.6 ** | 35.2 ** | 28.7 ** | 32.5 ** | 30.0 ** | 35.9 | 33.6 ** | 29.3 ** | 23.4 ** | 30.8 ** | 35.3 |
| Male | 72.9 ** | 74.4 ** | 64.8 ** | 71.3 ** | 67.5 ** | 70.0 ** | 64.1 | 66.4 ** | 70.7 ** | 76.6 ** | 69.2 ** | 64.7 |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | All industries | | | | | | | | | | | |
| | (n=2,609) | (n=13,396) | (n=4,248) | (n=6,288) | (n=12,648) | (n=33,615) | (n=2,480) | (n=4,679) | (n=6,005) | (n=2,855) | (n=6,372) | (n=4,025) |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 3.1 % | 17.3 % | 5.1 % | 4.8 % | 7.2 % | 12.4 % | 4.8 % | 1.7 % | 3.8 % | 6.0 % | 10.2 % | 3.8 % |
| Asian Pacific American | 2.2 | 0.7 | 1.0 | 0.5 | 0.9 | 1.0 | 0.4 | 2.8 | 0.5 | 0.5 | 1.2 | 0.8 |
| Subcontinental Asian American | 0.6 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 1.4 | 0.1 | 0.3 | 0.3 | 0.2 |
| Hispanic American | 1.3 | 9.4 | 8.6 | 0.7 | 3.2 | 2.4 | 1.0 | 4.5 | 1.6 | 1.1 | 4.0 | 1.0 |
| Native American | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.6 | 0.7 | 0.9 | 1.0 | 0.4 | 0.7 | 0.5 |
| Other Minority | 0.1 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 |
| Total minority | 8.0 % | 28.5 % | 15.6 % | 6.8 % | 12.4 % | 16.9 % | 6.9 % | 11.5 % | 7.1 % | 8.6 % | 16.6 % | 6.4 |
| Non-Hispanic white | 92.0 | 71.5 | 84.4 | 93.2 | 87.6 | 83.1 | 93.1 | 88.5 | 92.9 | 91.4 | 83.4 | 93.6 |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | | | | | | | |
| Female | 48.8 % | 46.7 | 44.9 | 47.6 | 46.6 | 47.3 | 43.9 | 46.5 | 46.7 | 47.2 | 47.7 | 45.9 |
| Male | 51.2 | 53.3 | 55.1 | 52.4 | 53.4 | 52.7 | 56.1 | 53.5 | 53.3 | 52.8 | 52.3 | 54.1 |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the goods industry and all industries is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Employment in Indiana MSAs. Figure E-17 summarizes employment across Indiana MSAs in the goods industry and all industries in 2000. Minority representation among workers varied substantially between Indiana MSAs. Fewer than 5 percent of the goods industry workforce in the Evansville MSA, but about 25 percent in the Gary-Hammond-East Chicago MSA, were minorities.

In most MSAs, minorities made up a smaller share of workers in the goods industry than in all industries. However, evidence from the 2000 data suggests that, as a whole, minorities had greater representation in the goods industry in the Elkhart-Goshen, Kokomo, Muncie and Terre Haute MSAs.

In each MSA women comprised a smaller proportion of goods industry workers than workers in all industries.

Advancement in the Indiana goods industry. BBC examined the demographic composition of specific occupations to explore whether certain groups may have less opportunity for advancement in the goods industry. Figure E-18 compares the demographics of these occupations with those of the entire goods industry labor force in 2000. Results show that non-Hispanic whites were about 90 percent of all goods workers, but they represented an even larger share of first-line supervisors and managers in the industry.

Racial and ethnic composition of goods industry occupations. Advancement in the Indiana goods industry appeared to be more difficult for some minority groups. In 2000:

- African Americans were 5 percent of all goods industry workers, less than 4 percent of first-line supervisors and only 1 percent of managers; and
- Hispanic Americans were roughly 4 percent of all goods industry workers but only 2 percent of first-line supervisors and managers.

Women in goods industry occupations. As shown in Figure E-18, women were also less represented in higher-ranking occupations in the Indiana goods industry in 2000. Women were 32 percent of all workers, 23 percent of first-line supervisors and 16 percent of managers in the industry.

**Figure E-18.
Demographics of all
goods workers and
selected occupations in
Indiana, 2000**

Note:

** Denotes that the difference in proportions between all workers in the goods industry and those in specific occupations is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

| | All goods industry (n=15,525) | First-line supervisors (n=1,283) | Managers (n=386) |
|-----------------------------|----------------------------------|-------------------------------------|---------------------|
| Race/ethnicity | | | |
| African American | 5.0 % | 3.5 % | 1.2 % ** |
| Asian-Pacific American | 0.8 | 0.9 | 1.3 |
| Subcontinent Asian American | 0.2 | 0.1 | 0.6 |
| Hispanic American | 3.8 | 2.2 | 2.2 |
| Native American | 0.5 | 0.5 | 1.1 |
| Other minority group | 0.1 | 0.1 | 0.0 |
| Total minority | 10.4 % | 7.3 % | 6.3 % |
| Non-Hispanic white | 89.6 | 92.7 ** | 93.7 |
| Total | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | |
| Female | 31.8 % | 23.0 % ** | 15.8 % ** |
| Male | 68.2 | 77.0 ** | 84.2 ** |
| Total | 100.0 % | 100.0 % | 100.0 % |

Support Services Industry

The study team also examined differences between race/ethnicity and gender groups with respect to entry and advancement in the support services industry. The support services industry includes transportation-related services, warehousing, employment services, printing and other business services, building and landscaping services, automotive services and a number of other specialized services. Appendix I provides the detailed definition of this study industry.

Education. Figure E-19 shows educational attainment levels among workers in support services and all industries in 2000 and 2006-2008.

Figure E-19.
Educational attainment in support services and all industries in Indiana and the U.S., 2000 and 2006-2008

| Indiana | | | | |
|----------------------------|---------------------|------------------------|-----------------------|--------------------------|
| | Support Services | | All workers | |
| | 2000 (n=9,917) | 2006-08 (n=6,976) | 2000 (n=153,716) | 2006-08 (n=100,001) |
| Less than high school | 19.5 % ** | 15.7 % ** | 15.2 % | 11.9 % |
| High school diploma | 43.1 % ** | 42.8 % ** | 34.5 % | 33.3 % |
| Some college | 27.8 % ** | 29.9 % ** | 29.8 % | 30.9 % |
| Four-year degree or higher | 9.6 % ** | 11.7 % ** | 20.5 % | 23.8 % |
| United States | | | | |
| | Support Services | | All workers | |
| | 2000 (n=435,479) | 2006-08 (n=283,938) | 2000 (n=6,832,970) | 2006-08 (n=4,488,276) |
| Less than high school | 23.2 % ** | 19.7 % ** | 15.5 % | 12.4 % |
| High school diploma | 34.7 % ** | 36.9 % ** | 26.9 % | 27.9 % |
| Some college | 29.8 % ** | 29.4 % ** | 31.4 % | 31.1 % |
| Four-year degree or higher | 12.3 % ** | 14.0 % ** | 26.2 % | 28.6 % |

Note: ** Denotes that the difference in proportions between workers in the support services industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Most support services occupations do not require a four-year college degree. Compared to all industries, the support services industry has a greater proportion of workers with at most a high school diploma. In 2000, approximately 20 percent of support services workers in Indiana did not have a high school diploma, and 43 percent were high school graduates with no post-secondary education. Although the percentage of goods industry workers with at most a high school degree declined between 2000 and 2006-2008, individuals with no college experience still represented the majority of workers in this industry.

Workers in the support services industry in Indiana are less likely than all workers to have a four-year or higher degree. In 2006-2008, about 24 percent of all workers but only 12 percent of support services workers were college graduates.

Based on educational requirements for the support services industry, one might expect a relatively large proportion of African Americans and Hispanic Americans and a relatively small proportion of Asian-Pacific Americans and Subcontinent Asian Americans to work in support services, compared to other industries.

In contrast to the construction industry, the support services industry does not have as strong a tradition as a male-dominated industry. Other factors aside, one might again anticipate that women would have a similar representation in this industry compared to all industries.

Employment. The study team examined the demographic composition of workers in the support services industry in Indiana and the United States. Based on data from 1980, 2000 and 2006-2008, Figure E-20 compares employment in the industry with that of the whole labor force. Figure E-21 summarizes worker demographics in Indiana regions.

Based on 2000 Census data, minorities made up about 14 percent of workers in the Indiana support services industry. By 2006-2008, minority representation among industry workers appears to have increased: about 19 percent of people working in support services were minorities during this period.

Of the people working in the Indiana support services industry in 2006-2008:

- 11 percent were African Americans;
- 6 percent were Hispanic Americans;
- Less than 1 percent were Asian-Pacific Americans; and
- Less than 1 percent were Native Americans.

Other race/ethnicity groups — including Subcontinent Asian Americans and other minority groups — made up less than one-half of a percent of workers in the Indiana support services industry. These minority groups together also represented a very small percentage of all workers.

Among race/ethnicity groups in Indiana in 2006-2008, only Asian-Pacific Americans made up a significantly smaller percentage of workers in support services than in all industries. Compared to their representation in the whole workforce, African Americans and Hispanic Americans were a larger proportion of workers in the Indiana support services industry.

- In 2006-2008, about 8 percent of the entire Indiana labor force were African Americans, compared to approximately 11 percent of support services workers.
- Hispanic Americans also made up a larger percentage of support services workers than all workers. About 4 percent of workers across all industries in Indiana and about 6 percent of workers in the support services industry were Hispanic Americans.

Lower levels of educational attainment among African Americans and Hispanic Americans may help explain the higher percentages of workers from these groups in support services.

Subcontinent Asian Americans, Native Americans and other minority groups did not have substantially different representation in the support services industry compared to all industries.

Women made up a smaller share of workers in support services than in all industries, in Indiana and each region. Not all of the patterns found for different race/ethnicity and gender groups at the state level were also evident at the regional level (see Figure E-21).

Figure E-20.
Demographic distribution of workers in support services and all industries in Indiana and the U.S.,
1980, 2000 and 2008

| | Indiana | | | | | |
|-----------------------------|---------------------|---------------------|------------------------|-----------------------|-----------------------|--------------------------|
| | Support Services | | | All industries | | |
| | 1980 (n=6,369) | 2000 (n=9,917) | 2006-08 (n=6,976) | 1980 (n=128,377) | 2000 (n=153,716) | 2006-08 (n=100,001) |
| Race/ethnicity | | | | | | |
| African American | 4.9 % ** | 8.9 % ** | 11.2 % ** | 6.8 % | 7.4 % | 8.1 % |
| Asian-Pacific American | 0.1 ** | 0.4 | 0.6 ** | 0.3 | 0.8 | 1.1 |
| Subcontinent Asian American | 0.0 | 0.1 | 0.3 | 0.1 | 0.3 | 0.4 |
| Hispanic American | 0.7 ** | 4.0 | 5.8 ** | 1.3 | 3.2 | 4.4 |
| Native American | 0.3 ** | 0.8 | 0.6 | 0.2 | 0.6 | 0.6 |
| Other minority group | <u>0.0</u> | <u>0.2</u> | <u>0.0</u> | <u>0.0</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 6.0 % ** | 14.3 % ** | 18.5 % ** | 8.7 % | 12.4 % | 14.7 % |
| Non-Hispanic white | <u>94.0</u> ** | <u>85.7</u> ** | <u>81.5</u> ** | <u>91.3</u> | <u>87.6</u> | <u>85.3</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | |
| Female | 27.4 % ** | 30.4 % ** | 30.4 % ** | 41.9 % | 46.5 % | 46.6 % |
| Male | <u>72.6</u> ** | <u>69.6</u> ** | <u>69.6</u> ** | <u>58.1</u> | <u>53.5</u> | <u>53.4</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | United States | | | | | |
| | Support Services | | | All industries | | |
| | 1980 (n=270,202) | 2000 (n=435,479) | 2006-08 (n=283,938) | 1980 (n=5,287,471) | 2000 (n=6,832,970) | 2006-08 (n=4,488,276) |
| Race/ethnicity | | | | | | |
| African American | 9.3 % ** | 12.4 % ** | 13.3 % ** | 10.1 % | 10.9 % | 11.6 % |
| Asian-Pacific American | 1.1 ** | 2.2 ** | 2.4 ** | 1.5 | 3.4 | 4.0 |
| Subcontinent Asian American | 0.1 ** | 0.3 ** | 0.4 ** | 0.2 | 0.7 | 1.0 |
| Hispanic American | 6.3 ** | 15.2 ** | 21.1 ** | 5.7 | 10.7 | 13.9 |
| Native American | 0.5 ** | 1.1 | 1.0 | 0.5 | 1.1 | 1.0 |
| Other minority group | <u>0.1</u> | <u>0.5</u> | <u>0.3</u> | <u>0.1</u> | <u>0.4</u> | <u>0.3</u> |
| Total minority | 17.4 % ** | 31.8 % ** | 38.5 % ** | 18.1 % | 27.3 % | 31.8 % |
| Non-Hispanic white | <u>82.6</u> ** | <u>68.2</u> ** | <u>61.5</u> ** | <u>81.9</u> | <u>72.7</u> | <u>68.2</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 68.5 % |
| Gender | | | | | | |
| Female | 28.6 % ** | 30.5 % ** | 30.4 % ** | 42.2 % | 46.5 % | 46.5 % |
| Male | <u>71.4</u> ** | <u>69.5</u> ** | <u>69.6</u> ** | <u>57.8</u> | <u>53.5</u> | <u>53.5</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the support services industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Figure E-21.
Demographics of workers in support services and all industries
in Indiana regions, 2000 and 2006-2008

| | Northern | | | |
|------------------------|-------------------|----------------------|--------------------|-----------------------|
| | Support Services | | All Industries | |
| | 2000 (n=3,408) | 2006-08 (n=2,375) | 2000 (n=54,457) | 2006-08 (n=34,403) |
| Race/ethnicity | | | | |
| African American | 10.1 % | 12.1 % ** | 8.7 % | 9.0 % |
| Asian-Pacific American | 0.5 | 0.5 ** | 0.8 | 0.9 |
| Subcontinent Asian | 0.1 | 0.1 | 0.3 | 0.3 |
| Hispanic American | 6.5 | 8.2 | 5.6 | 7.1 |
| Native American | 0.9 | 0.9 | 0.7 | 0.7 |
| Other minority group | <u>0.2</u> | <u>0.0</u> ** | <u>0.2</u> | <u>0.1</u> |
| Total minority | 18.3 % | 21.9 % ** | 16.2 % | 18.2 % |
| Non-Hispanic white | <u>81.7</u> | <u>78.1</u> ** | <u>83.8</u> | <u>81.8</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 32.2 % ** | 29.9 % ** | 46.1 % | 46.1 % |
| Male | <u>67.8</u> ** | <u>70.1</u> ** | <u>53.9</u> | <u>53.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | Central | | | |
| | Support Services | | All Industries | |
| | 2000 (n=4,134) | 2006-08 (n=3,185) | 2000 (n=62,795) | 2006-08 (n=44,049) |
| Race/ethnicity | | | | |
| African American | 11.1 % ** | 13.7 % ** | 8.8 % | 10.0 % |
| Asian-Pacific American | 0.4 | 0.8 ** | 0.9 | 1.3 |
| Subcontinent Asian | 0.0 | 0.5 | 0.3 | 0.5 |
| Hispanic American | 3.2 | 6.2 ** | 2.2 | 3.7 |
| Native American | 0.8 | 0.5 | 0.6 | 0.5 |
| Other minority group | <u>0.2</u> | <u>0.0</u> ** | <u>0.1</u> | <u>0.1</u> |
| Total minority | 15.7 % ** | 21.7 % ** | 13.1 % | 16.2 % |
| Non-Hispanic white | <u>84.3</u> ** | <u>78.3</u> ** | <u>86.9</u> | <u>83.8</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 29.9 % ** | 31.5 % ** | 46.8 % | 47.1 % |
| Male | <u>70.1</u> ** | <u>68.5</u> ** | <u>53.2</u> | <u>52.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| | Southern | | | |
| | Support Services | | All Industries | |
| | 2000 (n=2,377) | 2006-08 (n=1,416) | 2000 (n=36,516) | 2006-08 (n=21,549) |
| Race/ethnicity | | | | |
| African American | 2.5 % | 3.6 % | 2.4 % | 2.8 % |
| Asian-Pacific American | 0.3 | 0.2 ** | 0.7 | 0.9 |
| Subcontinent Asian | 0.0 | 0.1 ** | 0.2 | 0.3 |
| Hispanic American | 1.7 | 1.0 ** | 1.1 | 1.6 |
| Native American | 0.5 | 0.6 | 0.6 | 0.5 |
| Other minority group | <u>0.1</u> | <u>0.0</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 5.1 % | 5.4 % | 5.1 % | 6.1 % |
| Non-Hispanic white | <u>94.9</u> | <u>94.6</u> | <u>94.9</u> | <u>93.9</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | |
| Female | 28.5 % ** | 28.8 % ** | 46.5 % | 46.5 % |
| Male | <u>71.5</u> ** | <u>71.2</u> ** | <u>53.5</u> | <u>53.5</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the support services industry and all industries for the given Census/ACS year is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Employment in Indiana MSAs. The study team also examined differences between Indiana MSAs in the proportion of support services workers and all workers that were minorities. Figure E-22 shows the demographics of the workforce in support services and all industries in Indiana MSAs in 2000. Smaller sample sizes prevented a similar analysis using 2006-2008 ACS data.

The overall employment pattern at the MSA level was considerably different for the support services industry compared to other industries. In 10 of 12 Indiana MSAs, minorities represented an equal or greater share of workers in support services than in all industries. For example, in the Indianapolis and South Bend-Mishawaka MSAs, minorities comprised 17 percent of all workers but about 21 percent of those working in support services.

However, minorities represented a particularly small percentage of support services workers in two Indiana MSAs. In the Bloomington MSA, minorities made up only 3 percent of support services workers but were 8 percent of the entire workforce. In the Lafayette MSA, minorities were 6 percent of support services workers and 12 percent of all workers.

Figure E-22.
Demographics of workers in support services and all industries in Indiana Metropolitan Statistical Areas, 2000

| | MSA | | | | | | | | | | | |
|-------------------------------|------------------------|--|-------------------------------|-----------------------|-----------------------|---------------------------|-------------------|----------------------|-------------------------------------|-------------------|------------------------------------|------------------------|
| | Bloomington (n=113) | Gary- Hammond- East Chicago (n=903) | Elkhart- Goshen (n=210) | Evansville (n=476) | Fort Wayne (n=808) | Indianapolis (n=2,472) | Kokomo (n=125) | Lafayette (n=194) | Louisville- Jefferson (n=466) | Muncie (n=143) | South Bend Mishawaka (n=385) | Terre Haute (n=219) |
| Support Services | | | | | | | | | | | | |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 1.7 % | 18.1 % | 4.5 % | 4.9 % | 8.7 % | 15.0 % | 4.7 % | 2.8 % | 3.9 % | 8.5 % | 12.9 % | 5.0 % |
| Asian-Pacific American | 0.9 | 0.1 | 2.0 | 0.5 | 0.8 | 0.5 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| Subcontinental Asian American | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Hispanic American | 0.0 | 10.7 | 8.3 | 1.5 | 4.1 | 4.1 ** | 2.3 | 2.9 | 2.5 | 1.8 | 6.5 | 1.7 |
| Native American | 0.2 | 0.9 | 0.3 | 0.5 | 1.2 | 0.7 | 4.2 | 0.1 | 1.0 | 0.0 | 0.9 | 0.6 |
| Other Minority | <u>0.0</u> | <u>0.1</u> | <u>1.1</u> | <u>0.0</u> | <u>0.0</u> | <u>0.3</u> | <u>0.0</u> | <u>0.0</u> | <u>0.3</u> | <u>0.0</u> | <u>0.3</u> | <u>0.0</u> |
| Total minority | 2.9 % | 29.9 % | 16.3 % | 7.6 % | 15.0 % | 20.5 % ** | 11.2 % | 6.2 % | 7.8 % | 10.3 % | 20.5 % | 7.3 % |
| Non-Hispanic white | <u>97.1</u> | <u>70.1</u> | <u>83.7</u> | <u>92.4</u> | <u>85.0</u> | <u>79.5</u> ** | <u>88.8</u> | <u>93.8</u> | <u>92.2</u> | <u>89.7</u> | <u>79.5</u> | <u>92.7</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | | | | | | | |
| Female | 33.1 | 31.0 ** | 36.6 | 34.4 ** | 34.7 ** | 31.2 ** | 29.7 | 28.1 ** | 29.4 ** | 26.7 ** | 29.3 ** | 23.7 ** |
| Male | <u>66.9</u> | <u>69.0</u> ** | <u>63.4</u> | <u>65.6</u> ** | <u>65.3</u> ** | <u>68.8</u> ** | <u>70.3</u> | <u>71.9</u> ** | <u>70.6</u> ** | <u>73.3</u> ** | <u>70.7</u> ** | <u>76.3</u> ** |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| All industries | | | | | | | | | | | | |
| | (n=2,609) | (n=13,396) | (n=4,248) | (n=6,288) | (n=12,648) | (n=33,615) | (n=2,480) | (n=4,679) | (n=6,005) | (n=2,855) | (n=6,372) | (n=4,025) |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 3.1 % | 17.3 % | 5.1 % | 4.8 % | 7.2 % | 12.4 % | 4.8 % | 1.7 % | 3.8 % | 6.0 % | 10.2 % | 3.8 % |
| Asian-Pacific American | 2.2 | 0.7 | 1.0 | 0.5 | 0.9 | 1.0 | 0.4 | 2.8 | 0.5 | 0.5 | 1.2 | 0.8 |
| Subcontinental Asian American | 0.6 | 0.3 | 0.3 | 0.2 | 0.3 | 0.3 | 0.1 | 1.4 | 0.1 | 0.3 | 0.3 | 0.2 |
| Hispanic American | 1.3 | 9.4 | 8.6 | 0.7 | 3.2 | 2.4 | 1.0 | 4.5 | 1.6 | 1.1 | 4.0 | 1.0 |
| Native American | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.6 | 0.7 | 0.9 | 1.0 | 0.4 | 0.7 | 0.5 |
| Other Minority | <u>0.1</u> | <u>0.3</u> | <u>0.1</u> | <u>0.1</u> | <u>0.1</u> | <u>0.1</u> | <u>0.0</u> | <u>0.2</u> | <u>0.1</u> | <u>0.2</u> | <u>0.1</u> | <u>0.1</u> |
| Total minority | 8.0 % | 28.5 % | 15.6 % | 6.8 % | 12.4 % | 16.9 % | 6.9 % | 11.5 % | 7.1 % | 8.6 % | 16.6 % | 6.4 |
| Non-Hispanic white | <u>92.0</u> | <u>71.5</u> | <u>84.4</u> | <u>93.2</u> | <u>87.6</u> | <u>83.1</u> | <u>93.1</u> | <u>88.5</u> | <u>92.9</u> | <u>91.4</u> | <u>83.4</u> | <u>93.6</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | | | | | | | | | | |
| Female | 48.8 % | 46.7 | 44.9 | 47.6 | 46.6 | 47.3 | 43.9 | 46.5 | 46.7 | 47.2 | 47.7 | 45.9 |
| Male | <u>51.2</u> | <u>53.3</u> | <u>55.1</u> | <u>52.4</u> | <u>53.4</u> | <u>52.7</u> | <u>56.1</u> | <u>53.5</u> | <u>53.3</u> | <u>52.8</u> | <u>52.3</u> | <u>54.1</u> |
| Total | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % | 100.0 % |

Note: ** Denotes that the difference in proportions between workers in the support services industry and all industries is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from and 2000 U.S. Census 5% sample Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Advancement in the Indiana support services industry. Minorities and women in the support services industry may be concentrated in lower-ranking or less prominent positions. The study team explored opportunities for advancement in the Indiana support services industry by examining the demographic composition of different occupations. Based on 2000 Census data, Figure E-23 shows the race/ethnicity and gender of managers, first-line supervisors and all workers in the support services industry.

Racial and ethnic composition of support services occupations. About 14 percent of workers in support services were minorities in 2000. Representation of minorities among first-line supervisors and managers was lower: about 11 percent of first-line supervisors and 10 percent of managers in the Indiana support services industry were minorities.

The two largest minority groups in this industry — African Americans and Hispanic Americans — represented about 9 percent and 4 percent, respectively, of all workers in support services. In comparison, less than 7 percent of first-line supervisors and managers were African Americans. Hispanic Americans made up about 3 percent of first-line supervisors and 2 percent of managers in the industry.

Women in support services occupations. As shown in Figure E-23, women were also relatively under-represented among workers in higher-ranking occupations. While 30 percent of all support services workers were women in Indiana, about 28 percent of first-line supervisors and 21 percent of managers were women.

Figure E-23.
Demographics of all support services workers and selected occupations in Indiana, 2000

Note:

** Denotes that the difference in proportions between all workers in the support services industry and those in specific occupations is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2000 U.S. Census 5% sample Public Use Micro-sample data. The raw data extracts were obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

| | All support services (n=9,917) | First-line supervisors (n=467) | Managers (n=439) |
|-----------------------------|-----------------------------------|-----------------------------------|---------------------|
| Race/ethnicity | | | |
| African American | 8.9 % | 6.2 % | 6.6 % |
| Asian-Pacific American | 0.4 | 0.5 | 0.9 |
| Subcontinent Asian American | 0.1 | 0.0 | 0.0 |
| Hispanic American | 4.0 | 2.9 | 1.6 |
| Native American | 0.8 | 0.6 | 0.8 |
| Other minority group | <u>0.2</u> | <u>0.3</u> | <u>0.0</u> |
| Total minority | 14.3 % | 10.5 % | 9.9 % |
| Non-Hispanic white | 85.7 | 89.5 | 90.1 |
| Total | 100.0 % | 100.0 % | 100.0 % |
| Gender | | | |
| Female | 30.4 % | 27.7 % | 21.1 % ** |
| Male | <u>69.6</u> | <u>72.3</u> | <u>78.9</u> ** |
| Total | 100.0 % | 100.0 % | 100.0 % |

Summary of Entry and Advancement in the Construction, Professional Services, Goods and Other Services industries

BBC's analysis suggests that barriers to entry into the construction, professional services, goods and other services industries in Indiana may help explain the relatively low number of businesses owned by certain minority groups and women. The following observations are based on employment patterns found in the state as a whole in 2006-2008, many of which were also true in 2000.

- Representation of African Americans in the construction industry is relatively low compared to all industries in Indiana. Factors apart from education are likely to account for this difference.
- Women were represented in the construction industry in particularly low numbers, especially considering their representation among all workers in Indiana.
- Lack of education appears to be a barrier to entry into the Indiana professional services industry for African Americans, Hispanic Americans and Native Americans. Workers in each of these groups were less likely to have a bachelor's degree compared to non-Hispanic whites. For Hispanic Americans, Native Americans and to a greater extent, African Americans, disparities in educational attainment appear at the high school level, which may affect college opportunities for those groups.
- There were relatively fewer women than men in the professional services industry in Indiana, despite the fact that women had comparable levels of educational attainment.
- African Americans comprised a relatively small proportion of workers in the goods industry. For women as well, representation in the goods industry was lower than among all workers in Indiana.
- The support services industry was the only sector examined by the study team in which minorities made up a relatively large proportion of workers. Only Asian-Pacific Americans were a smaller percentage of support services workers than all workers.

Barriers to advancement in those industries may also be an important reason for the relatively low number of minority and female business owners. Unless otherwise noted, the following observations are based on 2000 Census data, as these were the only data analyzed by the study team for the purpose of examining advancement across industries.

- Minorities comprised a relatively small proportion of various types of machine operators in the construction industry. These occupations, including miscellaneous equipment operators; dredge, excavating, and loading machine operators; and crane and tower operators, were largely dominated by non-Hispanic whites. Each minority group also comprised a smaller percentage of first-line supervisors than all workers.
- Compared to non-Hispanic whites in the construction industry, African Americans and Hispanic Americans were less likely to be managers in 2006-2008.

- Considered as a single group, minorities represented a relatively small proportion of engineers and architects and management analysts in the professional services industry. African Americans had especially low representation among engineers and architects.
- In the goods industry, relatively few minorities were first-line supervisors and managers. African Americans comprised a particularly small percentage of managers considering their representation among all workers in the goods industry.
- Patterns were similar in the support services industry, as minorities made up a smaller percentage of first-line supervisors and managers than all workers in the industry.

In sum, the pattern of disparities seen nationally concerning entry and advancement in the construction, professional services, goods and support services industries is also found in Indiana.

APPENDIX F.

Business Ownership in the Indiana Construction, Professional Services, Goods and Support Services Industries

About 8 percent of all Indiana workers were self-employed in 2006-2008. However, business ownership rates in the state vary across industries.¹ Among those examined in this disparity study, the goods industry had the lowest overall rate of business ownership at approximately 4 percent, and the construction industry had the highest rate at about 23 percent. The professional services and support services industries had similar overall self-employment rates at approximately 19 percent and 16 percent, respectively.

Focusing on these industries, BBC examined business ownership rates for different racial, ethnic and gender groups in Indiana and the United States. This appendix includes both summary statistics and probit regression models for analyzing business ownership. “Self-employment” and “business ownership” are used interchangeably in the following discussion.

Business Ownership Rates

Many studies have explored differences at the national level between minorities and non-minorities in rates of business ownership. Although self-employment rates have increased for minorities and women over the years, a number of studies indicate that gender, ethnicity and race continue to affect opportunities for entrepreneurship.² Other studies have found that the extent to which these individual characteristics limit ownership opportunities varies between industries and locations.

Disparities in rates of business ownership have been considered by state and federal courts when reviewing state DOT implementation of the Federal DBE Program. Any disparities in business ownership rates may be especially important when considering annual DBE participation goals. For example, research developed for the Illinois Department of Transportation (IDOT) considered disparities in self-employment rates as a contributing factor in adjusting the base figure for the IDOT annual DBE goal.³

¹ The universe considered when calculating business ownership rates included individuals who were in the labor force — workers 16 years of age or older who were gainfully employed and those who were unemployed but seeking work. Business owners included individuals who indicated being self-employed, either for an incorporated or non-incorporated business.

² See, for example, Waldinger, Roger and Howard E. Aldrich. 1990. *Ethnicity and Entrepreneurship*. Annual Review of Sociology. 111-135.; Fairlie, Robert W. and Bruce D. Meyer. 1996. *Ethnic and Racial Self-Employment Differences and Possible Explanations*. The Journal of Human Resources, Volume 31, Issue 4, 757-793.; Fairlie, Robert W. and Alicia M. Robb. 2006. *Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital*. Forthcoming Journal of Labor Economics.; and Fairlie, Robert W. and Alicia M. Robb. 2006. *Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses*. Russell Sage Foundation.

³ National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

BBC used Public Use Micro-sample (PUMS) data from the 1980 and 2000 U.S. Censuses and the 2006-2008 American Community Surveys (ACS) to study business ownership rates in the construction, professional services, goods and support services industries. BBC examined self-employment rates in each industry for the United States, Indiana and regions within the state. These results help to inform the broader examination of how different factors, including race/ethnicity and gender, may affect the likelihood of business ownership.

Construction industry. Compared to other industries, construction has a relatively high rate of business ownership. In 2006-2008, about 23 percent of Indiana construction workers were self-employed, nearly three times the rate for workers across all industries. Figure F-1 shows the percentage of workers in the construction industry by race/ethnicity and gender who were self-employed in 1980, 2000 and 2006-2008. It also shows corresponding sample sizes for each percentage displayed in the figure. (Because the sample of Indiana workers included relatively few Asian-Pacific Americans and Subcontinent Asian Americans, BBC combined and analyzed these groups as a single “Asian American” category.)

Figure F-1.
Percentage of workers in the construction industry who were self-employed, Indiana and the U.S., 1980, 2000 and 2006-2008

| Indiana | 1980 | 2000 | 2006-08 | Sample size | | |
|------------------------|-----------|-----------|-----------|-------------|---------|---------|
| | | | | 1980 | 2000 | 2006-08 |
| Race/ethnicity | | | | | | |
| African American | 10.3 % ** | 17.3 % | 16.6 % | 291 | 303 | 178 |
| Asian American | NA | NA | 11.9 | 3 | 24 | 25 |
| Hispanic American | 10.5 | 8.3 ** | 14.0 ** | 57 | 328 | 367 |
| Native American | NA | 19.1 | 31.4 | 10 | 73 | 56 |
| All minorities | 9.9 ** | 13.3 ** | 15.6 ** | 362 | 740 | 630 |
| Non-Hispanic white | 18.2 | 22.5 | 23.5 | 6,746 | 9,719 | 6,108 |
| Gender | | | | | | |
| Female | 10.0 % ** | 17.8 % | 16.2 % ** | 481 | 1,059 | 651 |
| Male | 18.3 | 22.2 | 23.2 | 6,627 | 9,400 | 6,087 |
| All individuals | 17.8 % | 21.7 % | 22.6 % | 7,108 | 10,459 | 6,738 |
| United States | | | | | | |
| Race/ethnicity | | | | | | |
| African American | 9.0 % ** | 15.2 % ** | 17.9 % ** | 24,357 | 26,752 | 15,372 |
| Asian American | 10.4 ** | 20.7 ** | 23.5 ** | 2,604 | 6,471 | 5,490 |
| Hispanic American | 10.6 ** | 12.2 ** | 14.4 ** | 19,590 | 66,531 | 58,547 |
| Native American | 10.6 ** | 19.3 ** | 21.3 ** | 2,571 | 7,640 | 4,463 |
| All minorities | 9.8 ** | 14.1 ** | 15.9 ** | 49,370 | 109,317 | 84,611 |
| Non-Hispanic white | 19.4 | 25.4 | 27.3 | 281,094 | 371,152 | 241,237 |
| Gender | | | | | | |
| Female | 9.8 % ** | 16.8 % ** | 18.3 % ** | 26,096 | 46,791 | 33,461 |
| Male | 18.7 | 23.3 | 24.1 | 304,368 | 433,678 | 292,387 |
| All individuals | 18.0 % | 22.6 % | 23.5 % | 330,464 | 480,469 | 325,848 |

Note: “Asian American” includes Asian-Pacific Americans and Subcontinent Asian Americans.

Business ownership rates where the sample included less than 25 observations are not reported and are denoted by “NA.”

** Denotes that the difference in business ownership rates between the minority group and non-Hispanic whites (or between females and males) is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Business ownership rates in 2000. In 2000, approximately 23 percent of non-Hispanic whites working in the Indiana construction industry were self-employed (in incorporated or unincorporated businesses). Rates of business ownership for African Americans, Hispanic Americans and Native Americans working in the construction industry were lower.

- About 17 percent of African Americans and 19 percent of Native Americans working in the Indiana construction industry were self-employed.
- Hispanic Americans had the lowest self-employment rate at about 8 percent (a statistically significant difference compared to non-Hispanic whites).

Approximately 18 percent of women in the Indiana construction industry were self-employed compared to 22 percent of men. There were too few Asian Americans working in the Indiana construction industry to analyze differences in business ownership.

Similar patterns of business ownership were also found for minorities and women in the United States construction industry. Self-employment rates for most groups increased between 1980 and 2000 — in some cases by a substantial amount — but the rates of business ownership for minorities and women continued to be lower than those for non-Hispanic whites and men, respectively.

Changes in business ownership rates in Indiana since 2000. The rate of business ownership among non-Hispanic whites in the Indiana construction industry did not change substantially between 2000 and 2006-2008. However, ACS data show increases in business ownership rates for some race/ethnic groups and decreases for others. With the exception of Native American workers, differences in ownership rates persisted between non-Hispanic whites and minority groups.

- African Americans continued to own businesses at a rate of about 17 percent.
- Business ownership rates for Asian Americans could not be examined in 2000, but in 2006-2008, about 12 percent of Asian Americans in the Indiana construction industry owned businesses.
- Although increasing substantially between 2000 and 2006-2008, the self-employment rate for Hispanic Americans in the Indiana construction industry remained well below that of non-Hispanic whites (a statistically significant difference).
- The self-employment rate for Native Americans increased to 31 percent — the largest single increase among race/ethnicity groups. The relatively small number of Native Americans in the construction worker sample makes any comparison difficult.

Between 2000 and 2006-2008, the business ownership rate among men in the construction industry increased slightly to 23 percent while the rate for women declined to 16 percent. The difference in self-employment rates between genders in 2006-2008 was statistically significant.

Professional services industry. The Indiana professional services industry has high rates of business ownership compared to other industries. In 2006-2008, about 19 percent of workers in this industry were self-employed. Figure F-2 shows the percentage of professional services workers who were self-employed in 1980, 2000 and 2006-2008 by race/ethnicity and gender.

Figure F-2.
Percentage of workers in the professional services industry who were self-employed, Indiana and the U.S., 1980, 2000 and 2006-2008

| Indiana | 1980 | 2000 | 2006-08 | Sample size | | |
|------------------------|-------------|-------------|----------------|--------------------|-------------|----------------|
| | | | | 1980 | 2000 | 2006-08 |
| Race/ethnicity | | | | | | |
| African American | 7.0 % | 10.0 % | 16.3 % | 43 | 134 | 83 |
| Asian American | NA | 6.1 | 5.2 | 7 | 79 | 78 |
| Hispanic American | NA | 9.2 | 7.0 | 13 | 57 | 45 |
| Native American | NA | NA | NA | 2 | 12 | 7 |
| All minorities | 7.7 ** | 9.2 ** | 10.7 ** | 65 | 291 | 214 |
| Non-Hispanic white | 16.9 | 17.9 | 19.6 | 1,103 | 2,597 | 2,112 |
| Gender | | | | | | |
| Female | 11.4 % ** | 13.8 % | 13.3 % ** | 482 | 1,106 | 825 |
| Male | 19.8 | 18.8 | 21.5 | 686 | 1,782 | 1,501 |
| All individuals | 16.4 % | 16.9 % | 18.7 % | 1,168 | 2,888 | 2,326 |
| United States | | | | | | |
| | 1980 | 2000 | 2006-08 | Sample size | | |
| | | | | 1980 | 2000 | 2006-08 |
| Race/ethnicity | | | | | | |
| African American | 5.8 % ** | 8.4 % ** | 10.8 % ** | 5,059 | 12,786 | 8,869 |
| Asian American | 8.7 ** | 7.6 ** | 9.5 ** | 2,722 | 17,751 | 17,161 |
| Hispanic American | 9.5 ** | 10.2 ** | 13.5 ** | 3,466 | 12,311 | 10,274 |
| Native American | 15.5 | 15.9 | 17.3 | 355 | 1,651 | 1,147 |
| All minorities | 7.9 ** | 9.0 ** | 11.2 ** | 11,720 | 45,519 | 37,851 |
| Non-Hispanic white | 17.2 | 17.2 | 19.0 | 89,465 | 188,422 | 140,077 |
| Gender | | | | | | |
| Female | 11.4 % ** | 12.3 % ** | 14.7 % ** | 37,437 | 88,554 | 64,352 |
| Male | 18.9 | 17.5 | 18.6 | 63,748 | 145,387 | 113,576 |
| All individuals | 16.1 % | 15.6 % | 17.2 % | 101,185 | 233,941 | 177,928 |

Note: "Asian American" includes Asian-Pacific Americans and Subcontinent Asian Americans.
 Business ownership rates where the sample included less than 25 observations are not reported and are denoted by "NA."
 ** Denotes that the difference in business ownership rates between the minority group and non-Hispanic whites (or between females and males) is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Business ownership rates in 2000. In 2000, about 18 percent of non-Hispanic whites working in the Indiana professional services industry owned businesses. Some demographic groups working in the industry had substantially lower rates of business ownership.

- Only about 6 percent of Asian Americans working in professional services in Indiana were self-employed.
- Roughly 9 percent of Hispanic Americans and 10 percent of African Americans owned businesses.

- About 14 percent of women owned businesses, compared to 19 percent of men.

Differences in business ownership between non-Hispanic whites and Native Americans working in the professional services industry could not be examined due to small sample sizes. At the national level, however, Native Americans owned businesses in professional services at a rate comparable to that of non-Hispanic whites (16% and 17%, respectively). All other minority groups, including African Americans, Hispanic Americans and Asian Americans, exhibited statistically significant disparities in business ownership in the U.S. professional services industry.

Changes in business ownership rates in Indiana since 2000. Figure F-2 includes business ownership rates from the 2006-2008 ACS for each race/ethnicity and gender group. In 2006-2008, self-employment rates for non-Hispanic whites and men in the Indiana professional services industry continued to exceed those for minorities and women, respectively.

- The business ownership rate for African Americans working in the Indiana professional services industry increased to 16 percent in 2006-2008, but still remained below the rate for non-Hispanic whites.
- Business ownership rates for Asian Americans and Hispanic Americans were no greater in 2006-2008 than in 2000.
- Women in the Indiana professional services industry owned businesses at roughly the same rate in 2006-2008 as in 2000, while the business ownership rate for men increased, resulting in a statistically significant difference between these two groups in 2006-2008.

Nationally, self-employment rates in the professional services industry increased for all race/ethnicity and gender groups between 2000 and 2006-2008. This trend was not evident for Asian Americans, Hispanic Americans or women.

Goods industry. Goods industry workers generally have lower rates of business ownership compared to those in construction and professional services. In 2006-2008, about 4 percent of Indiana goods industry workers were self-employed, less than the national rate of 6 percent. Figure F-3 shows business ownership rates by race/ethnicity/gender for 1980, 2000 and 2006-2008.

Business ownership rates in 2000. Non-Hispanic whites and men working in the Indiana goods industry each had a business ownership rate of about 4 percent. With the exception of Native Americans, all other demographic groups working in the Indiana goods industry had lower rates of business ownership in 2000.

- One percent of African Americans owned businesses (a statistically significant difference compared to non-Hispanic whites).
- Compared to men, about half as many women were self-employed (also statistically significant).
- Less than 1 percent of Asian Americans and Hispanic Americans were self-employed.

Measured against other race/ethnicity groups including non-Hispanic whites, Native Americans working in the Indiana goods industry had a higher rate of business ownership in 2000.

Although business ownership rates in the Indiana goods industry were lower than for the United States, disparities in self-employment rates in the Indiana goods industry were broadly consistent with disparities seen at the national level. In 2000, African Americans and Hispanic Americans had substantially lower rates of self-employment than non-Hispanic whites in both Indiana and the nation. Similarly, females had substantially lower rates of self-employment compared to males at both the state and national levels.

Figure F-3.
Percentage of workers in the goods industry who were self-employed, Indiana and the U.S., 1980, 2000 and 2006-2008

| Indiana | 1980 | 2000 | 2006-08 | Sample size | | |
|------------------------|----------|----------|----------|-------------|---------|---------|
| | | | | 1980 | 2000 | 2006-08 |
| Race/ethnicity | | | | | | |
| African American | 0.0 % | 1.3 % ** | 1.1 % | 864 | 602 | 312 |
| Asian American | 2.7 | 0.9 | 2.0 | 74 | 134 | 87 |
| Hispanic American | 1.2 | 0.7 | 1.8 ** | 166 | 502 | 408 |
| Native American | 3.7 | 9.7 | 0.7 | 27 | 81 | 38 |
| All minorities | 0.4 | 1.6 ** | 1.5 ** | 1,136 | 1,330 | 853 |
| Non-Hispanic white | 3.6 | 4.0 | 4.5 | 17,322 | 14,201 | 7,900 |
| Gender | | | | | | |
| Female | 1.4 % ** | 2.3 % ** | 2.8 % ** | 6,056 | 5,072 | 2,642 |
| Male | 4.4 | 4.4 | 4.6 | 12,402 | 10,459 | 6,111 |
| All individuals | 3.4 % | 3.8 % | 4.1 % | 18,458 | 15,531 | 8,753 |
| United States | | | | | | |
| | 1980 | 2000 | 2006-08 | Sample size | | |
| | | | | 1980 | 2000 | 2006-08 |
| Race/ethnicity | | | | | | |
| African American | 1.0 % ** | 1.6 % ** | 1.9 % ** | 49,887 | 43,305 | 21,258 |
| Asian American | 4.8 ** | 5.7 | 6.6 | 9,588 | 25,916 | 17,806 |
| Hispanic American | 2.4 ** | 3.0 ** | 3.3 ** | 39,861 | 66,859 | 40,210 |
| Native American | 3.3 ** | 3.9 ** | 6.0 | 2,624 | 5,342 | 2,777 |
| All minorities | 2.0 ** | 3.1 ** | 3.6 ** | 102,383 | 143,405 | 82,612 |
| Non-Hispanic white | 5.5 | 6.1 | 6.9 | 508,674 | 435,437 | 246,877 |
| Gender | | | | | | |
| Female | 2.3 % ** | 3.8 % ** | 4.4 % ** | 180,036 | 177,433 | 97,409 |
| Male | 6.0 | 6.0 | 6.5 | 431,021 | 401,409 | 232,080 |
| All individuals | 4.9 % | 5.3 % | 5.9 % | 611,057 | 578,842 | 329,489 |

Note: "Asian American" includes Asian-Pacific Americans and Subcontinent Asian Americans.
Business ownership rates where the sample included less than 25 observations are not reported and are denoted by "NA."
** Denotes that the difference in business ownership rates between the minority group and non-Hispanic whites (or between females and males) is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Changes in business ownership rates in Indiana since 2000. ACS data indicate that disparities in business ownership rates in the Indiana goods industry continued in 2006-2008.

- At 2 percent, the business ownership rate for Hispanic Americans remained considerably below the rate of nearly 5 percent for non-Hispanic whites (a statistically significant difference).
- The business ownership rate for women did not change substantially between 2000 and 2006-2008 and remained well below the rate for men (also statistically significant).
- Asian Americans had a higher rate of business ownership in 2006-2008 compared to 2000, but the rate remained below that for non-Hispanic whites (neither difference was statistically significant).
- The self-employment rate for Native Americans working in the goods industry appeared to be lower in 2006-2008 than in 2000, although relatively small sample sizes made comparisons difficult for this group.

In the United States as a whole, business ownership rates across race/ethnicity and gender were slightly higher in 2006-2008 compared to 2000. However, African American, Hispanic American and female goods industry workers still experienced statistically significant disparities in business ownership, similar to what was found for Indiana.

Support services industry. As with professional services, business ownership rates in the support services industry were higher than those for the goods industry but lower than the rates seen in construction. In 2000, approximately 14 percent of support services workers in Indiana owned businesses. Figure F-4 compares business ownership rates in the support services industry for different race/ethnicity and gender groups in 1980, 2000 and 2006-2008.

Business ownership rates in 2000. Roughly 15 percent of non-Hispanic whites working in the support services industry in Indiana were self-employed in 2000. Rates of business ownership were lower for African Americans, Hispanic Americans and Native Americans working in the Indiana support services industry.

- African Americans and Hispanic Americans owned businesses at less than half the rate observed for non-Hispanic whites (both statistically significant differences).
- About 12 percent of Native Americans were business owners.
- Women owned support services businesses at a slightly lower rate than men working in the industry (not a statistically significant difference).

Similar patterns of disparities in business ownership rates existed at the national level — although ownership rates were generally higher in the U.S. than in Indiana.

Figure F-4.
Percentage of workers in the support services industry who were self-employed, Indiana and the U.S., 1980, 2000 and 2006-2008

| Indiana | 1980 | 2000 | 2006-08 | Sample size | | |
|------------------------|----------|-----------|-----------|-------------|---------|---------|
| | | | | 1980 | 2000 | 2006-08 |
| Race/ethnicity | | | | | | |
| African American | 8.3 % ** | 5.9 % ** | 6.9 % ** | 312 | 724 | 562 |
| Asian American | NA | 17.1 | 8.7 | 7 | 40 | 48 |
| Hispanic American | 15.6 | 6.9 ** | 10.3 ** | 45 | 331 | 325 |
| Native American | NA | 11.9 | 13.5 | 19 | 77 | 50 |
| All minorities | 8.6 ** | 6.9 ** | 8.4 ** | 383 | 1,187 | 988 |
| Non-Hispanic white | 14.2 | 15.3 | 17.7 | 5,986 | 8,732 | 5,988 |
| Gender | | | | | | |
| Female | 6.8 % ** | 12.4 % | 13.8 % ** | 1,746 | 2,997 | 2,169 |
| Male | 16.6 | 14.9 | 16.9 | 4,623 | 6,922 | 4,807 |
| All individuals | 13.9 % | 14.1 % | 16.0 % | 6,369 | 9,919 | 6,976 |
| United States | | | | | | |
| Race/ethnicity | | | | | | |
| African American | 9.5 % ** | 10.0 % ** | 11.1 % ** | 25,031 | 48,268 | 30,241 |
| Asian American | 20.7 ** | 17.1 ** | 17.8 ** | 3,264 | 10,457 | 7,887 |
| Hispanic American | 11.7 ** | 13.1 ** | 15.2 ** | 17,157 | 63,284 | 48,137 |
| Native American | 14.6 ** | 16.9 ** | 17.7 ** | 1,346 | 5,080 | 2,936 |
| All minorities | 11.3 ** | 12.4 ** | 14.1 ** | 46,994 | 128,958 | 89,854 |
| Non-Hispanic white | 16.8 | 20.3 | 21.8 | 223,208 | 306,664 | 194,084 |
| Gender | | | | | | |
| Female | 9.7 % ** | 15.9 % ** | 17.1 % ** | 77,214 | 131,139 | 88,687 |
| Male | 18.3 | 18.6 | 19.6 | 192,988 | 304,483 | 195,251 |
| All individuals | 15.9 % | 17.8 % | 18.8 % | 270,202 | 435,622 | 283,938 |

Note: "Asian American" includes Asian-Pacific Americans and Subcontinent Asian Americans.
 Business ownership rates where the sample included less than 25 observations are not reported and are denoted by "NA."
 ** Denotes that the difference in business ownership rates between the minority group and non-Hispanic whites (or between females and males) is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Changes in business ownership rates in Indiana since 2000. The overall business ownership rate for workers in the support services industry in Indiana increased between 2000 and 2006-2008. However, business ownership rates for some minorities remained below the rate for non-Hispanic whites.

- African American and Hispanic American workers continued to have lower self-employment rates than non-Hispanic whites in 2006-2008 (both statistically significant differences).
- Asian Americans and Native Americans appeared to have lower rates of business ownership in 2006-2008 compared to non-Hispanic whites, although these differences were not statistically significant.

Self-employment rates in the Indiana support services industry increased for both men and women between 2000 and 2006-2008. However, the self-employment rate for women remained below that of men (a statistically significant difference).

Business ownership rates by region and MSA. BBC also separately examined business ownership rates for study industries in the Northern, Central and Southern regions of Indiana and in individual Metropolitan Statistical Areas (MSAs). (Appendix I identifies the individual counties comprising each region and MSA.)

Figure F-5 on the following page shows the percentage of workers who were self-employed in the Northern, Central and Southern regions of Indiana by industry and race/ethnicity/gender in 2000. Due to relatively small sample sizes at the level of geographic resolution, rates are not shown for some combinations of demographic groups and industries. Figure F-5 identifies instances in which sample sizes are sufficiently large (and differences big enough) for any of the disparities in business ownership to be statistically significant. Because sample sizes at the regional level are often small, some relatively large differences in business ownership rates are not statistically significant.

Business ownership rates in the construction industry. Between 22 percent and 24 percent of non-Hispanic whites owned businesses in the Northern, Central and Southern regions of Indiana. In each region, business ownership rates for minorities and women were lower than corresponding rates for non-Hispanic whites and males, respectively. Disparities were greatest for Hispanic Americans in the Northern and Central regions.

Figure F-5.
Percentage of workers who were self-employed in construction, professional services, goods, and support services industries in Northern, Central and Southern Indiana, 2000

| | Construction | | | Professional Services | | | Goods | | | Support Services | | |
|---------------------------------|--------------|-----------|----------|-----------------------|---------|----------|----------|----------|----------|------------------|----------|----------|
| | Northern | Central | Southern | Northern | Central | Southern | Northern | Central | Southern | Northern | Central | Southern |
| Business ownership rates | | | | | | | | | | | | |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 16.1 % | 18.3 % | NA % | 7.0 % | 10.8 % | NA % | 1.8 % | 1.1 % | 1.0 % | 6.4 % ** | 5.4 % ** | 7.2 % |
| Asian American | NA | NA | NA | 4.2 | 7.0 | NA | 2.6 | 0.0 | NA | NA | NA | NA |
| Hispanic American | 9.1 ** | 7.2 ** | 11.5 | 11.7 | NA | NA | 0.2 | 2.2 | 0.0 | 9.4 | 4.3 | 2.8 |
| Native American | 10.2 | 21.1 | NA | NA | NA | NA | 2.5 | 22.6 | NA | 21.1 | 4.4 | NA |
| All minorities | 12.2 % ** | 13.6 % ** | 16.6 % | 7.3 % ** | 9.7 % | NA % | 1.0 % ** | 2.2 % | 1.4 % | 8.3 % ** | 5.7 % ** | 7.5 % |
| Non-Hispanic white | 21.8 | 22.2 | 24.0 | 19.1 | 17.9 | 15.7 | 4.3 | 4.2 | 3.3 | 16.8 | 14.2 | 15.5 |
| Gender | | | | | | | | | | | | |
| Female | 13.0 % ** | 18.9 % | 22.8 % | 12.7 % | 15.0 % | 12.6 % | 2.3 % ** | 2.6 % ** | 1.9 % | 14.2 % | 11.2 % | 11.5 % |
| Male | 21.7 | 21.6 | 23.9 | 20.5 | 18.2 | 17.5 | 4.6 | 4.7 | 3.9 | 15.7 | 13.6 | 16.5 |
| All individuals | 20.8 % | 21.3 % | 23.8 % | 17.4 % | 17.0 % | 15.7 % | 3.9 % | 4.0 % | 3.2 % | 15.3 % | 12.9 % | 15.1 % |
| Sample sizes | | | | | | | | | | | | |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 116 | 167 | 20 | 52 | 75 | 7 | 234 | 311 | 57 | 300 | 378 | 46 |
| Asian American | 12 | 7 | 5 | 28 | 40 | 11 | 55 | 56 | 23 | 21 | 13 | 6 |
| Hispanic American | 151 | 152 | 25 | 37 | 19 | 1 | 330 | 122 | 50 | 198 | 99 | 34 |
| Native American | 27 | 28 | 18 | 5 | 4 | 3 | 32 | 29 | 20 | 28 | 34 | 15 |
| All minorities | 312 | 356 | 72 | 125 | 142 | 24 | 659 | 520 | 151 | 553 | 530 | 104 |
| Non-Hispanic white | 3,217 | 3,924 | 2,578 | 818 | 1,297 | 482 | 4,909 | 5,178 | 4,114 | 2,855 | 3,604 | 2,273 |
| Gender | | | | | | | | | | | | |
| Female | 354 | 446 | 259 | 374 | 532 | 200 | 1,825 | 1,845 | 1,402 | 1,103 | 1,220 | 674 |
| Male | 3,175 | 3,834 | 2,391 | 569 | 907 | 306 | 3,743 | 3,853 | 2,863 | 2,305 | 2,914 | 1,703 |
| All individuals | 3,529 | 4,280 | 2,650 | 943 | 1,439 | 506 | 5,568 | 5,698 | 4,265 | 3,408 | 4,134 | 2,377 |

Note: "Asian American" includes Asian Pacific Americans and Subcontinent Asian Americans.
 Business ownership rates where the sample included less than 25 observations are not reported and are denoted by "NA."
 ** Denotes the difference in business ownership rates between the minority group and non-Hispanic whites (or between females and males) is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Business ownership rates in the professional services industry. Compared to other study industries, there were fewer workers in the U.S. Census Bureau worker sample for the professional services industry, which limits analyses by minority group. Self-employment rates for minorities in the Northern and Central regions were lower than corresponding rates for non-Hispanic whites working in professional services. Women owned professional services businesses at a lower rate than men in each Indiana region, although the differences between rates were not statistically significant.

Business ownership rates in the goods industry. In 2000, the pattern of business ownership in the goods industry was broadly similar at the regional level to that seen in the state as a whole. Most minority groups in each region had lower business ownership rates compared to non-Hispanic whites. For example, the self-employment rate for non-Hispanic whites in the Northern region was about four times that of all minorities (a statistically significant difference). Fewer women than men owned goods industry businesses in the Northern, Central and Southern regions.

Business ownership rates in the support services industry. In 2000, about 15 percent of non-Hispanic whites working in the support services industry in Indiana owned businesses. For some minority groups, business ownership rates were substantially lower at the state level and in particular Indiana regions. In all regions, business ownership rates in the support services industry were lower for minorities as a whole than for non-Hispanic whites. Differences were statistically significant in the Northern and Central region. In each region, the business ownership rate for women in the support services industry was lower than the corresponding rate for men, although differences were not statistically significant.

Changes in business ownership rates since 2000. The study team also examined differences in business ownership for each study industry using 2006-2008 ACS data. Figure F-6 shows the results of this analysis at the region level in Indiana.

Self-employment rates generally increased in all procurement areas and all Indiana regions between 2000 and 2006-2008. Only in the construction and goods industries in the Southern region did overall business ownership rates not increase between these years. For some demographic groups in some regions, however, business ownership rates did not increase during this time period.

Compared to 2000, female construction industry workers in Central and Southern Indiana had substantially lower rates of business ownership in 2006-2008. However, the self-employment rate in Northern Indiana increased by about 10 percentage points between the same years. The business ownership rate for women in some cases increased but by a margin less than the change observed for men.

Many of the same statistically significant disparities observed at the region level between self-employment rates for all minorities and non-Hispanic whites in 2000 were also present in the 2006-2008 data. In each procurement area in the later years, there was at least one region with a statistically significant disparity for these groups.

Figure F-6.
Percentage of workers who were self-employed in construction, professional services, goods, and support services industries in Northern, Central and Southern Indiana, 2006-2008

| | Construction | | | Professional Services | | | Goods | | | Other Services | | |
|---------------------------------|--------------|-----------|-----------|-----------------------|-----------|----------|----------|----------|----------|----------------|----------|-----------|
| | Northern | Central | Southern | Northern | Central | Southern | Northern | Central | Southern | Northern | Central | Southern |
| Business ownership rates | | | | | | | | | | | | |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 17.8 % | 15.5 % | NA % | 26.5 % | 13.8 % | NA % | 2.0 % | 0.8 % | 0.0 % | 11.0 % ** | 4.8 % ** | 3.8 % |
| Asian American | NA | NA | NA | NA | 3.0 | NA | 4.0 | 1.4 | NA | NA | 8.6 | NA |
| Hispanic American | 13.6 ** | 14.1 ** | 15.7 | NA | NA | NA | 2.2 | 1.4 | 0.0 | 13.7 | 7.9 ** | NA |
| Native American | 36.1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| All minorities | 15.5 % ** | 15.4 % ** | 18.5 % | 17.7 % | 8.5 % ** | NA % | 2.1 % ** | 1.1 % | 0.0 % | 11.8 % ** | 6.3 % ** | 4.4 % |
| Non-Hispanic white | 25.3 | 22.4 | 23.0 | 21.6 | 18.1 | 21.6 | 4.6 | 5.0 | 3.5 | 19.3 | 16.8 | 17.3 |
| Gender | | | | | | | | | | | | |
| Female | 23.0 % | 11.7 % ** | 14.3 % ** | 13.2 % ** | 11.6 % ** | 18.8 % | 2.8 % ** | 3.1 % ** | 2.3 % ** | 14.2 % ** | 14.2 % | 12.2 % ** |
| Male | 24.1 | 22.3 | 23.7 | 25.5 | 19.9 | 21.5 | 4.8 | 4.9 | 3.8 | 19.1 | 14.6 | 18.4 |
| All individuals | 24.0 % | 21.4 % | 22.9 % | 21.1 % | 17.0 % | 20.6 % | 4.2 % | 4.4 % | 3.4 % | 17.7 % | 14.5 % | 16.6 % |
| Sample sizes | | | | | | | | | | | | |
| Race/ethnicity | | | | | | | | | | | | |
| African American | 61 | 103 | 14 | 28 | 48 | 7 | 107 | 175 | 30 | 202 | 328 | 32 |
| Asian American | 12 | 9 | 4 | 13 | 53 | 12 | 28 | 48 | 11 | 15 | 31 | 2 |
| Hispanic American | 144 | 194 | 29 | 20 | 23 | 2 | 221 | 158 | 29 | 139 | 168 | 18 |
| Native American | 27 | 19 | 10 | 1 | 5 | 1 | 24 | 10 | 4 | 20 | 17 | 13 |
| All minorities | 245 | 327 | 58 | 62 | 130 | 22 | 384 | 393 | 76 | 377 | 545 | 66 |
| Non-Hispanic white | 2,040 | 2,666 | 1,402 | 510 | 1,197 | 405 | 2,894 | 2,998 | 2,008 | 1,998 | 2,640 | 1,350 |
| Gender | | | | | | | | | | | | |
| Female | 235 | 288 | 128 | 204 | 472 | 149 | 992 | 1,014 | 636 | 740 | 1,009 | 420 |
| Male | 2,050 | 2,705 | 1,332 | 368 | 855 | 278 | 2,286 | 2,377 | 1,448 | 1,635 | 2,176 | 996 |
| All individuals | 2,285 | 2,993 | 1,460 | 572 | 1,327 | 427 | 3,278 | 3,391 | 2,084 | 2,375 | 3,185 | 1,416 |

Note: "Asian American" includes Asian Pacific Americans and Subcontinent Asian Americans.
 Business ownership rates where the sample included less than 25 observations are not reported and are denoted by "NA."
 ** Denotes the difference in business ownership rates between the minority group and non-Hispanic whites (or between females and males) is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2006-2008 ACS Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Self-employment rates by MSA. The study team also examined business ownership rates in 2000 among race and gender groups in Indiana MSAs. Because sample sizes were considerably smaller at this level of geographic resolution, results for minorities and non-minorities are presented only for three MSAs: Gary-Hammond-East Chicago, Fort Wayne and Indianapolis.

Business ownership rates among minorities and non-Hispanic whites working in construction and professional services are presented in Figure F-7. Self-employment rates at the MSA level are shown for workers in the goods and support services industries in Figure F-8.

Figure F-7.
Percentage of workers who were self-employed in construction and professional services by MSA, 2000

| Construction | Gary-Hammond-East Chicago | Fort Wayne | Indianapolis | Sample size | | |
|-----------------------|---------------------------|------------|--------------|---------------------------|------------|--------------|
| | | | | Gary-Hammond-East Chicago | Fort Wayne | Indianapolis |
| Race/ethnicity | | | | | | |
| Minority | 10.3 % | 18.2 % | 14.7 % | 161 | 56 | 281 |
| Non-Hispanic white | 16.1 | 24.9 | 22.3 | 799 | 752 | 2,091 |
| Gender | | | | | | |
| Female | 8.6 % | 13.4 % | 21.1 % | 107 | 96 | 272 |
| Male | 16.0 | 25.8 | 21.3 | 853 | 712 | 2,100 |

| Professional Services | Gary-Hammond-East Chicago | Fort Wayne | Indianapolis | Sample size | | |
|-----------------------|---------------------------|------------|--------------|---------------------------|------------|--------------|
| | | | | Gary-Hammond-East Chicago | Fort Wayne | Indianapolis |
| Race/ethnicity | | | | | | |
| Minority | 6.8 % | NA % | 10.0 % | 66 | 22 | 121 |
| Non-Hispanic white | 16.2 | 22.4 | 18.2 | 246 | 263 | 946 |
| Gender | | | | | | |
| Female | 12.5 % | 18.7 % | 15.3 % | 126 | 96 | 396 |
| Male | 15.5 | 22.7 | 18.2 | 186 | 189 | 671 |

Note: Business ownership rates where the sample included less than 25 observations are not reported and are denoted by "NA."
 ** Denotes that the difference in business ownership rates between minority and non-Hispanic whites (or between females and males) is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

In 2000, rates of business ownership among minorities working in the construction industry were lower compared to non-Hispanic whites in the Gary, Fort Wayne and Indianapolis MSAs. Women had lower rates of self-employment than men working in the construction industry, except in the Indianapolis MSA where there was little difference in rates.

Minorities were less likely than non-Hispanic whites to own professional services businesses in the Gary and Indianapolis MSAs. (Differences in business ownership rates between minorities and non-minorities working in Fort Wayne could not be examined due to small sample sizes in this MSA.) Women had somewhat lower rates of business ownership in the professional services industry compared to men.

As shown in Figure F-8, business ownership rates in the goods industry were also lower for minority workers in the Gary, Fort Wayne and Indianapolis MSAs. Fewer women than men owned goods businesses in the Fort Wayne and Indianapolis MSAs. Business ownership rates for men and women were similar in the goods industry in the Gary MSA.

In 2000, there were disparities in business ownership rates for minorities working in the support services industry in each of the three MSAs. The only MSA that appeared to show a disparity for women in the support services industry was Fort Wayne.

Figure F-8.
Percentage of workers who were self-employed in goods and support services by MSA, 2000

| Goods | Gary-Hammond- East Chicago | Fort Wayne | Indianapolis | Sample size | | |
|-----------------------|-------------------------------|------------|--------------|-------------------------------|------------|--------------|
| | | | | Gary-Hammond- East Chicago | Fort Wayne | Indianapolis |
| Race/ethnicity | | | | | | |
| Minority | 0.9 % | 3.5 % | 2.3 % | 221 | 122 | 349 |
| Non-Hispanic white | 4.5 | 4.2 | 5.0 | 683 | 1,399 | 2,594 |
| Gender | | | | | | |
| Female | 4.0 % | 1.6 % | 3.0 % | 231 | 511 | 886 |
| Male | 3.5 | 5.4 | 5.3 | 673 | 1,010 | 2,057 |

| Support Services | Gary-Hammond- East Chicago | Fort Wayne | Indianapolis | Sample size | | |
|-----------------------|-------------------------------|------------|--------------|-------------------------------|------------|--------------|
| | | | | Gary-Hammond- East Chicago | Fort Wayne | Indianapolis |
| Race/ethnicity | | | | | | |
| Minority | 7.0 % ** | 8.0 % | 5.8 % ** | 273 | 102 | 456 |
| Non-Hispanic white | 16.2 | 15.4 | 12.2 | 630 | 706 | 2,016 |
| Gender | | | | | | |
| Female | 13.7 % | 10.4 % | 10.4 % | 281 | 283 | 791 |
| Male | 13.4 | 16.3 | 11.1 | 622 | 525 | 1,681 |

Note: "Asian American" includes Asian Pacific Americans and Subcontinent Asian Americans.

Rates were not reported when the sample included less than 25 observations.

** Denotes significance at the 95% confidence level.

Source: BBC Research & Consulting from 1980 and 2000 U.S. Census 5% sample and 2006-2008 ACS Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Potential causes of differences in business ownership rates. Researchers have examined whether there are disparities in business ownership rates after consideration of other personal characteristics such as education and age. A number of studies have found that disparities in business ownership still exist when accounting for such neutral factors:

- Some studies have found that access to financial capital is a strong determinant of business ownership. Researchers have consistently found a positive relationship between start-up capital and business formation, expansion and survival.⁴ One study found that housing appreciation measured at the MSA level is a positive determinant of becoming self-employed.⁵ Unexplained differences still exist, however, when controlling for these factors.⁶
- Education has positive effects on the probability of business ownership in most industries. However, findings from multiple studies indicate that minorities are still less likely to own a business than their non-minority counterparts with the same levels of education.⁷
- Generational factors affect one's likelihood of self-employment. One study found that experience working for a self-employed family member increases the likelihood of business ownership for minority groups.⁸
- Studies have found that time since immigration and assimilation into American society are important determinants of self-employment, but unexplained differences in minority-business ownership still exist when accounting for these factors.⁹

⁴ See Lofstrom, Magnus and Chunbei Wang. 2006. *Hispanic Self-Employment: A Dynamic Analysis of Business Ownership*. Working paper, Forschungsinstitut zur Zukunft der Arbeit (Institute for the Study of Labor).; and Fairlie, Robert W. and Alicia M. Robb. 2006. *Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses*. Russell Sage Foundation.

⁵ Fairlie, Robert W. and Harry A. Krashinsky. 2006. *Liquidity Constraints, Household Wealth and Entrepreneurship Revisited*.

⁶ Lofstrom, Magnus and Chunbei Wang. 2006. *Hispanic Self-Employment: A Dynamic Analysis of Business Ownership*. Working paper, Forschungsinstitut zur Zukunft der Arbeit (Institute for the Study of Labor).

⁷ See Fairlie, Robert W. and Bruce D. Meyer. 1996. *Ethnic and Racial Self-Employment Differences and Possible Explanations*. The Journal of Human Resources, Volume 31, Issue 4, 757-793; and Butler, John Sibley and Cedric Herring. 1991. *Ethnicity and Entrepreneurship in America: Toward an Explanation of Racial and Ethnic Group Variations in Self-Employment*. Sociological Perspectives. 79-94.

⁸ See Fairlie, Robert W. and Alicia M. Robb. 2006. *Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses*. Russell Sage Foundation; and Fairlie, Robert W. and Alicia M. Robb. 2006. *Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital*. Forthcoming Journal of Labor Economics.

⁹ See Fairlie, Robert W. and Bruce D. Meyer. 1996. *Ethnic and Racial Self-Employment Differences and Possible Explanations*. The Journal of Human Resources, Volume 31, Issue 4, 757-793; and Butler, John Sibley and Cedric Herring. 1991. *Ethnicity and Entrepreneurship in America: Toward an Explanation of Racial and Ethnic Group Variations in Self-Employment*. Sociological Perspectives. 79-94.

A number of researchers have determined that race, ethnicity and gender can affect opportunities for business ownership, even when taking account of other personal characteristics such as education, age and familial ties. To further examine this possibility, BBC developed multivariate statistical models to explore patterns of business ownership in Indiana. These models estimate the effect of race/ethnicity and gender on the probability of self-employment.

Business Ownership Regression Analysis

An extensive body of literature examines whether race- and gender-neutral factors such as access to financial capital, education, age, and family characteristics (e.g., marital status and number of children in household) help explain differences in business ownership. This subject has also been examined in other disparity studies. Prior studies in Minnesota¹⁰ and Illinois¹¹ have conducted econometric analyses investigating whether disparities in business ownership among race/ethnicity and gender groups in the combined construction and engineering industry remain after controlling for other personal characteristics. These studies have incorporated probit econometric models using PUMS data from the 2000 Census and have been among materials submitted to courts in subsequent litigation concerning state implementation of the Federal DBE Program.

BBC used similar probit regression models to predict business ownership from multiple independent or “explanatory” variables.¹² Independent variables include:

- Personal characteristics potentially linked to the likelihood of business ownership (age, age-squared, marital status, number of children and elderly people in the household, English-speaking ability and disability status);
- Indicators of educational attainment;
- Measures and indicators related to personal financial resources and constraints (home ownership, home value, monthly mortgage payment, dividend and interest income and additional household income from a spouse or unmarried partner); and
- Variables representing the race/ethnicity and gender of the individual.

¹⁰ National Economic Research Associates, Inc. 2000. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Minnesota Department of Transportation.

¹¹ National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

¹² Probit models estimate the effects of multiple independent or “predictor” variables in terms of a single, dichotomous dependent or “outcome” variable — in this case, business ownership. The dependent variable is binary, coded as “1” for individuals in a particular industry who are self-employed and “0” for individuals who are not self-employed. The model enables estimation of the probability that a worker in a given estimation sample is self-employed. The study team excluded observations where the Census Bureau had imputed values for the dependent variable, business ownership.

BBC developed four separate models using 2000 PUMS data:

- A probit regression model for the Indiana construction industry, which included 9,059 observations;
- A probit regression model for the Indiana professional services industry, which included 2,581 observations;
- A probit regression model for the Indiana goods industry, which included 13,356 observations; and
- A probit regression model for the Indiana support services industry, which included 8,481 observations.

Results specific to the Indiana construction industry. Figure F-9 presents the coefficients and t-statistics from the 2000 Indiana construction industry probit model. The Indiana construction industry model includes 9,059 observations.

Figure F-9.
Indiana construction business ownership probit model, 2000

| Variable | Coefficient | t-statistic |
|---------------------------------------|-------------|-------------|
| Constant | -2.4641 | -8.03 ** |
| Age | 0.0404 | 4.62 ** |
| Age-squared | -0.0002 | -2.14 ** |
| Married | 0.0006 | 0.01 |
| Disabled | 0.0557 | 0.94 |
| Number of children in household | 0.0771 | 4.89 ** |
| Number of people over 65 in household | 0.0427 | 0.73 |
| Owens home | -0.0826 | -1.55 |
| Home value (\$000s) | 0.0016 | 4.88 ** |
| Monthly mortgage payment (\$000s) | -0.0562 | -1.17 |
| Interest and dividend income (\$000s) | 0.0053 | 2.42 ** |
| Income of spouse or partner (\$000s) | 0.0003 | 0.39 |
| Speaks English well | 0.3240 | 1.32 |
| Less than high school education | 0.1611 | 3.44 ** |
| Some college | -0.0546 | -1.28 |
| Four-year degree | 0.1370 | 2.02 ** |
| Advanced degree | 0.0016 | 0.01 |
| African American | -0.2151 | -1.89 * |
| Asian American | -0.2539 | -0.71 |
| Hispanic American | -0.3497 | -2.61 ** |
| Native American | -0.0750 | -0.36 |
| Female | -0.2261 | -3.63 ** |

Note: *, ** Denote significance at the 90% and 95% confidence levels, respectively.

Source: BBC Research & Consulting based on analysis of 2000 Census 5% Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

The model indicated that several neutral factors were statistically significant in predicting the probability of business ownership in the Indiana construction industry.

- Older individuals working in the Indiana construction industry were more likely to be business owners, but this effect declined for the oldest individuals;
- Having more children living in the household increased the likelihood of being self-employed;
- Higher home values (for homeowners) and greater interest and dividend income were associated with a higher likelihood of business ownership; and
- Individuals with less than a high school education or four-year degree were more likely to be business owners than those with a high school education.

After controlling for neutral factors available in the PUMS data, statistically significant disparities in rates of business ownership remained for African Americans, Hispanic Americans and women working in the Indiana construction industry.

The probit modeling approach allows for simulation of business ownership rates for minorities and females if they had the same probability of self-employment as similarly situated non-Hispanic whites and men, respectively. To conduct this next step in the analysis, BBC performed a probit regression predicting business ownership using only the non-Hispanic white construction workers in the dataset. BBC then applied the coefficients from this version of the model to the mean characteristics of minority and female construction workers in Indiana to estimate the probability of business ownership in the absence of race and ethnicity-related effects. BBC performed these calculations for only those groups with statistically significant disparities in business ownership (as shown in Figure F-9). The study team developed a similar model for non-Hispanic white men to predict business ownership rates for non-Hispanic white women in the absence of gender-related effects. This simulation approach has been incorporated in disparity studies reviewed by the courts.

Figure F-10 shows the simulated (“benchmark”) business ownership rates, comparing them to the actual, observed mean probability of business ownership for African Americans, Hispanic Americans and white females.

Figure F-10.
Comparison of actual construction business ownership rates to simulated rates for groups with statistically significant disparities, 2000

| Group | Self-employment rate | | Disparity index (100 = parity) |
|-------------------|----------------------|-----------|-----------------------------------|
| | Actual | Benchmark | |
| African American | 16.4 % | 21.7 % | 76 |
| Hispanic American | 9.1 | 13.7 | 66 |
| White female | 19.2 | 24.5 | 79 |

Note: Because the benchmark figure can only be estimated for records with an observed dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure F-1.

Source: BBC Research & Consulting based on analysis of 2000 Census 5% Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

In 2000, the actual rate of self-employment for African Americans in the Indiana construction industry was about 16 percent, below the predicted rate of 22 percent. These results suggest that there were about three-quarters as many African American-owned construction businesses in Indiana as one would anticipate if African American workers owned businesses at the same rate as similarly situated non-Hispanic whites (disparity index of 76). The disparity between actual and “benchmark” self-employment rates was even larger for Hispanic Americans (disparity index of 66).

The rate at which white women owned businesses was 79 percent of what might be expected based on business ownership rates for non-Hispanic white men with similar characteristics.

Results for the Indiana professional services industry. BBC’s probit regression model of business ownership for the 2000 Indiana professional services industry included 2,581 workers. Figure F-11 presents results from this model.

Figure F-11.
Indiana professional services business ownership probit model, 2000

| Variable | Coefficient | t-statistic |
|---------------------------------------|-------------|-------------|
| Constant | -3.2483 | -8.26 ** |
| Age | 0.0767 | 4.07 ** |
| Age-squared | -0.0006 | -2.78 ** |
| Married | -0.1422 | -1.54 |
| Disabled | -0.1974 | -1.35 |
| Number of children in household | 0.0584 | 1.64 |
| Number of people over 65 in household | 0.1101 | 1.14 |
| Owns home | -0.0082 | -0.07 |
| Home value (\$000s) | 0.0009 | 2.19 ** |
| Monthly mortgage payment (\$000s) | -0.0363 | -0.52 |
| Interest and dividend income (\$000s) | 0.0073 | 3.20 ** |
| Income of spouse or partner (\$000s) | 0.0031 | 3.31 ** |
| Less than high school education | -0.0383 | -0.16 |
| Some college | 0.1314 | 1.23 |
| Four-year degree | 0.1714 | 1.60 |
| Advanced degree | 0.4459 | 3.40 ** |
| African American | -0.1825 | -0.99 |
| Asian American | -0.6438 | -2.25 ** |
| Hispanic American | -0.0444 | -0.16 |
| Native American | 0.4736 | 0.99 |
| Female | -0.1810 | -2.34 ** |

Note: *, ** Denote significance at the 90% and 95% confidence levels, respectively.

Source: BBC Research & Consulting based on analysis of 2000 Census 5% Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

A number of neutral factors were associated with business ownership in the Indiana professional services industry:

- Older individuals were more likely to be business owners, but as with the construction industry, this effect declined for the oldest individuals;
- Higher home values were associated with a greater likelihood of self-employment;
- As in the construction industry model, greater income from interest and dividends increased the probability of business ownership;
- Income from a spouse or partner was also positively correlated with the likelihood of self-employment in professional services; and
- Having an advanced degree significantly increased the probability of owning a business.

After accounting for neutral factors, the model indicated that there were statistically significant disparities in business ownership rates for Asian Americans and women working in the professional services industry.

As with the construction industry, BBC simulated business ownership rates for different race/ethnicity and gender groups working in this industry. Figure F-12 shows simulated self-employment rates and compares them to the actual, observed mean probability of business ownership for groups showing statistically significantly lower business ownership rates than non-Hispanic whites.

Figure F-12.
Comparison of actual professional services business ownership rates to simulated rates for groups with significant disparities, 2000

| Group | Self-employment rate | | Disparity index (100 = parity) |
|----------------|----------------------|-----------|-----------------------------------|
| | Actual | Benchmark | |
| Asian American | 5.9 % | 16.8 % | 35 |
| White female | 14.9 | 20.8 | 72 |

Note: Because the benchmark figure can only be estimated for records with an observed dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure F-2.

Source: BBC Research & Consulting based on analysis of 2000 Census 5% Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Simulation results for the Indiana professional services industry indicate that Asian Americans experienced large disparities in business ownership rates in 2000. About 35 percent as many Asian Americans owned businesses as one might expect based on the business ownership rate for similarly situated non-Hispanic whites. White women owned professional services firms at roughly three-quarters the rate observed for white men with similar neutral characteristics.

Results specific to the Indiana goods industry. Figure F-13 presents coefficients and t-statistics from the 2000 Indiana goods industry probit model. This model included 13,356 observations.

The probability of business ownership in the Indiana goods industry is influenced by a number of neutral factors:

- In contrast to the construction and professional services industries, age was not positively correlated with the likelihood of business ownership for younger age groups — although results suggest that the oldest individuals were more likely to own a business.
- Married people were more likely to own a business in this industry;
- Home ownership reduced the likelihood of business ownership, but higher home values among owners increased the likelihood of self-employment;
- Income from interest and dividends was positively correlated with business ownership; and
- Workers who have some college education were more likely to own a business than those with just a high school education.

Figure F-13.
Indiana goods industry business ownership probit model, 2000

| Variable | Coefficient | t-statistic |
|---------------------------------------|-------------|-------------|
| Constant | -2.1988 | -8.34 ** |
| Age | -0.0145 | -1.18 |
| Age-squared | 0.0004 | 2.90 ** |
| Married | 0.1250 | 1.93 * |
| Disabled | -0.1192 | -1.27 |
| Number of children in household | 0.0327 | 1.32 |
| Number of people over 65 in household | -0.0404 | -0.59 |
| Owens home | -0.1446 | -1.72 * |
| Home value (\$000s) | 0.0020 | 7.11 ** |
| Monthly mortgage payment (\$000s) | 0.0398 | 0.72 |
| Interest and dividend income (\$000s) | 0.0077 | 4.17 ** |
| Income of spouse or partner (\$000s) | 0.0011 | 1.25 |
| Less than high school education | 0.0018 | 0.02 |
| Some college | 0.1134 | 1.94 * |
| Four-year degree | 0.1047 | 1.36 |
| Advanced degree | 0.0235 | 0.18 |
| African American | -0.2527 | -1.43 |
| Asian American | -0.5699 | -1.25 |
| Hispanic American | -0.3987 | -1.62 |
| Native American | 0.4132 | 1.58 |
| Other minority group | 1.8943 | 2.74 ** |
| Female | -0.2670 | -4.46 ** |

Note: *, ** Denote significance at the 90% and 95% confidence levels, respectively.

Source: BBC Research & Consulting based on analysis of 2000 Census 5% Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

After controlling for neutral factors, the model indicates statistically significant disparities in rates of business ownership for women. Women were less likely to own their own business after controlling for other factors. African Americans, Asian Americans and Hispanic Americans working in the goods industry were less likely than non-Hispanic whites to own businesses, after controlling for other factors, but these effects were not statistically significant. “Other race” minorities were more likely to own a business.

Figure F-14 compares simulated goods industry self-employment rates for white women to the actual probability of business ownership. (The study team did not include “other race” minorities in this simulation exercise as there were only four observations in the estimation sample.)

Figure F-14.
Comparison of actual goods industry business ownership rates to simulated rates for groups with significant disparities, 2000

| Group | Self-employment rate | | Disparity index (100 = parity) |
|--------------|----------------------|-----------|-----------------------------------|
| | Actual | Benchmark | |
| White female | 2.4 % | 4.0 % | 61 |

Note: As the benchmark figure can only be estimated for records with an observed dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure F-3.

Source: BBC Research & Consulting based on analysis of 2000 Census 5% Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

In 2000 in Indiana, women owned goods businesses at less than two-thirds the rate that might be expected based on the business ownership rate for similarly situated white men.

Results specific to the Indiana support services industry. Figure F-15 presents results from the 2000 model for the support services industry in Indiana. This model included 8,481 observations.

Figure F-15.
Indiana support services business ownership probit model, 2000

| Variable | Coefficient | t-statistic |
|---------------------------------------|-------------|-------------|
| Constant | -2.9467 | -9.27 ** |
| Age | 0.0310 | 3.28 ** |
| Age-squared | -0.0001 | -1.32 |
| Married | 0.1625 | 3.22 ** |
| Disabled | 0.0323 | 0.49 |
| Number of children in household | 0.0359 | 1.84 * |
| Number of people over 65 in household | 0.0209 | 0.37 |
| Owns home | 0.1545 | 2.54 ** |
| Home value (\$000s) | 0.0014 | 4.68 ** |
| Monthly mortgage payment (\$000s) | -0.0411 | -0.76 |
| Interest and dividend income (\$000s) | 0.0094 | 3.88 ** |
| Income of spouse or partner (\$000s) | 0.0014 | 1.88 * |
| Speaks English well | 0.4899 | 1.98 ** |
| Less than high school education | 0.1942 | 3.52 ** |
| Some college | 0.0098 | 0.21 |
| Four-year degree | 0.1044 | 1.47 |
| Advanced degree | -0.0024 | -0.02 |
| African American | -0.3625 | -3.77 ** |
| Asian American | 0.2732 | 0.83 |
| Hispanic American | -0.1673 | -1.12 |
| Native American | 0.0504 | 0.24 |
| Other minority group | 0.2399 | 0.58 |
| Female | -0.0878 | -1.95 * |

Note: *, ** Denote significance at the 90% and 95% confidence levels, respectively.

Source: BBC Research & Consulting based on analysis of 2000 Census 5% Public Use Micro-sample data.
 The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

A number of neutral factors significantly impacted the probability of self-employment in the support services industry:

- Older workers were more likely to be business owners in the support services industry;
- Being married and having more children in the household both increased the probability of self-employment;
- Home ownership increased the likelihood of business ownership;
- Having more financial resources — including higher home values, greater interest and dividend income and income from a spouse or partner — increased the likelihood of business ownership;

- Individuals who speak English well were more likely to be business owners; and
- Individuals with less than a high school education were more likely to be business owners compared to those with just a high school education.

The support services industry business ownership model shows statistically significant disparities in business ownership rates for African Americans and women, even when accounting for the neutral characteristics included in the model. Figure F-16 shows simulated self-employment rates for these groups, comparing them to the observed, mean probability of business ownership in the support services industry.

Figure F-16.
Comparison of actual support services business ownership rates to simulated rates for groups with significant disparities, 2000

| Group | Self-employment rate | | Disparity index (100 = parity) |
|------------------|----------------------|-----------|-----------------------------------|
| | Actual | Benchmark | |
| African American | 5.7 % | 10.9 % | 52 |
| White female | 14.4 | 16.0 | 90 |

Note: Because the benchmark figure can only be estimated for records with an observed dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure F-4.

Source: BBC Research & Consulting based on analysis of 2000 Census 5% Public Use Micro-sample data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

In 2000, about half as many African Americans owned businesses in the support services industry in Indiana compared to similarly situated non-Hispanic whites. The disparity between actual and “benchmark” self-employment was smaller for white women: about 90 percent as many white women owned business as one would anticipate if they owned businesses at the same rate as similarly situated white men.

Summary of Business Ownership in Indiana Study Industries

At the time of this study, the 2000 Census provided the largest dataset for analyzing business ownership rates in the construction, professional services, goods and support services industries. In 2000, disparities in business ownership were present for certain minority groups and women working in the Indiana construction, professional services, goods and support services industries.

Disparities between minorities and non-Hispanic whites were also evident at the regional and MSA levels in several study industries. Similarly, women had significantly lower rates of business ownership than men in a number of industries at the regional and MSA levels.

BBC used probit regression models to investigate the presence of race/ethnicity and gender disparities in business ownership in Indiana after accounting for the effects of neutral factors:

- Statistically significant disparities in business ownership rates were found in the Indiana construction industry for African Americans, Hispanic Americans and women.
- BBC identified statistically significant disparities in ownership rates in the Indiana professional services industry for Asian Americans and women.
- The study team found statistically significant disparities in business ownership for women in the Indiana goods industry and for African Americans and women in the support services industry.
- Probit regression analysis at the regional level also revealed statistically significant disparities for certain race/ethnicity and gender groups in some industries after controlling for neutral factors.

APPENDIX G.

Access to Capital for Business Formation and Success

Access to capital represents one of the factors researchers have examined when studying business formation and success. If discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start or expand businesses.¹ This appendix explores access to business capital, which relates closely to the analyses of formation and success of businesses included in other report appendices.

BBC first examines homeownership and mortgage lending, as home equity can be an important source of capital to start and expand businesses. We then consider access to business loans. BBC also examines whether minority- and women-owned firms are more likely than majority-owned firms to report difficulties obtaining bonding and insurance.

Homeownership and Mortgage Lending

BBC analyzed homeownership and explored the mortgage lending industry, examining differences between race, ethnicity and gender groups that may lead to disparities in access to capital.

Homeownership. Wealth created through homeownership can be an important source of funds to help grow a business.² Indeed, the study team found that being a homeowner can significantly impact a person's probability of self-employment (see Appendix F). Any barriers to homeownership and home equity growth for minorities or women can affect business opportunities by constraining their acquisition of capital. Similarly, any barriers to accessing equity through home mortgages can limit the availability of funds for new or expanding businesses. In sum:

- A home is a tangible asset that provides borrowing power to the owner;
- Wealth that accrues from housing equity and tax savings from homeownership both contribute to capital formation;³

¹ For example, see: Coleman, Susan. 2002. *Small Firm Sources of Debt Capital: A Comparison by Gender, Race and Ethnicity*. University of Hartford.

² The recent (beginning in late 2006) housing and mortgage crisis has substantially affected the ability of small businesses to secure loans through home equity. A discussion of the consequences to small businesses and MBE/WBEs is provided at the end of this section.

³ Jackman, Mary R. and Robert W. Jackman 1980. "Racial Inequalities in Home Ownership." *Social Forces*. 58. 1221-1234.

- Mortgage loans have traditionally been the second largest loan type for small businesses next to lines of credit;⁴ and
- Homeownership correlates with an estimated 30 percent reduction in the probability of loan denial for small businesses.⁵

The study team first considered homeownership rates and home values before turning to data on the home mortgage market.

Homeownership rates in Indiana. Many studies have documented past discrimination in the housing market. The United States has a history of restrictive real estate covenants and property laws affecting the ownership rights of minorities and women.⁶ In the past, for example, a woman's involvement in homeownership was ancillary to that of her husband and parents.⁷

BBC used 2000 Census and 2006-2008 American Community Survey (ACS) data to examine homeownership rates. Figure G-1 shows rates of homeownership for minority groups and non-Hispanic whites in Indiana and the nation in 2000 and 2006-2008.

In 2000, three-quarters of non-Hispanic whites owned their own homes in Indiana. Rates of homeownership in Indiana were lower for each minority group compared to non-Hispanic whites.

- About 45 percent of African Americans and Subcontinent Asian Americans were homeowners;
- The homeownership rate for Hispanic Americans and Asian-Pacific Americans was 48 percent; and
- Native Americans had homeownership rate at about 58 percent, still considerably below the rate for non-Hispanic whites.

In each case, the difference in homeownership rates between each minority group and non-Hispanic whites was statistically significant.

Homeownership rates increased in Indiana between 2000 and 2006-2008 for race/ethnic groups other than African Americans, whose homeownership rate declined slightly. Even so, statistically significant disparities in homeownership rates between non-Hispanic whites and each minority group remained in 2006-2008. Patterns of homeownership in Indiana were similar to those seen in the United States in 2000 and 2006-2008.

⁴ Berger, Allen N. and Gregory F. Udell. 1998. "The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle." *Journal of Banking and Finance*. 22.

⁵ Cavalluzzo, Ken and John Wolken. 2005. "Small Business Loan Turndowns, Personal Wealth and Discrimination." *Journal of Business*. 78:2153-2178.

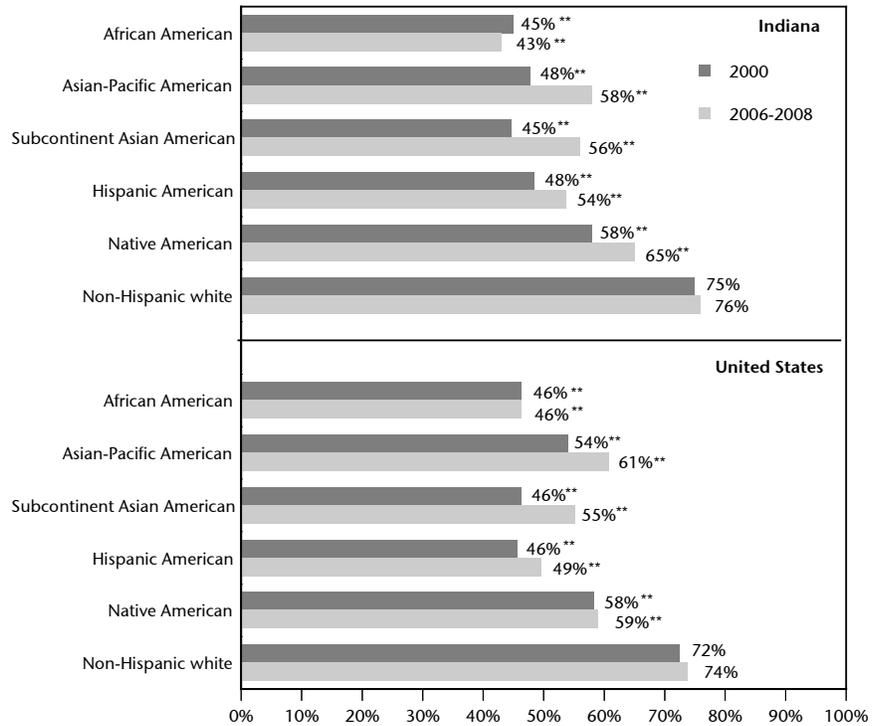
⁶ Ladd, Helen F. 1982. "Equal Credit Opportunity: Women and Mortgage Credit." *The American Economic Review*. 72:166-170.

⁷ Card, Emily. 1980. "Women, Housing Access, and Mortgage Credit." *Signs*. 5:215-219.

Figure G-1.
Homeownership rates,
2000 and 2006-2008

Note:
 The sample universe is all households.
 ** Denotes that the difference in proportion between the minority group and non-Hispanic whites is statistically significant at the 95% confidence level.

Source:
 BBC Research & Consulting from 2000 U.S. Census and 2006-2008 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



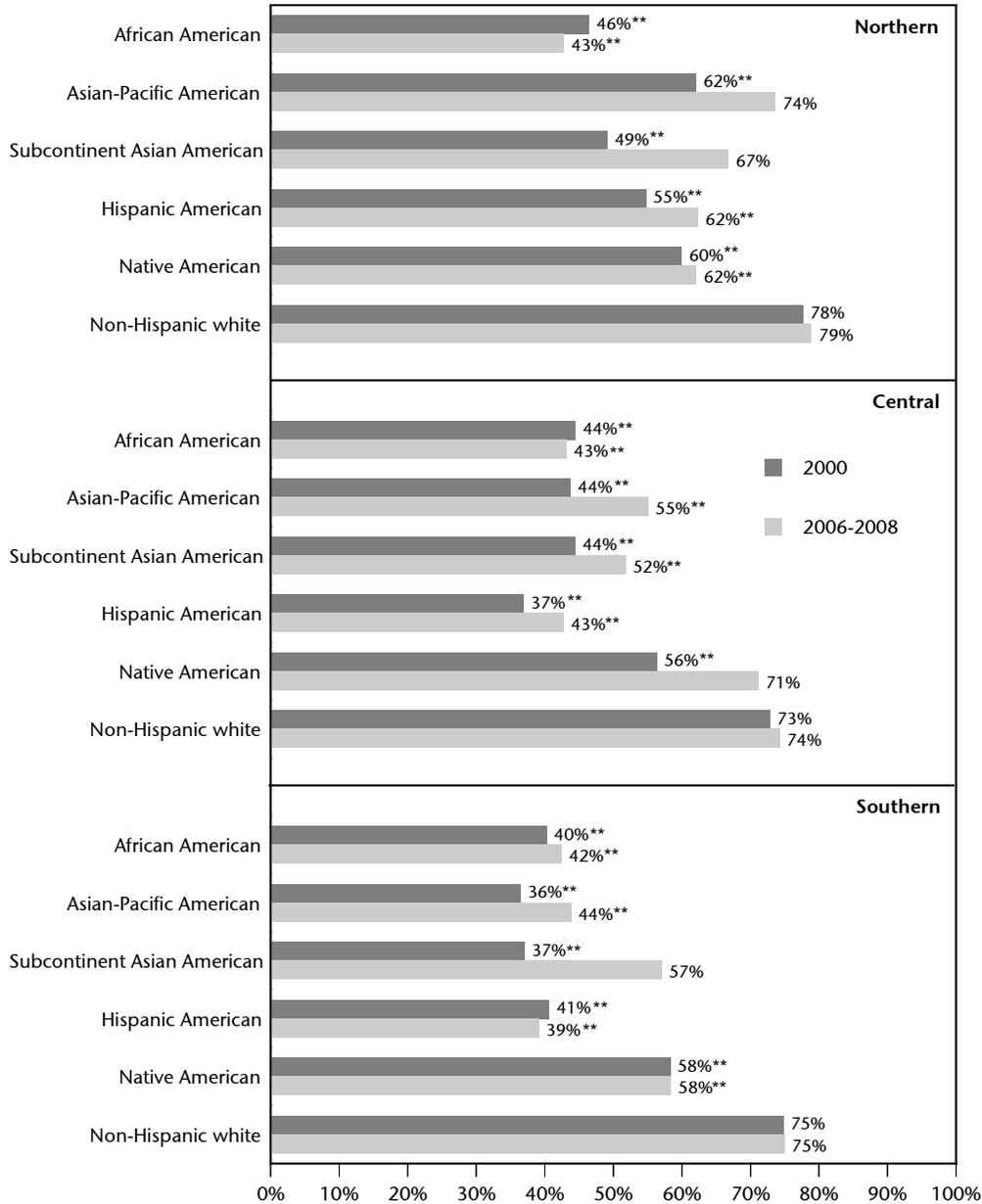
Although not shown here, the study team also examined homeownership rates in Indiana in 2000 for heads of households working in the four study industries: construction, professional services, goods and business support services. Each racial and ethnic minority group had lower rates of homeownership than non-Hispanic whites across each of the four industries.

Lower rates of homeownership could in part reflect lower incomes for minorities. This relationship may be self-reinforcing, as low wealth puts individuals at a disadvantage in becoming homeowners and homeownership can be an effective path to building wealth. One 1980 study found statistically significant results indicating that the probability of homeownership has historically been lower for African Americans than for similarly situated non-Hispanic whites throughout the U.S.⁸

⁸ Jackman. 1980. "Racial Inequalities in Home Ownership."

Homeownership rates in Indiana regions. The study team separately examined homeownership rates by race/ethnicity in the Northern, Central and Southern Indiana regions. Figure G-2 shows rates of homeownership for minority groups and non-Hispanic whites in each region in 2000 and 2006-2008. (Appendix I identifies the individual counties comprising each region.)

Figure G-2.
Homeownership rates in Northern, Central and Southern Indiana regions, 2000 and 2006-2008



Note: The sample universe is all households.

** Denotes that the difference in proportion between the minority group and non-Hispanic whites is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census and 2006-2008 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

In 2000, rates of homeownership for individual minority groups were lower than the rate for non-Hispanic whites in every region of Indiana. Although homeownership rates increased for several groups between 2000 and 2006-2008, substantial disparities for many minority groups remained. In every region, African Americans and Hispanic Americans had lower rates of homeownership in 2006-2008, compared to non-Hispanic whites. Homeownership rates for Asian-Pacific Americans, Subcontinent Asian Americans and Native Americans were closer to the rate for non-Hispanic whites in some regions, but were still substantially below the rate for non-Hispanic whites in other regions.

Homeownership rates in Indiana MSAs. BBC also used 2000 Census and 2006-2008 ACS data to examine homeownership by race/ethnicity in federally-defined Indiana Metropolitan Statistical Areas (MSAs). Figure G-3 on the following page compares rates of homeownership by MSA among race and ethnic groups in 2000. In addition to rates for individual race/ethnicity groups, Figure G-3 shows the homeownership rates for all minority groups combined. Because sample sizes were smaller at this level of geographic resolution, homeownership rates for some race/ethnic groups are not reported.

In 2000, the rate of homeownership for all minorities combined was lower than the rate for non-Hispanic whites in every MSA. In each case, these differences are statistically significant. Differences in rates of homeownership between individual minority groups and non-Hispanic whites were also statistically significant in many cases. In Bloomington, for example, the homeownership rate for non-Hispanic whites was about three times the rate for African Americans and Asian Americans. In Lafayette, the homeownership rate observed for non-Hispanic whites was almost five times the rate for African Americans and four times the rate for Asian Americans. The homeownership rate for Hispanic Americans in Indianapolis was about 34 percent, less than half the rate for non-Hispanic whites (73%). African Americans had consistently low rates of homeownership compared to non-Hispanic whites in all MSAs.

Figure G-4 shows homeownership rates by MSA for different race and ethnicity groups in 2006-2008. Although the overall rate of homeownership increased between 2000 and 2006-2008, many of the disparities observed in 2000 were still present in 2006-2008.

Figure G-3.
Homeownership rates by MSA, 2000

| | MSA | | | | | | | | | | | |
|-----------------------------|-------------|-------------------------------|----------------|------------|------------|--------------|-----------|-----------|--------------------------|-----------|-------------------------|-------------|
| | Bloomington | Gary-Hammond- East Chicago | Elkhart-Goshen | Evansville | Fort Wayne | Indianapolis | Kokomo | Lafayette | Louisville- Jefferson | Muncie | South-Bend Mishawaka | Terre Haute |
| Home ownership rates | | | | | | | | | | | | |
| African American | 16.3 % ** | 47.1 % ** | 40.8 % ** | 40.8 % ** | 46.1 % ** | 44.8 % ** | 49.0 % ** | 13.1 % ** | 43.2 % ** | 37.6 % ** | 45.0 % ** | 43.2 % ** |
| Asian American | 20.3 ** | 60.9 | NA | NA | 63.9 | 54.3 ** | NA | 17.0 ** | NA | NA | 54.1 | NA |
| Hispanic American | NA | 60.3 ** | 39.5 ** | 52.7 | 53.7 ** | 33.5 ** | NA | 32.9 ** | 44.9 ** | NA | 54.5 ** | NA |
| Native American | NA | 57.9 | NA | NA | 68.2 | 58.0 ** | NA | NA | 60.6 | NA | 60.8 | NA |
| All minorities | 21.7 % ** | 51.6 % ** | 40.7 % ** | 44.5 % ** | 50.5 % ** | 44.8 % ** | 49.2 % ** | 24.1 % ** | 46.9 % ** | 39.1 % ** | 48.6 % ** | 40.9 % ** |
| Non-Hispanic white | 57.1 % | 78.4 % | 76.5 % | 73.8 % | 76.7 % | 72.7 % | 75.0 % | 63.2 % | 75.2 % | 69.6 % | 76.3 % | 72.4 % |
| Sample size | | | | | | | | | | | | |
| African American | 51 | 2,065 | 123 | 233 | 607 | 3,228 | 97 | 51 | 158 | 139 | 479 | 100 |
| Asian American | 76 | 90 | 23 | 22 | 87 | 251 | 10 | 103 | 15 | 14 | 61 | 21 |
| Hispanic American | 20 | 846 | 155 | 29 | 186 | 385 | 18 | 107 | 44 | 21 | 137 | 20 |
| Native American | 15 | 54 | 22 | 24 | 59 | 155 | 17 | 24 | 33 | 14 | 32 | 20 |
| All minorities | 167 | 3,090 | 324 | 312 | 952 | 4,052 | 143 | 291 | 255 | 188 | 720 | 168 |
| Non-Hispanic white | 1,744 | 7,325 | 2,608 | 4,489 | 8,237 | 21,230 | 1,928 | 2,952 | 4,247 | 2,107 | 4,118 | 3,077 |

Note: "Asian American" includes Asian-Pacific Americans and Subcontinent Asian Americans. "All minorities" includes African Americans, Asian Americans, Hispanic Americans and Native Americans. Rates are not reported when the sample included less than 25 observations.

** Denotes that the difference in proportion between the minority group and non-Hispanic whites is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2000 U.S. Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>

Figure G-4.
Homeownership rates by MSA, 2006-2008

| | MSA | | | | | | | | | | | |
|-----------------------------|-------------|-------------------------------|----------------|------------|------------|--------------|-----------|-----------|--------------------------|-----------|-------------------------|-------------|
| | Bloomington | Gary-Hammond- East Chicago | Elkhart-Coshen | Evansville | Fort Wayne | Indianapolis | Kokomo | Lafayette | Louisville- Jefferson | Muncie | South-Bend Mishawaka | Terre Haute |
| Home ownership rates | | | | | | | | | | | | |
| African American | 30.0 % ** | 44.9 % ** | 38.4 % ** | 41.8 % ** | 41.4 % ** | 43.8 % ** | 40.4 % ** | 13.8 % ** | 44.2 % ** | 44.4 % ** | 37.1 % ** | 41.4 % ** |
| Asian American | 25.7 ** | 73.5 | NA | NA | 78.9 | 64.7 ** | NA | 18.1 ** | NA | NA | 73.8 | NA |
| Hispanic American | NA | 66.7 ** | 52.7 ** | NA | 57.2 ** | 42.0 ** | NA | 38.8 ** | 29.9 ** | NA | 67.1 | NA |
| Native American | NA | 70.4 | NA | NA | 63.0 | 77.2 | NA | NA | NA | NA | NA | NA |
| All minorities | 27.2 % ** | 53.0 % ** | 48.3 % ** | 44.1 % ** | 50.0 % ** | 46.0 % ** | 44.6 % ** | 28.5 % ** | 45.9 % ** | 47.1 % ** | 46.9 % ** | 43.1 % ** |
| Non-Hispanic white | 59.9 % | 81.6 % | 75.7 % | 73.7 % | 77.8 % | 75.3 % | 73.2 % | 64.0 % | 76.4 % | 70.7 % | 77.0 % | 70.8 % |
| Sample size | | | | | | | | | | | | |
| African American | 27 | 1,181 | 100 | 161 | 366 | 2,269 | 54 | 46 | 118 | 78 | 278 | 52 |
| Asian American | 62 | 75 | 16 | 22 | 62 | 324 | 5 | 89 | 16 | 15 | 38 | 16 |
| Hispanic American | 14 | 607 | 108 | 19 | 166 | 554 | 20 | 97 | 39 | 10 | 104 | 16 |
| Native American | 16 | 36 | 11 | 14 | 43 | 97 | 8 | 10 | 17 | 14 | 18 | 15 |
| All minorities | 121 | 1,905 | 237 | 220 | 641 | 3,268 | 87 | 243 | 191 | 120 | 440 | 100 |
| Non-Hispanic white | 1,290 | 5,031 | 1,685 | 3,013 | 5,441 | 16,822 | 1,222 | 2,137 | 2,640 | 1,308 | 2,657 | 1,834 |

Note: "Asian American" includes Asian-Pacific Americans and Subcontinent Asian Americans. "All minorities" includes African Americans, Asian Americans, Hispanic Americans and Native Americans. Rates are not reported when the sample included less than 25 observations.

** Denotes that the difference in proportion between the minority group and non-Hispanic whites is statistically significant at the 95% confidence level.

Source: BBC Research & Consulting from 2006-2008 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

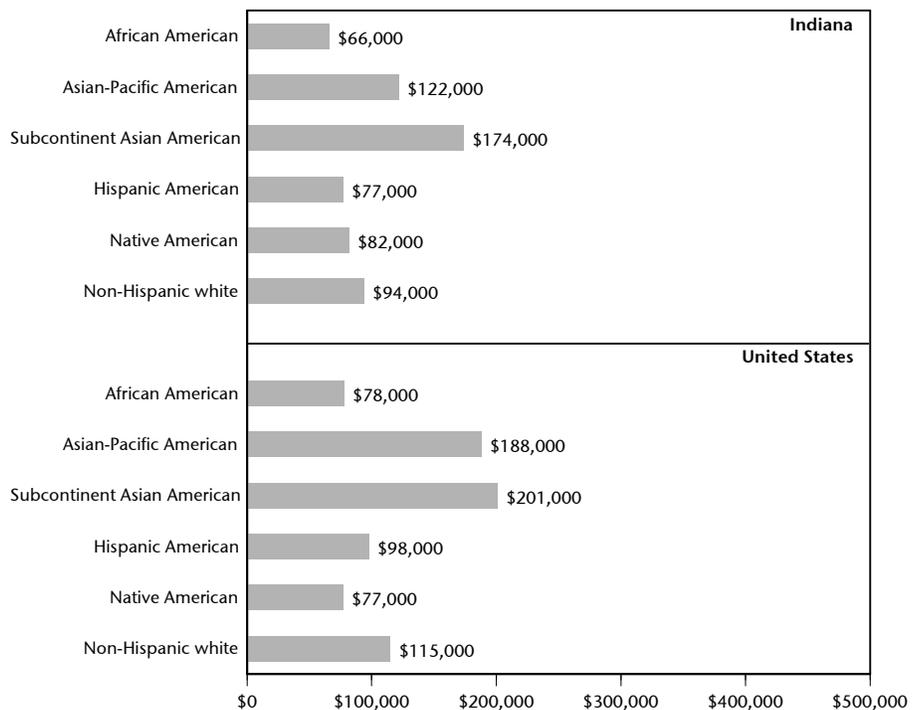
Home values in Indiana. Recent research has found that the amount of capital available to form or expand a business directly corresponds with the value of a person’s home. Using microdata from matched Current Population Surveys (1993-2004), one study found that differences in housing appreciation between metropolitan areas affected opportunities for self-employment. The study indicated that a 10 percent annual increase in housing equity increases the mean probability of entrepreneurship by approximately 20 percent.⁹ In addition, BBC found that greater home value significantly increases the probability of self-employment in each study industry (see Appendix F).

Using Census data from 2000 and ACS data from 2006-2008, BBC examined median home values for different race/ethnicity groups in Indiana.¹⁰ Figure G-5 shows median home values in 2000.

**Figure G-5.
Median home values,
2000**

Note:
The sample universe is all owner-occupied housing units.

Source:
BBC Research & Consulting from 2000 U.S. Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



Non-Hispanic whites living in Indiana had a median home value of \$94,000 in 2000, substantially greater than the median value of homes owned by African Americans, Hispanic Americans and Native Americans. The median value of homes owned by Asian-Pacific Americans and Subcontinent Asian Americans was more than that of non-Hispanic whites. Although home values were generally lower in Indiana compared to the United States, the overall pattern of differences by race/ethnic group was similar to that found at the national level.

⁹ Fairlie, Robert W. and Harry A. Krashinsky. 2006. “Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited.” *IZA Discussion Paper*. No. 2201.

¹⁰ Home values were reported by the midpoint of an interval. For this reason, the study team did not test for statistical significance when examining median home values.

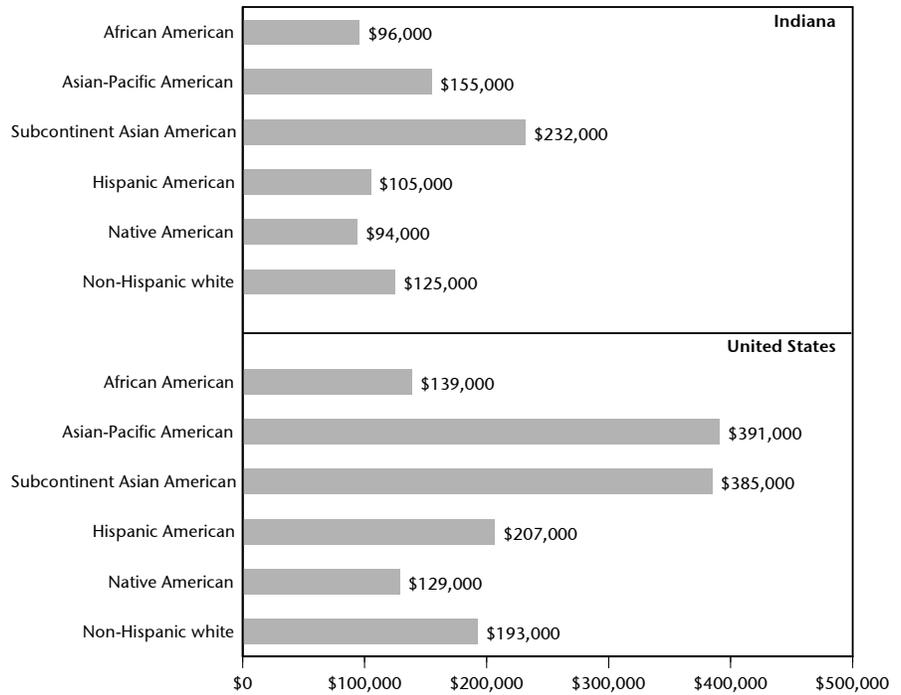
Figure G-6 presents median home values by race/ethnicity in Indiana and the U.S. based on 2006-2008 ACS data. Despite the rise in median home values for all groups between 2000 and 2006-2008, differences between median values for minorities and non-Hispanic whites in Indiana were consistent with those seen in 2000.

At the national level, the median home value was greater for Hispanic Americans than non-Hispanic whites in 2006-2008. Asian-Pacific Americans and Subcontinent Asian Americans had substantially greater home values in the United States than in Indiana.

Figure G-6.
Median home values,
2006-2008

Note:
The sample universe is all owner-occupied housing units.

Source:
BBC Research & Consulting from 2006-2008 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



Home values in Indiana regions. Figure G-7 presents median home values by race/ethnicity in the three Indiana regions in 2000. The pattern at the regional level was consistent with that seen at the state level. African Americans had the lowest median home value in each region and homes owned by Asian American had the highest median value. Native Americans and Hispanic Americans had lower median homes values than non-Hispanic whites in each region, although the difference in median home value between these groups was small in the Southern region.

Figure G-7.
Median home values
by region, 2000

Note:
 The sample universe is all owner-occupied housing units.

Source:
 BBC Research & Consulting from 2000 U.S. Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

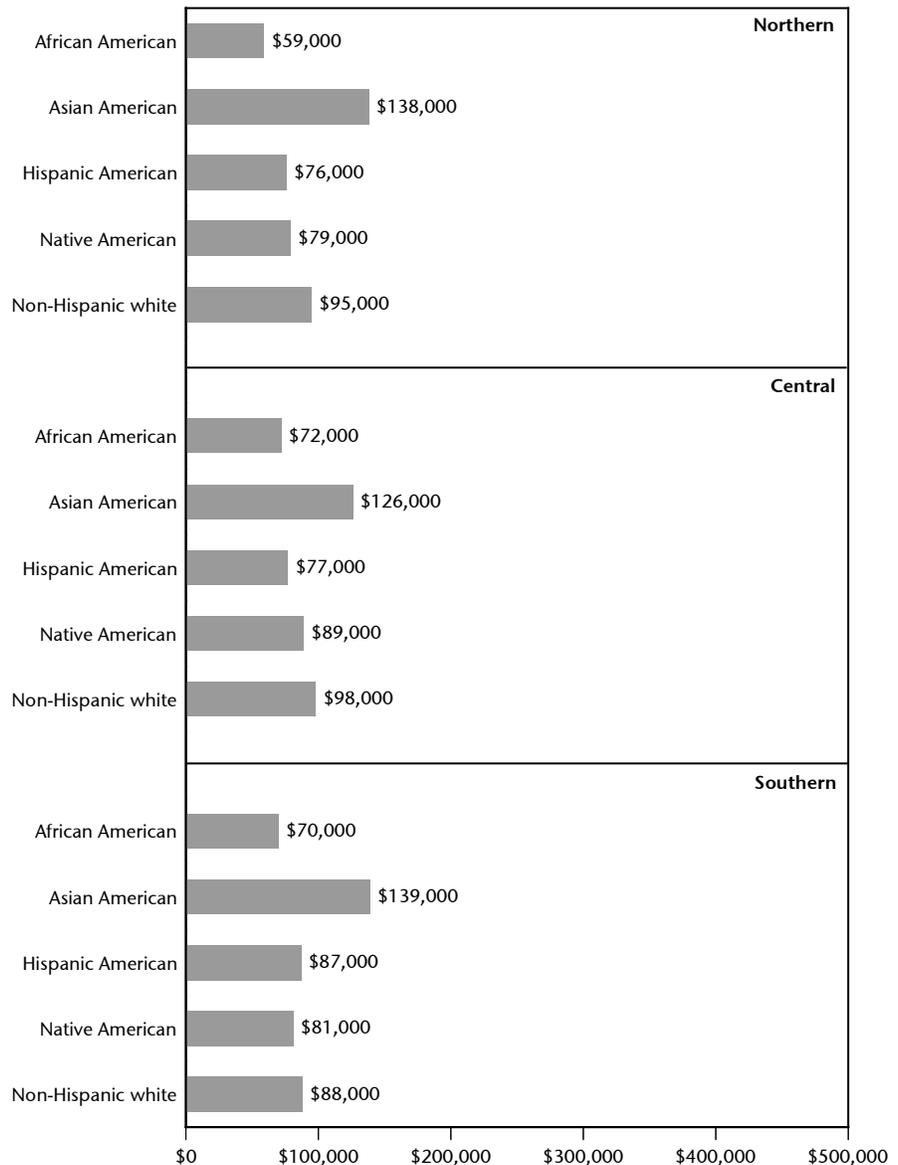
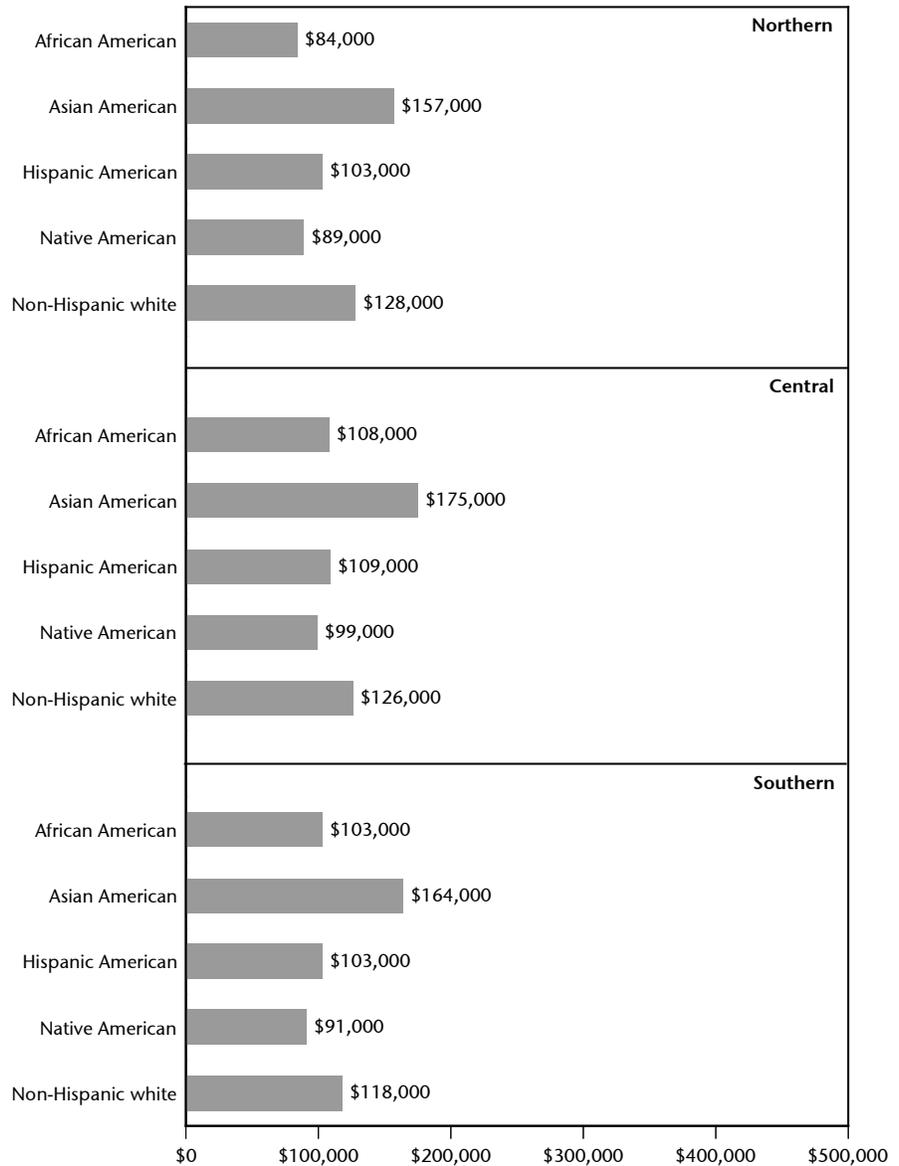


Figure G-8 presents median home values by race/ethnicity for each Indiana region in 2006-2008. Despite increases in home values for most groups, many of the disparities between non-Hispanic whites and minorities remained. In 2006-2008, non-Hispanic whites had higher median home values in each region compared to African Americans, Native Americans and Hispanic Americans whereas Asian Americans had the highest median home value.

Figure G-8.
Median home values
by region, 2006-2008

Note:
 The sample universe is all owner-occupied housing units.

Source:
 BBC Research & Consulting from 2006-2008 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



Home values in Indiana MSAs. BBC also examined home values in Indiana MSAs. Figure G-9 presents median home values by MSA for minorities and non-Hispanic whites in 2000. All minority groups were combined due to relatively small sample sizes.

In all but one MSA, minorities had lower median home values compared to non-Hispanic whites. This difference was especially large in the Gary-Hammond-East Chicago MSA. In Bloomington, the median home value for minorities exceeded that of non-Hispanic whites.

Figure G-9.
Median home values by MSA, 2000

Note:
The sample universe is all owner-occupied housing units.

Source:
BBC Research & Consulting from 2000 Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.

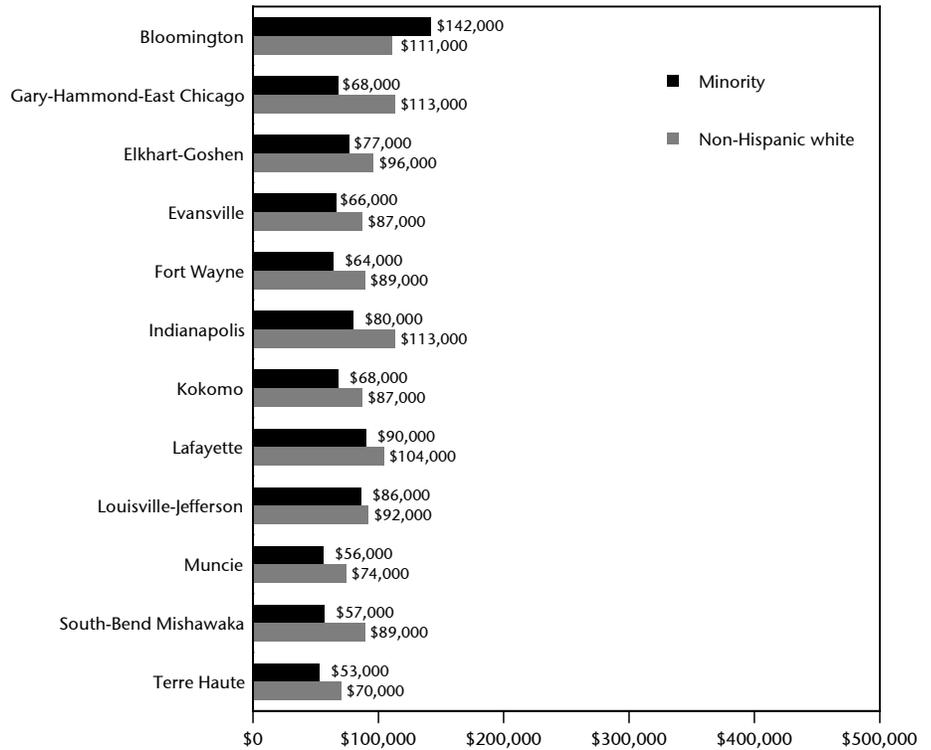
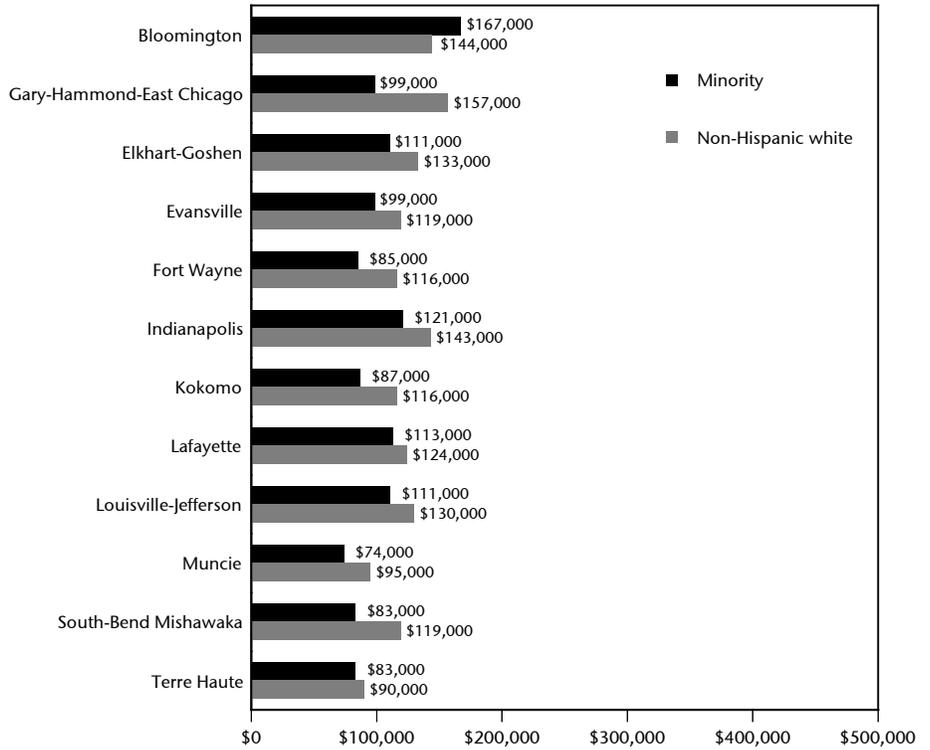


Figure G-10 shows home values for 2006-2008. As in 2000, the median home values for minorities were below the median values for non-Hispanic whites in all MSAs except Bloomington. Again, the difference between minorities and non-Hispanic whites in median home value was especially large in Gary, Indiana.

Figure G-10.
Median home values by
MSA, 2006-2008

Note:
 The sample universe is all owner-occupied housing units.

Source:
 BBC Research & Consulting from 2006-2008 American Community Survey data. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



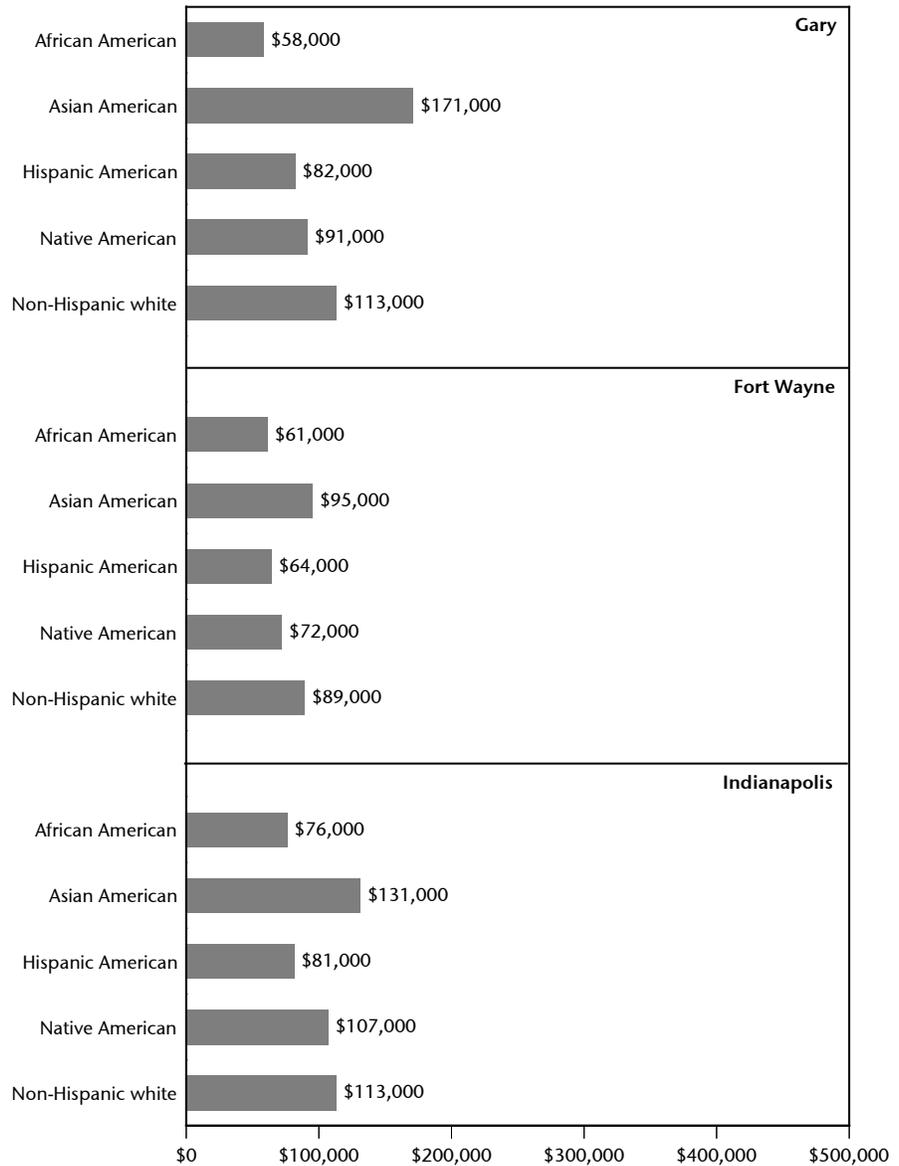
The Gary, Fort Wayne and Indianapolis MSAs had sufficient sample sizes in 2000 to separately examine median home values by individual race/ethnicity group. Figure G-11 presents the median value of homes by race/ethnicity for these MSAs.

The pattern seen in each MSA is consistent with that seen at the state and regional levels. In each MSA, Asian Americans had the highest median home values, and non-Hispanic whites had higher median home values than African Americans, Native Americans and Hispanic Americans.

Figure G-11.
Median home values
by MSA, 2000

Note:
The sample universe is all owner-occupied housing units.

Source:
BBC Research & Consulting from 2000 Census data. The raw data extract was obtained through the IPUMS program of the MN Population Center:
<http://usa.ipums.org/usa/>.



Loan denial in mortgage lending. If discriminated against when applying for home mortgages, minorities may be denied opportunities to own homes, purchase more expensive homes or access equity in homes they currently own. BBC explored the mortgage lending market to examine this possibility in Indiana. This part of Appendix G examines loan denial in mortgage lending and the following part considers subprime lending.

The best available source of information concerning mortgage lending comes from Home Mortgage Disclosure Act (HMDA) data, which provide information on mortgage loan applications received by financial institutions, savings banks, credit unions and some mortgage companies.¹¹ These data include information about the location, dollar amount, and types of loans made, as well as race and ethnicity, income, and credit characteristics of loan applicants. Data are available for home purchase, home improvement and refinance loans.

BBC examined HMDA data provided by the Federal Financial Institutions Examination Council (FFIEC) on conventional loan denial rates for high-income borrowers. Conventional loans are those that are not insured by a government program; high-income borrowers include households with income at or above 120 percent of the U.S. Department of Housing and Urban Development (HUD) area median family income.¹² Loan denial rates are based on denied loans as a share of all mortgage applications where the application process was not terminated by the potential borrower.

The following figures report denial rates for 2006 and 2008. Although 2008 was the most recent year for which HMDA data were available, the 2006 data are the most complete and up-to-date source as many of the institutions that originated loans in 2008 were no longer in business by the 2008 reporting date for HMDA data.¹³

Loan denial rates in Indiana. BBC first examined loan denial rates for Indiana and the United States, presented in Figure G-12. Data on loan denial for mortgages in Indiana show higher denial rates for minority high-income households than for non-Hispanic white high-income households.¹⁴

¹¹ Financial institutions are required to report HMDA data if they have assets of more than \$32 million, have a branch office in a metropolitan area, and originated at least one home purchase or refinance loan in the reporting calendar year. Mortgage companies are required to report HMDA if they are for-profit institutions, had home purchase loan originations exceeding 10 percent of all loan obligations in the past year, are located in an Metropolitan Statistical Area (or originated five or more home purchase loans in an MSA) and either had more than \$10 million in assets or made at least 100 home purchase or refinance loans in the calendar year.

¹² The 2006 median household incomes for HUD regions in Indiana ranged from \$49,300 to \$65,100.

¹³ According to an article by the Federal Reserve, the volume of reported loan applications and originations fell sharply from 2007 to 2008 after previously falling between 2006 and 2007. See Avery, Brevoort, and Canner, "The 2008 HMDA Data." Available online: <http://www.federalreserve.gov/pubs/bulletin/>.

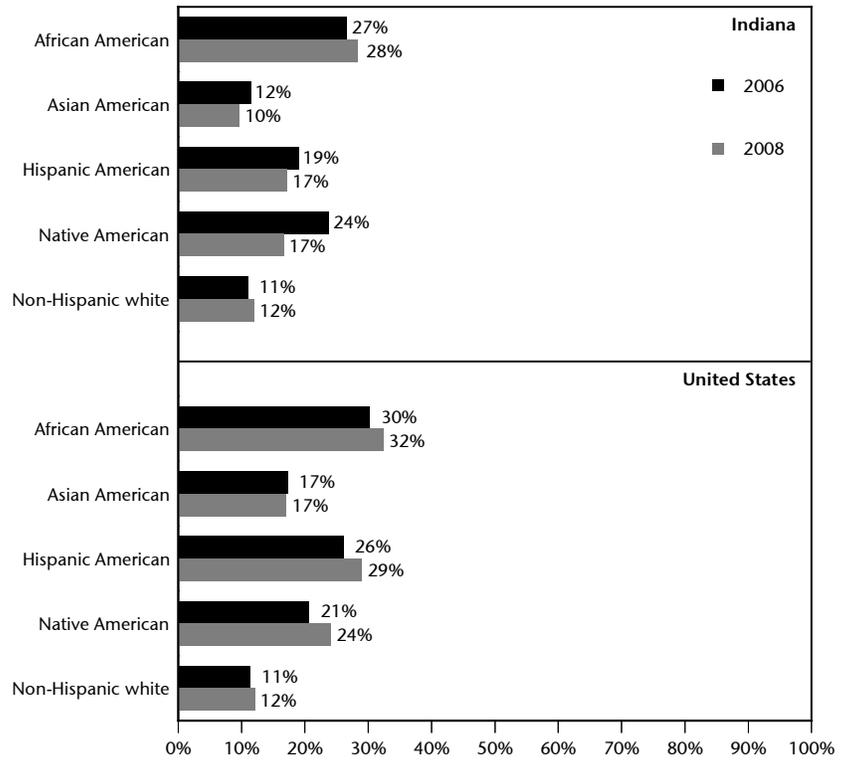
¹⁴ Statistical significance is not reported for analyses using HMDA data as rates are based on all loans originated during the year and not on a sample.

Among high-income Indiana households applying for mortgages, about 27 percent of African American applicants had their applications denied during 2006, compared to 11 percent of non-Hispanic white applicants. Loan denial rates were also higher for Native Americans and Hispanic Americans compared to non-Hispanic whites. Asian Americans had a loan denial rate similar to non-Hispanic whites.

Figure G-12.
Denial rates on conventional purchase loans to high-income households in 2006 and 2008

Note:
 High-income borrowers are those households with 120% or more than the HUD area median family income (MFI).

Source:
 FFIEC HMDA data 2006 and 2008.



Loan denial rates in Indiana regions. BBC also examined loan denial rates for high-income borrowers at the regional level. Because data are more comprehensive for 2006 than 2008, the results presented in Figure G-13 focus on 2006 loan denial rates. Native Americans were not included as there were too few observations in the dataset to draw comparisons to non-Hispanic whites.

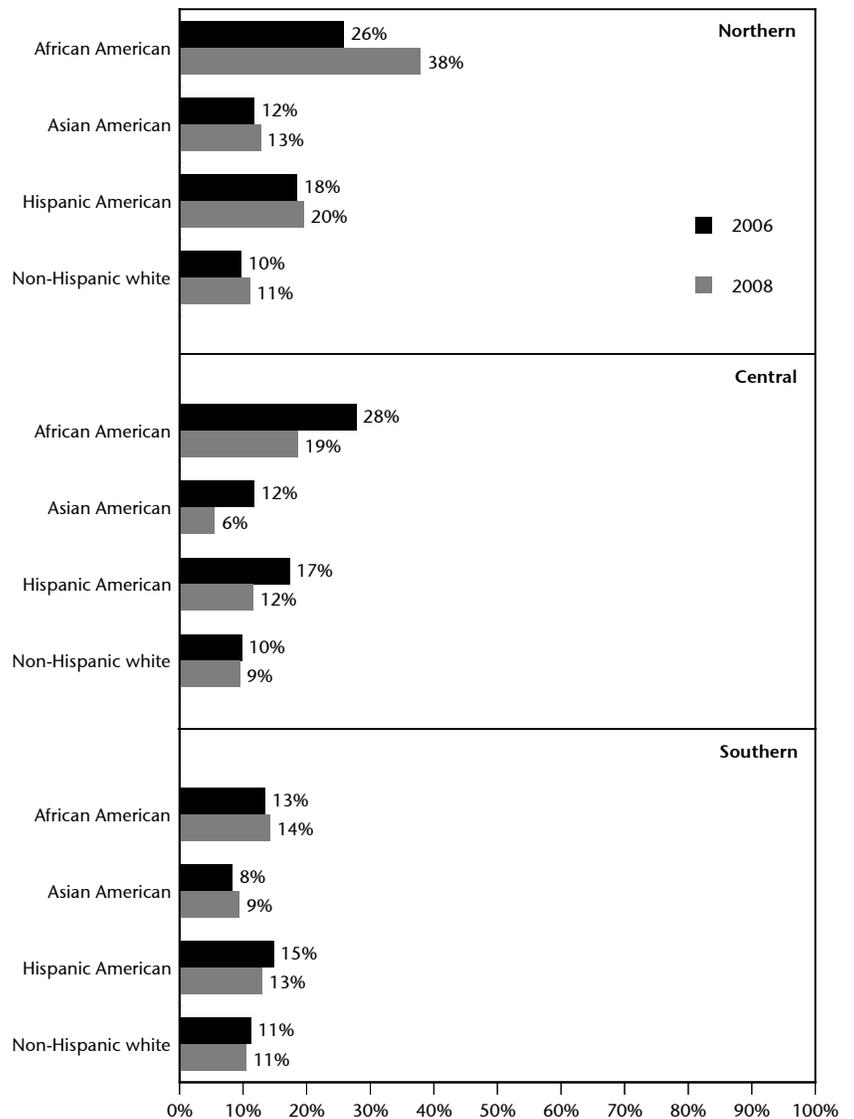
In the Northern and Central regions, African Americans were denied loans at more than twice rate of non-Hispanic whites. Hispanic Americans were also denied loans at a higher rate than non-Hispanic whites in these regions. The denial rate for Asian Americans was similar to the non-Hispanic white rate.

Disparities in loan denial rates were less evident in the Southern region. Denial rates for Asian Americans were slightly lower than those for non-Hispanic whites. African Americans and Hispanic Americans were denied loans at a slightly higher rate than non-Hispanic whites.

Figure G-13.
Denial rates on conventional purchase loans to high-income households by region, 2006 and 2008

Note:
High-income borrowers are those households with 120% or more than the HUD area median family income (MFI).

Source:
FFIEC HMDA data 2006 and 2008.



Loan denial rates in Indiana MSAs. The study team also considered the percentage of home purchase loan applications that were denied to high-income borrowers in Indiana MSAs. Figure G-14 shows loan denial rates in 2006 in each MSA. Results are presented for each minority group separately as well as for all minorities combined.

Denial rates for non-Hispanic whites ranged from a low of 8 percent in the Lafayette MSA to a high of 14 percent in the Michigan City-La Porte MSA. In most metropolitan areas, minority mortgage applicants had a higher loan denial rate than non-Hispanic whites. Some MSAs exhibited substantially higher denial rates for certain minority groups. For example, the denial rate for African Americans in the Indianapolis MSA was 29 percent, more than three times the denial rate for non-Hispanic whites (9%). There was also a large disparity in denial rates for African Americans and Hispanic Americans compared to non-Hispanic whites in the Gary-Hammond-East Chicago MSA. Substantial disparities in denial rates appeared to occur in other MSAs, although the small number of observations in the dataset makes comparison between groups difficult.

National research. A number of national studies have examined disparities in loan denial rates and loan amounts for minorities in the presence of other influences. Examples include the following:

- A study by the Federal Reserve Bank of Boston is one of the most cited studies of mortgage lending discrimination.¹⁵ It was conducted using the most comprehensive set of credit characteristics ever assembled for a study on mortgage discrimination.¹⁶ The study provided persuasive evidence that lenders in the Boston area discriminated against minorities in 1990.¹⁷
- Using the Federal Reserve Board's 1983 Survey of Consumer Finances and the 1980 Census of Population and Housing data, statistical analysis revealed that minority households were one-third as likely to receive conventional loans as non-Hispanic white households after taking into account financial and demographic controls.¹⁸
- Findings from a Midwest study indicate a significant relationship between race and both the number and size of mortgage loans. Data matched on socioeconomic characteristics revealed that African American borrowers across 13 census tracts received significantly fewer and smaller loans compared to white counterparts.¹⁹

¹⁵ Munnell, Alicia H., Geoffrey Tootell, Lynn Browne and James McEneaney. 1996. "Mortgage Lending in Boston: Interpreting HMDA Data." *The American Economic Review*. 86: 25-53.

¹⁶ Ladd, Helen F. 1998. "Evidence on Discrimination in Mortgage Lending." *The Journal of Economic Perspectives*. 12:41-62.

¹⁷ Yinger, John. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. New York: Russell Sage Foundation, 71.

¹⁸ Canner, Glenn B., Stuart A. Gabriel and J. Michael Woolley. 1991. "Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets." *South Economic Journal*. 58:249-262.

¹⁹ Leahy, Peter J. 1985. "Are Racial Factors Important for the Allocation of Mortgage Money?: A Quasi-Experimental Approach to an Aspect of Discrimination." *American Journal of Economics and Sociology*. 44:185-196.

Figure G-14.
Denial rates on conventional purchase loans to high-income households by MSA, 2006

| | MSA | | | | | | | | | | | | | | | |
|--|----------|-------------|-----------------------|----------|---------------------------|----------------|------------|------------|--------------|--------|-----------|----------------------|------------------------|--------|----------------------|-------------|
| | Anderson | Bloomington | Cincinnati-Middletown | Columbus | Gary-Hammond-East-Chicago | Elkhart-Goshen | Evansville | Fort Wayne | Indianapolis | Kokomo | Lafayette | Louisville-Jefferson | Michigan city-La Porte | Muncie | South-Bend Mishawaka | Terre Haute |
| Denial rates on conventional purchase loans to high income households | | | | | | | | | | | | | | | | |
| African American | 7.7 % | 5.6 % | NA % | NA % | 26.1 % | 40.0 % | 8.0 % | 12.1 % | 29.2 % | 16.7 % | 18.8 % | 20.0 % | 31.3 % | 21.1 % | 32.7 % | 12.5 % |
| Asian American | NA | 0.0 | NA | 4.5 | 9.3 | 21.4 | 7.9 | 10.4 | 13.3 | NA | 2.4 | 0.0 | 27.3 | NA | 11.1 | 0.0 |
| Hispanic American | NA | 6.7 | NA | NA | 17.7 | 26.7 | 5.6 | 16.2 | 17.0 | NA | 5.9 | 14.3 | NA | NA | 18.4 | 27.3 |
| Native American | NA | NA | NA | NA | NA | NA | NA | NA | 10.5 | NA | NA | NA | NA | NA | NA | NA |
| All minorities | 11.1 % | 4.4 % | NA % | 12.1 % | 20.6 % | 27.1 % | 7.0 % | 13.0 % | 21.8 % | 20.7 % | 6.6 % | 14.5 % | 25.0 % | 19.4 % | 22.9 % | 8.8 % |
| Non-Hispanic white | 12.2 % | 10.6 % | 9.1 % | 7.3 % | 9.5 % | 8.3 % | 7.2 % | 8.4 % | 8.8 % | 12.4 % | 7.9 % | 10.9 % | 13.8 % | 11.7 % | 8.2 % | 10.9 % |
| Population size | | | | | | | | | | | | | | | | |
| African American | 13 | 18 | 2 | 4 | 441 | 10 | 25 | 66 | 823 | 18 | 16 | 30 | 16 | 19 | 52 | 16 |
| Asian American | 1 | 32 | 0 | 22 | 107 | 14 | 38 | 48 | 541 | 6 | 41 | 11 | 11 | 7 | 36 | 28 |
| Hispanic American | 4 | 15 | 5 | 7 | 390 | 45 | 18 | 37 | 259 | 5 | 17 | 21 | 9 | 4 | 38 | 11 |
| Native American | 0 | 3 | 1 | 0 | 8 | 1 | 5 | 3 | 19 | 0 | 2 | 0 | 0 | 1 | 5 | 2 |
| All minorities | 18 | 68 | 8 | 33 | 946 | 70 | 86 | 154 | 1,642 | 29 | 76 | 62 | 36 | 31 | 131 | 57 |
| Non-Hispanic white | 378 | 861 | 351 | 385 | 3,393 | 711 | 1,494 | 1,589 | 9,206 | 267 | 723 | 1,069 | 354 | 367 | 1,054 | 806 |

Note: High-income borrowers are those households with 120% or more than the HUD area median family income (MFI).
Source: FFIEC HMDA data 2006.

However, other studies have found that differences in preferences for Federal Housing Administration (FHA) loans — mortgage loans that are insured by the federal government — versus conventional loans among race and ethnic groups may partly explain disparities found in conventional loan approvals between minorities and non-minorities in past years.²⁰ Several studies have found that minority borrowers were historically far more likely to receive FHA loans than comparable non-Hispanic white borrowers at all income and wealth levels. The insurance on FHA loans protects the lender, but the borrower can be affected by higher-cost loans.²¹

Subprime lending. Loan denial represents one of several ways minorities might be discriminated against in the home mortgage market; mortgage lending discrimination could also occur through higher fees and interest rates. The housing market provides a unique environment for this type of discrimination through fees associated with various loan types.

Until recently, one of the fastest-growing segments of the home mortgage industry was subprime lending. From 1994 through 2003, subprime mortgage activity grew by 25 percent per year and accounted for \$330 billion of U.S. mortgages in 2003, up from \$35 billion a decade earlier. In 2006, subprime loans represented about one-fifth of all mortgages in the United States.²²

Subprime loans generally have higher interest rates than prime loans. These loans are marketed and sold to customers with blemished or limited credit histories who would not typically qualify for prime loans. Over time, these loans also became available to homeowners who did not want to make a down payment, disclose or provide proof of income and assets, or wanted to purchase a larger home with a cost above that for which they would qualify from a prime lender.²³ Because of higher interest rates and additional costs, subprime loans affect homeowners' ability to grow home equity while simultaneously increasing their risk of foreclosure.

Although there is no standard definition of a subprime loan, there are several commonly-used approaches to examining rates of subprime lending. BBC used a “rate-spread method” — in which subprime loans are identified as those with substantially above-average interest rates — to measure rates of subprime lending in 2006 and 2008.²⁴ The study team considered home purchase loans and refinance loans separately.

²⁰ Canner. 1991. “Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets.”

²¹ Yinger. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. 80.

²² See Avery, Brevoort, and Canner, “The 2006 HMDA Data.”

²³ Gerardi, Shapiro, and P. Willen. 2008. “Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure.” *Federal Reserve Bank of Boston*.

²⁴ Consistent with other researchers, first lien loans are identified as subprime if they have an interest rate more than 3 percentage points higher than the federal treasury rate of like maturity. For junior lien loans, the required rate difference is 5 percentage points.

Subprime lending in Indiana. Figure G-15 shows the percent of conventional home purchase loans that were subprime in 2006 and 2008 in Indiana and the nation. In 2006, African American, Native American and Hispanic American borrowers in Indiana were more likely to receive subprime home purchase loans than non-Hispanic whites. Asian Americans were less likely to receive subprime loans. This pattern continued in 2008, although subprime lending to all groups was much lower.

Figure G-15.
Percent of conventional home purchase loans that were subprime: 2006 and 2008

Note:
 Subprime loans are identified using rate spreads.

Source:
 FFIEC HMDA data 2006 and 2008.

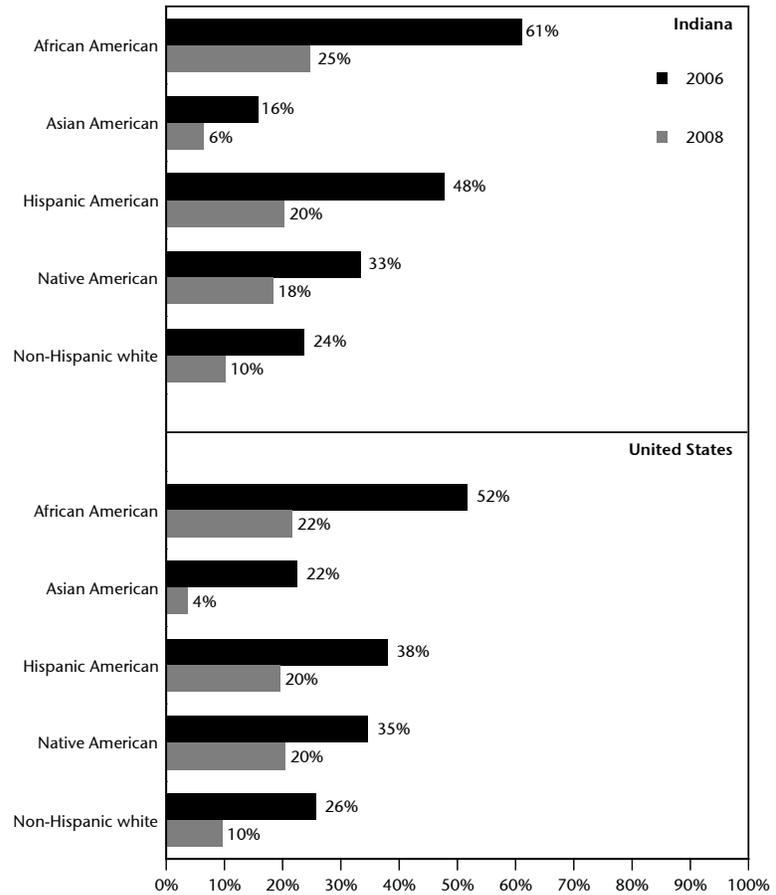
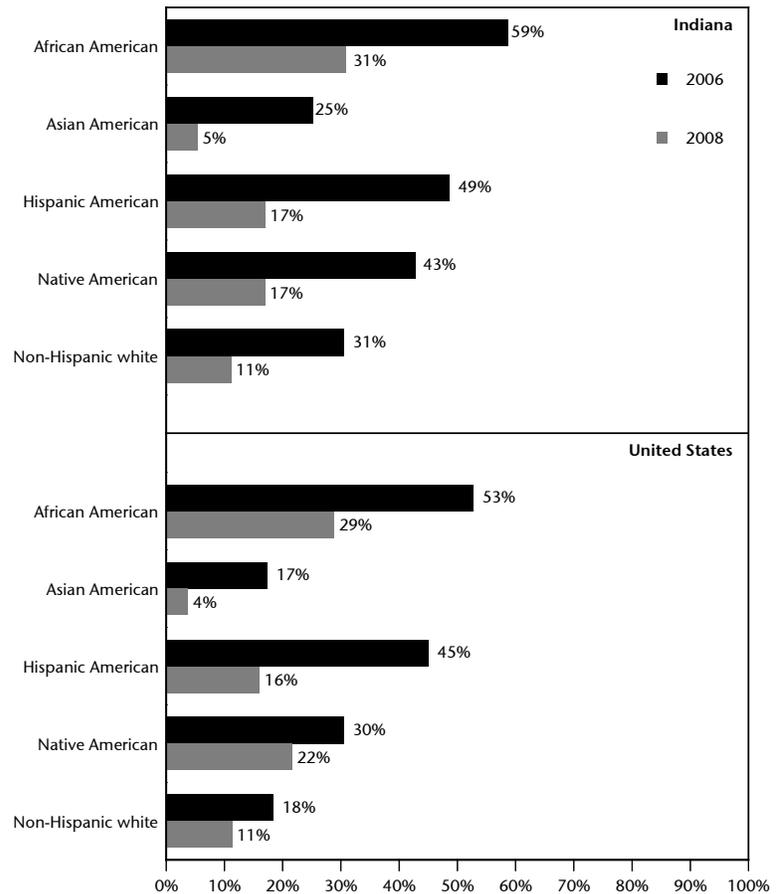


Figure G-16 shows the percentage of conventional refinancing loans that were subprime in 2006 and 2008 in Indiana and the United States. As with home purchase loans, African Americans, Hispanic Americans and Native Americans in Indiana were more likely to obtain a subprime refinancing loan than non-Hispanic whites. Despite the steep decline in subprime refinancing between 2006 and 2008, these groups were still more likely than non-Hispanic whites to refinance with a subprime loan in 2008.

Figure G-16.
Percent of conventional refinancing loans that were subprime: 2006 and 2008

Note:
 Subprime loans are identified using rate spreads.

Source:
 FFIEC HMDA data 2006 and 2008.



Subprime lending in Indiana regions. The study team analyzed regional differences in the percent of home purchase loans that were subprime in 2006 and 2008. Figure G-17 presents results of this analysis.

In 2006, about one-quarter of home purchase loans issued to non-Hispanic whites in the Northern region were subprime, compared to about one-third for Native Americans, approximately one-half for Hispanic Americans and about two-thirds for African Americans.

Differences among groups were similar in the Central and Southern regions, where African American and Hispanic American borrowers were much more likely than non-Hispanic whites to obtain a subprime home purchase loan. Native Americans borrowers were also more likely than non-Hispanic white borrowers to purchase their home with a subprime loan, although the disparity between these two groups was not as great. As in the Northern region, Asian Americans were the least likely to purchase a home with a subprime loan.

In 2008, these patterns were largely repeated, although the overall rate of subprime home purchase lending was much lower.

Figure G-17.
Percent of conventional home purchase loans that were subprime by region, 2006 and 2008

Note:
 Subprime loans are identified using rate spreads.

Source:
 FFIEC HMDA data 2006 and 2008.

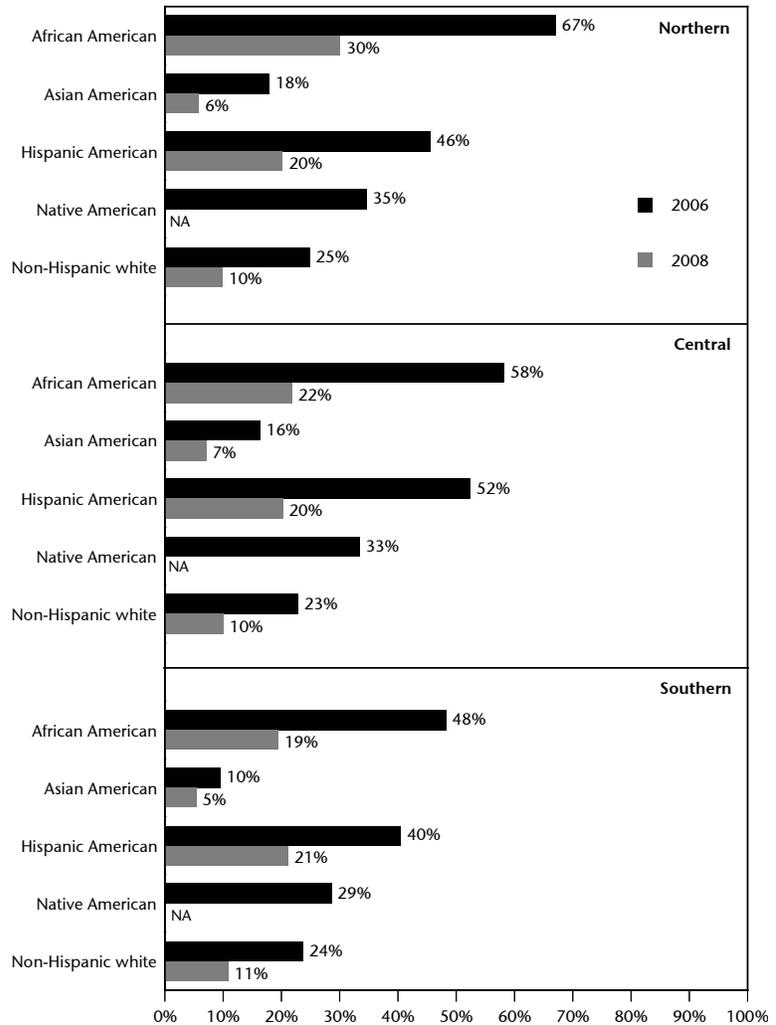
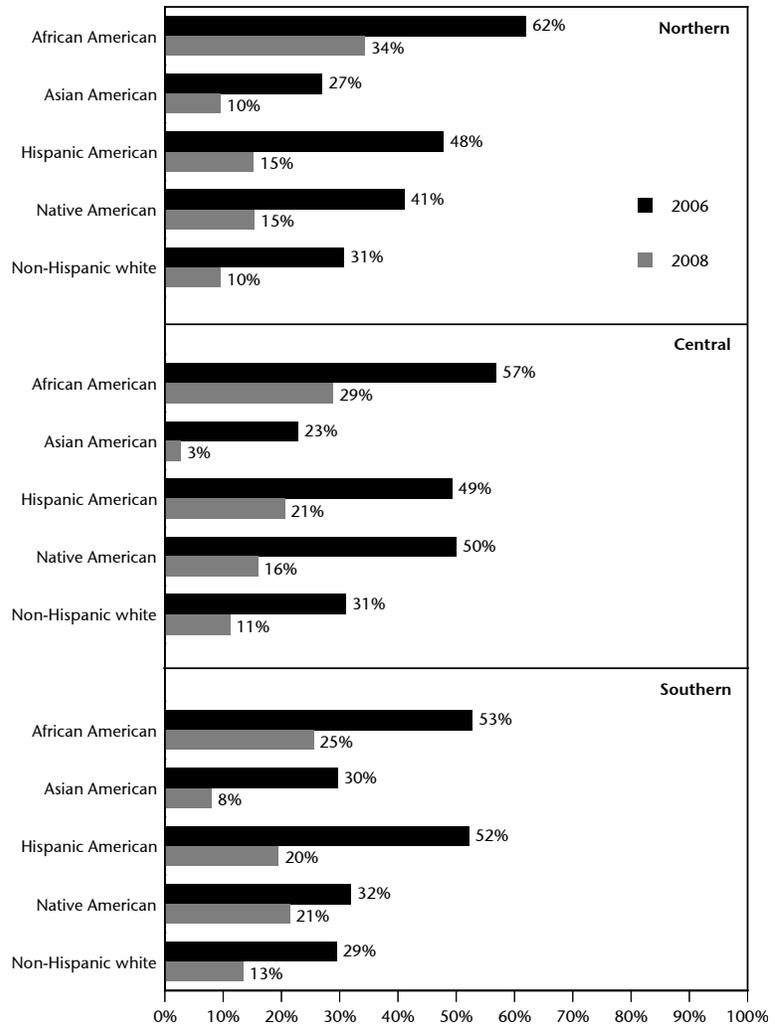


Figure G-18 shows the percentage of conventional refinancing loans that were subprime in the Northern, Central and Southern Indiana regions in 2006 and 2008. Disparities in each region were largely consistent with those seen for home purchase loans.

Figure G-18.
Percent of conventional refinancing loans that were subprime by region, 2006 and 2008

Note:
 Subprime loans are identified using rate spreads.

Source:
 FFIEC HMDA data 2006 and 2008.



Subprime lending in Indiana MSAs. Figure G-19 shows the percent of conventional home purchase loans in 2006 that were subprime in each Indiana MSA. Percentages are shown for individual minority groups as well as for all minorities combined.

In nearly all MSAs, minorities as a whole were much more likely than non-Hispanic whites to receive subprime loans when applying for conventional home purchase loans. Rates of subprime lending to African Americans and Hispanic Americans were typically greatest, with subprime lending rates for Asian Americans usually below the rate for non-Hispanic whites. For example, in Gary-Hammond-East Chicago, 69 percent of home purchase loans made to African Americans were subprime, compared to 24 percent for non-Hispanic whites. At 46 percent, the rate for Hispanic Americans was also much higher than that for non-Hispanic whites. The rate for Asian Americans was only 14 percent. Similar patterns were evident in the other large Indiana MSAs.

Figure G-20 shows the percentage of conventional refinancing loans that were subprime in 2006 in each Indiana MSA. Hispanic Americans and African Americans were more likely to receive subprime refinance loans than non-Hispanic whites in every MSA. The rate of subprime refinancing for Asian Americans was typically closer to the rate for non-Hispanic whites.

Figure G-19.
Percent of conventional home purchase loans that were subprime by MSA, 2006

| | MSA | | | | | | | | | | | | | | | |
|---|----------|-------------|-----------------------|----------|---------------------------|----------------|------------|------------|---------------------|--------|-----------|----------------------|------------------------|--------|----------------------|-------------|
| | Anderson | Bloomington | Cincinnati-Middletown | Columbus | Gary-Hammond-East-Chicago | Elkhart-Goshen | Evansville | Fort Wayne | Indianapolis-Carmel | Kokomo | Lafayette | Louisville-Jefferson | Michigan city-La Porte | Muncie | South-Bend Mishawaka | Terre Haute |
| Percent of conventional home purchase loans that were subprime | | | | | | | | | | | | | | | | |
| African American | 47.9 % | 16.7 % | NA % | 30.8 % | 69.2 % | 54.7 % | 48.9 % | 61.0 % | 59.0 % | 61.4 % | 33.3 % | 58.0 % | 64.4 % | 52.8 % | 66.8 % | 55.0 % |
| Asian American | NA | 4.4 | NA | 11.1 | 14.3 | 38.5 | 8.3 | 14.9 | 17.3 | 9.1 | 5.1 | 7.7 | 45.5 | NA | 18.3 | 6.9 |
| Hispanic American | 50.0 | 45.7 | 20.0 | 53.3 | 46.3 | 44.3 | 46.5 | 52.4 | 56.1 | 35.7 | 30.7 | 37.1 | 48.7 | NA | 38.1 | 40.0 |
| Native American | NA | NA | NA | NA | 53.8 | NA | NA | 23.1 | 31.0 | NA | NA | NA | NA | NA | NA | NA |
| All minorities | 49.3 % | 21.1 % | 40.9 % | 26.3 % | 55.3 % | 44.9 % | 36.7 % | 50.3 % | 49.8 % | 50.0 % | 24.1 % | 40.8 % | 55.1 % | 38.3 % | 49.0 % | 35.5 % |
| Non-Hispanic white | 36.0 % | 20.0 % | 20.2 % | 20.4 % | 23.6 % | 26.5 % | 18.0 % | 21.1 % | 19.8 % | 31.3 % | 16.1 % | 21.9 % | 29.3 % | 25.6 % | 24.7 % | 27.7 % |
| Population size | | | | | | | | | | | | | | | | |
| African American | 48 | 30 | 8 | 13 | 1,215 | 53 | 88 | 310 | 2,315 | 57 | 39 | 69 | 45 | 36 | 214 | 40 |
| Asian American | 4 | 45 | 2 | 27 | 147 | 26 | 48 | 94 | 823 | 11 | 59 | 26 | 11 | 12 | 60 | 29 |
| Hispanic American | 20 | 35 | 10 | 15 | 1,200 | 296 | 43 | 185 | 1,020 | 14 | 127 | 70 | 39 | 9 | 176 | 20 |
| Native American | 3 | 4 | 2 | 2 | 13 | 8 | 9 | 13 | 42 | 2 | 3 | 4 | 3 | 3 | 7 | 4 |
| All minorities | 75 | 114 | 22 | 57 | 2,575 | 383 | 188 | 602 | 4,200 | 84 | 228 | 169 | 98 | 60 | 457 | 93 |
| Non-Hispanic white | 1,108 | 1,799 | 910 | 921 | 7,200 | 2,130 | 3,676 | 4,785 | 20,173 | 1,047 | 1,906 | 2,603 | 1,022 | 954 | 2,900 | 1,722 |

Note: Subprime loans are identified using rate spreads.
Source: FFIEC HMDA data 2006.

Figure G-20.
Percent of conventional refinancing loans that were subprime by MSA, 2006

| | MSA | | | | | | | | | | | | | | | |
|---|----------|-------------|-----------------------|----------|---------------------------|----------------|------------|------------|---------------------|--------|-----------|----------------------|------------------------|--------|----------------------|-------------|
| | Anderson | Bloomington | Cincinnati-Middletown | Columbus | Gary-Hammond-East-Chicago | Elkhart-Goshen | Evansville | Fort Wayne | Indianapolis-Carmel | Kokomo | Lafayette | Louisville-Jefferson | Michigan city-La Porte | Muncie | South-Bend Mishawaka | Terre Haute |
| Percent of conventional refinance loans that were subprime | | | | | | | | | | | | | | | | |
| African American | 61.4 % | 42.1 % | NA % | NA % | 62.7 % | 58.6 % | 48.2 % | 62.0 % | 56.9 % | 43.2 % | 50.0 % | 56.5 % | 54.9 % | 48.8 % | 62.6 % | 68.2 % |
| Asian American | NA | 26.3 | NA | NA | 20.8 | 37.5 | 30.8 | 27.7 | 22.1 | NA | 9.1 | 15.8 | NA | NA | 31.6 | 40.0 |
| Hispanic American | 66.7 | 48.1 | NA | 45.5 | 47.2 | 44.4 | 56.1 | 51.9 | 50.7 | 52.2 | 29.0 | 26.5 | 39.4 | 33.3 | 59.1 | 81.0 |
| Native American | NA | NA | NA | NA | 47.1 | NA | 14.3 | NA | 45.6 | NA | NA | 30.0 | NA | NA | NA | NA |
| All minorities | 62.6 % | 37.7 % | 66.7 % | 45.8 % | 54.4 % | 48.1 % | 46.1 % | 55.0 % | 52.5 % | 49.4 % | 29.7 % | 42.6 % | 47.4 % | 45.6 % | 57.3 % | 67.8 % |
| Non-Hispanic white | 37.9 % | 29.6 % | 28.1 % | 26.2 % | 31.5 % | 29.6 % | 28.5 % | 29.9 % | 29.6 % | 33.2 % | 21.9 % | 25.5 % | 29.9 % | 34.3 % | 30.8 % | 37.7 % |
| Population size | | | | | | | | | | | | | | | | |
| African American | 70 | 19 | 7 | 8 | 992 | 70 | 110 | 258 | 1,842 | 44 | 14 | 85 | 71 | 43 | 182 | 22 |
| Asian American | 2 | 19 | 1 | 5 | 72 | 24 | 13 | 47 | 231 | 4 | 22 | 19 | 7 | 1 | 38 | 10 |
| Hispanic American | 24 | 27 | 7 | 11 | 776 | 135 | 41 | 133 | 432 | 23 | 62 | 34 | 33 | 12 | 127 | 21 |
| Native American | 3 | 4 | 0 | 0 | 17 | 4 | 14 | 9 | 57 | 6 | 3 | 10 | 3 | 1 | 7 | 6 |
| All minorities | 99 | 69 | 15 | 24 | 1,857 | 233 | 178 | 447 | 2,562 | 77 | 101 | 148 | 114 | 57 | 354 | 59 |
| Non-Hispanic white | 1,357 | 1,957 | 1,348 | 808 | 6,988 | 2,149 | 2,957 | 4,118 | 18,327 | 1,202 | 1,610 | 3,601 | 1,286 | 1,082 | 2,575 | 1,672 |

Note: Subprime loans are identified using rate spreads.
Source: FFIEC HMDA data 2006.

In sum, BBC's analysis of HMDA data on subprime lending reveals the following:

- Compared to non-Hispanic white borrowers, a greater share of loans made to Hispanic American, African American and Native American borrowers in Indiana were subprime. This is true for both home purchase and refinancing loans in 2006 and 2008.
- Asian Americans were typically less likely than non-Hispanic whites to obtain subprime loans in Indiana.
- At the regional and MSA levels, a pattern of the disparities between individual minority groups and non-Hispanic whites was still evident.

There is national evidence of lenders seeking out and offering these loans to individuals who will likely be unable to pay off the loan, a form of “predatory lending.”²⁵ Furthermore, some research has shown that many recipients of subprime loans could have qualified for prime loans.²⁶

Research has found evidence that predatory lenders have disproportionately targeted minorities. A 2001 HUD study using 1998 HMDA data found that subprime loans were disproportionately concentrated in black neighborhoods compared to white neighborhoods even after controlling for income.²⁷ For example, borrowers in upper-income black neighborhoods were six times more likely to refinance with a subprime loan than borrowers in upper-income white neighborhoods.

Historically, differences in types of loans awarded to minorities have also been attributed to steering by real estate agents, who serve as an information filter between buyers and sellers.²⁸ Some studies claim that real estate brokers provide different levels of assistance and different information on loans to minorities and non-minorities.²⁹ This “steering” can shape the perception of minority borrowers with respect to the availability of loans.

Lessons from the recent mortgage lending crisis. The turmoil in the housing market since late 2006 has been far-reaching, resulting in the loss of home equity, decreased demand for housing and increased rates of foreclosure.³⁰ Much of the blame has been placed on risky practices in the mortgage industry including substantial increases in subprime lending.

²⁵ Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001. HUD-Treasury National Predatory Lending Task Force Report. *HUD*; Carr, J. and L. Kolluri. 2001. Predatory Lending: An Overview. *Fannie Mae Foundation*; and California Reinvestment Coalition, Community Reinvestment Association of North Carolina, Empire Justice Center, Massachusetts Affordable Housing Alliance, Neighborhood Economic Development Advocacy Project, Ohio Fair Lending Coalition and Woodstock Institute, 2008. “Paying More for the American Dream.”

²⁶ Freddie Mac. 1996, September. “Automated Underwriting: Making Mortgage Lending Simpler and Fairer for America's Families.” *Freddie Mac*. (accessed February 5, 2007); and Lanzerotti. 2006. “Homeownership at High Cost: Foreclosure Risk and High Cost Loans in California.” *Federal Reserve Bank of San Francisco*.

²⁷ Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001.

²⁸ Kantor, Amy C. and John D. Nystuen. 1982. “De Facto Redlining a Geographic View.” *Economic Geography*. 4:309-328.

²⁹ Yinger. 1995. Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. 78-79.

³⁰ Joint Center for Housing Studies of Harvard University. 2008. “The State of the Nation's Housing.”

As discussed above, subprime mortgages increased at an extraordinary rate over time. These high-cost loans increased from 8 percent of originations in 2003 to 20 percent in both 2005 and 2006.³¹ In 2005, subprime loans represented roughly one-fourth of all loans originated in Indiana.³² The preponderance of subprime lending is important as households repaying subprime loans have a higher probability of delinquency or foreclosure. A 2008 study released from the Federal Reserve Bank of Boston found, “homeownerships that begin with a subprime purchase mortgage end up in foreclosure almost 20 percent of the time, or more than 6 times as often as experiences that begin with prime purchase mortgages.”³³

Although Indiana has not suffered to the same extent as states such as California and Nevada in terms of foreclosures and falling home values, the state has nevertheless been affected by the change in housing market conditions. In Indiana, there were over 41,000 properties with foreclosure filings in 2009, representing one in every 67 housing units.³⁴ Indiana’s foreclosure rate ranked 18 out of 50 states and Washington D.C. in 2009. As of September 2009, the proportion of residential properties in Indiana with negative equity (a mortgage worth more than the value of the home) was 8.9 percent, considerably below the national average of 22.6 percent.³⁵ However, due to higher rates of subprime mortgages, it is likely that minority homeowners have been disproportionately affected in terms of foreclosures and loss of home equity.

The problems facing the housing industry substantially reduce the ability of would-be borrowers to secure capital through home mortgages for starting or expanding small businesses. This issue was highlighted in statements made by members of the Board of Governors of the Federal Reserve System to the U.S. Senate and U.S. House of Representatives in 2008:

- On April 16, 2008, Frederic Mishkin informed the U.S. Senate Committee on Small Business and Entrepreneurship that “one of the most important concerns about the future prospects for small business access to credit is that many small businesses use real estate assets to secure their loans. Looking forward, continuing declines in the value of their real estate assets clearly have the potential to substantially affect the ability of those small businesses to borrow. Indeed, anecdotal stories to this effect have already appeared in the press.”³⁶

³¹ Joint Center for Housing Studies of Harvard University. 2008. “The State of the Nation’s Housing.”

³² Mayer, Chris and Karen Perce. “Subprime Mortgage: Who, Where and to Whom?” *Division of Research and Statistics and Monetary Affairs*. Available online at: “<http://www.federalreserve.gov/Pubs/FEDS/2008/200829/200829abs.html>.”

³³ Gerardi, Shapiro, and P. Willen. 2008. “Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure.” *Federal Reserve Bank of Boston*.

³⁴ RealtyTrac. 2009 U.S. Foreclosure Market Report.™ Available online at <http://www.realtytrac.com>.

³⁵ First American CoreLogic. 2009. First American CoreLogic’s Negative Equity Data Report.

³⁶ Mishkin, Frederic. 2008. “Statement of Frederic S. Mishkin, Member, Board of Governors of the Federal Reserve System before the Committee on Small Business and Entrepreneurship, U.S. Senate on April 16.”

- On November 20, 2008, Randall Kroszner told the U.S. House of Representatives Committee on Small Business that “small business and household finances are, in practice, very closely intertwined. [T]he most recent Survey of Small Business Finances (SSBF) indicated that about 15 percent of the total value of small business loans in 2003 was collateralized by ‘personal’ real estate. Because the condition of household balance sheets can be relevant to the ability of some small businesses to obtain credit, the fact that declining house prices have weakened household balance-sheet positions suggests that the housing market crisis has likely had an adverse impact on the volume and price of credit that small businesses are able to raise over and above the effects of the broader credit market turmoil.”³⁷

Federal Reserve Chairman Ben Bernanke recognized the reality of these concerns in a speech titled “Restoring the Flow of Credit to Small Businesses” on July 12, 2010.³⁸ Bernanke indicated that small businesses have had difficulty accessing credit and pointed to the declining value of real estate as one of the primary obstacles.

Furthermore, the National Federation of Independent Business (NFIB) conducted a national survey of 751 small businesses³⁹ in late-2009 to investigate how the recent recession has impacted access to capital.⁴⁰ NFIB concluded that “falling real estate values (residential and commercial) severely limit small business owner capacity to borrow and strains currently outstanding credit relationships.” Survey results indicated that 95 percent of small business employers owned real estate and 13 percent held upside-down property.⁴¹

Current opportunities to obtain business capital through home mortgages appear to be limited, especially for homeowners with little home equity. Furthermore, the increasing rates of default and foreclosure, particularly for homeowners with subprime loans, reflect shrinking capital that was initially available through these loans. These consequences are likely to have a disproportionate impact on minorities in terms of both homeownership and their ability to secure capital for business start-up and growth.

Redlining. Redlining refers to mortgage lending discrimination against geographic areas associated with high lender risk. These areas are often racially determined, focused in African American or mixed-race neighborhoods.⁴² This practice can perpetuate problems in already poor neighborhoods.⁴³

³⁷ Kroszner, Randall. 2008. “Effects of the financial crisis on small business.” *Testimony before the Committee on Small Business, U.S. House of Representative on November 20.*

³⁸ Bernanke, Ben. 2010. Restoring the Flow of Credit to Small Businesses. *Presented at the Federal Reserve Meeting Series: Addressing the Financing Needs of Small Businesses on July 12.*

³⁹ The study defined a small business as a business employing no less than one individual in addition to the owner(s) and no more than 250.

⁴⁰ National Federation of Independent Business (NFIB). 2010. Small Business Credit in a Deep Recession.

⁴¹ Upside-down is defined as a mortgage that is worth more than the appraised value of the house.

⁴² Holloway, Steven R. 1998. “Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio.” *Annals of the Association of American Geographers.* 88:252-276.

⁴³ Ladd, Helen F. 1998. “Evidence on Discrimination in Mortgage Lending.” *The Journal of Economic Perspectives.* 12:41-62.

Most quantitative studies have failed to find strong evidence in support of geographic dimensions of lender decisions. Studies in Columbus, Ohio; Boston, Massachusetts; and Houston, Texas found that racial differences in loan denial had little to do with the racial composition of a neighborhood, but rather the individual characteristics of the borrower.⁴⁴ Some studies found the race of an applicant but not the racial makeup of the neighborhood to be a factor in loan denials.

Studies of redlining have primarily focused on the geographic aspect of lender decisions; however, redlining can also include the practice of restricting credit flows to minority neighborhoods through procedures that are not observable in actual loan decisions. Examples include branch placement, advertising and other pre-application procedures, all of which can prevent minorities from starting businesses.⁴⁵ Locations of financial institutions are important because local banking sectors often finance local business.⁴⁶ Redlining practices would limit this capital resource to minorities.

Steering by real estate agents. A number of researchers have found that discrimination by real estate agents sometimes contributes to residential segregation of minorities. Such practices include “steering” of prospective homebuyers toward particular neighborhoods based on their race or ethnicity (a practice that has been prohibited by law for many decades). A recent study found such practices in cities throughout the country.⁴⁷

Gender discrimination in mortgage lending. Relatively little information is available on sex-based discrimination in mortgage lending markets. Historically, lending practices overtly discriminated against women by requiring information on marital and childbearing status. Risk associated with women of childbearing age and unmarried women resulted in “income discounting” and limiting the availability of loans to women.⁴⁸

The Equal Credit Opportunity Act (ECOA) of 1973 suspended these discriminatory lending practices, but certain barriers have continued in spite of such laws. For example, there is some evidence that lenders have under-appraised property for female borrowers, thereby restricting the amount of capital they received.⁴⁹

⁴⁴ See Holloway. 1998. “Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio.”; Tootell. 1996. “Redlining in Boston: Do Mortgage Lenders Discriminate Against Neighborhoods?”; and Holmes, Andrew and Paul Horvitz. 1994. “Mortgage Redlining: Race, Risk, and Demand.” *The Journal of Finance*. 49:81-99.

⁴⁵ Yinger, John. 1995. “Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination.” Russell Sage Foundation. New York. 78-79.

⁴⁶ Holloway. 1998. “Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio.”

⁴⁷ Galster, George and Erin Godfrey. 2005. “Racial Steering by Real Estate Agents in the U.S. in 2000.” *Journal of the American Planning Association*. 71:251-268.

⁴⁸ Card. 1980. “Women, Housing Access, and Mortgage Credit.”

⁴⁹ Ladd, Helen F. 1982. “Equal Credit Opportunity: Women and Mortgage Credit.” *The American Economic Review*. 72:166-170.

Access to Business Capital

Barriers in capital markets can have a substantial impact on small business formation and expansion. Several studies have found that start-up capital is important for business profits, longevity and other positive outcomes:⁵⁰

- Greater start-up capital is associated with higher sales and other positive financial outcomes among small businesses;⁵¹
- Limited access to capital has restricted the growth of African American-owned businesses;⁵² and
- Weak financial capital was identified as a significant reason that more African American-owned firms than non-Hispanic white-owned firms closed during a four-year period.⁵³

Bank loans are one of the largest sources of debt for small businesses.⁵⁴ Discrimination in the application and approval processes and limited access to other credit resources could be detrimental to the success of minority- and women-owned businesses. Previous investigations have addressed race/ethnicity and gender discrimination in capital markets by evaluating the following:

- Loan denial rates;
- Loan values;
- Interest rates;
- Individual assumptions that loan applications will be rejected;
- Sources of capital; and
- Relationships between start-up capital and business survival.

To examine the role of race/ethnicity and gender in capital markets, the study team analyzed data from the Federal Reserve Board's 1998 and 2003 Surveys of Small Business Finances (SSBF), the most comprehensive national source of credit characteristics of small firms (those with fewer than 500 employees). The survey contains information on loan denial and interest rates, as well as

⁵⁰ For examples see Fairlie. 2006. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited;" and Grown, Caren and Timothy Bates. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies." Center for Economic Studies, U.S. Bureau of the Census.

⁵¹ See Fairlie, Robert W. and Harry A. Krashinsky. 2006. "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited"; and Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

⁵² Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

⁵³ Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

⁵⁴ Data from the 1998 SSBF indicates that 70 percent of loans to small business are from commercial banks. This result is consistent across all gender, race and ethnic groups with the exception of African Americans, whose rate of lending from commercial banks is even greater than other minorities. See Blanchard, Lloyd, Bo Zhao and John Yinger. 2005. "Do Credit Market Barriers Exist for Minority and Woman Entrepreneurs?" *Center for Policy Research, Syracuse University*.

anecdotal information from firms. Sample weights were applied to provide representative estimates. The samples from 1998 and 2003 contained records for 3,521 and 4,240 firms, respectively.

The SSBF records the geographic location of firms by Census Division, rather than city, county or state. Indiana is in the East North Central Census Division (referred to in the following discussion as the ENC region).⁵⁵

Loan denial rates. Although the 1998 SSBF oversampled minority-owned businesses in the national dataset, the number of minority-businesses that applied for loans in the ENC region was too small to report robust results. Figure G-21 therefore only reports results for 2003. The 2003 SSBF data for the U.S. revealed the following:

- African American-owned businesses experienced substantially higher rates of loan denial than all other groups (a statistically significant difference compared to the denial rate for non-Hispanic white-owned firms);
- Asian American- and Hispanic American-owned firms had a loan denial rate considerably higher than that of non-Hispanic white-owned firms; and
- Women-owned firms had higher rates of loan denial compared to male-owned firms (a statistically significant difference).

Loan denial statistics for individual minority groups in the ENC region are not reported in Figure G-21 due to small sample sizes. Evidence from the 2003 data suggests that a smaller percentage of minority- and women-owned firms in the ENC region were denied loans than non-Hispanic white male-owned businesses. However, those differences were not statistically significant, perhaps due to the limited number of minority- and women-owned businesses in the sample for the ENC region in 2003.

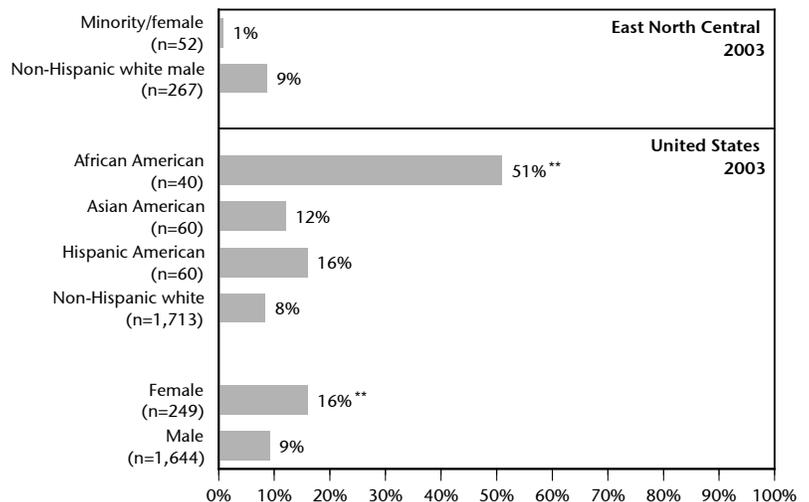
Figure G-21.
Business loan denial rates, 2003

Note:

** Denotes that the difference in proportion from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:

BBC Research & Consulting from 2003 Survey of Small Business Finances.



⁵⁵ The East North Central Census Division includes Illinois, Indiana, Michigan, Ohio and Wisconsin.

Regression analyses of loan denial rates. A number of studies have investigated whether there are disparities in loan denial rates for different race/ethnicity and gender groups after controlling for other factors that affect loan approvals. Findings from these studies include:

- Commercial banks are less likely to loan to African American-owned firms than to non-Hispanic white-owned firms after controlling for neutral factors.⁵⁶
- African American, Hispanic American and Asian American men are more likely to be denied a loan than non-Hispanic white men. However, African American borrowers are more likely to apply for a loan.⁵⁷
- Disparities in loan denial rates between African American-owned and non-Hispanic white-owned firms tend to decrease with increasing competitiveness of lender markets. A similar phenomenon is observed when considering differences in loan denial rates between male- and female-owned firms.⁵⁸
- The probability of loan denial decreases with greater personal wealth. However, controlling for personal wealth does not resolve the large differences in denial rates between minority and non-Hispanic white owned firms. Personal wealth may explain some differences in denial rates for Hispanic- and Asian American-owned firms compared to non-Hispanic whites, but not for African American-owned firms.⁵⁹
- Loan denial rates are significantly higher for African American-owned firms than for non-Hispanic white-owned firms in the presence of neutral factors such as creditworthiness. This result is largely insensitive to specification of the model. Consistent evidence on loan denial rates and other indicators of discrimination in credit markets was not found for other minorities and women.⁶⁰
- Women-owned businesses are as likely to apply for and to be approved for loans as firms owned by men.⁶¹

⁵⁶ Cavalluzzo, Ken, Linda Cavalluzzo and John Wolken. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey." *Journal of Business*. 75: 641-679.

⁵⁷ Coleman, Susan. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances." *The Journal of Business and Entrepreneurship*. 151-166.

⁵⁸ Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

⁵⁹ Cavalluzzo, Ken and John Wolken. 2002. "Small Business Turndowns, Personal Wealth and Discrimination." *FEDS Working Paper No. 2002-35*.

⁶⁰ Blanchflower, David G., Phillip B. Levine and David J. Zimmerman. 2003. "Discrimination in the Small Business Credit Market." *The Review of Economics and Statistics*. 85:930-943.

⁶¹ Coleman. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances."

BBC regression model for the 1998 SSBF. The study team conducted its own analysis of the 1998 SSBF by developing a model to explore the relationships between loan denial and the race/ethnicity and gender of firm ownership while controlling for other factors.⁶² As discussed above, the extensive body of literature on business loan denials provides the theoretical basis for the regression model. Many studies have used probit econometric models to investigate the effects of various owner, firm and loan characteristics — including the race and gender of the ownership — on the likelihood of being denied a loan. The standard model includes three general categories of variables relating to:

- The owner’s demographic characteristics (including race and gender), credit and resources;
- The firm’s characteristics, credit and financial health; and
- The environment in which the firm and lender operate and characteristics of the loan.⁶³

After excluding a small number of observations where the loan outcome was imputed, the national sample included 922 firms that applied for a loan during the three years preceding the survey.⁶⁴

A large number of variables were used to control for differences in the neutral factors described above. Variables were included to represent: the owner’s credit and resources (11 variables); the firm’s characteristics, credit and financial health (29 variables); and the environment in which the firm and lender operate including the nature of the loan applied for (19 variables). Given the relatively small sample size and the large number of variables, the study team did not develop a model based on firms located in the ENC region. Instead, all U.S. firms are included in the model, and any ENC region effects were estimated by including regional control variables — an approach commonly used in other studies that analyze these data.⁶⁵ The regional variables included an indicator variable for firms located in the ENC region and interaction terms that represent firms located in the ENC region that were owned by minorities or women.

⁶² BBC performed the regression analysis using the 1998 SSBF — as opposed to the 2003 SSBF — to capitalize on oversampling of minority-owned businesses in the national dataset in 1998 (not done in 2003).

⁶³ See, for example, Blanchard, Lloyd; Zao, Bo and John Yinger. 2005. “Do Credit Barriers Exist for Minority and Women Entrepreneurs?” *Center for Policy Research, Syracuse University*.

⁶⁴ When a value assigned to a particular variable predicts failure perfectly, observations with that value are dropped from the model. As a result, nine observations were dropped from the model.

⁶⁵ Blanchflower, David G.; Levine, Phillip B. and David J. Zimmerman. 2003. “Discrimination in the Small-Business Credit Market.” *The Review of Economics and Statistics*. 85(4): 930-943; National Economic Research Associates, Inc., 2008. “Race, Sex, and Business Enterprise: Evidence from the City of Austin.” *Prepared for the City of Austin, Texas*; and CRA International. 2007. “Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization.” *Prepared for Santa Clara Valley Transportation Authority*.

Figure G-22 presents the coefficients and t-statistics from the probit model predicting loan denial. The results from the model indicated that a number of neutral factors affect the probability of loan denial with statistical significance:

- Older business owners were more likely to be denied loans;
- Having a four-year degree lowered the probability of loan denial;
- Increased equity in the business owner's home — if he or she is a homeowner — reduced the likelihood of loan denial;
- Business owners who filed for bankruptcy in the past seven years or had a judgment against them in the past three years were more likely to be denied loans;
- Family-owned businesses were more likely to be denied;
- An existing line of credit, an existing mortgage, or existing vehicle or equipment loans reduced the probability of loan denial. However, firms with outstanding loans from stockholders were more likely to be denied;
- Firms that have been delinquent in business transactions or that filed for bankruptcy in the past seven years had a greater chance of being denied loans;
- Being in the construction industry increased the likelihood of loan denial;
- Firms in highly concentrated industry segments (as measured by the Herfindahl index) were more likely to be denied; and
- Business mortgage applications, vehicle and equipment loan applications and loan applications for other purposes were less likely to be denied.

Even after controlling for neutral characteristics, firms owned by African Americans and Hispanic Americans were still more likely than non-Hispanic white-owned firms to have their loans denied in the United States (both statistically significant differences). The interaction term for African Americans in the ENC region is also statistically significant, implying that the probability of loan denial for African American-owned firms within the ENC region is even greater than in the U.S., after controlling for other factors.

Figure G-22.
Likelihood of business loan denial (probit regression) in the U.S. in the 1998 SSBF
Dependent variable: loan denial

| Variable | Coefficient | t-statistic | Variable | Coefficient | t-statistic | Variable | Coefficient | t-statistic |
|--|-------------|-------------|--|-------------|-------------|---|-------------|-------------|
| Race/ethnicity and gender | | | Firm's characteristics, credit and financial health | | | Firm and lender environment and loan characteristics | | |
| Constant | -5.417818 | -4.23 ** | D&B credit score = moderate risk | 0.521896 | 1.02 | Partnership | 0.150428 | 0.44 |
| African American | 1.110291 | 4.20 ** | D&B credit score = average risk | 0.650883 | 1.28 | S corporation | -0.144253 | -0.62 |
| Asian American | 0.252747 | 0.84 | D&B credit score = significant risk | 0.349164 | 0.67 | C corporation | -0.260942 | -0.95 |
| Hispanic American | 0.986560 | 4.36 ** | D&B credit score = high risk | 0.355688 | 0.64 | Construction industry | 0.559901 | 2.14 ** |
| Female | -0.065250 | -0.38 | Total employees | -0.001322 | -0.42 | Manufacturing industry | 0.110422 | 0.41 |
| East North Central (ENC) region | -0.489120 | -1.56 | Percent of business owned by principal | -0.001315 | -0.28 | Transportation, communications and utilities industry | 0.396978 | 0.9 |
| African American in ENC region | 1.816634 | 3.15 ** | Family-owned business | 0.657004 | 2.20 ** | Finance, insurance and real estate industries | -0.204755 | -0.58 |
| Female in ENC region | 0.376219 | 0.46 | Firm purchased | -0.248872 | -1.20 | Engineering industry | 0.556421 | 1.49 |
| | | | Firm inherited | 0.121091 | 0.35 | Other industry | 0.269969 | 1.39 |
| | | | Firm age | -0.013355 | -1.25 | Herfindahl index = .10 to .18 | 2.098092 | 3.92 ** |
| | | | Firm has checking account | 0.344435 | 1.07 | Herfindahl index = .18 or above | 2.468705 | 4.57 ** |
| | | | Firm has savings account | -0.146954 | -0.82 | Located in MSA | 0.064922 | 0.34 |
| | | | Firm has line of credit | -0.961585 | -5.35 ** | Sales market local only | 0.127150 | 0.78 |
| Owner's characteristics, credit and resources | | | Existing capital leases | -0.076398 | -0.38 | Loan amount | 0.000000 | -0.20 |
| Age | 0.013588 | 1.65 * | Existing mortgage for business | -0.390642 | -1.87 * | Capital lease application | -0.178001 | -0.53 |
| Owner experience | 0.007605 | 0.70 | Existing vehicle loans | -0.550492 | -2.95 ** | Business mortgage application | -0.717025 | -2.60 ** |
| Less than high school education | 0.334953 | 0.95 | Existing equipment loans | -0.474286 | -2.08 ** | Vehicle loan application | -1.279722 | -4.02 ** |
| Some college | -0.131451 | -0.63 | Existing loans from stockholders | 0.589614 | 2.78 ** | Equipment loan application | -0.830852 | -2.81 ** |
| Four-year degree | -0.497991 | -2.20 ** | Other existing loans | -0.153084 | -0.78 | Loan for other purposes | -0.352698 | -1.72 * |
| Advanced degree | -0.403930 | -1.63 | Firm used trade credit in past year | -0.198620 | -1.23 | | | |
| Log of home equity | -0.062182 | -3.22 ** | Log of total sales in prior year | 0.007579 | 0.11 | | | |
| Bankruptcy in past 7 years | 1.183356 | 2.17 ** | Negative sales in prior year | 0.456809 | 0.54 | | | |
| Judgement against in past 3 years | 1.017607 | 3.35 ** | Log of cost of doing business in prior year | -0.002321 | -0.05 | | | |
| Log of net worth excluding home | 0.005274 | 0.09 | Log of total assets | 0.037307 | 0.52 | | | |
| Owner has negative net worth | -0.247718 | -0.36 | Negative total assets | -0.431963 | -0.49 | | | |
| | | | Log of total equity | 0.081001 | 1.08 | | | |
| | | | Negative total equity | 0.921773 | 1.18 | | | |
| | | | Firm bankruptcy in past 7 years | 0.871873 | 1.78 * | | | |
| | | | Firm delinquency in business transactions | 1.158625 | 6.19 ** | | | |

Note: * Statistically significant at 90% confidence level.
 ** Statistically significant at 95% confidence level.

There were insufficient observations to include separate variables for Native Americans at the national level or Asian Americans or Native Americans at the West South Central region level.

Source: BBC Research & Consulting analysis of 1998 SSBF data.

The study team simulated loan approval rates for minority groups with statistically significant disparities (African Americans and Hispanic Americans) by inputting observed variables for those groups into a probit model developed for non-Hispanic white-owned firms. To conduct this next step in the analysis, BBC performed a probit regression predicting loan approval rates using only the non-Hispanic white-owned firms in the dataset. BBC then applied the coefficients from this version of the model to the mean characteristics of minority- and women-owned firms to estimate the probability of loan approval in the absence of race and ethnicity-related effects. The model also included the effect of a business being in the ENC region.⁶⁶ To obtain a measure of how firms owned by those groups compare to similarly situated non-Hispanic white-owned firms, the study team created a disparity index that compares observed approval rates to simulated rates. Figure G-23 shows the results from this analysis.

Figure G-23.
Comparison of actual loan approval rates to simulated loan approval rates, 1998

| Group | Loan approval rates | | Disparity index (100 = parity) |
|-------------------|---------------------|-----------|-----------------------------------|
| | Actual | Benchmark | |
| African American | 46.4% | 76.3% | 61 |
| Hispanic American | 53.7% | 75.7% | 71 |

Note: Actual approval rates presented here and denial rates in Figure G-8 do not sum to 100% due to some observations being dropped in the probit regression.

Source: BBC Research & Consulting analysis of 1998 SSBF data.

Based on 1998 SSBF data, the observed loan approval rate was 46 percent for African American-owned firms that applied for loans in the ENC region. Model results show that African American-owned firms would have an approval rate of about 76 percent if they were approved at the same rate as similarly situated firms owned by non-Hispanic whites. In this same environment, Hispanic American-owned firms would be approved for loans about 76 percent of the time, but the actual loan approval rate for Hispanic American-owned firms was 54 percent.

Applying for loans. Fear of loan denial can prevent small businesses from applying for loans and thus can help explain differences in business outcomes. In addition, it provides insight into minority business owners' perception of the small business lending market. Figure G-24 shows the percentage of firms that reported needing credit but did not apply for fear of having their applications denied in 1998 and 2003.

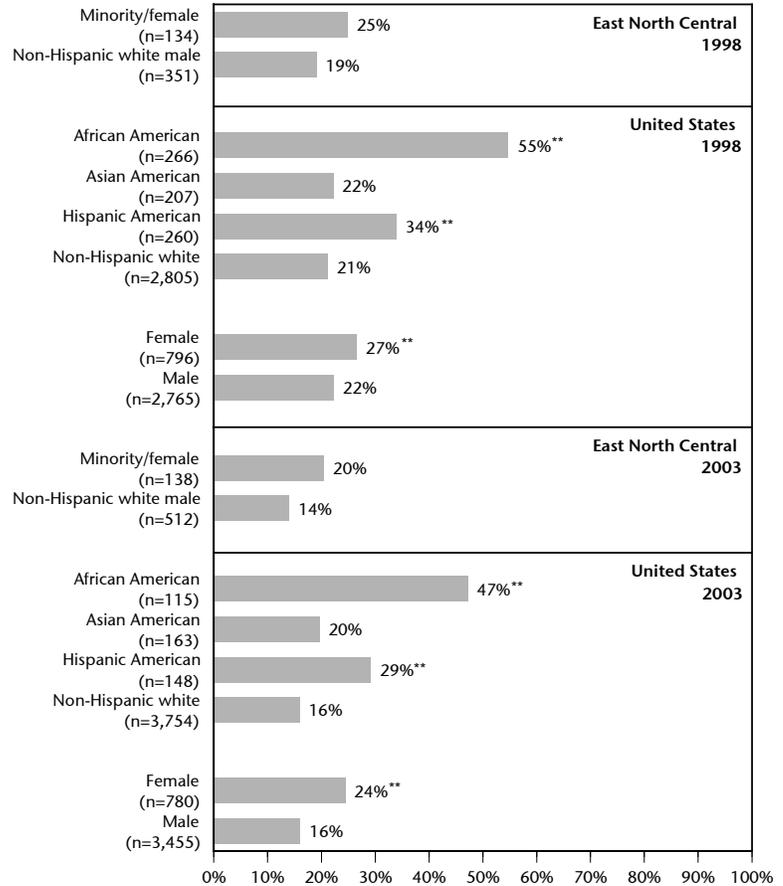
In 1998 and 2003, firms owned by minorities or women were more likely than non-Hispanic white male-owned firms to forgo applying for loans due to fear of denial, both in the ENC region and nationally. In 2003, for example, 20 percent of firms owned by minorities or women in the ENC region indicated that they had not applied for this reason, compared to 14 percent of non-Hispanic white male-owned firms. At the national level, the disparity was greatest for African American- and Hispanic American-owned businesses.

⁶⁶ The approval rate is equal to one minus the denial rate.

Figure G-24.
Firms that needed loans but did not apply due to fear of denial, 1998 and 2003

Note:
 ** Denotes that the difference in proportions from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:
 BBC Research & Consulting from 1998 and 2003 Survey of Small Business Finances.



Loan values. The study team also examined the mean values of approved loans as this may be the most direct measure of capital available to businesses. Results from the 2003 SSBFs for loan values awarded by race and ethnicity are provided in Figure G-25. Comparing loan amounts for non-Hispanic white male-owned firms to minority- and women-owned firms in 2003 indicates the following:

- Minority- or women-owned firms in the ENC region received loans that were on average less than the amount given to non-Hispanic white male-owned firms.
- In the United States, minority- or women-owned firms received loans with a mean value of \$161,000. This compares to an average loan amount of about \$375,000 for non-Hispanic white males.

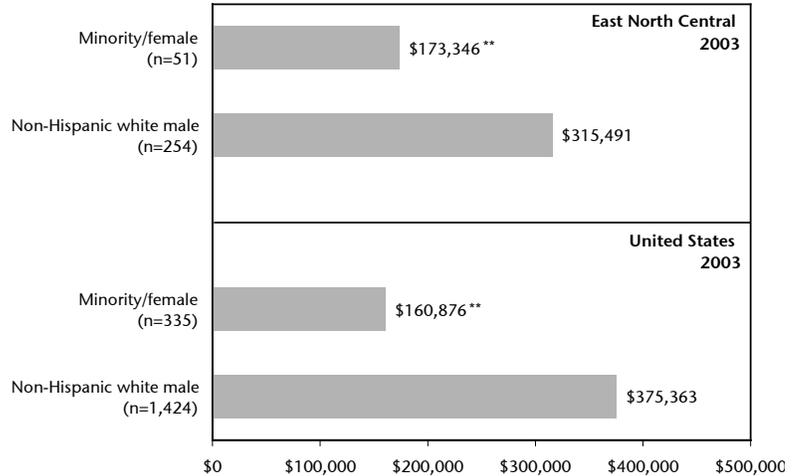
Previous national studies have found that African American-owned firms received substantially lower loan amounts than their non-Hispanic white counterparts with similar characteristics. Examination of construction companies in the United States revealed that African American-owned firms received smaller loans than firms with otherwise identical traits.⁶⁷

⁶⁷ Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

Figure G-25.
Mean value of approved business loans, 2003

Note:
 ** Denotes that the difference in means from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:
 BBC Research & Consulting from 2003 Survey of Small Business Finances.



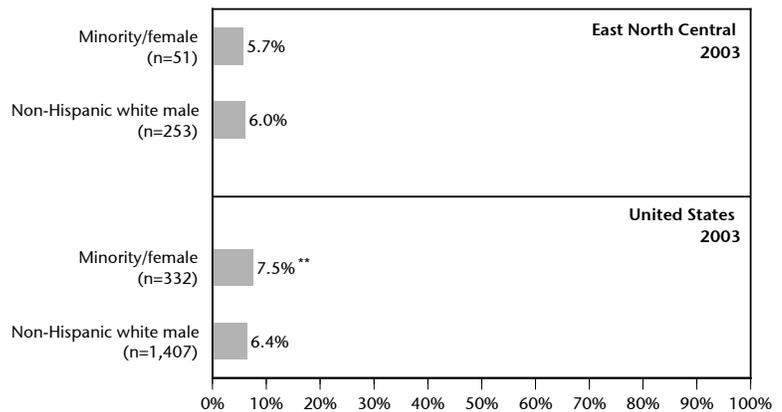
Interest rates. Figure G-26 shows the average interest rate on commercial loans from the 2003 SSBF. The mean interest rate on loans issued to minority- or women-owned firms in the ENC region was similar to the mean interest rate on loans issued to non-Hispanic white male-owned firms.

At the national level, however, the mean interest rate for minority- or female-owned businesses was higher than for non-Hispanic white male-owned businesses (a statistically significant difference).

Figure G-26.
Mean interest rate for business loans, 2003

Note:
 ** Denotes that the difference in means from non-Hispanic white male-owned firms is statistically significant at the 95% confidence level.

Source:
 BBC Research & Consulting from 2003 Survey of Small Business Finances.



Other studies have investigated differences in interest rates across race/ethnicity and gender while controlling for factors such as individual credit history, firm credit history and Dun & Bradstreet credit scores. Findings from these studies include:

- Hispanic-owned firms had significantly higher interest rates for lines of credit in locations with less credit market competition. However, no evidence was found that African American- or female-owned firms received different rates.⁶⁸
- Among a sample of firms without past credit problems, African American-owned firms paid significantly higher interest rates on approved loans.⁶⁹

Other factors affecting capital markets. Ethnic banking sectors may further affect the availability of loans to different minority groups. For example, one study found that strength in the ethnic banking sector influences credit accessibility in ethnic communities in Los Angeles. A strong Asian American bank sector helped Asian American communities develop into successful business environments, and lack of strong banking sectors in African American communities could have hindered development of African American businesses.⁷⁰

⁶⁸ Cavalluzzo. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

⁶⁹ Blanchflower. 2003. "Discrimination in the Small Business Credit Market."

⁷⁰ Dymski, Gary and Lisa Mohanty. 1999. "Credit and Banking Structure: Asian and African-American Experience in Los Angeles." *The American Economic Review*. 89:362-366.

Summary of Analysis of Access to Capital for Business Formation and Success

There is evidence from multiple data sources that minorities and women continue to face certain disadvantages in accessing capital necessary to start and expand businesses.

- Compared to non-Hispanic whites, relatively fewer minorities in Indiana own homes. Among those that do own homes, African Americans, Hispanic Americans and Native Americans tend to have lower home values than non-Hispanic whites. Given that home equity is an important source of capital for business start-up and growth, such conditions may limit opportunities to grow businesses for these groups.
- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Indiana were more likely than non-minorities to have their applications denied.
- African American, Hispanic American and Native American mortgage borrowers are more likely to have subprime loans than non-Hispanic whites.
- African Americans in the East North Central region of the United States were more likely than non-Hispanic white male-owned firms to have business loan applications denied after controlling for neutral factors (based on 1998 data).
- In the ENC region, firms owned by minorities or women were more likely to forgo applying for a business loan due to fear of denial.
- Firms owned by minorities or women in the ENC region that successfully applied for business loans generally received smaller value loans than those provided to non-Hispanic white male-owned businesses.

APPENDIX H.

Success of Businesses in the Indiana Construction, Professional Services, Goods and Support Services Industries

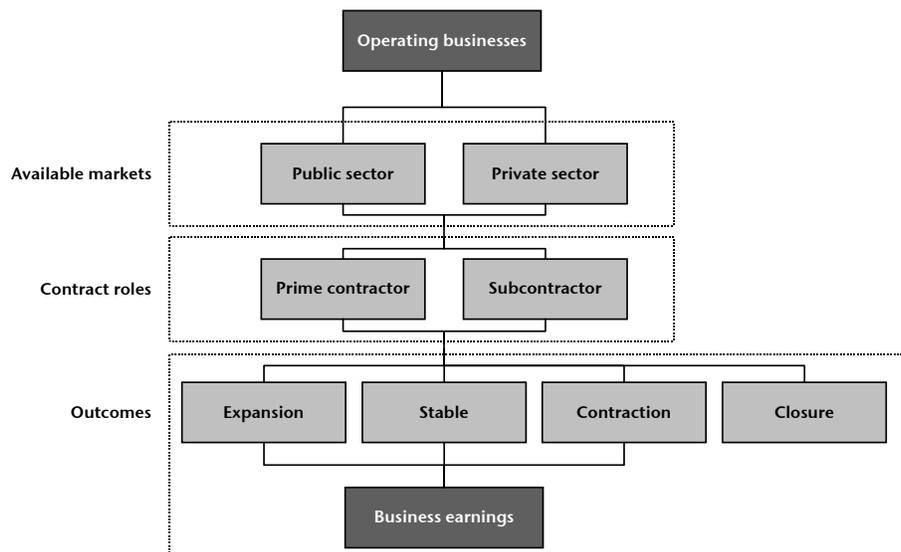
BBC examined the relative success of MBE/WBEs once they were in operation, assessing whether business outcomes for minority- and women-owned firms differed from those of majority-owned firms in the construction, professional services, goods and support services industries. BBC researched outcomes for MBE/WBEs and majority-owned businesses in terms of:

- Participation in public versus private sector markets;
- Participation as prime contractors and subcontractors;
- Sizes of contracts bid on and performed;
- Businesses discontinuing operations;
- Businesses expanding or contracting;
- Business receipts and earnings; and
- Size distribution of gross revenue.

Those analyses examine whether disparities in outcomes that Congress has found for minority- and women-owned businesses in the U.S. are also found in Indiana. Figure H-1 provides a framework for analyzing business success, the components of which will be examined in this appendix.

Figure H-1.
Business success

Source:
BBC Research & Consulting.



This section begins by examining data that the study team collected from interviews with Indiana businesses as part of BBC's availability analysis. Those data included information about firms' involvement in public and private sector work, including:

- Whether firms had bid on and won contracts in study industries;
- The size of those contracts; and
- Whether firms had worked as prime contractors, subcontractors or both.

After examining data from the availability analysis, this section turns to federal data for Indiana and the nation concerning business closures, expansion and contraction. Using those data and information collected from availability interviews, BBC concludes this appendix with an analysis of business earnings.

Markets and Contract Roles

As part of the disparity study, the study team performed telephone availability interviews with transportation construction, professional services, goods and support services firms in Indiana. The study team conducted interviews with local businesses in late 2009 and early 2010. Results provide information on public and private sector work, prime and subcontracts, and past bidding success. The study team also examined data on the largest contract that each firm was awarded. Firm owners and managers were also asked about potential difficulties in the marketplace. Appendix D describes the interview methodology in detail.

Results that the study team examined from the availability interviews pertain to businesses with Indiana locations that reported working within the local transportation construction industry.

- Because of the relatively small number of firms representing specific minority groups, BBC reports results from the availability interviews in aggregate for minority-owned firms ("MBE," regardless of whether they are certified as such).
- Responses for white women-owned firms are shown as "WBE." Results for minority women-owned firms are reported under MBE.
- "Majority-owned firms" are all firms not owned or controlled by minorities or women.

Public sector versus private sector work. BBC examined whether minority- and women-owned firms involved in transportation work were less likely to work in the private sector than the public sector.

The study team separately examined responses for firms in construction subindustries, professional services subindustries (including engineering firms), goods subindustries and support services industries. Results indicate whether a firm had pursued public or private sector work.^{1,2}

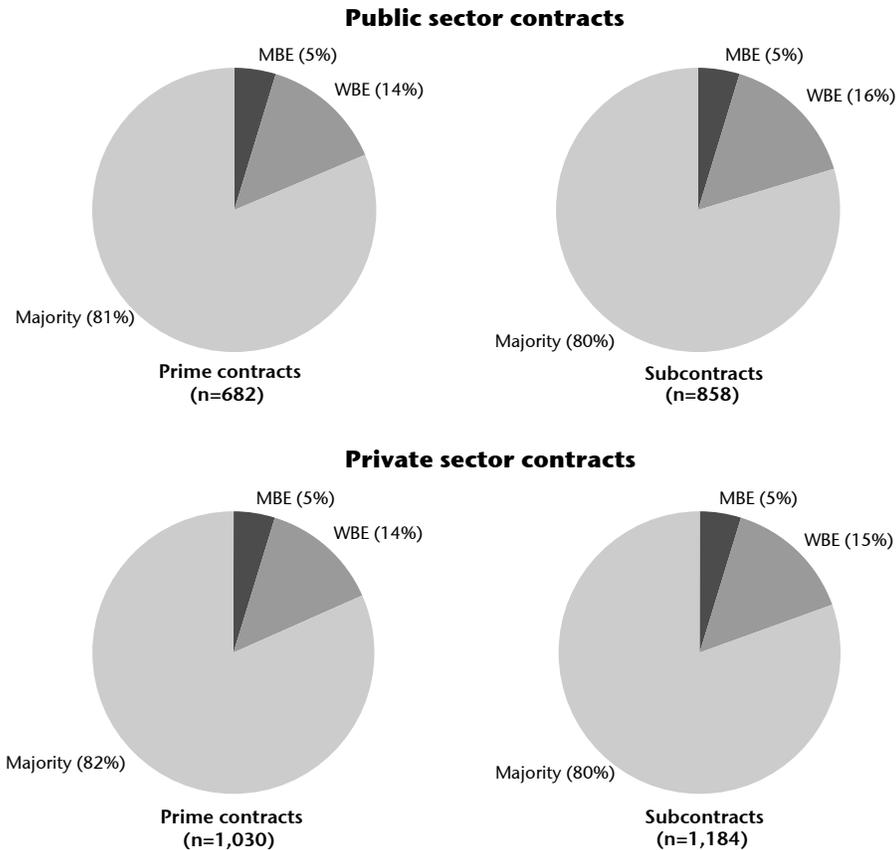
Construction firms. The pie charts in Figure H-2 present the distribution of majority-, minority- and women-owned firms competing for government and private sector prime contracts and subcontracts, based on responses from availability interviews.

- Of the 682 transportation construction industry firms that reported bidding on public sector prime contracts in the past five years, 81 percent were majority-owned, 5 percent were MBEs and 14 percent were WBEs. The share of firms bidding as primes that were MBE/WBEs was about the same for private sector work.
- Among the 858 firms that reported competing for public sector subcontracts, about 80 percent of the firms were majority-owned, 5 percent were MBEs and 16 percent were WBEs. The share of MBE/WBE firms bidding on subcontract work was similar between government contracts and private sector contracts.

¹ A firm was deemed to have performed or bid on public sector work if it answered “yes” to either of the following questions: (a) “Next, I have a few questions about your company’s role in construction, maintenance or design work. During the past five years, has your company submitted [a bid || qualifications || a proposal] or a price quote to any part of a contract for a state or local government agency or public college in Indiana?”; or (b) “During the past five years, has your company received an award for work [as a prime contractor or as a subcontractor || as a prime consultant or as a subconsultant] to any part of a contract for a state or local government agency or public college in Indiana?”

² A firm was deemed to have performed or bid on private sector work if it answered “yes” to either of the following questions: (a) “During the past five years, has your company submitted [a bid || qualifications, a proposal] or a price quote for any part of a private sector contract in Indiana?”; or (b) “During the past five years, has your company received an award for work as a [prime contractor or as a subcontractor] [prime consultant or as a subconsultant] for any part of a private sector contract in Indiana?”

Figure H-2.
Share of construction industry firms bidding on public sector and private sector of work in Indiana in the past five years



Note: "WBE" is white women-owned firms.
 Total may not add to 100 percent due to rounding.
 Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

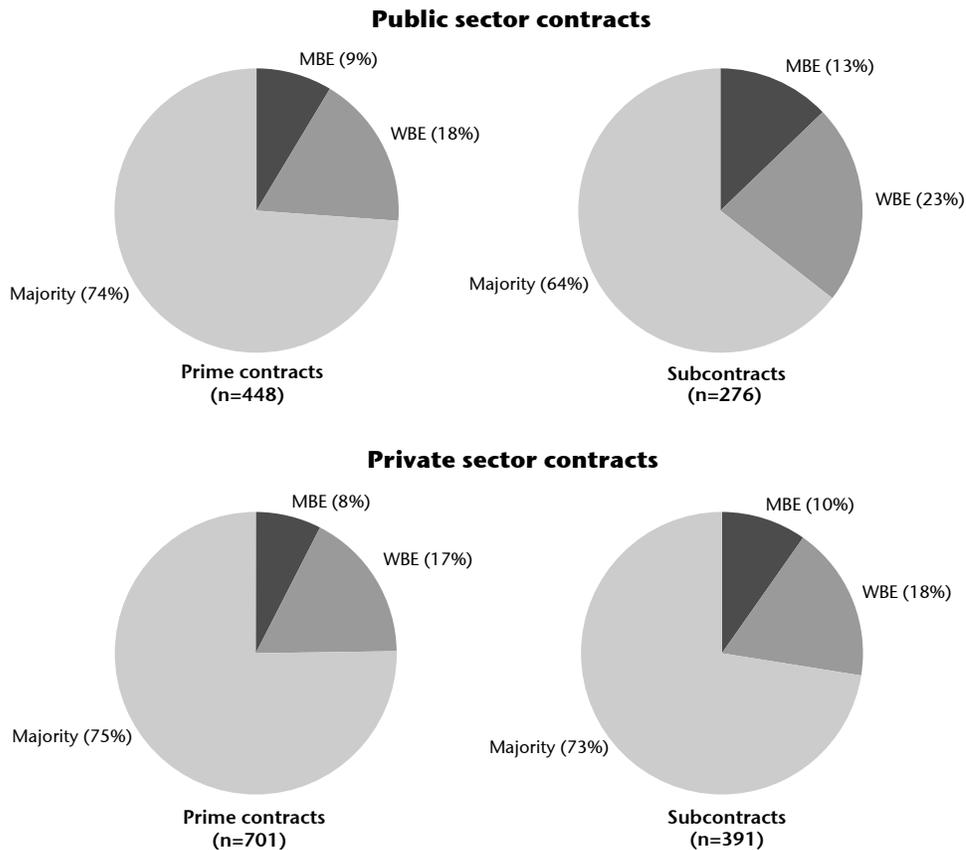
Firms competing for public sector work in Indiana were also asked if they had been awarded any public sector contracts (including both prime contracts and subcontracts). When asked to consider the past five years, 62 percent of MBE and 60 percent of WBE construction firms bidding on public sector work reported that they had been successful in obtaining some work. That percentage was about the same for majority-owned construction firms bidding in the public sector (63%).

About 66 percent of MBEs and 69 percent of WBEs bidding on private sector work indicated that they had received such work. About the same share of majority-owned firms (69%) had received private sector construction prime contracts or subcontracts.

Professional services firms. As with construction firms, the study team analyzed the distribution of majority-, minority- and women-owned firms competing for government and private sector prime contracts and subcontracts, based on responses from availability interviews.

- As shown in Figure H-3, MBE/WBEs comprise a slightly larger share of professional services firms competing for public sector prime contracting work than for private sector prime contracting work (27% for the public sector versus 25% for the private sector).
- MBE/WBEs comprised 36 percent of firms pursuing government professional services subcontracts, more than the MBE/WBE representation among firms seeking subcontracts in the private sector (28%).

Figure H-3.
Share of professional services industry firms bidding on public sector and private sector work in Indiana in the past five years



Note: "WBE" is white women-owned firms.
 Total may not add to 100 percent due to rounding.
 Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

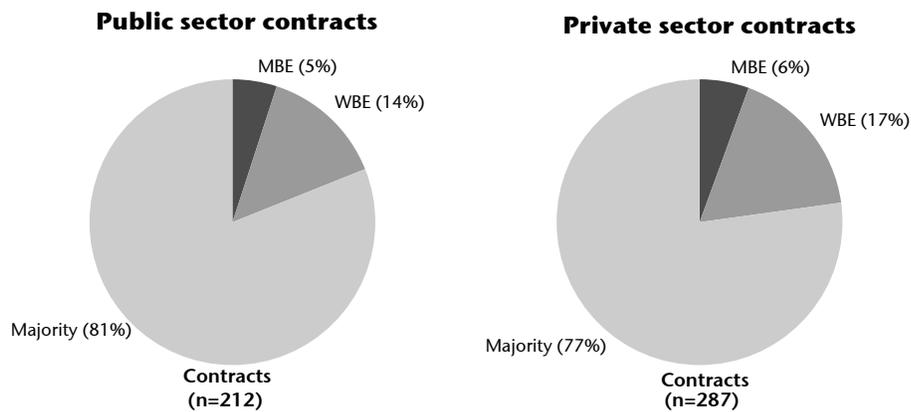
As with construction firms, professional services firms competing for public sector and private sector work were asked if they had received any such work in the past five years. About 78 percent of WBEs and 69 percent of MBEs indicated that they had received some public sector work. Seventy-two percent of majority-owned firms said that they had received public work.

A higher share of MBEs (84%) and WBEs (83%) reported receiving at least some private sector work compared to majority-owned firms (77%).

Goods firms. The study team also analyzed the distribution of majority-, minority- and women-owned firms competing for government and private sector goods prime contracts and subcontracts, based on responses from the availability interviews. The goods analysis does not separately report the share of goods firms that bid as prime contractors and subcontractors, because subcontracting opportunities are not typically available for goods contracts.

- As shown in Figure H-4, MBE/WBEs comprise a slightly larger share of goods firms competing for private sector contracting work than for public sector contracting work (23% for the private sector versus 19% for the public sector).
- In both the public and the private sector, WBEs comprise the majority of MBE/WBEs competing for goods subindustry work.

Figure H-4.
Share of goods industry firms bidding on public sector and private sector work in Indiana in the past five years



Note: "WBE" is white women-owned firms.
 Total may not add to 100 percent due to rounding.
 Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

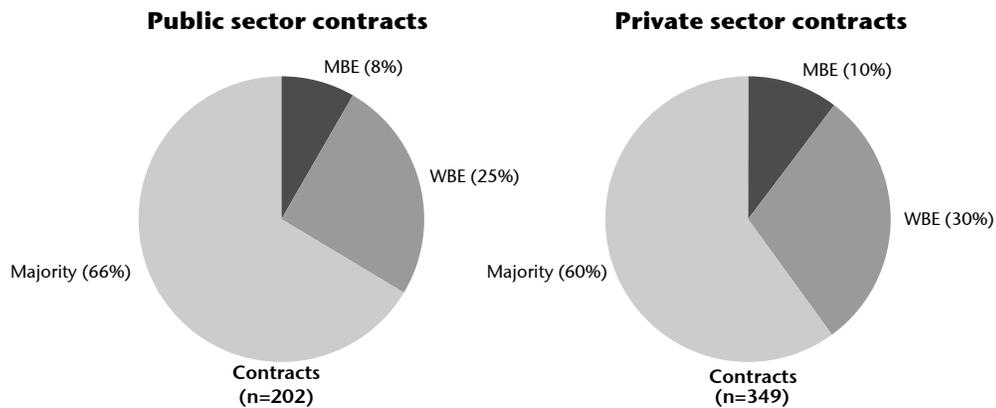
Goods firms competing for public sector and private sector work were also asked if they had received any such work in the past five years. About 93 percent of WBEs and 100 percent of MBEs bidding on public sector goods contracts indicated that they had received some public sector work. A similar share of majority-owned firms (97%) bidding on public sector goods contracts indicated that they had received public work.

When asked whether they had received private sector goods work in the past five years, 100 percent of MBE/WBEs indicated that they had done so. A similar share of majority-owned firms (97%) bidding on private sector goods work said that they had received such work.

Support services firms. As with the other subindustries, the study team also analyzed the distribution of majority-, minority- and women-owned firms competing for government and private sector support services prime contracts and subcontracts, based on responses from the availability interviews. Like the goods analysis, the support services analysis does not separately report the share of support services firms that bid as prime contractors and subcontractors, because subcontracting opportunities are not typically available for support services contracts.

- Figure H-5 shows that the share of MBE/WBEs that competed for public sector support services work (33%) was lower than the share competing for private sector work (40%).
- For both public and private sector support services work, WBEs comprised a larger share of firms competing for support services work than for any other subindustry (25% for public sector work, and 30% for private sector work).

Figure H-5.
Share of support services industry firms bidding on public sector and private sector work in Indiana in the past five years



Note: "WBE" is white women-owned firms.
 Total may not add to 100 percent due to rounding.

Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Support services firms competing for public sector and private sector work were also asked if they had received any such work in the past five years. Three-quarters of WBEs and 71 percent of MBEs bidding on public sector support services contracts said that they had received some public sector support services work. A greater share of majority-owned firms (90%) bidding on public sector support services contracts reported that they had received public sector support services work.

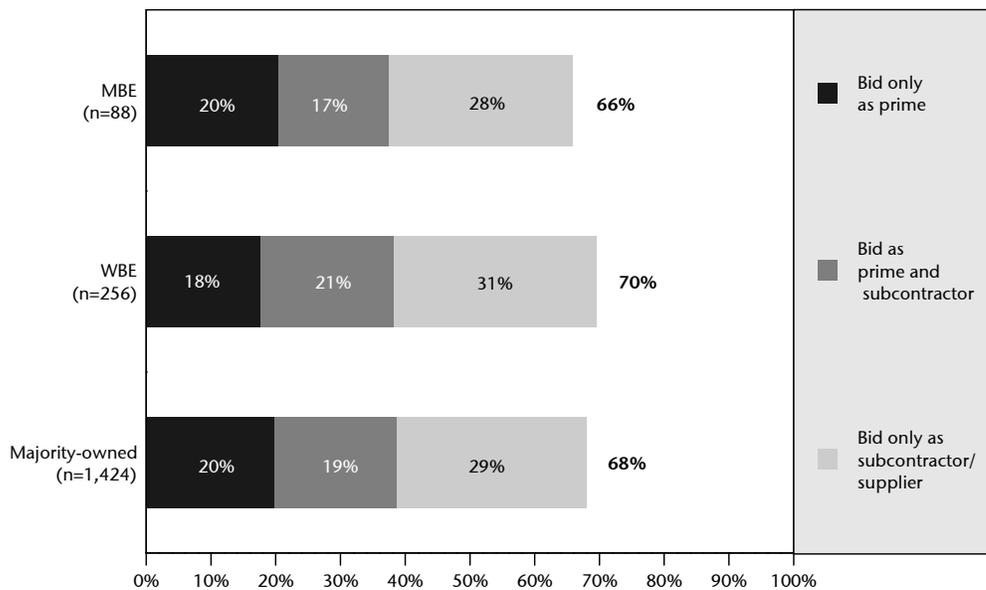
When asked whether they had received public sector support services work in the past five years, 92 percent of MBEs and 94 percent of WBEs bidding on private sector support services work indicated that they had. A similar share of majority-owned firms (97%) bidding on private sector support services work said that they had received such work.

Bidding as prime contractors and subcontractors/suppliers. Figures H-6 through H-13 present the share of majority-, minority- and women-owned firms that bid on public sector or private sector work within the past five years. For the construction and professional services subindustries, the figures indicate what percentage of firms bid as a prime contractor, a subcontractor or as both. Results are reported separately for each subindustry. The following analysis draws from availability interview data.

Construction firms. Figure H-6 examines the share of majority-, minority and women-owned Indiana construction firms that reported bidding on public sector work as a prime contractor, a subcontractor or as both.

- Approximately 68 percent of majority-owned construction firms that reported being qualified and interested in future construction work bid on public sector work as a prime contractor or a subcontractor in the past five years (including submitting price quotes). About 20 percent had bid only as a prime contractor and 29 percent had bid only as a subcontractor.
- About the same share of minority- and women-owned firms reported bidding on past public sector work, as shown in Figure H-6. Two-thirds of MBEs and 70 percent of WBEs reported bidding on public sector construction work in the past five years.
- A similar share of both WBEs (18%) and MBEs (20%) reported that they had bid on public sector construction contracts only as prime contractors within the past five years.

Figure H-6.
Percent of construction firms that reported submitting a bid for any part of a public sector project in the past five years



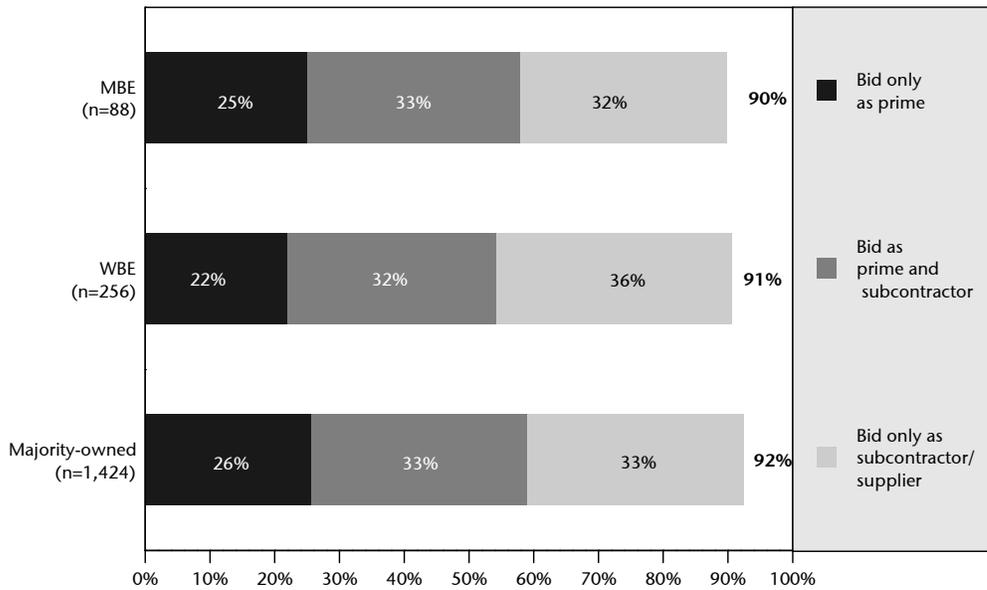
Note: "WBE" is white women-owned firms.

Source: BBC Research & Consulting from the 2009 and 2010 Availability Interviews.

The study team also asked firm owners and managers if the firm had bid on a private sector construction project in the past five years. The proportion of construction firms that bid as prime contractors or as subcontractors on private sector work in the past five years was similar for majority-owned firms, MBEs and WBEs (see Figure H-7).

- Approximately 92 percent of majority-owned firms, 90 percent of MBEs and 91 percent of WBEs reported submitting bid or price quotes for private sector work in the past five years.
- The share of majority-owned construction firms (59%) and MBEs (58%) that bid on prime contracts were similar. The proportion of WBEs that bid on prime contracts was slightly lower (54%).

Figure H-7.
Percent of construction firms that reported submitting a bid for any part of a private sector project in the past five years



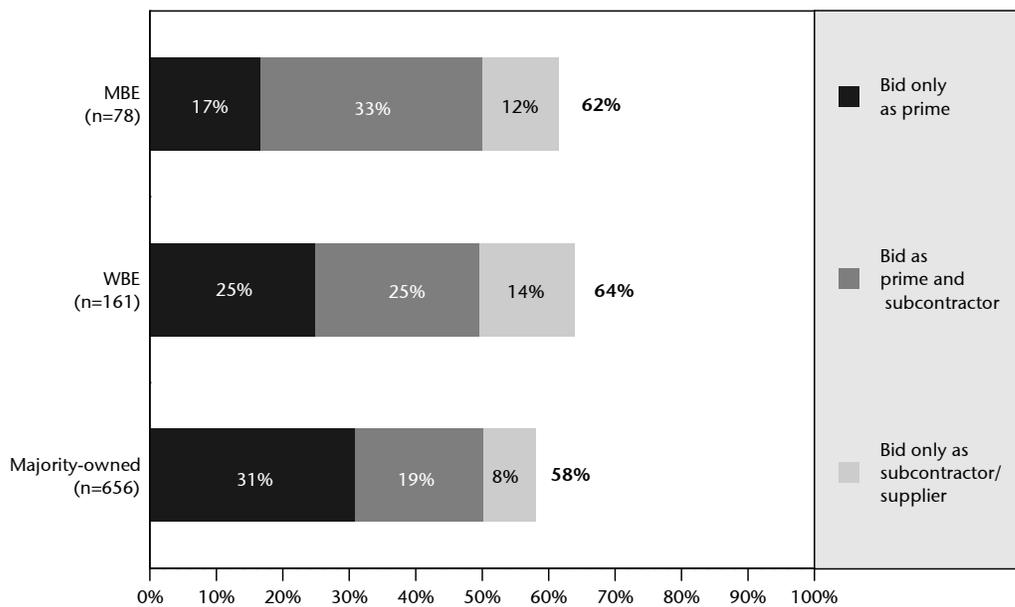
Note: "WBE" is white women-owned firms.

Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Professional services firms. Figures H-8 and H-9 examine prime contract versus subcontract bidding on professional services contracts, based on data from the availability interviews.

- Figure H-8 shows that MBE/WBEs were about as likely as majority-owned firms to bid on public sector professional services contracts as prime contractors. Half of MBEs, WBEs and majority-owned professional services had bid as a prime contractor on public sector work in the past five years.
- Relative to MBEs (12%) and WBEs (14%), a smaller share of majority-owned firms (8%) indicated that they had bid only as a subcontractor on public sector professional services contracts within the past five years.

Figure H-8.
Percent of transportation professional services industry firms that reported submitting a bid for any part of a public sector project in the past five years



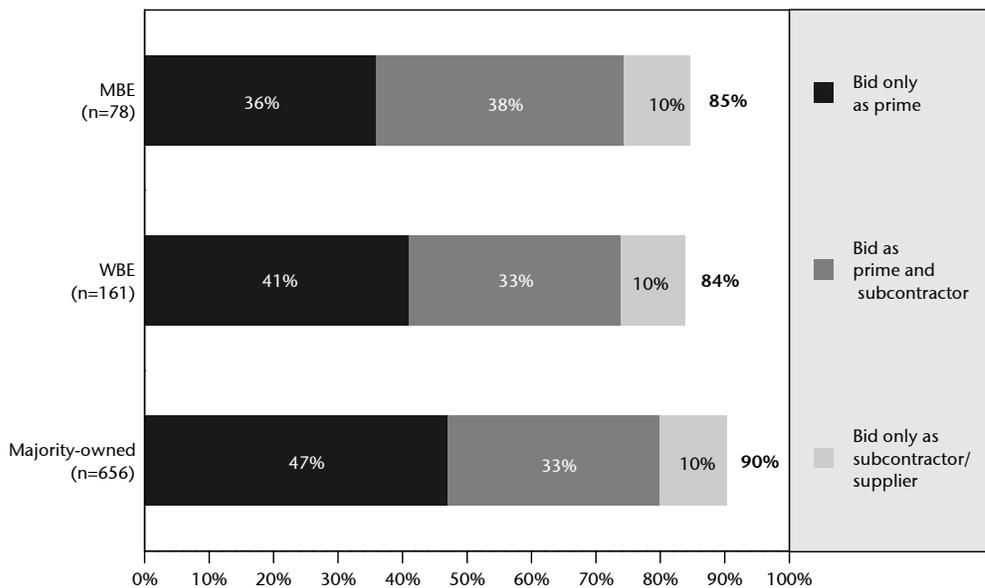
Note: "WBE" is white women-owned firms.

Source: BBC Research & Consulting from the 2009 and 2010 Availability Interviews.

Figure H-9 presents results for professional services firms bidding on private sector work in the past five years.

- Approximately 90 percent of majority-owned firms had bid on private sector professional services work in the past five years. Figure H-9 shows that a smaller share of both MBEs (85%) and WBEs (84%) had bid on private sector contracts within the past five years.
- Majority-owned professional services firms were also more likely to bid on private sector prime contracts. About 80 percent of majority-owned firms had submitted a bid or price quote as prime contractors in the past five years. About three-quarters (74%) of WBEs and MBEs had bid on such work in the past five years.

Figure H-9.
Percent of transportation professional services industry firms that reported submitting a bid for any part of a private sector project in the past five years



Note: "WBE" is white women-owned firms.

Source: BBC Research & Consulting from the 2009 and 2010 Availability Interviews.

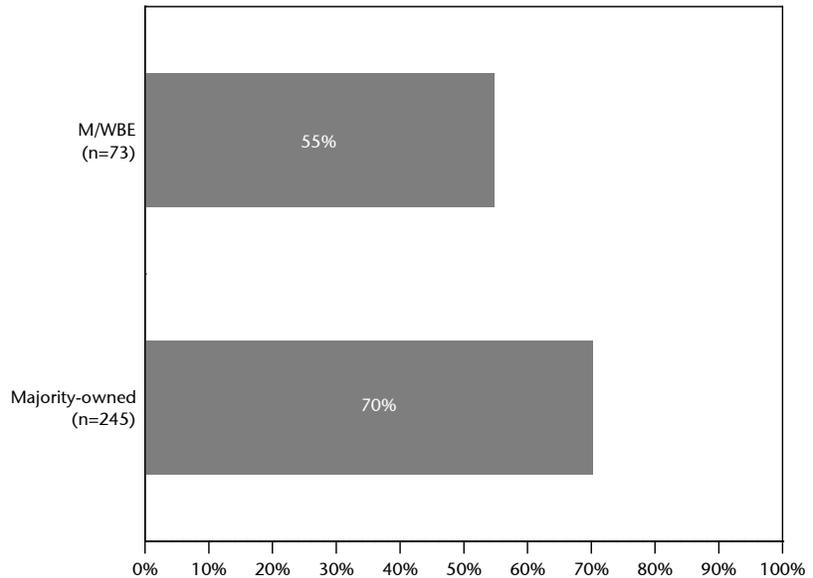
Goods firms. Figure H-10 examines the share of Indiana goods firms in the availability analysis that reported bidding on public sector work as a supplier. The goods analysis does not separately report the share of goods firms that bid as prime contractors and subcontractors, because subcontracting opportunities are not typically available for goods contracts. Responses for MBEs and WBEs were combined due to the relatively small number of respondents (18 MBEs and 55 WBEs).

- Figure H-10 shows that about 55 percent of MBE/WBEs had bid on public sector goods contracts within the past five years.
- Compared to MBE/WBEs, a greater share of majority-owned firms (70%) reported bidding on public sector goods contracts.

Figure H-10.
Percent of goods firms that reported submitting a bid for any part of a public sector project in the past five years

Note:
“WBE” is white women-owned firms.

Source:
BBC Research & Consulting from 2009 and 2010 Availability Interviews.



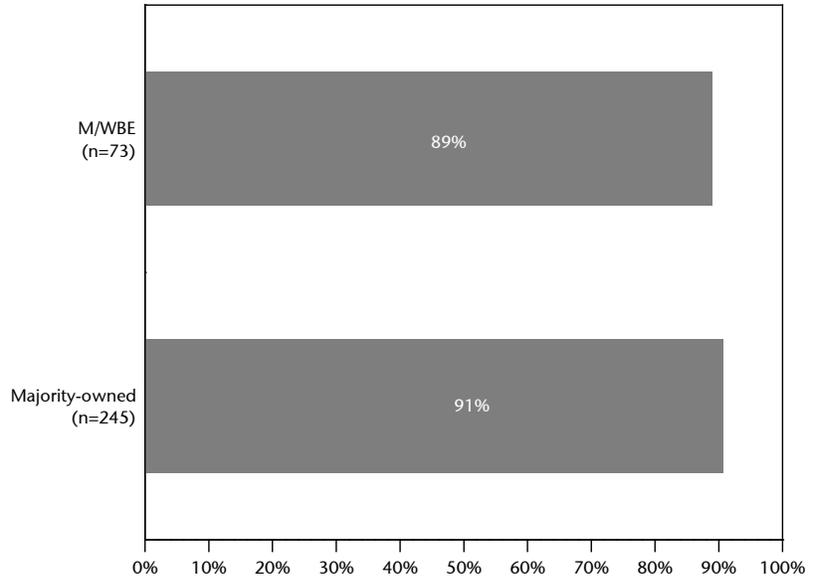
The study team also asked firm owners and managers if their firms had bid on a private sector goods contract in the past five years.

- Figure H-11 shows that 89 percent of MBE/WBEs had submitted bids (or price quotes) on private sector goods contracts within the past five years.
- A similar share of majority-owned firms (91%) had reported bidding on private sector goods work.

Figure H-11.
Percent of goods firms that reported submitting a bid for any part of a private sector project in the past five years

Note:
 "WBE" is white women-owned firms.

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.



Support services firms. Figure H-12 examines the share of Indiana support services firms in the availability analysis that reported bidding on public sector work as a supplier. Like the goods analysis, the support services analysis does not separately report the share of goods firms that bid as prime contractors and subcontractors, because subcontracting opportunities are not typically available for support services contracts. Responses for MBEs and WBEs were combined due to the relatively small number of respondents (41 MBEs and 107 WBEs).

- As shown in Figure H-12, 56 percent of majority-owned support services firms reported that they had bid or proposed on a public sector contract in the past five years.
- Compared to majority-owned firms, a smaller share of MBE/WBEs (46%) reported bidding on public sector support services work in the past five years.

Figure H-12.
Percent of support services firms that reported submitting a bid for any part of a public sector project in the past five years

Note:
 "WBE" is white women-owned firms.

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.

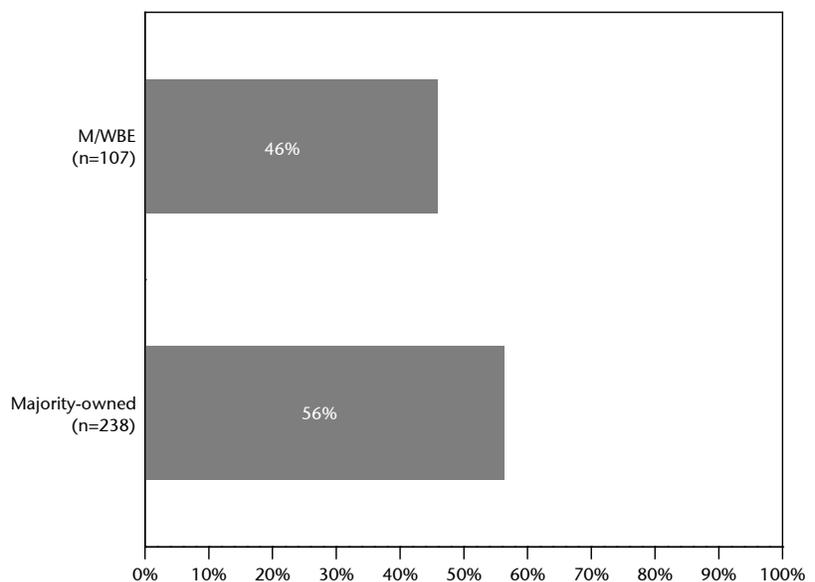


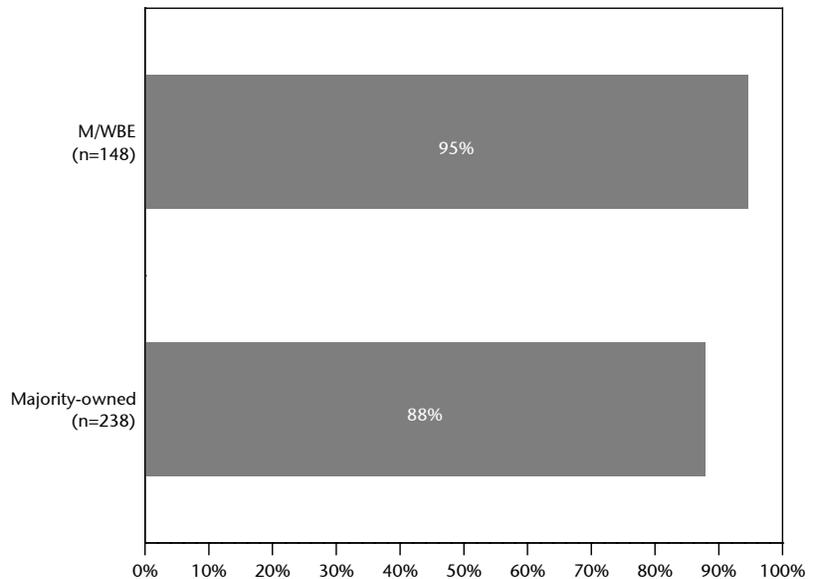
Figure H-13 presents results for support services firms bidding on private sector work.

- About 88 percent of majority-owned firms reported bidding on private sector support services contracts within the last five years.
- Relative to majority-owned firms, a larger share of MBE/WBEs (95%) indicated that they had submitted bids (including price quotes) on private sector support services work.

Figure H-13.
Percent of support services firms that reported submitting a bid for any part of a private sector project in the past five years

Note:
"WBE" is white women-owned firms.

Source:
BBC Research & Consulting from 2009 and 2010 Availability Interviews.



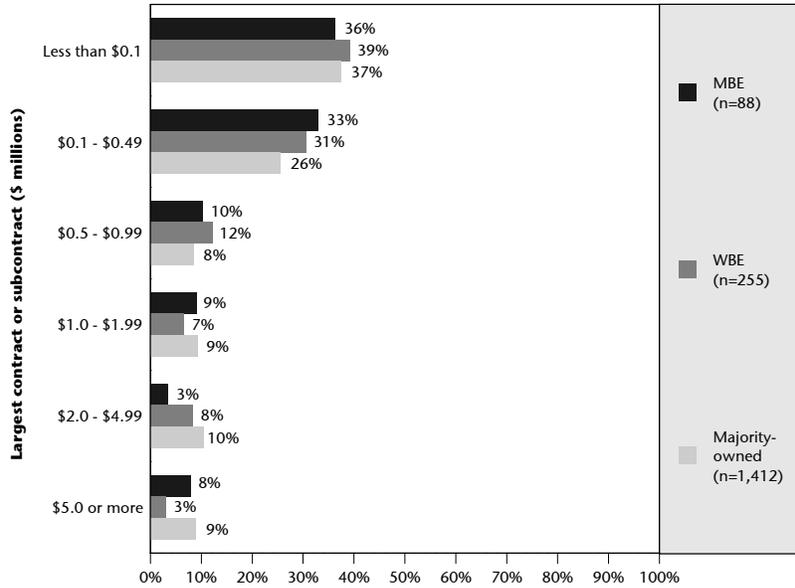
Largest contract. As part of the availability interviews, the study team asked firms to identify the largest contract each firm was awarded in Indiana in the past five years. Data from MBEs and WBEs were combined for goods firms and for support services firms due to the relatively small number of respondents.

Construction firms. Among construction firms in the availability interviews, 28 percent of majority-owned firms reported that the largest contract they received was worth \$1 million or more. A smaller share of MBEs (20%) and WBEs (18%) reported that the largest contract they received was worth \$1 million or more. Only 3 percent of WBEs received work worth \$5 million or more, whereas 8 percent of MBEs and 9 percent of majority-owned firms were awarded contracts of that size or larger.

Figure H-14.
Largest contract or subcontract that the company received in Indiana in the past five years, construction firms

Note:
 "WBE" is white women-owned firms.

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.

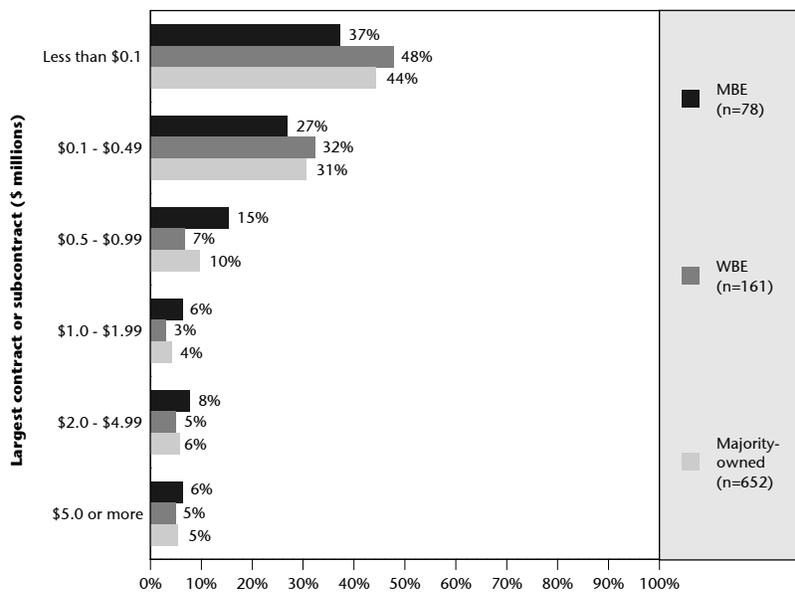


Professional services firms. Among professional services firms, a similar share of MBE/WBEs and majority-owned firms reported that the largest contract that they received was worth \$5 million or more (6% for MBEs; 5% for WBEs; 5% for majority-owned firms). Twenty percent of MBEs reported that the largest contract they received was worth \$1 million or more. A smaller share of WBEs (13%) and majority-owned firms (15%) reported that the largest contract they received was worth \$1 million or more. The percent of majority-owned firms whose largest contract was worth \$0.5 million or less was similar to that of WBEs (85% for majority-owned firms; 87% for WBEs). A smaller share of MBEs (79%) reported that the largest contract they received was worth \$0.5 million or less.

Figure H-15.
Largest contract or subcontract that the company received in Indiana in the past five years, professional services firms

Note:
 "WBE" is white women-owned firms.

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.

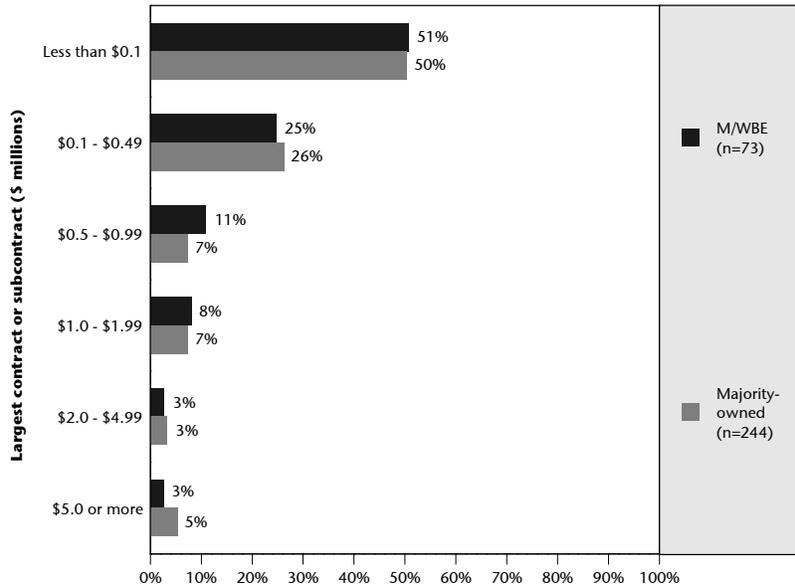


Goods firms. As shown in Figure H-16, there was little difference between the size of the largest contract that MBEs, WBEs and majority-owned goods firms reported receiving in the past five years.

Figure H-16.
Largest contract or subcontract that the company received in Indiana in the past five years, goods firms

Note:
 "WBE" is white women-owned firms.

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.

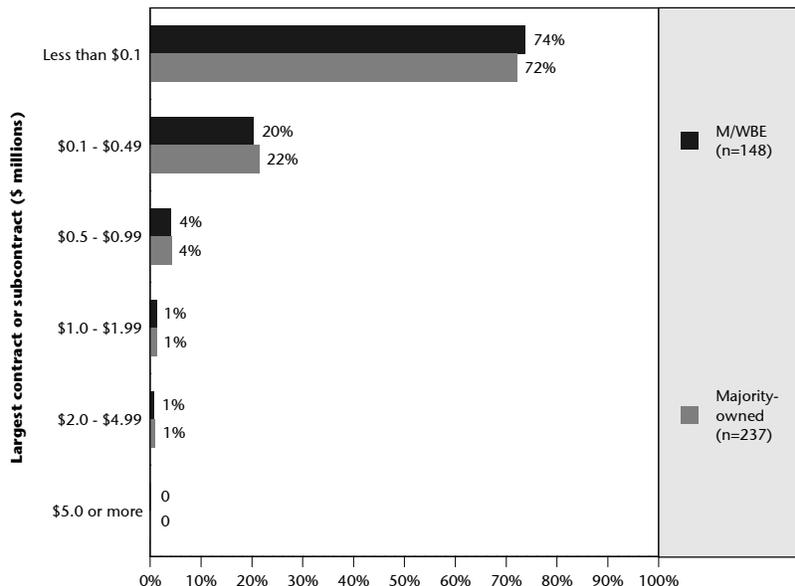


Support services firms. As shown in Figure H-17, there was little difference between the size of the largest contract that MBEs, WBEs and majority-owned support services firms reported receiving in the past five years. No support services firms in the availability interview reported that the largest contract they had received was worth \$5 million or more, and a negligible share of firms reported that the largest contract they received was worth between \$2 million and \$5 million.

Figure H-17.
Largest contract or subcontract that the company received in Indiana in the past five years, support services firms

Note:
 "WBE" is white women-owned firms.

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.



Bid capacity. Some recent legal cases regarding race- and gender-conscious contracting programs have considered the issue of the “relative capacity” of firms included in an availability analysis.³ One approach to accounting for differing capacity between types of firms is to examine relatively small contracts, a technique noted in *Rothe*. In addition to examining small contracts, BBC directly measured bid capacity in its availability analysis.

Measurement of bid capacity. “Bid capacity” for a firm is measured as the largest contract or subcontract the firm bid on or performed in Indiana within the five years preceding when BBC interviewed the firm. BBC uses bid capacity as one factor in determining whether a firm would be available to bid on specific prime contracts and subcontracts.

Assessment of possible disparities in bid capacity of MBE/WBEs and majority-owned firms. The availability analysis produced a database of 3,997 firms potentially available for IDOA, INDOT and SEI work.^{4,5} The following analysis of bid capacity relies on the results of availability interviews.

One factor that affects bid capacity is the industry specializations of firms. Some industry segments, such as construction of water, sewer and utility lines, involve larger projects. Other segments, such as landscape architecture and surveying and mapmaking, involve smaller-scale assignments. One way of controlling for variation in bid capacities in different subindustries is to assess whether a firm has a bid capacity above or below the median level of firms in a particular subindustry. BBC can then test whether minority- and women-owned firms bid on larger or smaller contracts or subcontracts compared with other firms in the same subindustry.

Figure H-18 indicates the median bid capacity among Indiana-based firms in each of the 64 industry segments within the construction, professional services, goods and support services subindustries included in the disparity study. Note that the survey questions regarding the largest project that firms had bid on or been awarded captured data in dollar ranges rather than in specific dollar amounts.

³ See, for example, the decision of the United States Court of appeals for the Federal Circuit in *Rothe Development Corp. v. U.S. Department of Defense*, 545 F.3d 1023 (Fed. Cir. 2008).

⁴ Six hundred and twenty-eight of these firms were not included in the availability marketplace analysis reported in this section, because they did not supply answers to survey question D2 or D4 on the Availability Survey.

⁵ See Appendix D for further description of the survey sample and process.

Figure H-18.
Median bid capacity by subindustry

| Subindustry | Median Bid Capacity | Subindustry | Median Bid Capacity |
|--|---------------------------------|--|---------------------------------|
| Advertising, marketing and public relations | Over \$100,000 to \$500,000 | IT and data services | Over \$100,000 to \$500,000 |
| Agricultural services | Over \$500,000 to \$1 million | Industrial chemicals | Over \$500,000 to \$1 million |
| Architectural and design services | Over \$1 million to \$2 million | Industrial equipment and machinery | Over \$100,000 to \$500,000 |
| Asphalt | Over \$1 million to \$2 million | Insulation and waterproofing | Over \$100,000 to \$500,000 |
| Athletic goods | \$100,000 or less | Laboratory equipment | \$2 million to \$5 million |
| Automobiles | Over \$100,000 to \$500,000 | Landscape architecture | Over \$100,000 to \$500,000 |
| Building construction | \$2 million to \$5 million | Law enforcement equipment and supplies | Over \$1 million to \$2 million |
| Business services and consulting | \$100,000 or less | Masonry, drywall and stonework | Over \$100,000 to \$500,000 |
| Ceiling and floor contractor | \$100,000 or less | Office equipment | \$100,000 or less |
| Cleaning and janitorial services | \$100,000 or less | Office supplies | \$100,000 or less |
| Cleaning and janitorial supplies | \$100,000 or less | Other building construction | Over \$500,000 to \$1 million |
| Coal and other minerals | Greater than \$100 million | Other construction materials | Over \$100,000 to \$500,000 |
| Communications equipment | Over \$100,000 to \$500,000 | Other construction services | \$100,000 or less |
| Computer systems and services | \$100,000 or less | Painting | 100,000 |
| Concrete and related products | Over \$1 million to \$2 million | Petroleum and petroleum products | Over \$500,000 to \$1 million |
| Concrete work | Over \$100,000 to \$500,000 | Plumbing and HVAC | 100,000 |
| Construction management | \$5 million to \$10 million | Printing and copying | \$100,000 or less |
| Construction materials | Over \$500,000 to \$1 million | Research services | Over \$100,000 to \$500,000 |
| Electrical equipment and supplies | Over \$500,000 to \$1 million | Residential construction | Over \$100,000 to \$500,000 |
| Electrical work | Over \$100,000 to \$500,000 | Restaurant and hotel equipment | \$100,000 or less |
| Elevator installation, repair and equipment | Over \$100,000 to \$500,000 | Roofing | Over \$100,000 to \$500,000 |
| Engineering | Over \$100,000 to \$500,000 | Security guard services | Over \$100,000 to \$500,000 |
| Environmental services and transportation planning | Over \$100,000 to \$500,000 | Security services | Over \$100,000 to \$500,000 |
| Excavation | Over \$100,000 to \$500,000 | Surveying and mapmaking | \$100,000 or less |
| Finance consulting and accounting | \$100,000 or less | Testing services | Over \$100,000 to \$500,000 |
| Floor coverings | Over \$100,000 to \$500,000 | Tires and inner tubes | \$100,000 or less |
| Food and concessions | \$100,000 or less | Tools | \$100,000 or less |
| Foundation work | \$100,000 or less | Trucking, hauling and storage | Over \$100,000 to \$500,000 |
| Furniture | Over \$500,000 to \$1 million | Uniforms and linens | \$100,000 or less |
| Heavy construction equipment rental | 100,000 | Vehicle parts and supplies | \$100,000 or less |
| Highway, street and bridge construction | Over \$500,000 to \$1 million | Water, sewer, and utility lines | Over \$500,000 to \$1 million |
| Human resources and job training services | Over \$500,000 to \$1 million | Wrecking and demolition | Over \$500,000 to \$1 million |

Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Firms with bid capacities above the median for their industry segments are counted as available for larger projects than most of the firms in their line of business (as well as being counted as available for smaller assignments). Thus, these firms figure more prominently in the availability analysis than firms with smaller bid capacities. An initial question is whether minority and women-owned firms are as likely as majority owned firms to have above-median bid capacity for their industry segment. Figure H-19 compares the proportions of firms with above-median bid capacity by ownership.

Figure H-19.
Proportion of firms with above-median bid capacity by ownership

| Firm ownership | Proportion with above-median bid capacity | | | |
|-----------------------------|---|-----------------------|---------------|------------------|
| | Construction | Professional Services | Goods | Support Services |
| African American | 43.9 % | 41.9 % | 0.0 % | 46.2 % |
| Asian-Pacific American | 44.4 | 55.6 | 33.3 | 33.3 |
| Subcontinent Asian American | 100.0 | 58.8 | 0.0 | 0.0 |
| Hispanic American | 53.3 | 28.6 | 57.1 | 33.3 |
| Native American | 25.0 | 66.6 | 0.0 | 50.0 |
| Unknown MBE | 100.0 | — | — | — |
| Female | 37.2 | 34.8 | 29.1 | 23.8 |
| Majority-owned | <u>42.9</u> | <u>38.3</u> | <u>30.4</u> | <u>28.1</u> |
| All firms | 42.3 % | 38.3 % | 30.2 % | 28.3 % |

Source: BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Construction. The results shown in Figure H-19 indicate that, in aggregate, the proportion of MBEs that have an above-median bid capacity (46%) is relatively higher than the share of majority-owned firms with above-median bid capacity (43%). One-hundred percent of both Subcontinent Asian American-owned and unknown MBE-owned firms had an above-median bid capacity. However, these results are based on a small number of observations: four for Subcontinent Asian American, and two for unknown MBEs. Of MBEs, Native American-owned firms had the lowest share of firms with above-median bid capacity. In aggregate, WBEs had the lowest share of firms with above-median bid capacity in the construction subindustry (37%).

Professional services. Figure H-19 shows that 38 percent of majority-owned firms have an above-median bid capacity. Like MBEs in the construction subindustry, 46 percent of professional services MBEs had an above-median bid capacity. Hispanic American-owned firms had the lowest proportion of firms with above-median bid capacity in the professional services subindustry (29%). About 35 percent of WBEs in the professional services subindustry had an above-median bid capacity. This percentage was lower than any other group besides Hispanic American-owned firms.

Goods. As shown in Figure H-19, zero percent of African American, Subcontinent Asian American and Native American-owned firms had an above-median bid capacity. Aggregated, 31 percent of MBEs had an above-median bid capacity. These results are based on a relatively small number of total MBE observations (16). The share of WBEs (29%) and majority-owned firms (30%) with an above-median bid capacity was similar to that of MBEs.

Support services. Figure H-19 also presents results for support services firms with above-median bid capacity. In aggregate, 42 percent of MBEs had an above-median bid capacity. Subcontinent Asian American-owned firms had the lowest rate of above-median bid capacity (0%). This result is based on only one observation of Subcontinent Asian American-owned support services firm. Compared to MBEs, a smaller share of WBEs (24%) and majority-owned firms (28%) had an above-median bid capacity.

BBC then considered whether neutral factors account for differences among groups in the probability of having above-median bid capacity and if there are statistically significant disparities in bid capacity after accounting for neutral factors.

There are a number of variables from the availability interviews that may be correlated with bid capacity. Annual revenues, number of employees and, potentially, whether a firm has multiple establishments in Indiana are examples. However, the direction of causation for these variables is unclear. Do firms have greater bid capacity because they have more employees, or do they have more employees because they bid on and win larger projects?

After considering the array of variables from the availability interviews, the study team determined that the age of firms was the neutral factor that might best explain differences in bid capacity (within a subindustry) while being truly exogenous to that capacity. Theoretically, the longer firms are in business, the larger the contracts or subcontracts they might pursue.

To test this hypothesis, the study team conducted separate logistic regression analyses for the construction, professional services, goods and support services industries to determine whether bid capacity could be at least partly explained by the age of the firm and whether minority- and women-owned firms differ from majority-owned firms of similar ages (after controlling for subindustry).

Bid capacity results for Indiana construction industry. The results for the Indiana construction industry are shown in Figure H-20. The results of the logistic regression indicated the following:

- The age of the firm was a significant predictor of having above-median bid capacity. The older a firm, the more likely it is to have an above-median bid capacity;
- Minority-owned firms were significantly (significant at the 90% confidence level) more likely to have an above median bid capacity; and
- WBE ownership was not a significant predictor of having above-average bid capacity for firms in the construction industry.

Figure H-20.
Indiana available
construction industry bid
capacity model

Note:
 ** Denotes statistical significance at the 95% confidence level.

| Variable | Coefficient | Z-Statistic |
|-------------|-------------|-------------|
| Constant | -0.97 | -10.51 ** |
| Age of firm | 0.02 | 9.14 ** |
| Minority | 0.41 | 1.75 |
| Female | -0.13 | -0.86 |

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Bid capacity results for Indiana professional services industry. The results for the Indiana professional services industry are shown in Figure H-21. The logistic regression model for the industry indicated:

- The age of the firm was a significant predictor of having above-average bid capacity for professional services firms. The older a firm, the more likely it is to have an above-median bid capacity; and
- MBE/WBE ownership was not a significant predictor of having above-average bid capacity for firms in the professional services industry.

Figure H-21.
Indiana available professional services industry bid capacity model

Note:
** Denotes statistical significance at the 95% confidence level.

| Variable | Coefficient | Z-Statistic |
|-------------|-------------|-------------|
| Constant | -0.95 | -7.20 ** |
| Age of firm | 0.02 | 4.61 ** |
| Minority | 0.41 | 1.58 |
| Female | -0.03 | -0.17 |

Source:
BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Bid capacity results for Indiana goods industry. The results for the Indiana goods industry are shown in Figure H-22. The results of the logistic regression indicated the following:

- The age of the firm was not a significant predictor of having above-median bid capacity; and
- MBE/WBE ownership was not a significant predictor of having above-average bid capacity for firms in the goods industry.

Figure H-22.
Indiana available goods industry bid capacity model

Note:
** Denotes statistical significance at the 95% confidence level.

| Variable | Coefficient | Z-Statistic |
|-------------|-------------|-------------|
| Constant | -0.99 | -4.30 ** |
| Age of firm | 0.00 | 1.05 |
| Minority | 0.13 | 0.22 |
| Female | -0.03 | -0.09 |

Source:
BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Bid capacity results for Indiana support services industry. The results for the Indiana support services industry are shown in Figure H-23. The logistic regression model for support services indicated:

- The age of the firm was not a significant predictor of having above-median bid capacity in the support services industry; and
- MBE/WBE ownership was not a significant predictor of having above-average bid capacity for firms in the goods industry.

Figure H-23.
Indiana available support services industry bid capacity model

| Variable | Coefficient | Z-Statistic |
|-------------|-------------|-------------|
| Constant | -0.90 | -3.99 ** |
| Age of firm | 0.00 | -0.14 |
| Minority | 0.59 | 1.63 |
| Female | -0.24 | -0.88 |

Note:

** Denotes statistical significance at the 95% confidence level.

Source:

BBC Research & Consulting from 2009 and 2010 Availability Interviews.

Businesses Closures, Expansions and Contractions

Having examined different markets for work, Appendix H now turns to an examination of business outcomes, including closure, expansion and contraction. BBC used U.S. Small Business Administration (SBA) analyses to examine outcomes for minority- and women-owned firms in Indiana and the nation. The SBA analyses pertained to minority-owned firms, by demographic group, in comparison with all firms.

Business closure. High rates of business failures may reflect adverse business conditions faced by minority business owners.

Rates of business closures in Indiana. BBC explored possible data sources that might indicate whether MBEs were more likely to close than other firms. Using data on firms first surveyed in the 1997 Survey of Minority- and Women-Owned Business Enterprises conducted by the U.S. Census Bureau, the SBA reported on employer firm survival rates for minority-owned businesses between 1997 and 2001 across sectors of the economy (“employer firms” are firms with paid employees other than the business owner and family members).^{6,7} The SBA report examined patterns in each state.

- Figure H-24 shows that 40 percent of African American-owned firms operating in Indiana in 1997 had closed by 2001, a rate higher than other groups.
- Hispanic American-owned firms also had above-average closure rates during this time.
- The closure rate for Native American-owned firms was below that of all firms.

⁶ Lowrey, Ying. 2005. “Dynamics of Minority-Owned Employer Establishments, 1997-2001.” U.S. Small Business Administration Office of Advocacy. Washington D.C.

⁷ Results from the 2007 SBO will be available by the end of 2010.

Firm closure rates for most race/ethnicity groups were similar in Indiana and the United States, although Native Americans had a lower rate of firm closure in Indiana.

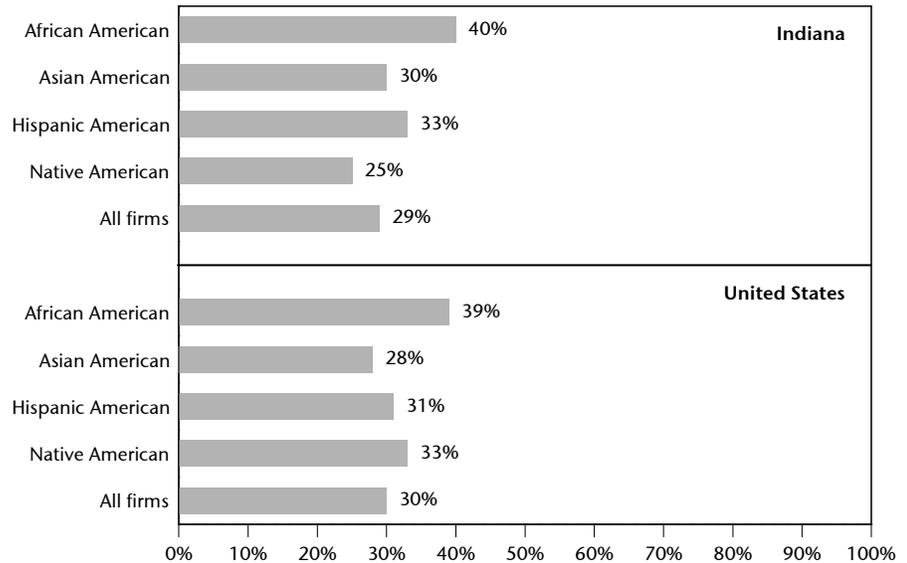
Figure H-24.
Rates of firm closure 1997-2001,
Indiana and the U.S.

Note:

Data refer only to employer firms. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source:

Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



Rates of business closures by industry. The SBA analysis examined national firm closure rates by race/ethnicity in ten separate industry sectors. Figure H-25 compares national rates of firm closure for the industry sectors that most closely correspond with study industries.

- African American-owned firms had a greater than average rate of closure in each of the five industries examined in the study.
- Compared to all firms, Native American-owned businesses were more likely to have closed in the construction industry and the transportation, communications and utilities industry.
- Hispanic American-owned businesses in the transportation, communications and utilities sector were substantially more likely to have closed compared to all firms.
- Closure rates also appeared to be above average for manufacturing firms owned by Asian Americans, but in other industries, firms owned by this group closed at a rate similar to that of all firms.

The study team could not examine whether these patterns also existed in Indiana, as the SBA analysis across industries was not available for the state.

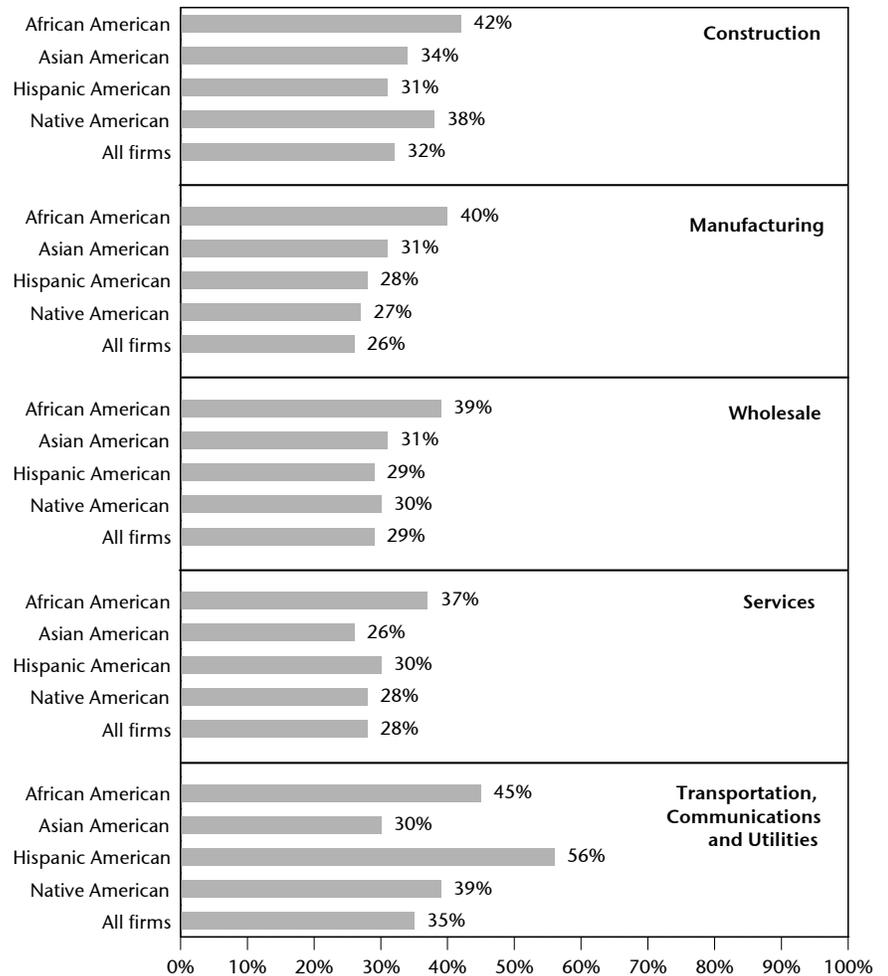
Figure H-25.
Rates of firm closure, 1997-2001,
selected industries in the U.S.

Note:

Data refer only to employer firms. Sample sizes not reported, but statistics are consistent with SBA data quality guidelines.

Source:

Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



Successful versus unsuccessful closures. Not all firm closures can be interpreted as a business “failure.” Firms may also close when an owner retires or a more profitable business alternative emerges, both of which represent successful closures.

To date, the 1992 Characteristics of Business Owners Survey (CBO) is the only dataset released by the Census Bureau that classifies firm closures into successful and unsuccessful subsets.⁸ The CBO survey, completed in 1996, asked owners of businesses that had closed between 1992 and 1995 the question, “Which item below describes the status of this business at the time the decision was made to cease operations?” Only the responses “successful” and “unsuccessful” were permitted. A firm that reports to be unsuccessful at time of closure is understood to have failed. Figure H-26 shows comparative data for the proportion of firms that closed for failure in the U.S. between 1992 and

⁸ CBO data from the 1997 and 2002 Economic Censuses do not include statistics on successful and unsuccessful closure. To date, the 1992 CBO is the only U.S. Census dataset that does.

1995.⁹ Failure rates are shown for businesses in all industries and in industries that correspond closely with study industries.

According to the CBO data, African American-owned firms were the most likely to report being “unsuccessful” at the time in which their businesses closed.

- About 77 percent of African Americans who had owned and closed a business reported having an unsuccessful business or business status.
- In contrast, only 61 percent of non-minority men who had owned a business said that their business was unsuccessful at the time of closing.

There were also differences, albeit less substantial, between other groups and non-minority men in the proportion of closed businesses that reported being unsuccessful.

- About 71 percent of Hispanic Americans who had owned and closed businesses reported the business to be unsuccessful at time of closing, a substantial difference from results for non-minority men.
- About 73 percent of other minorities who had owned and closed firms reported their business to be unsuccessful, also higher than the rate for non-minority men.

Unsuccessful closure rates for women-owned businesses were similar to those of non-minority male-owned businesses.

⁹ All CBO data should be interpreted with caution due to the fact that firms that did not respond to the survey cannot be assumed to have the same characteristics of ones that did. This report does not include CBO data on overall firm closure rates because firms not responding to the survey were found to be much more likely to have closed than ones that did. Holmes, Thomas J. and James Schmitz. 1996. “Nonresponse Bias and Business Turnover Rates: The Case of the Characteristics of Business Owners Survey.” *Journal of Business & Economic Statistics*. 14(2): 231-241.

This study includes CBO data on firm success because there is no compelling reason to believe that closed firms responding to the survey would have reported different rates of success/failure than those closed firms that did not respond to the survey. Headd, Brian. U.S. Small Business Administration, Office of Advocacy. 2000. *Business Success: Factors leading to surviving and closing successfully*. Washington D.C.: 12.

Figure H-26.
Comparative “failure” rates for firms that closed between 1992 and 1995,
selected industries in the U.S.

| | Construction | Manufacturing | Wholesale | Services | Transportation, communications and utilities | All industries |
|----------------------|--------------|---------------|-----------|----------|--|----------------|
| African American | 82 % | 82 % | 85 % | 72 % | 88 % | 77 % |
| Hispanic American | 71 | 71 | 73 | 64 | 75 | 71 |
| Other minority group | 82 | 82 | 82 | 66 | 68 | 73 |
| Women | 66 | 61 | 79 | 52 | 73 | 61 |
| Non-minority men | 58 | 76 | 59 | 59 | 70 | 61 |
| All firms | 60 % | 72 % | 67 % | 57 % | 72 % | 62 % |

Source: U.S. Census Bureau, 1996 Characteristics of Business Owners Survey (CBO).

As shown in Figure H-26, an examination of firms in individual industries revealed the following:

- African American-owned businesses were more likely than firms owned by non-minorities to report an unsuccessful closure in each of the five industries examined by the study team.
- Hispanic Americans who had owned and closed firms in the construction, wholesale and services industries and the transportation, communications and utilities industry were also more likely to report that the business had been unsuccessful.
- Rates of unsuccessful closures for women-owned firms were higher than those for non-minority, male-owned firms in all industries except manufacturing and services.
- For firms owned by the “other minority” group, rates of unsuccessful closure were higher in all industries except transportation, communications and utilities.

Although this analysis is national in scope, these results suggest that higher overall closure rates for minority-owned firms in Indiana may indicate higher rates of actual business failure.

Reasons for differences in failure rates. Several researchers have offered explanations for higher rates of successful closure among non-minority-owned firms and higher rates of failure among minority-owned firms:

- Minority business failure is largely due to barriers in access to capital. Regression analysis has identified initial capitalization as the most significant factor in determining firm viability. Because African American-owned businesses secure smaller amounts of debt equity in the form of loans, they are more likely to fail. Difficulty in accessing capital is found to be particularly acute for minority firms in the construction industry.¹⁰
- Prior work experience in a family member's business and experience in a similar business are both found to be strong determinants of business viability. Because African American business owners are much less likely to have such experience, their firms are less likely to survive.¹¹
- Level of education is found to be a strong determinant of business survival. Differences in educational attainment explain a significant portion of the gap in firm closure rates between African Americans and non-minority firms.¹²
- Non-minority business owners have the opportunity to pursue a much wider array of business activities, which increases their likelihood of closing successful businesses to pursue more profitable business alternatives. Minority business owners, especially those who do not speak English, have greatly limited employment options and are less likely to close a successful business.¹³
- The possession of greater initial capital and the generally higher levels of education among Asian Americans determine the high survival rate of Asian American-owned firms compared to other minority-owned firms.¹⁴

National data indicate that African Americans who owned and closed firms are more likely to have done so because the firm was unsuccessful, compared to all firms. Several studies have examined why business failure rates are higher for African American-owned firms at the national level.

Comparative rates of expansion and contraction. Comparative rates of expansion and contraction of minority and all firms are also useful indicators of the relative success of minority-owned businesses. Again, only some of the data available for the nation are also available at the state level.

¹⁰ Bates, Timothy and Caren Grown. 1991. "Commercial Lending Practices and the Development of Black-Owned Construction Companies." Center for Economic Studies, U.S. Census Bureau.

¹¹ Robb, A. and Fairlie, R. 2005. "Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital." University of California, Santa Cruz.

¹² Ibid. 24.

¹³ Bates, Timothy. 2002. "Analysis of Young Small Firms That Have Closed: Delineating Successful from Unsuccessful Closures." Center for Economic Studies, U.S. Census Bureau.

¹⁴ Bates, Timothy. 1993. "Determinants of Survival and Profitability Among Asian Immigrant-Owned Small Businesses." Center for Economic Studies, U.S. Census Bureau.

Expansion. The SBA’s 2005 study of minority business dynamics from 1997-2001 also explored rates of expansion and contraction for minority-owned firms in Indiana. This particular study examined “employer firms,” those that had paid employees at the starting time period for the analysis.

Figure H-27 compares the percentage of firms that increased their total employment between 1997 and 2001.

- Slightly less than one-third of all Indiana firms expanded, according to the SBA study.
- Compared to all Indiana firms, African American-owned firms were less likely to expand during 1997-2001.
- The percentage of other minority-owned businesses that expanded was equal to or greater than the rate for all firms.

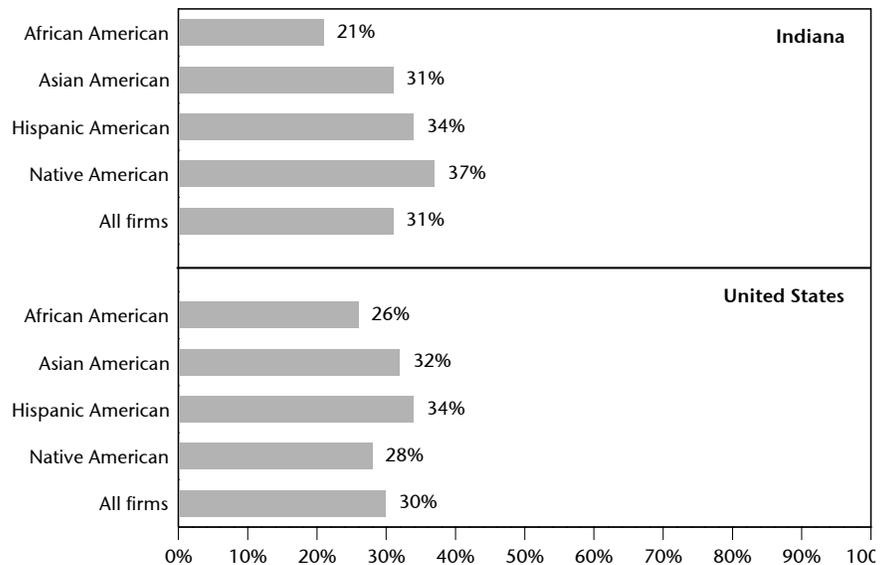
African American-owned firms were also less likely to expand than all firms at the national level. However, the 2009 SBA study of business dynamics found that, in the United States, a similar percentage of African American-owned firms expanded during 2002-2003 compared to firms owned by other race and ethnicity groups.¹⁵

Expansion rates at the national level were similar to Indiana rates for most other groups. However, Native American-owned firms were less likely to expand in the United States than in Indiana.

Figure H-27.
Percentage of firms that expanded employment 1997-2001, Indiana and the U.S.

Note:
 Data refer only to employer firms. Sample sizes not reported, but statistics are consistent with SBA data quality guidelines.

Source:
 Lowrey, Ying. 2005. “Dynamics of Minority-Owned Employer Establishments, 1997-2001.” U.S. Small Business Administration Office of Advocacy. Washington, D.C.



The 2005 SBA study did not separately report expansion rates for firms in individual industries in Indiana. Thus, the results shown above are for all firms, not those in selected industries.

¹⁵ Lowrey, Ying. 2009. “Dynamics of Employer Establishments, 2002-2003.” U.S. Small Business Administration Office of Advocacy. Washington D.C.

Figure H-28 shows the proportion of firms that expanded across selected industries in the United States. Nationally, the patterns seen in individual industries are similar to those seen for all industries. African American-owned firms in construction, manufacturing, wholesale, services and transportation, communications and utilities were less likely than all firms to have expanded between 1997 and 2001.

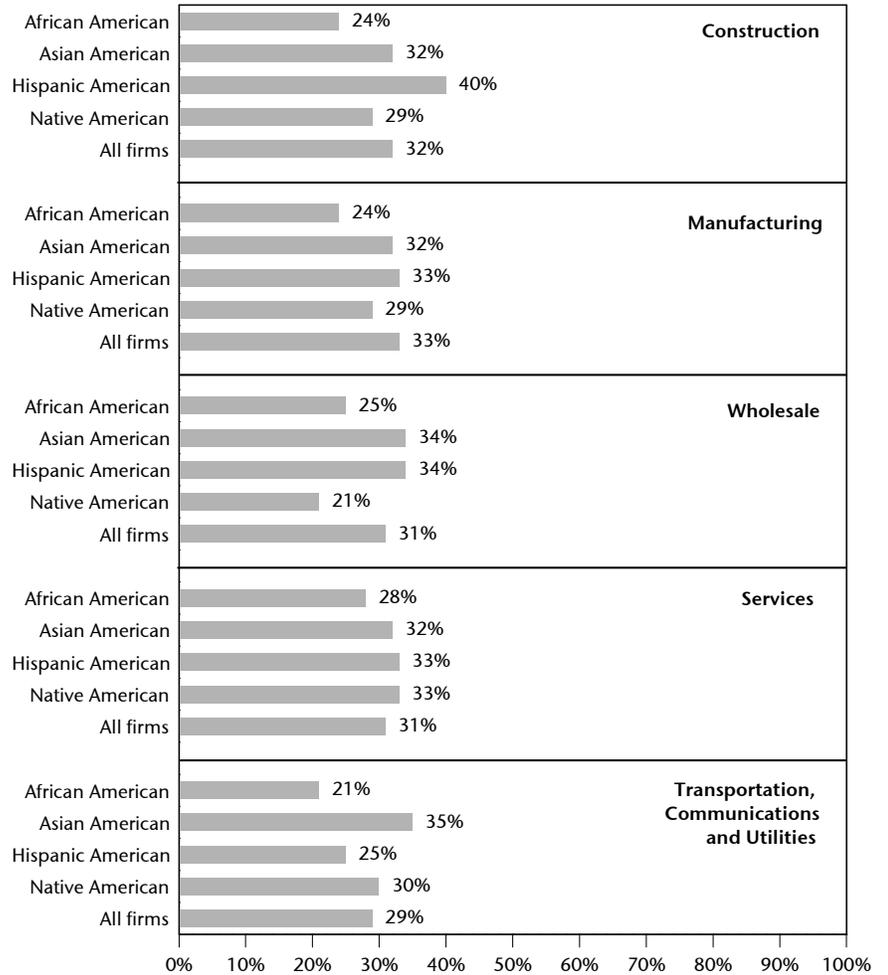
Figure H-28.
Percentage of firms that expanded employment, 1997-2001, selected industries in the U.S.

Note:

Data refer only to employer firms. Sample sizes not reported, but statistics are consistent with SBA data quality guidelines.

Source:

Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



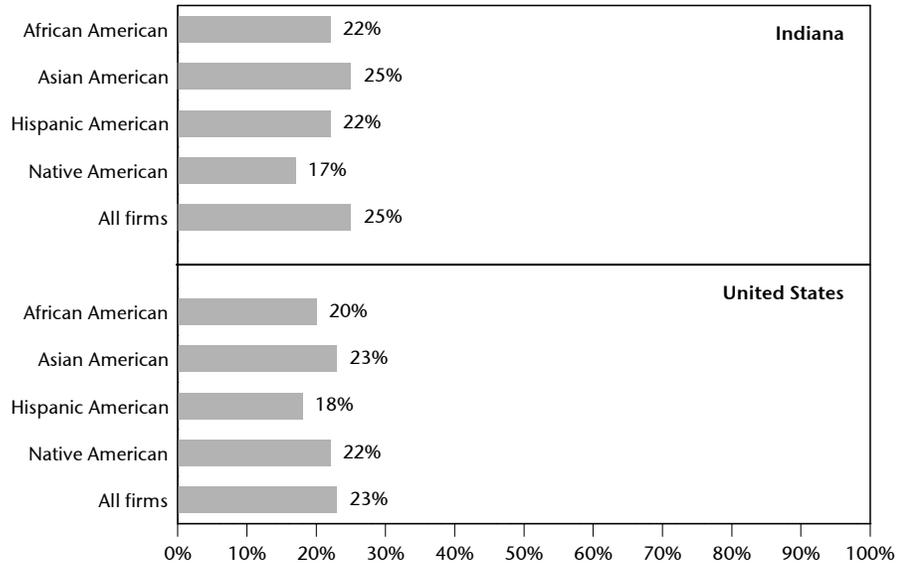
Contraction. Figure H-29 examines the percentage of firms that reduced their employment between 1997 and 2001. As with the analysis of expanding firms, these data track the activity of firms that had paid employees in 1997. In Indiana, minority-owned firms were no more likely to have contracted during 1997-2001 than all firms. Among minority groups, Native American-owned firms were the least likely to have contracted.

Results for Indiana are similar to those seen in the United States, where minority-owned firms were no more likely to have contracted than all firms.

Figure H-29.
Percentage of firms that contracted employment, 1997-2001, Indiana and the U.S.

Note:
 Data refers only to employer firms. Sample sizes not reported, but statistics are consistent with SBA data quality guidelines.

Source:
 Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



The results in Figure H-29 for Indiana are for all industries. As with expansion, the SBA study did not report results for contraction in individual Indiana industries. However, Figure H-30 shows rates of contraction for different industries at the national level.

Nationally, the percentage of minority-owned firms that contracted was about the same or less than all firms for the industries examined in this study. However, in the wholesale industry, the percentage of Native American-owned firms that contracted between 1997 and 2001 was considerably greater than that of all firms.

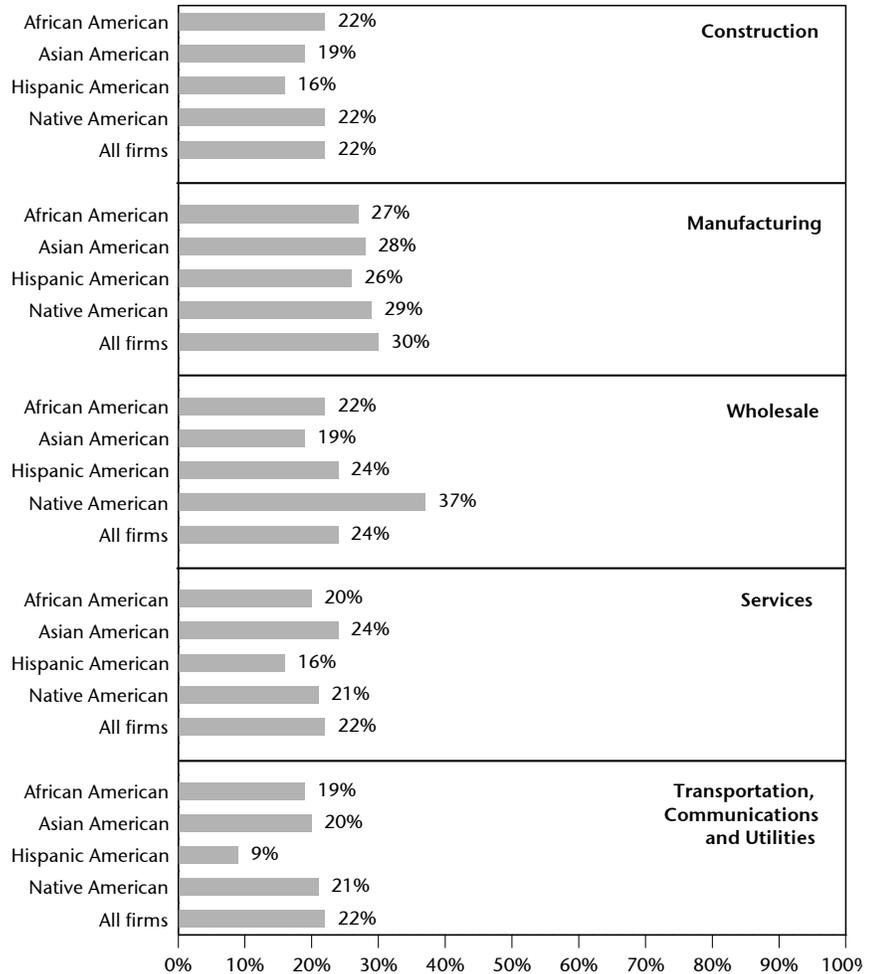
Figure H-30.
Percentage of firms that contracted employment, 1997-2001, selected industries in the U.S.

Note:

Data refer only to employer firms. Sample sizes not reported, but statistics are consistent with SBA data quality guidelines.

Source:

Lowrey, Ying. 2005. "Dynamics of Minority-Owned Employer Establishments, 1997-2001." U.S. Small Business Administration Office of Advocacy. Washington, D.C.



Summary of closures, expansions and contraction. The SBA study found that between 1997 and 2001, 31 percent of Indiana employer firms had expanded employment, 25 percent had contracted employment, and 29 percent had closed.

- Among the groups examined, African American-owned firms were the most likely to close and the least likely to expand, but were no more likely to contract than all firms.
- Hispanic American-owned businesses were more likely to close than all firms. However, these firms were also less likely to contract and more likely to expand than all firms.
- Compared to all firms, Native American firms were less likely to close, less likely to contract and more likely to expand.
- Asian American-owned firms were no more likely to expand or contract than all firms and were near the average in terms of the percentage that closed during this period.

Analysis of for the United States found that African American-owned firms were consistently more likely to close and less likely to expand than all firms when examining individual industry sectors.

Business Earnings/Receipts

Annual receipts and business earnings are also important indicators of the success of businesses. The study team examined:

- Business receipts data published by the U.S. Census Bureau;
- Data on business earnings for business owners from the 2000 Census of Population; and
- Annual revenue data collected as part of the availability interviews.

Business receipts from the 2002 Survey of Business Owners. BBC examined receipts for firms across all industries in Indiana and the U.S. using data from the 2002 Survey of Business Owners (SBO), conducted by the U.S. Census Bureau. BBC also analyzed receipts for firms in individual industries. The SBO separately reports business receipts for employer firms (those with paid employees other than the business owner and family members) and for all firms.¹⁶

Because the SBO did not separately report receipts for publicly-traded and privately held companies in individual MSAs, the study team could not examine differences between minority- and women-owned firms and all privately held businesses at the MSA level. However, results for different race/ethnicity and gender groups in individual MSAs were very similar to those found in Indiana as a whole.

Receipts for all firms. Figure H-31 presents the mean annual receipts in 2002 for employer and non-employer firms, by race/ethnicity and gender.

The SBO data for firms across all industries indicate that the average receipts for minority- and women-owned businesses were lower than the average for all firms, with some minority groups faring worse than others.

In Indiana, businesses owned by African Americans had the lowest average receipts. Receipts for African American-owned firms in Indiana averaged \$120,000 in 2002, roughly 28 percent of the average for all firms. Average receipts for Hispanic American-, Native American- and women-owned firms in Indiana were also below the average for all firms. Asian American-owned firms had the highest average receipts at \$425,000, close to the average for all firms. Disparities in minority- and women-owned business receipts compared to all firms in Indiana were consistent with those seen at the national level.

A recent SBA study found similar differences when examining firms in all industries across the U.S.¹⁷

¹⁶ The SBO data used in this analysis include incorporated and unincorporated firms, but not publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

¹⁷ Lowrey, Ying. 2007. *Minorities in Business: A Demographic Review of Minority Business Ownership*. Office of Economic Research, Office of Advocacy, U.S. Small Business Administration.

Figure H-31.
Mean annual receipts (thousands)
for all firms, by race/ethnicity and
gender of owners, 2002

Note:

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source:

2002 Survey of Business Owners, part of the U.S. Census Bureau's 2002 Economic Census.

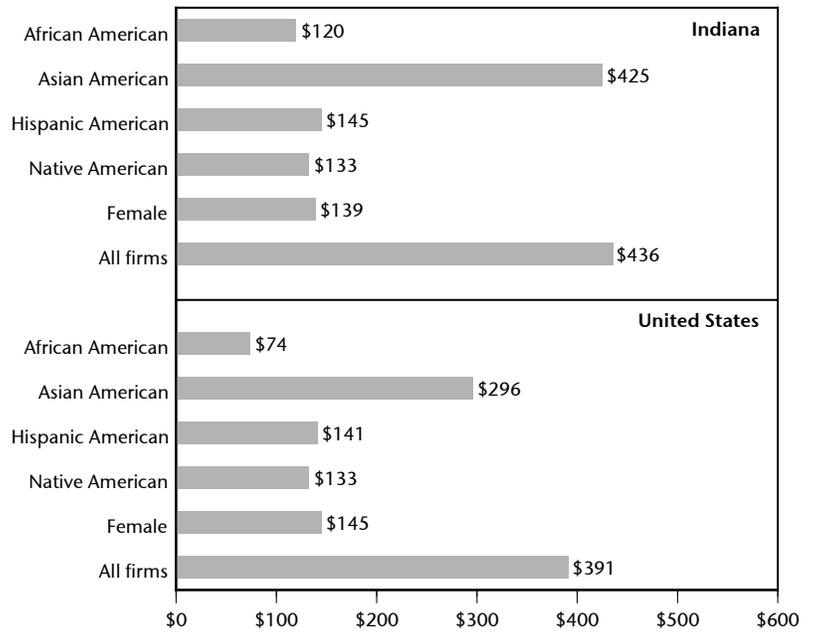


Figure H-32 shows mean annual earnings in 2002 for employer firms in Indiana and the United States. Minority- and women-owned employer firms had substantially lower business receipts, on average, than all employer firms, both in the state and nation.

Compared to the average \$1.7 million in receipts earned by all firms in Indiana, African American- and Asian American-owned firms in Indiana had mean annual receipts of just over \$1 million. Hispanic American- and Native American-owned firms had mean annual receipts that were less than one-half of the average receipts for all firms. Female-owned firms also had substantially lower average receipts than all firms.

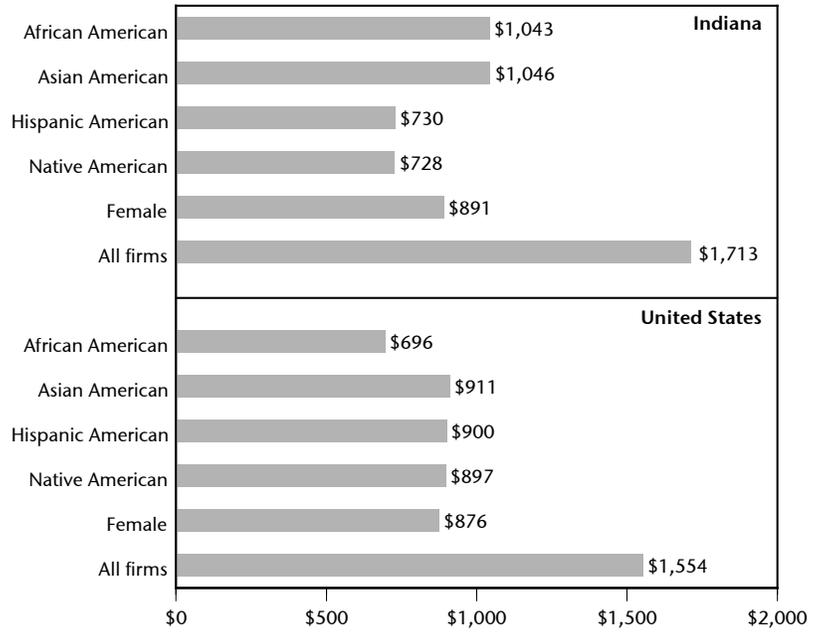
Figure H-32.
Mean annual receipts (thousands)
for employer firms, by
race/ethnicity and gender of
owners, 2002

Note:

Includes employer and non-employer firms. Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.

Source:

2002 Survey of Business Owners, part of the U.S. Census Bureau's 2002 Economic Census.



Receipts by industry. The study team analyzed SBO data for firms in selected industries. Because the industries included in the SBO data differed from those found in PUMS data, BBC examined receipts for the industries that most closely corresponded with study industries, as defined in the marketplace appendices. Figure H-33 and H-34 shows results for Indiana and the United States.

Figure H-33 presents the mean annual receipts in 2002 for all firms, by race/ethnicity and gender.

Figure H-33.
Mean annual receipts (thousands) for firms in selected industries, by race/ethnicity and gender of owners, 2002

| | Construction | Manufacturing | Wholesale | Professional, scientific & technical services | Administrative & support ¹ | Transportation & warehousing | Other services ² |
|----------------------|--------------|---------------|-----------|---|---------------------------------------|------------------------------|-----------------------------|
| Indiana | | | | | | | |
| African American | \$465 | NA | \$1,606 | \$47 | \$53 | \$77 | \$23 |
| Asian American | 99 | 9,467 | 2,085 | 140 | 218 | 161 | 62 |
| Hispanic American | 188 | 452 | NA | 75 | 33 | 67 | NA |
| Native American | 498 | 298 | NA | 43 | NA | 91 | 48 |
| Female | 249 | 1,514 | 1,404 | 75 | 82 | 190 | 31 |
| All firms | \$381 | \$2,797 | \$2,716 | \$138 | \$182 | \$249 | \$79 |
| United States | | | | | | | |
| African American | \$128 | \$461 | \$449 | \$81 | \$50 | \$55 | \$25 |
| Asian American | 250 | 1,114 | 1,870 | 177 | 126 | 95 | 60 |
| Hispanic American | 148 | 581 | 1,151 | 109 | 56 | 85 | 40 |
| Native American | 188 | 521 | 508 | 93 | 96 | 95 | 35 |
| Female | 339 | 844 | 1,734 | 85 | 81 | 201 | 36 |
| All firms | \$400 | \$1,811 | \$2,669 | \$180 | \$170 | \$234 | \$402 |

Note: Includes both employer and non-employer firms.
 Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.
¹ Includes administrative, waste management, remediation and support services.
² Does not include public administration services.

Source: 2002 Survey of Business Owners, part of the U.S. Census Bureau's 2002 Economic Census.

In Indiana, average 2002 receipts for minority- and women-owned firms were lower than the average for all firms across industries:

- African American-owned firms had lower average receipts than all firms in every industry except construction, in which mean receipts for African American-owned firms were higher than the average for all firms (data were not available for African American-owned manufacturing firms).
- Asian American-owned construction firms' receipts were about one-quarter the average for all construction firms. In the manufacturing and administrative and support services industries, Asian American-owned firms' average receipts were greater than the average for all firms.
- Average receipts for Hispanic American firms were considerably below the average for all firms in each industry (data were not available for Hispanic American-owned wholesale firms and other services firms).
- Native American-owned firms had lower than average receipts in each industry, with the exception of construction (data were not available for Native American-owned wholesale and administrative and support services firms).

- Women-owned firms also had lower average receipts than all firms in all industries shown in Figure H-33.

Based on 2002 data, Figure H-34 presents the mean annual receipts for employer firms in different industries. When examining only employer firms in Indiana, substantial disparities in mean annual receipts were present in most industries. Women-owned firms also averaged much lower receipts compared to all firms in each industry.

The study team found some exceptions to the overall pattern across industries. For example, African American-owned employer firms had higher average receipts than all firms in the construction and wholesale industries. Asian American-owned employer firms also had higher average receipts than all firms in manufacturing; professional, scientific and technical services; and transportation and warehousing.

Figure H-34.
Mean annual receipts (thousands) for employer firms in selected industries, by race/ethnicity and gender of owners, 2002

| | Construction | Manufacturing | Wholesale | Professional, scientific & technical services | Administrative & support services ¹ | Transportation & warehousing | Other services ² |
|----------------------|--------------|---------------|-----------|---|--|------------------------------|-----------------------------|
| Indiana | | | | | | | |
| African American | \$2,264 | NA | \$23,260 | \$232 | NA | \$619 | NA |
| Asian American | NA | 23,198 | 4,061 | 783 | NA | 1,495 | 248 |
| Hispanic American | 922 | 1,551 | NA | 369 | NA | 376 | NA |
| Native American | NA | 3,906 | NA | 164 | NA | NA | NA |
| Female | 1,076 | 3,281 | 3,984 | 374 | 576 | 1,040 | 261 |
| All firms | \$1,302 | \$4,937 | \$5,339 | \$498 | \$869 | \$1,142 | NA |
| United States | | | | | | | |
| African American | \$860 | \$2,148 | \$2,639 | \$644 | \$479 | \$456 | \$243 |
| Asian American | 1,100 | 2,188 | 3,416 | 779 | 762 | 965 | 233 |
| Hispanic American | 901 | 1,665 | 3,020 | 595 | 549 | 633 | 276 |
| Native American | 1,007 | 2,178 | 2,583 | 480 | 774 | 589 | 263 |
| Female | 1,206 | 2,286 | 4,941 | 429 | 655 | 997 | 229 |
| All firms | \$1,398 | \$3,564 | \$5,538 | \$699 | \$845 | \$1,174 | \$79 |

Note: Includes only employer firms.
Does not include publicly-traded companies or other firms not classifiable by race/ethnicity and gender.
¹ Includes administrative, waste management, remediation and support services.
² Does not include public administration services.

Source: 2002 Survey of Business Owners, part of the U.S. Census Bureau's 2002 Economic Census.

Business earnings for business owners. In order to assess the relative business success of self-employed minorities and women in the study industries, BBC examined earnings using Public Use Micro-Sample (PUMS) data from the 2000 U.S. Census. BBC analyzed incorporated and unincorporated business owners age 16 and over who reported positive business earnings. Because the 2000 Census reports earnings for the previous year, figures presented here are based on business earnings in 1999.

Figure H-35 shows average earnings in 1999 for business owners in study industries in Indiana and the United States.

- In Indiana, mean annual earnings for non-Hispanic white construction business owners were \$29,000. In contrast, minority business owners averaged earnings of about \$24,000. Female construction business owners in Indiana earned less than male construction business owners.
- In the support services industry, average earnings were similar for minority and non-minority business owners. However, women business owners earned substantially less than their male counterparts (a statistically significant difference).
- Due to small sample sizes, BBC was unable to report robust figures for average earnings of minority business owners in the professional services and goods industries. However, averages for female and male business owners indicate substantial disparities in business earnings between women and men (both statistically significant differences).

Results for Indiana are consistent with the national picture, where large disparities in average earnings existed between women and men across industries. Disparities between minority and non-minority business owners were also evident in each industry, although these disparities tended to be smaller.

Figure H-35.
Mean annual business
owner earnings
(thousands) in the study
industries, 1999

Note:

The sample universe is business owners age 16 and over who reported positive earnings.

** Denotes statistical significance at the 95% confidence level.

“Minority” includes African Americans, Hispanic Americans, Asian Americans, Native Americans and other race groups.

Source:

BBC Research & Consulting from 2000 U.S. Census 5% Public Use Micro-sample data.

| | Construction | Professional Services | Goods | Support Services |
|-----------------------|---------------|-----------------------|---------------|------------------|
| Indiana | | | | |
| Race/ethnicity | | | | |
| Minority | \$24 | NA | NA | \$29 |
| Non-Hispanic white | 29 | 35 | 35 | 28 |
| Gender | | | | |
| Female | \$20 | \$21 ** | \$19 ** | \$18 ** |
| Male | 30 | 42 | 40 | 31 |
| All firms | \$29 | \$35 | \$35 | \$28 |
| United States | | | | |
| Race/ethnicity | | | | |
| Minority | \$26 ** | \$44 | \$32 ** | \$25 ** |
| Non-Hispanic white | 31 | 47 | 39 | 28 |
| Gender | | | | |
| Female | \$21 ** | \$33 ** | \$25 ** | \$21 ** |
| Male | 30 | 53 | 42 | 30 |
| All firms | \$30 | \$47 | \$38 | \$27 |
| Sample sizes | | | | |
| Indiana | | | | |
| Race/ethnicity | | | | |
| Minority | 87 | 17 | 11 | 63 |
| Non-Hispanic white | 1,664 | 276 | 287 | 1,054 |
| Gender | | | | |
| Female | 102 | 99 | 70 | 293 |
| Male | 1,649 | 194 | 228 | 824 |
| All firms | 1,751 | 293 | 298 | 1,117 |
| United States | | | | |
| Race/ethnicity | | | | |
| Minority | 9,809 | 2,203 | 2,043 | 10,351 |
| Non-Hispanic white | 76,271 | 23,931 | 15,504 | 53,201 |
| Gender | | | | |
| Female | 4,772 | 8,541 | 3,802 | 17,444 |
| Male | 81,308 | 17,593 | 13,745 | 46,108 |
| All firms | 86,080 | 26,134 | 17,547 | 63,552 |

Regression analysis of business earnings. Differences in business owner earnings may be at least partially attributable to neutral factors such as age, marital status or educational attainment. BBC performed regression analysis using 2000 Census PUMS data to examine whether disparities in business earnings for 1999 remained after controlling for certain neutral factors. Consistent with past court-reviewed research, BBC applied an ordinary least squares (OLS) regression to the data. The study team developed four separate models, one for each study industry.

Due to small sample sizes, BBC did not develop separate models for Indiana but instead created models for the East North Central Census Division (referred to in the following discussion as the ENC region). The ENC region includes Illinois, Indiana, Michigan, Ohio and Wisconsin. Each model was comprised of interaction terms to represent business owners in Indiana, similar to approaches used by other researchers.

Consistent with model specifications that have been reviewed by the courts, the dependent variable in this model is the natural logarithm of business earnings. Business owners reporting zero or negative business earnings were excluded, as were observations where the Census Bureau had imputed the value of business earnings. Apart from variables indicating the race, ethnicity and gender of the business owner, the model also used available measures from the PUMS data considered likely to affect earnings potential, including age, age-squared, marital status, ability to speak English well, disability condition and educational attainment. This model is very similar to models reviewed by the courts after other recent disparity studies.¹⁸

Construction industry. Figure H-36 shows the results of the OLS model for 1999 earnings in the ENC region construction industry. The ENC region construction industry model includes 8,931 observations. The model indicates that several neutral factors are statistically significant in predicting the 1999 earnings of business owners in the Indiana construction industry:

- Older business owners had greater earnings, but this marginal effect declined for the oldest individuals;
- Business owners who were married tended to have greater business earnings;
- Disabled business owners, on average, had lower earnings; and
- Business owners with less than a high school degree tended to have lower business earnings than those with just a high school degree.

Even when taking into account neutral factors, there were statistically significant disparities in business owner earnings for African Americans and women in the ENC region construction industry in 1999.

¹⁸ For example, National Economic Research Associates, Inc. 2000. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Minnesota Department of Transportation; and National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

Figure H-36.
East North Central region construction business owner earnings model, 1999

| Variable | Coefficient | t-statistic |
|---------------------------------|-------------|-------------|
| Constant | 7.591 | 38.25 ** |
| Age | 0.100 | 12.80 ** |
| Age-squared | -0.001 | -13.90 ** |
| Married | 0.261 | 7.30 ** |
| Speaks English well | 0.116 | 1.06 |
| Disabled | -0.165 | -3.18 ** |
| Less than high school | -0.118 | -2.67 ** |
| Some college | -0.049 | -1.39 |
| Four-year degree | 0.070 | 0.94 |
| Advanced degree | -0.123 | -0.99 |
| In Indiana | -0.067 | -1.39 |
| African American | -0.308 | -2.42 ** |
| African American in Indiana | 0.144 | 0.44 |
| Asian American | -0.212 | -0.87 |
| Asian American in Indiana | -0.636 | -0.58 |
| Hispanic American | -0.015 | -0.16 |
| Hispanic American in Indiana | 0.214 | 0.65 |
| Native American | -0.270 | -1.14 |
| Native American in Indiana | -0.416 | -0.55 |
| Other minority group | 0.004 | 0.01 |
| Other minority group in Indiana | NA | NA |
| Female | -0.762 | -8.78 ** |
| Female in Indiana | 0.106 | 0.53 |

Note: ** Denotes statistical significance at the 95% confidence level.

* Denotes statistical significance at the 90% confidence level.

Due to small sample sizes, the variable representing other minority groups in Indiana was dropped from the model.

Source: BBC Research & Consulting based on analysis of 2000 Census Public Use Microdata Sample.

The following differences by race/ethnicity and gender were statistically significant after accounting for neutral factors.

- African American construction business owners in the ENC region tended, on average, to earn less than non-Hispanic white owners; and
- Female construction business owners in the ENC region tended, on average, to earn less than male construction business owners.

Results for African American and female construction business owners indicated that they did not fare significantly differently in Indiana compared to elsewhere in the ENC region.

The model also indicated that business earnings in the ENC region were lower for Asian Americans, Hispanic Americans and Native Americans compared to non-Hispanic whites after taking other factors into account. However, these results were not statistically significant.

Professional services industry. Figure H-37 shows the results of the OLS model for 1999 earnings in the ENC region professional services industry. This model included 2,442 business owners. The following neutral factors were statistically significant in predicting business earnings in the 1999 ENC professional services industry:

- Older business owners had greater earnings, and this marginal effect declined for the oldest individuals (similar to the construction industry);
- Business owners who spoke English well tended, on average, to have greater business earnings; and
- Business owners with a four-year degree or higher tended to have greater business earnings, compared to business owners with just a high school degree.

Figure H-37.
East North Central region professional services industry
business owner earnings model, 1999

| Variable | Coefficient | t-statistic |
|---------------------------------|-------------|-------------|
| Constant | 5.541 | 6.94 ** |
| Age | 0.141 | 7.00 ** |
| Age-squared | -0.002 | -7.88 ** |
| Married | 0.050 | 0.58 |
| Speaks English well | 1.135 | 1.92 * |
| Disabled | -0.189 | -0.95 |
| Less than high school | -0.198 | -0.68 |
| Some college | -0.103 | -0.83 |
| Four-year degree | 0.394 | 3.52 ** |
| Advanced degree | 0.611 | 5.17 ** |
| In Indiana | -0.068 | -0.44 |
| African American | 0.079 | 0.29 |
| African American in Indiana | 0.531 | 1.36 |
| Asian American | -0.173 | -0.52 |
| Asian American in Indiana | 0.255 | 0.28 |
| Hispanic American | 0.235 | 0.78 |
| Hispanic American in Indiana | -0.487 | -0.40 |
| Native American | -0.467 | -1.03 |
| Native American in Indiana | -2.051 | -1.99 ** |
| Other minority group | 0.099 | 0.63 |
| Other minority group in Indiana | NA | NA |
| Female | -0.655 | -7.83 ** |
| Female in Indiana | -0.158 | -0.61 |

Note: ** Denotes statistical significance at the 95% confidence level.

* Denotes statistical significance at the 90% confidence level.

Due to small sample sizes, the variable representing other minority groups in Indiana was dropped from the model.

Source: BBC Research & Consulting based on analysis of 2000 Census Public Use Microdata Sample.

After controlling for neutral factors, the model indicated that:

- Female professional services business owners in the ENC region earned significantly less than their male counterparts; and
- Native American business owners in Indiana had statistically significantly lower earnings, on average, than Native American owners elsewhere in the ENC region (which also appeared to be lower than non-minority).

Goods industry. Figure H-38 presents the results of the OLS model of business owner earnings specific to the ENC region goods industry in 1999. This model included 1,750 observations. Several neutral factors were statistically significant in explaining business earnings in this industry:

- As in other industries, older business owners had greater earnings, but this marginal effect declined for the oldest individuals;
- Business owners who were married tended to have greater business earnings;
- Disabled business owners, on average, had lower earnings;
- Business owners with any formal education beyond high school tended to have greater business earnings, compared to business owners with just a high school degree; and
- Business owners in Indiana earned less, on average, than business owners elsewhere in the ENC region.

After accounting for neutral factors, the model indicated that:

- Women who owned goods businesses earned significantly less on average than men who owned businesses in this industry; and
- There were no statistically significant differences in business earnings for any minority group.

Figure H-38.
East North Central region goods industry business owner earnings model, 1999

| Variable | Coefficient | t-statistic |
|---------------------------------|-------------|-------------|
| Constant | 8.764 | 12.65 ** |
| Age | 0.070 | 3.43 ** |
| Age-squared | -0.001 | -4.14 ** |
| Married | 0.314 | 3.22 ** |
| Speaks English well | -0.518 | -1.18 |
| Disabled | -0.244 | -1.77 * |
| Less than high school | 0.047 | 0.35 |
| Some college | 0.292 | 2.83 ** |
| Four-year degree | 0.541 | 4.95 ** |
| Advanced degree | 0.349 | 1.85 * |
| In Indiana | -0.272 | -1.93 * |
| African American | -0.380 | -0.97 |
| African American in Indiana | 0.400 | 0.77 |
| Asian American | 0.107 | 0.31 |
| Asian American in Indiana | 0.213 | 0.57 |
| Hispanic American | -0.281 | -0.94 |
| Hispanic American in Indiana | 0.275 | 0.72 |
| Native American | 0.218 | 0.30 |
| Native American in Indiana | 0.209 | 0.18 |
| Other minority group | -0.391 | -0.82 |
| Other minority group in Indiana | NA | NA |
| Female | -0.920 | -8.22 ** |
| Female in Indiana | 0.175 | 0.51 |

Note: ** Denotes statistical significance at the 95% confidence level.

* Denotes statistical significance at the 90% confidence level.

Due to small sample sizes, the variable representing other minority groups in Indiana was dropped from the model.

Source: BBC Research & Consulting, based on analysis of 2000 Census Public Use Microdata Sample.

Support services industry. Figure H-39 presents the results of the OLS model of business owner earnings in the ENC region support services industry. Based on earnings from 1999, this model included 6,040 business owners. Many of the neutral factors that were statistically significant in explaining business earnings in the other industries are also significant in this industry:

- As in other industries, older business owners had greater earnings, but this effect declined for the oldest individuals;
- Business owners who were married tended to have greater business earnings;
- Disabled business owners, on average, had lower earnings;
- Business owners with a college degree or higher tended to have greater business earnings, compared to business owners with just a high school degree; and
- Business owners who had less than a high school education earned less, on average, than business owners with just a high school degree.

After controlling for neutral factors, model results indicate statistically significant disparities in support services business earnings at the ENC region level.

- Female business owners earned less on average than male business owners in the ENC region; and
- Hispanic American and “other minority” business owners earned more on average than non-Hispanic white business owners in the ENC region, but the relationship may not be present in Indiana.

There was evidence that one group fared differently in Indiana: the model indicates that members of the “other minority” group earned significantly less in Indiana than in other parts of the ENC region.

Figure H-39.
East North Central region support services industry business owner earnings model, 1999

| Variable | Coefficient | t-statistic |
|---------------------------------|-------------|-------------|
| Constant | 6.051 | 21.89 ** |
| Age | 0.161 | 15.76 ** |
| Age-squared | -0.002 | -15.95 ** |
| Married | 0.174 | 3.79 ** |
| Speaks English well | 0.079 | 0.53 |
| Disabled | -0.141 | -1.84 * |
| Less than high school | -0.272 | -4.38 ** |
| Some college | 0.063 | 1.24 |
| Four-year degree | 0.149 | 2.13 ** |
| Advanced degree | 0.304 | 2.43 ** |
| In Indiana | -0.033 | -0.45 |
| African American | -0.069 | -0.68 |
| African American in Indiana | 0.402 | 1.15 |
| Asian American | 0.245 | 1.04 |
| Asian American in Indiana | 0.125 | 0.15 |
| Hispanic American | 0.211 | 2.29 ** |
| Hispanic American in Indiana | -0.997 | -1.64 |
| Native American | -0.256 | -1.24 |
| Native American in Indiana | 0.180 | 0.43 |
| Other minority group | 0.603 | 2.13 ** |
| Other minority group in Indiana | -1.125 | -3.81 ** |
| Female | -0.640 | -13.34 ** |
| Female in Indiana | -0.112 | -0.80 |

Note: ** Denotes statistical significance at the 95% confidence level.

* Denotes statistical significance at the 90% confidence level.

Source: BBC Research & Consulting, based on analysis of 2000 Census Public Use Microdata Sample.

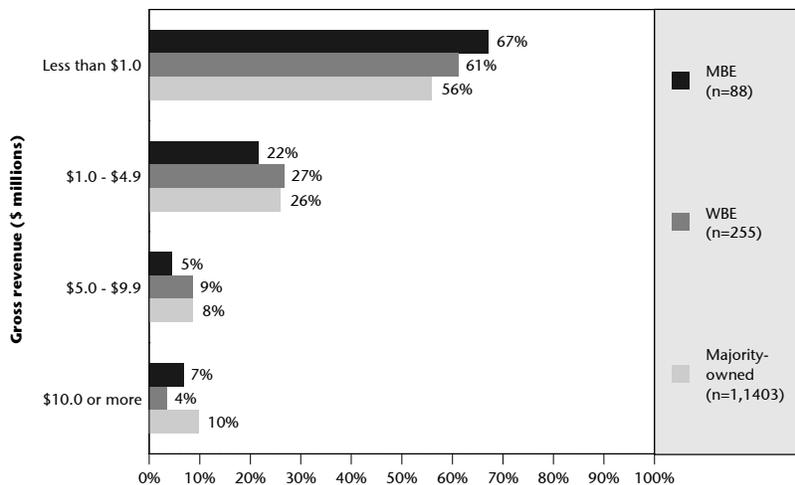
Gross revenue of transportation construction, professional services, goods and support services firms from availability interviews. Respondents were asked to identify the size range for their gross revenue for 2008. A second question asked for gross revenue across all Indiana locations for multi-location firms. Results for all Indiana locations are reported in Figure H-40 through Figure H-43.

Construction firms. Figure H-40 examines the distribution of MBEs, WBEs and majority-owned transportation construction industry firms by revenue class. More MBE/WBEs than majority-owned construction firms in Indiana had gross revenue of less than \$1 million. About two-thirds (67%) of MBEs and 61 percent of WBEs reported revenue of less than \$1 million. A relatively smaller share of majority-owned firms (56%) reported the same revenue for 2008. Compared to MBEs (12%) and WBEs (13%), a larger share of majority-owned firms (18%) reported gross revenue of \$5 million or more.

Figure H-40.
Gross revenue of company for all Indiana locations, transportation construction industry

Note:
 WBE is white women-owned firms.

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.

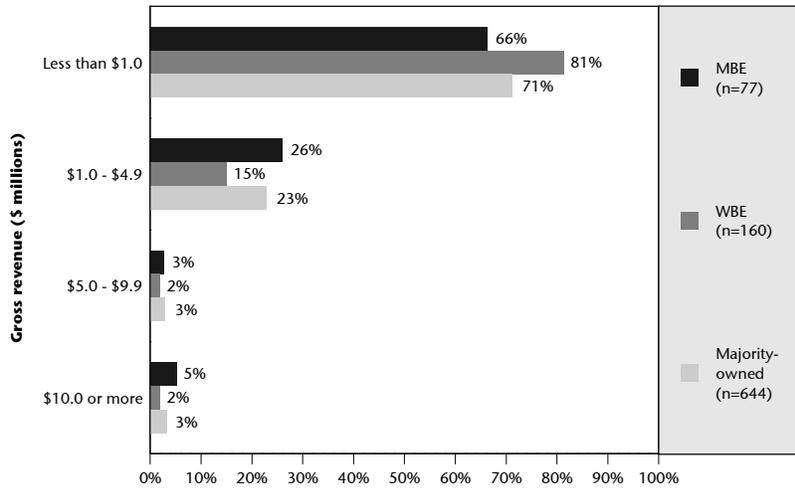


Professional services firms. Transportation professional services industry firms were also asked to identify gross revenue across all Indiana locations. As shown in Figure H-41, MBEs reported higher gross revenue for 2008 in general. About one-third (34%) percent of MBEs reported having gross revenue of \$1 million or more across all Indiana locations in 2008. A smaller share of majority-owned firms (29%) reported the same gross revenue. The share of WBEs that reported gross revenue of \$1 million or more (19%) was smaller than that of both MBEs and majority-owned firms. Compared to WBEs and majority-owned firms, MBEs also had the highest share of firms with gross revenue of \$10 million or more (5%).

Figure H-41.
Gross revenue of company for all Indiana locations, transportation professional services industry

Note:
 WBE is white women-owned firms.

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.

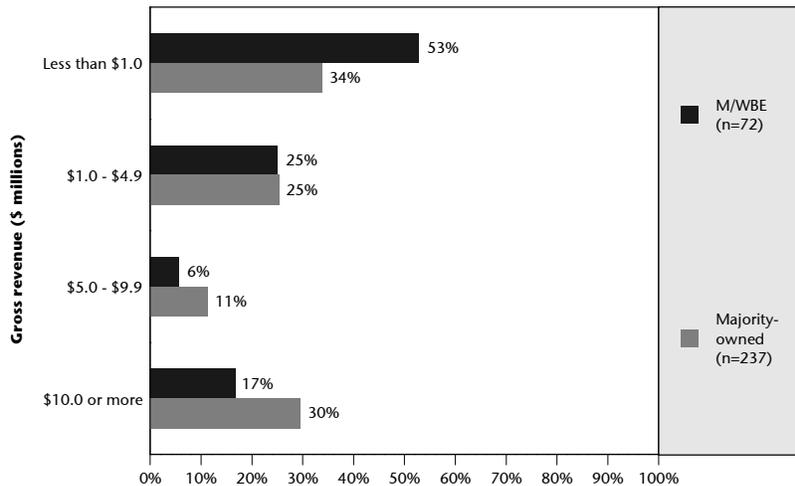


Goods firms. Figure H-42 examines the distribution of MBEs, WBEs and majority-owned transportation goods industry firms by revenue class. Responses of MBEs and WBEs were combined due to the relatively small number of respondents (17 MBEs and 55 WBEs). More MBE/WBEs than majority-owned construction firms in Indiana had annual revenue of less than \$1 million. Over half of MBE/WBEs reported gross revenue of less than \$1 million while 34 percent of majority-owned firms reported the same gross revenue for 2008. A greater proportion of majority-owned firms (41%) than MBE/WBEs (23%) indicated that they had gross revenue of \$5 million or greater in 2008.

Figure H-42.
Gross revenue of company for all Indiana locations, transportation goods industry

Note:
 WBE is white women-owned firms.

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.

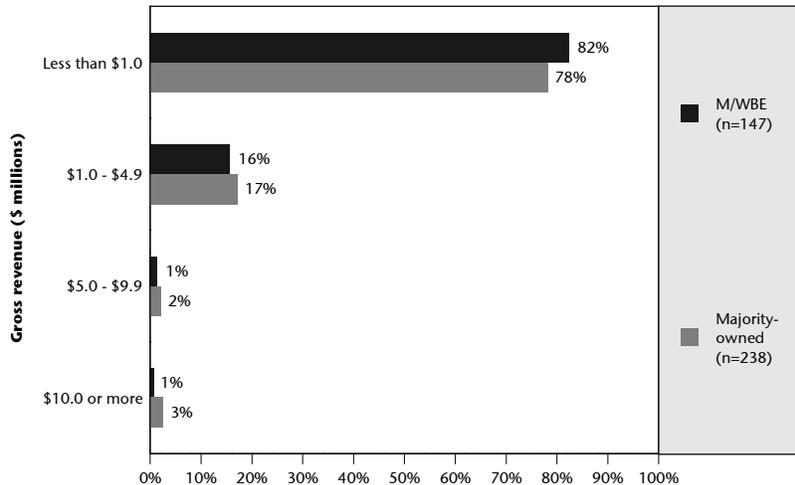


Support services firms. Transportation support industry firms were also asked to identify gross revenue across all Indiana locations. As shown in Figure H-43, the distribution of gross revenue for MBE/WBE support services firms was similar to that of majority-owned firms. Most MBE/WBEs and majority-owned support services firms reported gross revenue less than \$1 million for 2008. The share of majority-owned firms that indicated that they had gross revenue of \$1 million or more (22%) was slightly higher than the share of MBE/WBEs (18%) that reported that same revenue for 2008. Responses of MBEs and WBEs were combined due to the relatively small number of respondents (41 MBEs and 106 WBEs).

Figure H-43.
Gross revenue of company for all Indiana locations, transportation support services industry

Note:
 WBE is white women-owned firms.

Source:
 BBC Research & Consulting from 2009 and 2010 Availability Interviews.



Summary of analysis of business receipts and earnings. BBC examined a number of different data sources for business receipts and earnings for Indiana firms.

- Analysis of 2002 data on business receipts show relatively low mean receipts for minority- and women-owned firms in Indiana.
- Regression analyses using 2000 Census data for business owner earnings indicate that there are statistically significant disparities in earnings in the ENC region for some groups, even after taking several neutral factors into account:
 - African American construction business owners tended to earn less than non-Hispanic white construction business owners; and
 - Female business owners tended to earn less than male business owners in each of the study industries.
- Data from the availability interviews indicate that — across all subindustries except professional services — a larger share of majority-owned firms than of MBE/WBEs reported gross revenues of \$5 million or more. A smaller share of WBEs than of MBEs reported gross revenues of \$5 million or more.

APPENDIX I.

Description of Data Sources for Marketplace Analyses

To perform the analyses in Appendices E through H, BBC used data from a range of sources, including:

- U.S. Census Bureau Public Use Microdata Samples (PUMS) from the 1980 and 2000 Census;
- 2006-2008 American Community Survey (ACS) data;
- The Federal Reserve Board's 1998 and 2003 Survey of Small Business Finances (SSBF);
- The 2002 Survey of Business Owners (SBO), conducted by the U.S. Census Bureau;
- Home Mortgage Disclosure Act (HMDA) data provided by the Federal Financial Institutions Examination Council (FFIEC); and
- Information from availability interviews that BBC conducted with Indiana businesses in 2009 and 2010.

Further detail on these data sources and their use in marketplace analyses is provided below.

PUMS Data

Focusing on study industries, BBC used PUMS data to analyze:

- Demographic characteristics;
- Measures of financial resources;
- Educational attainment; and
- Self-employment (business ownership).

PUMS data offer several features ideal for the analyses reported in this study, including historical cross-sectional data, stratified national and state-level samples, and large sample sizes that enable many estimates to be made with a high level of statistical confidence, even for subsets of the population (e.g., ethnic and occupational groups). PUMS data also enable analysis of regions and metropolitan areas within states.

BBC obtained selected Census and ACS data via the Minnesota Population Center's Integrated Public Use Microdata Series (IPUMS). The IPUMS program provides online access to customized, accurate data extracts.¹ For the analyses contained in this report, BBC used the 1980 and 2000 Census 5 percent samples and the 2006-2008 ACS three-year sample.

Data for 2000. The 2000 U.S. Census 5 percent sample contains 14,081,466 observations. When applying the Census person-level population weights, this sample represents 281,421,906 people in the United States. The 2000 Indiana sub-sample contains 306,060 individual observations, weighted to represent 6,081,521 people.

Categorizing individual race/ethnicity. To define race/ethnicity for the 2000 Census dataset, BBC used the IPUMS race/ethnicity variables RACED and HISPAN to categorize individuals into one of seven groups:

- Non-Hispanic white;
- Hispanic American;
- African American;
- Asian-Pacific American;
- Subcontinent Asian American;
- Native American; and
- Other minority (unspecified).

An individual was considered “non-Hispanic white” if they did not report Hispanic ethnicity and indicated being white only — not in combination with any other race group. All self-identified Hispanics (based on the HISPAN variable) were considered Hispanic American, regardless of any other race or ethnicity identification.

For the five other racial groups, an individual's race/ethnicity was categorized by the first (or only) race group identified in each possible race-type combination. BBC used a rank ordering methodology similar to that used in the 2000 Census data dictionary. An individual who identified multiple races was placed in the reported race category that ranked highest in BBC's ordering. African American was first, followed by Native American, Asian-Pacific American and then Subcontinent Asian American. For example, if an individual identified himself or herself as “Korean,” this person was placed in the Asian-Pacific American category; if the individual identified himself or herself as “Korean” in combination with “Black,” the individual was considered African American.

¹ Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota, 2010.

- The Asian-Pacific American category included the following race/ethnicity groups: Cambodian, Chamorro, Chinese, Filipino, Guamanian, Hmong, Indonesian, Japanese, Korean, Laotian, Malaysian, Native Hawaiian, Samoan, Taiwanese, Thai, Tongan, and Vietnamese. This category also included other Polynesian, Melanesian and Micronesian races as well as individuals identified as Pacific Islanders.
- The Subcontinent Asian American category included these race groups: Asian Indian (Hindu), Bangladeshi, Pakistani, and Sri Lankan. Individuals who identified themselves as “Asian,” but were not clearly categorized as Subcontinent Asian were placed in the Asian-Pacific American group.
- American Indian, Alaska Native and Latin American Indian groups were considered Native American.
- If an individual was identified with any of the above groups and an “other race” group, the individual was categorized into the known category. Individuals identified as “other race” or “white and other race” were categorized as “other minority.”

In some cases, where sample sizes were small, BBC combined the Asian-Pacific American and Subcontinent Asian American categories into a single “Asian American” category.

Business ownership. BBC used the Census detailed “class of worker” variable (CLASSWKD) to determine self-employment. Individuals were classified into eight categories.

- Self-employed for a non-incorporated business;
- Self-employed for an incorporated business;
- Wage or salary employee for a private firm;
- Wage or salary employee for a non-profit organization;
- Employee of the Federal government;
- Employee of a State government;
- Employee of a local government; or
- Unpaid family worker.

BBC counted individuals who reported being self-employed — either for an incorporated or a non-incorporated business — as business owners.

Study industries. The marketplace analyses focused on the four study industries: construction, professional services, goods and support services. For the analysis of Census and ACS data, workers were identified as belonging to a particular study industry using the IND variable. This variable includes several hundred industry and sub-industry categories. Figure I-1 identifies the IND codes used to define each study area for the 2000 Census analyses.

Figure I-1.
2000 Census industry codes used for study industries

| Study industry | 2000 Census IND codes | Description |
|-----------------------|---|---|
| Construction | 77 | Construction industry |
| Professional services | 729, 738, 739, 746, 747, 749 | Architectural, engineering and related services; computer systems design and related services; management, scientific and technical consulting services; scientific research and development services; advertising and related services; other professional, scientific and related services. |
| | 679 | Data processing services |
| Goods | 108, 109, 117, 119, 127, 128, 129, 137, 207, 209, 227, 228, 229, 238, 257, 259, 279, 287, 298, 309, 317, 318, 337, 338, 339, 349, 378, 387, 389 | Selected manufacturing subindustries: sugar and confectionary products; fruit and vegetable preserving and specialty foods; dairy products; retail bakeries; bakeries, except retail; seafood and other miscellaneous foods, nec; not specified food industries; beverage; petroleum refining; miscellaneous petroleum and coal products; paint, coating and adhesives; soap, cleaning compound and cosmetics; industrial and miscellaneous chemicals; tires; cement, concrete, lime and gypsum products; miscellaneous nonmetallic mineral products; cutlery and hand tools; structural metals and tank and shipping containers; miscellaneous fabricated metal products; commercial and service industry machinery; metalworking machinery; engines, turbines and power transmission equipment; communications, audio and video equipment; navigational, measuring, electromedical and control instruments; electronic components and products, nec; electrical machinery, equipment and supplies, nec; veneer, plywood and engineered wood products; miscellaneous wood products; furniture and fixtures |
| | 407-459 | Wholesale industry |
| Support services | 199 | Printing and related support activities |
| | 617, 638, 639 | Truck transportation; couriers and messengers; warehousing and storage |
| | 737, 758, 759, 769, 777, 778 | Specialized design services; employment services; business support services; services to buildings and dwellings; landscaping services; other administrative and other support services |
| | 877, 878 | Automotive repair and maintenance; car washes |

Source: BBC Research & Consulting from the IPUMS program: <http://usa.ipums.org/usa/>.

Industry occupations. BBC also examined workers by occupation within study industries, using the PUMS variable OCC. Figure I-2 summarizes the occupations used in BBC’s analyses and the 2000 Census OCC codes that comprised each occupation.

Figure I-2.
2000 Census occupation codes used to examine workers in study industries

| Study industry | Occupation | 2000 Census OCC codes | Description of 2000 Census OCC code |
|-----------------------|-----------------------------------|--|---|
| Construction | Manager | 22 | Construction managers |
| | First-line supervisor | 620 | First-line supervisors/managers of construction trades and extraction workers |
| | Selected construction occupations | 625, 626, 632, 635, 653, 913, 952 | Cement masons, concrete finishers and terrazzo workers; construction laborers; miscellaneous equipment operators; electricians; iron and steel workers; drivers/sales workers and truck drivers; dredge, excavating and loading machine operators |
| Professional services | Engineers and architects | 130, 132, 135, 136, 141, 142, 143, 145, 146, 153 | Architects, except naval; aerospace engineers; chemical engineers; civil engineers; electrical and electronic engineers; environmental engineers; industrial engineers, including health and safety; materials engineers; mechanical engineers; miscellaneous engineers, including agricultural and biomedical |
| | Computer scientists | 100, 101, 102, 111, 140 | Computer scientists and systems analysts; computer programmers; computer software engineers; network systems and data communications analysts; computer hardware engineers |
| | Management analysts | 71 | Management analysts |
| Goods | Manager | 2, 5, 14 | General and operations managers; marketing and sales managers; industrial production managers |
| | First-line supervisor | 471, 500, 700, 770 | First-line supervisors/managers of non-retail sales workers; first-line supervisors/managers of office and administrative support workers; first-line supervisors/managers of mechanics, installers and repairers; first-line supervisors/managers of production and operating workers |
| Support services | Manager | 2, 5, 14, 15, 16, 43 | General and operations managers; marketing and sales managers; industrial production managers; purchasing managers; transportation, storage and distribution managers; managers, all others |
| | First-line supervisor | 420, 421, 471, 500, 700, 770 | First-line supervisors/managers of housekeeping and janitorial workers; first-line supervisors/managers of landscaping, lawn service and groundskeeping workers; first-line supervisors/managers of non-retail sales workers; first-line supervisors/managers of office and administrative support workers; ; first-line supervisors/managers of mechanics, installers and repairers; first-line supervisors/managers of production and operating workers |

Source: BBC Research & Consulting from the IPUMS program: <http://usa.ipums.org/usa/>.

Indiana regions. BBC performed separate analyses for the Northern, Central and Southern Indiana regions, defined using the Public Use Microdata Area (PUMA) geographic unit. PUMAs generally follow the boundaries of groups of counties, single counties, or census-defined “places,” and provide the greatest level of geographical detail available in PUMS data. The 2000 Census PUMAs used to define each Indiana region are shown in Figure I-3.

Figure I-3.
2000 Census PUMA codes used to define Indiana regions

| Indiana region | 2000 Census PUMA codes |
|----------------|--|
| Northern | 100, 201, 202, 203, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1500 |
| Central | 1400, 1600, 1700, 1800, 1901, 1902, 2001, 2002, 2100, 2200, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2400, 2500, 2600, 2700 |
| Southern | 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800 |

Note: Note that PUMA codes must be read in conjunction with the state code (STATEFIP) as the same PUMA code may be used in more than one state. The STATEFIP code for Indiana is 18.

Source: BBC Research & Consulting from the IPUMS program: <http://usa.ipums.org/usa/>.

Metropolitan Statistical Areas. BBC also reported results for Indiana Metropolitan Statistical Areas (MSAs). BBC used the PUMS variable METAREAD to identify MSAs in 2000 Census PUMS data. Note that due to data reporting constraints, the counties that comprise each MSA, as defined in the PUMS data, may be inconsistent with other MSA definitions. For this same reason, some Indiana MSAs cannot be identified in 2000 Census PUMS data.

Education variables. BBC used the variable indicating respondents’ highest level of educational attainment (EDUCD) to classify individuals into four categories:²

- Less than high school;
- High school diploma;
- Some college or associate’s degree; and
- At least a bachelor’s degree.

Definition of workers. The universe for the class of worker, industry and occupation variables includes workers 16 years of age or older who are gainfully employed and those who are unemployed but seeking work. “Gainfully employed” means that the worker has reported an occupation as defined by the Census code, OCC.

² In the 1940-1980 samples, respondents were classified according the highest year of school completed (HIGRADE). In the years after 1980, this method was used only for individuals who did not complete high school, and all high school graduates were categorized based on the highest degree earned (EDUC99). The EDUCD variable merges two different schemes for measuring educational attainment by assigning to each degree the typical number of years it takes to earn.

1980 Census data. BBC compared 2000 Census data with data for the 1980 Census to analyze changes in worker demographics, educational attainment and business ownership over time. The 1980 Census 5 percent sample includes 11,343,120 observations weighted to represent 226,862,400 people. The sample includes 274,642 observations in Indiana, weighted to represent 5,492,840 people.

A number of changes in variables and coding took place between the 1980 and 2000 Censuses.

Changes in race/ethnicity categories between censuses. Figure I-4 lists the seven BBC-defined racial/ethnic categories with the corresponding 1980 and 2000 Census race groups. Combinations of race types are available in the 2000 Census but not in the 1980 Census. The Bureau of the Census introduced categories in 2000 representing a combination of race types to allow individuals to select multiple races when responding to the questionnaire.

For example, an individual who is primarily white with Native American ancestry could choose the “white and American Indian/Alaska Native” race group in 2000. However, if the same individual received the 1980 Census questionnaire, she would need to choose a single race group — either “white” or “American Indian/Alaska Native.” Such a choice would ultimately depend on unknowable factors including how strongly the individual identifies with her Native American heritage.

In addition, the data analyst does not have information about the proportions of individual ancestry in 2000 and can only know that a particular individual has mixed ancestry. The variability introduced by allowing multiple race selection complicates direct comparisons between years with respect to race/ethnicity. Even so, 98 percent of survey respondents in 2000 indicated a single race.³

³ Grieco, Elizabeth M. & Rachel C. Cassidy. “Overview of Race and Hispanic Origin,” *Census 2000 Brief*, March 2001, page 3.

Figure I-4.
BBC race/ethnic categories compared with Census race and Hispanic Origin survey questions, 1980 and 2000

| BBC-defined race/ethnic categories | 2000 Census | 1980 Census |
|------------------------------------|---|--|
| African American | Hispanic origin: no Race: Black/Negro alone or in combination with any other non-Hispanic group | Hispanic origin: no Race: Black/Negro |
| Asian-Pacific American | Hispanic origin: no Race: Chinese, Taiwanese, Japanese, Filipino, Korean, Vietnamese, Cambodian, Hmong, Laotian, Thai, Indonesian, Malaysian, Samoan, Tongan, Polynesian, Guamanian/Chamorro, Native Hawaiian, Pacific Islander, Micronesian, Melanesian, or other Asian, either alone or in combination with any non-Hispanic, non-Black, or non-Native American groups | Hispanic origin: no Race: Chinese, Japanese, Filipino, Korean, Vietnamese, Native Hawaiian, Pacific Islander or other Asian |
| Subcontinent Asian American | Hispanic origin: no Race: Asian Indian, Bangladeshi, Pakistani or Sri Lankan, alone or in combination with white or other groups only | Hispanic origin: no Race: Asian Indian |
| Hispanic American | Hispanic origin: yes Race: any race groups, alone or in combination with other groups | Hispanic origin: yes Race: any or Hispanic origin: no Race: Spanish |
| Native American | Hispanic origin: no Race: American Indian or Alaskan Native tribe identified alone or in combination with any non-Hispanic, non-Black group | Hispanic origin: no Race: American Indian/Alaska Native |
| Other minority group | Hispanic origin: no Race: other race alone or in combination with white only | Hispanic origin: no Race: other race |
| Non-Hispanic white | Hispanic origin: no Race: white alone | Hispanic origin: no Race: white |

Source: BBC Research & Consulting from the IPUMS program: <http://usa.ipums.org/usa/>.

Business ownership. BBC uses the Census “class of worker” variable (CLASSWKD) to determine self-employment. This variable is the same for 1980 and 2000 with one exception: the 1980 variable does not include a separate category for individuals who work for a wage or salary at a non-profit organization.

Changes in industry codes between censuses. The Census definitions of some industries and sub-industries changed between 1980 and 2000. As a result, 1980 codes for the industry variable (IND) are not the same as 2000 IND codes. In most cases, the 1980 code corresponds directly to an equivalent 2000 code. In some cases, however, industries have been regrouped, split up or combined with other industries. As much as possible, BBC selected industry codes to minimize any differences in study industries for the two Census years. Figure I-5 provides a crosswalk between the codes used to define study industries in 1980 and 2000.

Figure I-5.
Crosswalk between 1980 and 2000 Census industry codes used for study industries

| Study industry | 2000 Census IND codes | 1980 Census IND codes |
|-----------------------|--|---|
| Construction | 77 | 60 |
| Professional services | 747, 746, 739, 679, 738, 729, 746, 749 | 721, 730, 732, 740, 882, 891, 892 |
| Goods | 117, 109, 127, 108, 137, 128, 129, 228, 227, 229, 207, 209, 238, 378, 387, 389, 257, 259, 279, 287, 298, 318, 317, 309, 337, 339, 349, 338, 119 407-459 | 101, 102, 111, 112, 120, 121, 122, 182, 190, 192, 200, 201, 210, 231, 241, 242, 251, 262, 281, 282, 300, 310, 320, 321, 341, 342, 371, 610 500-571 |
| Support services | 617, 638, 639 777, 199, 769, 758, 759, 778, 737 878, 877 | 410, 411 21, 172, 722, 731, 742 750, 751 |

Source: BBC Research & Consulting from the IPUMS program: <http://usa.ipums.org/usa/>.

Geographic variables. For the analyses performed in the report, there were no changes in geographic variables. BBC examined 1980 Census data at the state level, but not at the region or MSA levels. BBC used the same variable (STATEFIP) available for 2000 Census data to identify Indiana in the 1980 data.

Changes in educational variables between Censuses. The 1980 Census PUMS data now includes the same educational variable found in the 2000 Census data, although the questions used for each Census to capture educational attainment differed between the two surveys.⁴

⁴ For a more detailed explanation, see footnote 2.

2006-2008 American Community Survey (ACS) data. BBC also examined 2006-2008 ACS data from IPUMS. Conducted by the U.S. Census Bureau, the ACS uses monthly samples to produce annually updated data for the same small areas as the 2000 Census long-form.⁵ Since 2005, the ACS has expanded to a roughly 1 percent sample of the population, based on a random sample of housing units in every county in the U.S. (along with the District of Columbia and Puerto Rico). Since 2008, the Census Bureau has released ACS PUMS files that cover multiple years of data. The 2006-2008 ACS three-year file, released at the end of 2009, combines previously released one-year files from 2006, 2007, and 2008. The three-year file combines the one-year files to document a total of 3 percent of the population. Note that all dollar amounts reported in the three-year file are expressed as 2008 dollars.

Applying the person-level population weights to the 8,965,060 observations included in the data, the 2006-2008 ACS dataset represents 301,237,703 people in the U.S. The 2006-2008 ACS dataset includes 196,614 observations for Indiana representing 6,335,595 individuals.

With the exception of a few minor differences, the variables available for the 2006-2008 ACS dataset are the same as those available for the 2000 Census 5 percent sample.

Changes in race/ethnicity categories between the 2000 Census and 2008 ACS. The 2000 Census 5 percent sample and the 2006-2008 ACS PUMS data use essentially the same numerical categories for the detailed race variable (RACED). However, in both samples, any category representing fewer than 10,000 people was combined with another category. As a result, some PUMS race/ethnicity categories that occur in one sample may not exist in the other, which could lead to inconsistencies between the two samples once the detailed race/ethnicity categories are grouped according to the seven broader categories. This issue is unlikely to affect all but a very small number of observations. PUMS categories that were available in 2000 but not 2006-2008 (or vice versa) represented a very small percentage of the 2000 (or 2006-2008) population. Categories for the Hispanic variable (HISPAN) remained consistent between the two datasets.

Other variables. Other variables used by BBC did not change between 2000 and 2006-2008. The variables CLASSWKD, LABFORCE, IND, OCC, PUMA, METAREAD and EDUCD were consistent between datasets, with variable codes in each case representing the same categories.

⁵ U.S. Census Bureau. *Design and Methodology: American Community Survey*. Washington D.C.: U.S. Government Printing 2009. Available at http://www.census.gov/acs/www/SBasics/desgn_meth.htm

Survey of Small Business Finances (SSBF)

The study team used the SSBF to analyze the availability and characteristics of loans among small business enterprises.

The SSBF, conducted every five years by the Federal Reserve Board, collects financial data from non-governmental for-profit firms with fewer than 500 employees. This survey is a nationally representative sample, structured to allow for analysis of specific geographic regions, industry sectors, and gender and racial groups. The SSBF is unique in that it provides detailed data on both firm and owner financial characteristics. For the purposes of this report, BBC used the surveys from 1998 and 2003, which are available at the Federal Reserve Board website.⁶

Data for 1998. The 1998 SSBF includes information from 3,561 small businesses. The survey oversampled minority-owned businesses, allowing for a more precise analysis of how race and ethnicity may affect loan and financial outcomes.

Categorizing owner race/ethnicity and gender. Definition of race and ethnic groups in the 1998 SSBF are slightly different than the classifications used in the 2000 Census and 2006-2008 ACS. In the SSBF, businesses are classified into the following six groups:

- Non-Hispanic white;
- Hispanic American;
- African American;
- Asian American;
- Native American; and
- Other (unspecified).

A business is considered Hispanic American-owned if more than 50 percent of the business was owned by Hispanic Americans, regardless of race. All businesses reporting 50 percent or less Hispanic American ownership were included in the racial group that owns more than half of the company. No firms reported ownership by “other.”

Similarly, firms were classified as female-owned if more than 50 percent of the firm was owned by women. Firms owned half by women and half by men were counted as male-owned.

⁶ The Federal Reserve Board. *Survey of Small Business Finances, 1998 and Survey of Small Business Finances, 2003*. Available online at <http://www.federalreserve.gov/pubs/>.

Defining selected industry sectors. In the 1998 SSBF, each business was classified according to SIC code and placed into one of eight industry categories:

- Construction;
- Mining;
- Transportation, communications and utilities;
- Finance, insurance and real estate;
- Trade;
- Engineering;
- Services (excluding engineering); or
- Agriculture, forestry and fishing.

Region variables. The SSBF divides the United States into nine Census Divisions. Indiana is included in the East North Central Census Division (referred to in marketplace appendices as the ENC region). The ENC region also includes Illinois, Michigan, Ohio and Wisconsin.

Loan denial variables. In the 1998 survey, firm owners were asked if they have applied for a loan in the last three years and whether loan applications were always approved, always denied, or sometimes approved and sometimes denied. For the purposes of this study, only firms that were always denied were considered when analyzing loan denial.

Data for 2003. The 2003 SSBF differs from previous surveys in terms of the population surveyed, the variables available and in data reporting methodology.

Population differences. Similar to the 1998 survey, the 2003 survey records data from businesses with 500 or fewer employees. The sample contains data from 4,240 firms, but in 2003, minority-owned firms were not oversampled. In the 1998 data, 7.3 percent of the survey firms were owned by Hispanic Americans, but that number dropped to 4 percent in the 2003 data. Representation in the sample also dropped for African American-owned (7.7% to 2.8%) and Asian American-owned firms (5.7% to 4.2%). The smaller sample sizes for minority groups in the 2003 SSBF affects the ability to conduct analyses related to differences in loan application outcomes for race and ethnic groups.

Variable differences. In the 2003 SSBF, businesses were able to give responses on owner characteristics for up to three different owners. The data also include a fourth variable that is a weighted average of other answers provided for each question. In order to define race/ethnicity and gender variables consistently from the 1998 to 2003 surveys, BBC used the final weighted average for variables on owner characteristics. Firms were then divided into race, ethnicity and gender groups according to the same guidelines used for the 1998 data.

Industry, region and loan denial variables for the 2003 survey were defined by the study team along the same guidelines as the 1998 survey, with one exception: the 2003 survey did not include any firms in the agriculture, forestry and fishing industry.

Data reporting. Due to missing responses to survey questions in both the 1998 and 2003 datasets, data were imputed to fill in missing values. For the 1998 SSBF data, missing values were imputed using a randomized regression model to estimate values based on responses to other questions in the survey. A single variable includes both reported and imputed values, and a separate “shadow variable” can be used to identify where missing values have been imputed. However, the missing values in the 2003 data set were imputed using a different method than in previous studies. In the 1998 survey data, the number of observations in the data set matches the number of firms surveyed. However, the 2003 data includes five implicates, each with imputed values that have been filled in using a randomized regression model.⁷ Thus there are 21,200 observations in the 2003 data, five for each of the 4,240 firms surveyed. Across the five implicates, all non-missing values are identical, whereas imputed values may differ. In both data sets, therefore, when a firm answered a survey question, the response was not altered. However the method for filling in missing values differed between surveys.

As discussed in a recent paper about the 2003 imputations by the Finance and Economics Discussion Series, missing survey values can lead to biased estimates and inaccurate variances and confidence intervals.⁸ These problems can be corrected through use of multiple implicates. In order to provide the most accurate analysis, BBC utilized all five implicates provided with the 2003 data in analysis of the survey.

Multiple implicates were not provided with the 1998 data, making the method of analysis used for the 2003 data inapplicable. To address this, the study team performed analysis two different ways, first only with observations whose data was not imputed and second with all observations. Differences in results were insignificant. For summary statistics using SSBF data, BBC included observations with missing values in the analyses. For the probit regression model presented in Appendix G, the study team did not include observations with imputed values for the depended variable, loan denial.

⁷ For a more detailed explanation of imputation methods, see the “Technical Codebook” for the *2003 Survey of Small Business Finances*.

⁸ Lieu N. Hazelwood, Traci L. Mach and John D. Wolken. *Alternative Methods of Unit Nonresponse Weight Adjustments: An Application from the 2003 Survey of Small Businesses*. Finance and Economics Discussion Series Divisions of Research and Statistics and Monetary Affairs, Federal Reserve Board. Washington, D.C., 2007. <http://www.federalreserve.gov/pubs/feds/2007/200710/200710pap.pdf>

Survey of Business Owners (SBO)

BBC used data from the 2002 SBO to analyze mean annual firm receipts. The SBO is conducted every five years by the U.S. Census Bureau. Data for the most recent publication of the SBO was collected in 2002. (Data for the 2007 SBO are due to be released by the end of 2010). Response to the survey is mandatory, which ensures comprehensive economic and demographic information for business and business owners in the U.S. All tax-filing businesses are covered in the survey: firms with and without paid employees. In 2002, almost 23 million firms were surveyed.

BBC examined SBO data relating to the number of firms, number of firms with paid employees, number of firms without paid employees, and total receipts. This information is available by geographic location, industry, gender and race/ethnicity.

The SBO uses the 2002 North American Industry Classification System (NAICS) for classification of industries. BBC analyzed data for firms in all industries and for firms selected industries that corresponded closely to study industries.

To categorize the business ownership of firms reported in the SBO, the Census Bureau uses standard definitions for women-owned and minority-owned businesses. A business is defined as female-owned if more than half of the ownership and control is by women. Firms with joint male-/female-ownership were tabulated as an independent gender category. A business is defined as minority-owned if more than half of the ownership and control is African American, Asian American, Hispanic American, Native American or another minority group. Respondents had the option of selecting one or more racial groups when reporting on business ownership.

BBC reported business receipts for the following race/ethnicity and gender groups:

- African American;
- Asian American;
- Hispanic American;
- Native American; and
- Women.

BBC also reported business receipts for all firms.

Home Mortgage Disclosure Act (HMDA) Data

BBC used HMDA data provided by the Federal Financial Institutions Examination Council (FFIEC) to analyze mortgage lending in Indiana and the nation. HMDA data provide information on mortgage loan applications received by financial institutions, savings banks, credit unions and some mortgage companies. These data include information about the location, dollar amount, and types of loans made, as well as race and ethnicity, income, and credit characteristics of loan applicants. Data are available for home purchase, home improvement and refinance loans.

Financial institutions are required to report HMDA data if they have assets of more than \$32 million, have a branch office in a metropolitan area, and originated at least one home purchase or refinance loan in the reporting calendar year. Mortgage companies are required to report HMDA data if they are for-profit institutions, had home purchase loan originations exceeding 10 percent of all loan obligations in the past year, are located in an MSA (or originated five or more home purchase loans in an MSA) and either had more than \$10 million in assets or made at least 100 home purchase or refinance loans in the calendar year.

BBC used these data to examine loan denial rates and subprime lending rates in 2006 and 2008 by race/ethnicity in Indiana and the United States. Note that the HMDA data that BBC analyzed represent the entirety of home mortgage loan applications reported by participating financial institutions in each year examined; these data are not a sample. However, BBC did not report loan denial rates or subprime lending rates in cases where there were fewer than 25 loans in a particular category. An explanation of the methodology for measuring loan denial and subprime lending rates is provided in Appendix G.

APPENDIX J.

Summary of Anecdotal Interviews

Appendix J provides a summary of anecdotal interviews for the Indiana disparity study. A table of contents for Appendix J is provided on the following pages.

Table of Contents

| | |
|---|-----|
| Introduction and Background..... | 1 |
| Summary of Anecdotes..... | 4 |
| I. Certification..... | 4 |
| A. The Certification Process..... | 4 |
| B. Perceived Value to Certification..... | 13 |
| C. Recommendations Regarding the Certification Process..... | 24 |
| II. Prime and/or Subcontractor Work..... | 27 |
| A. Anecdotes Regarding Businesses Acting as a Prime or a Subcontractor..... | 27 |
| B. Contractor Reported Utilization of DBE and Non-DBE Subcontractors in the Public and Private Sectors..... | 36 |
| C. Subcontractor / Minority and Female-Owned Businesses’ Perception of Utilization in the Public and Private Sectors..... | 55 |
| III. Experiences in the Private Sector and Public Sector..... | 76 |
| A. Private Sector Work Experience..... | 76 |
| B. Public Sector Work Experience..... | 84 |
| C. Identified Differences in Securing and Performing Work in the Public and Private Sectors..... | 90 |
| IV. Indiana State Agencies and Public Colleges..... | 101 |
| V. Marketplace Conditions..... | 126 |
| VI. Anecdotes Regarding Whether or Not There are Potential Barriers and/or Discrimination Based on Race, Ethnicity, or Gender..... | 144 |
| A. Financing..... | 146 |
| B. Bonding..... | 149 |
| C. Insurance..... | 151 |
| D. Equipment..... | 153 |
| E. Labor and Personnel..... | 155 |
| F. Working with Unions..... | 156 |
| G. Being a Union or a Non-Union Employer..... | 159 |
| H. Obtaining Inventory or Other Materials and Supplies..... | 161 |
| I. Prequalification Requirements..... | 163 |
| J. Experience and Expertise..... | 165 |
| K. Licenses and Permits..... | 166 |
| L. Notification of Work Opportunities / Marketing..... | 168 |
| M. Contract Specifications and Bidding Procedures..... | 171 |

| | | |
|-------|--|-----|
| N. | Bidding Process..... | 175 |
| O. | Factors Public Agencies or Others Use to Make Contract Awards..... | 178 |
| P. | Bid Shopping..... | 180 |
| Q. | Bid Manipulation..... | 183 |
| R. | Treatment by Prime Contractor or Customer During Performance of Work..... | 185 |
| S. | Approval of the Work by the Prime Contractor or Customer..... | 187 |
| T. | Payment by the Prime Contractor or Customer..... | 189 |
| U. | Other..... | 193 |
| VII. | Additional Information Regarding Whether or Not Any Race, Ethnicity, or Gender Discrimination Affects Business Opportunities..... | 196 |
| A. | Price Discrimination in Obtaining Financing, Bonding, Materials and Supplies or Other Products or Services..... | 196 |
| B. | Denial of the Opportunity to Bid..... | 197 |
| C. | Stereotypical Attitudes on the Part of Customers and Buyers..... | 199 |
| D. | Unfair Denials of Contract Awards..... | 202 |
| E. | Unfair Termination of Contract..... | 204 |
| F. | Double Standards in Performance..... | 205 |
| G. | Discrimination in Payments..... | 207 |
| H. | Other Predatory Business Practices..... | 208 |
| I. | Unfavorable Work Environment for Minorities or Women..... | 209 |
| J. | The 'Good Old Boy Network' or Other Closed Networks..... | 211 |
| K. | Governmental Resistance to Use of MBE/WBEs..... | 217 |
| L. | MBE/WBE and DBE Fronts or Fraud..... | 219 |
| M. | False Reporting of MBE/WBE Participation or Falsifying Good Faith Efforts..... | 222 |
| N. | Any Other Related Forms of Discrimination Against Minorities or Women..... | 225 |
| VIII. | Neutral Measures..... | 226 |
| A. | Technical Assistance and Support Services..... | 231 |
| B. | On-The-Job Training Programs..... | 233 |
| C. | Mentor/Protégé Relationships..... | 235 |
| D. | Joint Venture Relationships..... | 238 |
| E. | Financing Assistance..... | 240 |
| F. | Bonding Assistance..... | 243 |
| G. | Assistance in Obtaining Business Insurance..... | 244 |
| H. | Assistance in Using Emerging Technology..... | 246 |
| I. | Other Small Business Start-Up Assistance..... | 247 |
| J. | Information on Public Agency Contract Procedures and Bidding Opportunities..... | 249 |
| K. | On-Line Registration with a Public Agency as a Potential Bidder..... | 252 |
| L. | Hard Copy or Electronic Directory of Potential Subcontractors..... | 254 |

| | |
|---|-----|
| M. Pre-Bid Conferences Where Subcontractors Can Meet Prime Contractors. | 255 |
| N. Distribution of Plan-holders’ Lists or Other Lists of Potential Prime Bidders to Subcontractors. | 258 |
| O. Other Agency Outreach. | 260 |
| P. Streamlining or Other Simplification of Bidding Procedures..... | 264 |
| Q. Segmenting Larger Contracts into Smaller Pieces. | 266 |
| R. Price or Evaluation Preferences for Small Businesses. | 270 |
| S. Small Business Set-Asides..... | 272 |
| T. Mandatory Subcontracting Minimums. | 275 |
| U. Small Business Subcontracting Goals..... | 277 |
| V. Formal Complaint / Grievance Procedures at the Public Agency. | 279 |
| IX. Race, Ethnicity, or Gender-Based Measures..... | 281 |
| X. Recommendations..... | 288 |

APPENDIX J.

Summary of Anecdotal Interviews and Public Forum Testimony

Introduction and Background

Appendix J was prepared by BBC Research & Consulting (BBC) and Holland & Knight, LLP with assistance from Bischoff Performance Improvement Consulting, Briljent, LLC, and Engaging Solutions. It sets forth the summaries of 86 personal interviews conducted for multiple state agencies and State Educational Institutions (SEIs). The interviews include perceptions and anecdotes regarding the Disadvantaged Business Enterprise (DBE) Program and the contracting and procurement policies, practices, and procedures of the State of Indiana (the State), including the Indiana Department of Administration (IDOA), Indiana Department of Transportation (INDOT), Indiana University (IU), Purdue University (Purdue), Indiana State University (ISU), Ball State University (BSU), University of Southern Indiana (USI), Ivy Tech Community College (Ivy Tech), and Vincennes University (VU). The interviews were conducted by Bischoff Performance Improvement Consulting, Briljent, LLC, and Engaging Solutions.

Interviews. Interview participants included prime contractors, subcontractors, professional service providers, and trade and professional organizations that have a membership base of numerous minority-, white woman-, and white male-owned firms. Interview participants were obtained primarily from a random sampling of businesses generated by BBC and stratified by firm type, firm size, location, and ethnicity, race and gender of ownership. Most of the interviews were conducted with the owner, president, chief executive officer, or other officer of the business or organization. Some interviews were conducted with a designated representative. The interviewees are identified in this report by their random interview number.

Firms. Of the businesses interviewed, some work exclusively or primarily as prime contractors or subcontractors, and some work as both. Some businesses were minority-owned (MBEs), some were white woman-owned (WBEs) and some were white male-owned. All of the businesses were located throughout the state of Indiana.

Trade and professional organizations. The following trade associations and business organizations agreed to be interviewed in connection with the disparity study and report on the experiences, anecdotes, and perceptions of their members:

- The Chamber of Commerce of Southwest Indiana;¹
- The Greater Indianapolis Chamber of Commerce;²

¹ The Chamber of Commerce of Southwest Indiana (TA #1) is an organization that has been in existence since 2006 as a result of a merger of two local chambers of commerce. The organization provides public policy services, economic development activities, networking and education. With respect to its members, the organization represents all types of businesses.

- Asian American Alliance, Inc.;³
- Northeast Indiana Regional Partnership;⁴
- Indianapolis Office of the National Association of Women Business Owners (NAWBO);⁵
- Indiana Minority Supplier Development Council (IMSDC);⁶
- Indiana Civil Rights Commission (ICRC);⁷
- W.C. Benton and Associates, Inc.;⁸ and
- Indiana Construction Association (ICA).⁹

² The Greater Indianapolis Chamber of Commerce (TA #2) was founded in 1913 by Eli Lilly and a small group of Indianapolis business leaders. The organization has 4,100 members representing businesses from nine different counties. The organization helps its members grow their businesses by providing them with networking activities and educational programs.

³ The Asian American Alliance, Inc. (TA #3) is an organization that was founded in 1999 by a group of Asian-born Indianapolis business leaders and philanthropists who wanted to create a multi-cultural, non-partisan, non-profit organization to serve and lead the growing Indianapolis community of Asians and Pacific Islanders. Their mission is to promote cultural awareness and civic participation for Asian groups. The organization has 650 members.

⁴ The Northeast Indiana Regional Partnership (TA #4) was founded in 2006 as an extension of an earlier effort to expand regional marketing to the Allen County area. The organization serves as an economic development stimulus agent and provides marketing services for a 10-county region in northeastern Indiana.

⁵ The Indianapolis Office of the National Association of Women Business Owners (TA #5) was founded in 1975 by a group of 12 business women in the Washington, D.C. area to discuss fiscal matters and promote women entrepreneurs. The organization is comprised of 80 chapters throughout the United States. With its 230 members in almost every type of business, the Indianapolis Chapter draws its membership primarily from Marion County and the surrounding counties. With respect to services, the organization offers education and business training for its members.

⁶ The Indiana Minority Supplier Development Council (TA #6) was founded in 1976. The organization has 140 members consisting mainly of Fortune 500 companies and some smaller organizations. With respect to services, the organization assists in connecting corporations with MBEs, training, education and awareness about supplier diversity. It also provides assistance with certification for minority-owned businesses.

⁷ The Indiana Civil Rights Commission (TA #7) was formed in the 1960s. The purpose of the organization is to enforce civil rights codes of the State of Indiana. With respect to services, the organization assists with mediation, employment and fair housing discrimination cases, and other problems.

⁸ W.C. Benton and Associates, Inc. (TA #8) was formed because the president did not feel that construction businesses had the necessary technical and business expertise. The formation of the organization was inspired by the legislation on minority business participation. With respect to services, the organization provides services related to accounting, estimating and bidding, marketing, financing, and everything else that a construction company needs to operate effectively.

⁹ The Indiana Construction Association (TA #10) is a result of the 2006 consolidation of the ICI and the Associated General Contractors. The ICI and AGC date back over 80 years combined. The Association has just over 300 members. The members represent all areas of construction except residential. With respect to services, the organization provides assistance with safety, labor relations, state agencies and local government units, and education programs.

Public forum and written testimony. Appendix J also summarizes oral testimony from 29 individuals in response to solicitations for comments about current marketplace conditions in Indiana. Individuals had the opportunity to give verbal testimony in person at a public forum held in Indianapolis, Indiana on February 24, 2010. IDOA held a second public forum on December 6, 2010 after publication of a draft disparity study report in early November 2010. Eight individuals provided comments at this public forum.

Individuals had the opportunity to submit written testimony to IDOA as well. IDOA received written testimony to IDOA via mail, electronic mail and fax.

Public forum participants represented businesses and organizations throughout the state. Their comments are identified by number with the “PF” prefix designating oral testimony and the “WT” prefix designating written testimony.

Telephone interviews. Appendix J also includes responses from telephone interviews that the study team conducted with Indiana firms. Those surveys were conducted as part of the availability analysis, and included an open-ended question that allowed respondents to offer general insights about working in their industries or working with public agencies. More than 30,000 firms were given the opportunity to complete the telephone survey for the study. Of those firms, more than 9,000 actually completed the survey and approximately 1,400 provided a response to the open ended question.

Summary of Anecdotes

I. Certification.

A. The Certification Process.

Some interviewees reported a positive experience with the certification process. [Interviewees #: 102, 112, 123, 200, 201, 202, 204, 205, 206, 207, 222, 228, 301, 307, TA #2, TA #3, TA #5, TA #6, TA #7, TA #8, TA #10]. Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, is registered with the City of Fort Wayne as a certified MBE. Interviewee #102 is not certified as an MBE with the State of Indiana. Interviewee #102 noted that he considered the City's MBE application rather straightforward and easy and it took only about 60 days to receive certification.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that the owner of a cleaning firm for the area is a certified Minority Business Enterprise (MBE) and that she has a franchise under him that is certified as a minority and woman business enterprise. Interviewee #112 explained that they are only certified with the State of Indiana and said that her experience with becoming certified was not easy. She reported that when they tried the certification process ten years ago with her other company, it took them a year and a half to complete the process because of the amount of paperwork. However, she said that “under this administration, we have found that it is not so hard.” She shared that the process does not seem to be as difficult as it used to be, “[s]o we encourage it to everybody that we know!” She also reported that the re-certification process was also “not bad. It was pretty much smooth sailing. I mean we had all the cooperation that we needed from the State.”

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, commented “It was painless getting certified as a State MBE.” He said the certification process was “easy.”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, indicated that his firm has already been through the re-certification process and said that the process “isn't that bad,” but he said that he was not personally involved in the certification or re-certification process. He added that the owner said that the process is easier now than it used to be and that “they almost give them away now.”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that although it “took me forever” to get the paperwork together, the certification process was not difficult.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, reported that she is certified as a WBE with the State of Indiana and the City of Indianapolis and as a DBE with INDOT. She stated that she sought certification because “it just seemed like the place to start.” She said that she hired an attorney to prepare her DBE paperwork and the attorney also prepared her WBE paperwork, so she does not believe her application for WBE certification “was a conscious decision on my part.” Interviewee #202 indicated that the DBE application process went very quickly and reported that the process was fairly easy primarily because she hired an attorney to complete her initial WBE/DBE certification paperwork. She said that the

representative from the IDOA MBE/WBE Office who conducted her site visit was very nice and “was a joy to talk to and made me feel very comfortable ... he was very kind and patient with me.” She added that she always gets a good response from the MBE/WBE IDOA office. She also said that the process for becoming DBE-certified was smooth. She explained, though, that completing the financial paperwork was a bit challenging and that without the help of her accountant it would have been more difficult. However, she added that she does not think the process could be simplified further. Interviewee #202 said that the DBE certification process was not terribly hard and went fairly smoothly and quickly.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, stated that the recertification process was easier than the original certification process because he retained the original paperwork and merely updated it. He mentioned that the original certification process took six months, whereas the recertification process took two months. He attributed the reduced certification time to a woman at the MBE/WBE certification office who was “extremely helpful.” He said that it “seems like she’s on the ball.” He recommended, however, that the application process could be improved if the application were “thinned down.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, stated that the firm’s ownership is and has always been 51 percent African American female and 49 percent African American male and that the firm is certified as an MBE/WBE through the State of Indiana and the City of Indianapolis. He reported that the firm is also certified as a DBE through INDOT. He added that the firm is certified with the Indiana Minority Supplier Diversity Council (IMSDC) and the Kentucky Minority Diversity Council. Interviewee #205 said that Indiana’s certification process “was not as difficult as we thought it would be. There is a lot of information. If you’re structured well as a company, it just transposes on the paper. I can see where a lot of people would have issues with the complexity of the process.”

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, reported that the firm is certified as an MBE through the State of Indiana and that the certification process “wasn’t hard at all.” He said that it was “a little laborious in the beginning, the first time the firm did it, because it was just so overwhelming.” He added that he has since been recertified, and now “it’s routine ... I can have everything together in an hour.” He said that the certification process “has come a long way ... it used to take forever ... it happens pretty quickly.... I think it works fine.”

Interviewee #207, the Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, reported that the firm received its MBE certification from the State of Indiana in 2008 and its Federal DBE certification in 2009. He said that they hired an attorney to handle the MBE/DBE paperwork to “minimize the opportunity for rejection and we wanted to get it done right the first time. I guess there’s room for interpretation in the way the legislation is written and so I guess that room for interpretation leads to rejections and so forth.” He said that IDOA approved their MBE certification “almost immediately, with minimal hassle.” However, he stated that INDOT had a different interpretation of the legislation, and their DBE certification was initially challenged because of issues primarily related to control of the company.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, reported that the firm's ownership is and always has been 100 percent Caucasian female. She said that the WBE certification process "was difficult just gathering the information and taking the time to work through it. However, I do agree with the process. I think it needs to be a challenge. I think that you need to gather all of that information, because if it's just a simple process, everybody will be there and not everybody is qualified to be there. And the qualifications are stringent, they are a challenge, but they need to remain that ... if you're going to be a pass-through company, hopefully they'll snag you somewhere along the process.... This validates my legitimacy. I was very proud of it once I got it."

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, reported that his firm is certified by the City of Indianapolis, the State of Indiana and the Indiana Minority Supplier Development Council. He indicated that the firm has experienced no issues with the certification process and that they are now pursuing MBE certification in Chicago. He said that "it is easy for us to get certified especially since the applications are available on-line." However, he said that he is not aware of whether the certification process is easy or difficult because he does not complete the paperwork, and he has no recommendations to improve the certification process.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said that the certification process for MBE was easy, "except for the documentation part of the process. That is laborious."

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that she has heard MBE/WBE business owners tell the new members that the certification process is not difficult and that they would be pleased to help the new members through the process.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that she has heard anecdotally that the MBE/WBE certification process is "pretty easy, it's a lot of paperwork."

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, stated the certification process is not difficult, even though it is tedious and arduous. She said "I think it's beneficial for companies to get their business in order, so to speak, by having all their paperwork, tax forms, organization charts, etc. in one place and organized. It's simply good for business."

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, said that the certification process is easy, "as long as you follow directions, and you have your supporting documents in order and your business in order — setup properly." She noted that the process requires a lot of supporting documentation. But, if everything is set-up correctly, "it's not difficult to become certified. That is, if you truly are a minority and doing what you say you're doing."

Interviewee TA #7, the African American male representative of a civil rights agency, said "I don't consider it hard especially if you can show it's you from the start. If you have the basic information,

corporation, how much money you used to get started, being able to prove ownership. If you're legit you ought to be able to prove you are who you say you are."

Interviewee TA #8, an African American male president and female chief operating officer of an organization that provides assistance in the highway construction industry, said that while the certification process is difficult it is well laid out, rigorous, and deals with reduction in fraud. He said "What I like about it (across the board) is what people are asked to furnish. It's a great way to begin training with these firms because they have to be organized to even be considered. Trying to decide who is in control of the company is a good way for due diligence in order to be a good business anyway. If it's done by the book, it's very good. Enforcement to make sure everybody is doing it the same way. Indiana has one of the better DBE certification processes in terms of on-sites, etc. In terms of rigor, it's inconsistently applied and has grown over the years."

Other interviewees reported challenges in connection with the certification process.

[Interviewees #: 100, 104, 108, 109, 110, 111, 117, 119, 124, 125, 126, 128, 203, 205, 210, 212, 213, 219, 220, 300, 305, 307, 308, 314, TA #1]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said "We have not applied for MBE certification as of yet. We have applied for WBE certification given the fact that we are 100 percent woman-owned. In fact, we have tried twice for WBE certification; however, we were turned down twice. The State told us that we absolutely needed the tax returns of all three of our female owners. We had two owners who turned over their tax returns (the two women who together have 85 percent share in the company). The third woman did not want to submit her tax returns, and so our application was turned down. I thought that was unfair, since majority ownership is with the two women who did produce their tax returns. I cannot understand the State's reasoning on that matter." Interviewee #100 also stated that he thought that the certification application process was "complicated," and he did not understand why his company was denied WBE certification.

Interviewee #104, a male Hispanic American owner of a civil engineering firm, stated that his firm was certified as an MBE by the State in 1989. He added, "Somehow I let the certification lapse, and when I went to reapply, I discovered the process had become much more complex, and the Department of Commerce would not simply renew my earlier certification." Interviewee #104 said that he made one or two more attempts to complete the process, but he never achieved that goal. He said, "At that time in my life — trying to work and maintain myself — it just became more trouble than I thought it was worth."

Interviewee #108, an African American male and previous owner of a commercial cleaning company, reported that he founded and owned his business from 2005 to 2008. He said that in 2005, he applied for and received MBE certification, but the certification expired in 2008, and he chose not to renew it. Interviewee #108 stated "The State wanted me to go through the entire application process again. They would not just renew my certification. I decided not to reapply." He said, "The certification process was way too complicated and long." He indicated that he believes that for a small business owner just starting out, the application was far too detailed, asking for size of office spaces, extent of equipment, employee earnings, etc., none of which he had because he was just starting his business.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, indicated that his partner, who is also a Hispanic male, is vice president of the firm. He reported that the firm does not have

certification with the State. He stated, “I have not sought this certification. It is such a pain ... to deal with the State. I do not want to get into all that.” He said that before starting his current business he worked in another business that was certified 8A by the federal government and received the State’s MBE certification. He reported, “State certification is not too bad. It’s certainly easier than the 8A process.”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that she obtained certification with the State as an MBE/WBE and attempted the process of DBE certification. However, she reported that she could not get through the process of becoming a DBE and that that process was hard and cumbersome.

Interviewee #111, a Hispanic owner of an engineering services firm, reported that he was turned down for certification despite meeting requirements. He stated that the race, ethnicity, or gender of the firm has always been the same since he has always managed the company. Interviewee #111 said, “I had such a bad taste in my mouth from the last time we tried to do it. I said, ‘I don’t need this.’” However, he also indicated that now that he is the sole owner of the company, he is considering re-applying for MBE certification. He reported that before starting his current business, he was a contractor for the City and was a certified MBE and that he currently has some self-certifications. Interviewee #111 said that the certification process is difficult, but that he understands why the process is challenging. However, he mentioned said that he does question how some other companies became certified while his was turned down. Interviewee #111 reported that his firm is beginning the certification process again. He stated that it is a time-consuming process.

Interviewee #117, a Caucasian male co-owner and vice president of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, reported that his wife was Hispanic and that she owned a 51 percent share in the company. He said the certification process was slow, took a lot of paperwork and probably took at least a year or longer. He also stated that “We did not find the process difficult, just slow, and I don’t really have any recommendations to make about the process.” He said that the company is also certified in Illinois.

Interviewee #119, a male Hispanic owner of a CD duplication, graphic design, and sign printing company, said he looked into the certification process and in fact downloaded the form about six months ago and when he saw that the form was over a hundred pages long (he thought this included the regulations, explanations, and the form), he “got lost in all the details and quickly lost interest and just gave up on the idea of applying for certification.” He stated that he would need someone to walk him through the process because it is too difficult to take the time to figure out on his own.

Interviewee #124, an African American male and president of an MBE-certified promotional products company, reported the certification process to be “very time consuming; there must be a better way to do this; it’s not simple enough.”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, said the certification process was difficult the first time. She commented “After the original certification, the process of re-certification was less intimidating. However, asking for all the very same information we’ve already provided seems a waste of time and paper. For example, expecting us to retrieve all the information from former employees and three years of tax returns is nearly impossible, and seemingly not all that essential. I’d like to see the time frame for completing the re-certification lengthened. I’d also suggest that bios of key staff people be kept on file and therefore we

would not need to repeat it each time we re-certify. The State could simply ask whether there have been any changes to the bios and we could send just the changes, and it could all be done electronically.”

Interviewee #126, a Filipino Caucasian American male owner of a full-service marketing and advertising firm, commented “I just have not had time to apply for MBE certification from the State. The task seems so daunting to me. If the process were more streamlined and if I could get more cooperation from the State, I might consider applying. Right now the time commitment to running the business does not permit a lot of time for such a labor-intensive application process.”

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, commented “The application process is [difficult]. My first try — some years ago — required two years of tax papers which I did not have because I had just taken over the company from my partner. The process is not very user friendly. It could be a lot more straightforward. Even a simple tutorial on how to navigate through the application process with Q&As would be helpful.” He said in November 2009 he hired a firm to usher his company through the certification process.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, reported that his firm is certified as an MBE with the State of Indiana and as a DBE with INDOT. He said that he sought certification “hoping to get work through this process” and added, “I thought there would be some set-aside program.” He stated that the certification process requires the completion of documentation that is “unnecessary ... cumbersome ... totally irrelevant ... baseless.” He added, “Some of the things they ask for do not apply to educated people like us who sell our brain ... they need to make it simpler.” He said that the documentation that the State requires for the MBE and DBE certification is too intrusive, citing the following questions that he was asked: “How much money do you have in the bank? Where did this money come from? Can I have a copy of the loan agreement? Can I have a copy of your car title?” He described examples of business certifications in Singapore and Korea he thinks are far simpler than the Indiana business certification process.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that the firm’s ownership is and always has been 100 percent Caucasian female. She said that her firm is certified both as a WBE and as a DBE with the State of Indiana. She said that her experience with becoming WBE-certified by the State of Indiana “the first time wasn’t so good.” She said that the State initially denied her certification because the State claimed that her husband had too much control in the business. She said that she had always run the company, that her husband was sick with cancer, and that the State was wrong. So, she said she wrote letters to officials in Washington, D.C. to appeal the State’s decision. She received a letter from the federal officials in response to her letter stating that there was nothing that could be done to overturn the State’s initial denial. She said that after the waiting period, she re-applied for WBE certification from the State of Indiana and became certified in 2004. She said that she has since been re-certified as a WBE by the State of Indiana. She said that her experience in becoming DBE-certified was “pretty easy.” She did note that her first re-certification was “so much easier.” She said that the female staff member from IDOA who came on-site for the initial certification was “in and out and she wasn’t very pleasant” but that the male staff member who came on-site the second time was “so much easier to talk to.”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that the firm's ownership is and always has been 100 percent Caucasian female. She said that she was initially certified ten years ago and that the initial certification process was "confusing, with the DBE and the WBE, it took me a long time, with a lot of questions, to figure out what the dickens was the difference ... finally, I found someone who was able to explain it to me so that I could understand it ... I think I understand it now." She said that her initial WBE certification was denied because IDOA officials believed that her son controlled the business, and that she did not. She said that she appealed the initial decision and had to go to a hearing in Indianapolis. She stated that the initial decision was overturned on appeal and she was granted her WBE certification. She remarked, "I do believe that they have changed a few things that have made it easier and less confusing. And I'm happy to say the last couple of times I've called up [IDOA] I've actually talked to somebody, which is refreshing. And she called me back, and that's all good, because then I knew what I had to do." She said "It's very easy to be confused by some of it (the WBE-certification process). I don't know if there's any good way to make it simpler."

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that the firm's ownership is and always has been 100 percent Caucasian female. She said that her firm is not certified as a WBE with the State of Indiana, but that she is currently looking into the certification process. She said that she has retained a large Indianapolis-based law firm to inform her if she will qualify as a WBE before she goes to the trouble of completing the paperwork. She said that an attorney from that law firm has told her that she may not qualify as a WBE because the money used to start the firm came from her husband's and her joint checking account and because her son drives the truck. She said that they lawyer told her that to qualify as a WBE, she would have to perform more than administrative duties. She said, "I guess I have to be out there driving the truck for them [IDOA WBE certification officials] to consider that I am a woman-owned business ... it (the business) doesn't run if I don't do my work." She said that she has heard from others regarding the WBE certification application "that you have to have it worded right ... for them to accept it, so I've been kind of skeptical about doing it on my own and I'm trying to fill it out."

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she is not certified as a WBE with the State of Indiana because that would require her to change the percentage of her ownership of the business to more than 50 percent. She said that she looked into the WBE certification process, but that she was told by a good friend who went through the process that there was a "tremendous amount of paperwork." She said that she was also told that once she starts the WBE application completion process, that she only has 30 days in which to complete the paperwork. She said she was advised by a local "business coach" to establish a fictitious company name so that she could obtain the WBE certification application without having to reveal the actual name of her firm.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that the process of becoming WBE-certified involved "a lot of paper." She said that the WBE certification process was "difficult." She said that before she completed the WBE certification paperwork, she went to Indianapolis and met with State of Indiana Minority and Women's Business Enterprises Division staff who were "absolutely" helpful. She added that she has heard that the re-certification process is easier than the initial certification process.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said that she is and has always been the owner of this firm. She stated the WBE certification is with IDOA. She reported that she is not currently DBE-certified, but she will seek this certification as soon as they have completed all of the architectural licensing on which they are currently working. She stated that the certification process “can be a little confusing, finding the right places to find the paperwork, crossing the T’s and dotting the I’s. Comparing the State to the Federal, it’s moderately easy.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “From what I understand, the process is difficult. It takes a lot of time. There is a lot of paperwork. It is time consuming for a small business owner who does everything.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said that he has been the only owner of the firm since it began. He stated that the firm has both Minority and Disadvantaged Business Enterprise certification with the State and indicated that the purpose of securing these certifications was to enable the firm “to pursue City and county work and to try to get work on the I-69 project.” He said that the MBE/DBE certification process is not bad but said, “You need 20 million documents to prove everything and the benefits are that I get a little more proposals to look at.” He indicated that the certification process for MBE was easy, “except for the documentation part of the process. That is laborious.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, indicated that the certification process is “difficult” and raised an issue with the competence of certain staff. She said “I had an issue this year with my new certification and I just finally gave up.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said that MBE certification process is difficult and very time consuming the first time, but that recertification was easy.

Interviewee TA #1, a Caucasian male President/CEO of a regional chamber of commerce, said that he has heard from his members that the State certification process is difficult. He said that the leadership of his organization has discussed the option of expanding the scope of their local Small Business Development Center to include providing MBE/WBE/DBE certification assistance.

A few telephone interviewees reported challenges in connection with the certification process.

For example, a representative from a white women-owned firm indicated that it is sometimes difficult for a firm to prove its eligibility: “We applied for WBE status because my wife owns 51 percent of the company, and she has always owned the company and ran it. However, [the State will not] certify [our firm], because they don’t believe that she runs it enough ... They think it’s too even — I own 49 percent. I think it is ridiculous ... we meet all the qualifications.” A representative from another MBE/WBE firm made similar comments: “It seems more difficult and more of a problem to try and start a minority-owned business and to deal with the State on that issue. My wife has tried [to become certified] with another business we are in, and we got nowhere.”

Other interviewees reported having little to no experience with the certification process.

[Interviewees #: 101, 103, 105, 106, 113, 114, 115, 116, 118, 120, 121, 208, 209, 211, 214, 215, 216, 217, 218, 221, 223, 224, 225, 227, 230, 231, 302, 303, 304, 306, 309, 310, 311, 312, 313, 315, TA #4]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, indicated that their company is not and has never been certified in the State of Indiana. He stated that it is the owner's preference to not seek certification. He stated that they have heard that the certification process is long and labor intensive.

Interviewee #106, an African American male owner of a recently started electrical engineering firm, stated that he has not sought either state or local certification as an MBE and said, "I don't really have the money or time to pursue it, but it is something I'd like to look into."

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, "I'm also one-sixteenth Native American, but I doubt that qualifies me for any State minority status." He said that he has been under the impression that he would not qualify for any MBE certification and has not sought any such certification. He noted that his company's only certification is with the federal government (Disabled Veteran Small Business).

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, reported that he came to the U.S. in 1987 and is a full citizen now. He said that he has never sought MBE certification with the State. He added, "I did not seek any special advantages because of my minority status. I wanted to compete on an even plane and win or lose on my merits. I have no need to be treated special, so I never sought certification."

Interviewee #214, a Caucasian female owner of a custom computer programming firm, said that her firm is not a WBE-certified firm with the State of Indiana, but is WBE-certified by the Women's Business Enterprise National Council (WBENC), based in Washington, DC.

Interviewee #217, an African American female owner of a commercial cleaning service, said that she is in the initial stages of completing the application for both the MBE and the WBE certification. She said that she met with someone from an organization in Plymouth, Indiana, who helped her start on her application.

Interviewee #227, a Caucasian male owner of a truck haulage company stated that he has no experience with any state or local MBE/WBE/DBE programs, and said that it is a "bad idea" to have these certifications.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, stated that the company is not certified with any of the certifying agencies. He said, "We never thought about securing certification and do not believe in goals based on race or gender." Further, he said that "the white male is now the minority, and the winner of any bid should be the person with the best bid and the best rapport with the agency or company." Interviewee #302 stated that upon formation of the company, it was thought it would be advantageous for the female spouse to be the majority owner. He said that while the company never sought certification, when seeking a contract with the State they advised the State of the 51 percent female majority ownership.

Interviewee #303, the Caucasian female owner of an electrical contracting business, reported that the company is not certified with any of the certifying agencies. Interviewee #303 said, "I do not know

how to become certified but I am very interested in learning how to become certified.” She indicated that, although the company does not hold any certifications, when seeking contracts with the City of Indianapolis (“the City”), they advise the City personnel that they are a wholly female-owned company.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “I don’t handle the certification process, but the contractors I have worked with said they are in awe of how much easier the process is even for renewal. These comments have come within the last several years. People are no longer intimidated by the paperwork and the process and just the word certification.”

Interviewee #312, a Caucasian female and corporate officer of a construction firm, indicated that they do not currently qualify as an MBE or WBE and therefore are not certified as such, “But when I take over the business after my Dad retires, I will look into WBE certification.”

Interviewee #315, an office manager of a Hispanic-owned environmental staffing firm, said that the firm is not MBE/WBE/DBE/SBA-certified. He said, “We are looking into the certification process now. I have received the paperwork to begin the process.”

B. Perceived Value to Certification.

Some interviewees perceived a value to certification. [Interviewees #: 101, 104, 107, 111, 116, 117, 119, 123, 128, 200, 205, 207, 210, 212, 213, 215, 217, 219, 222, 300, 301, 304, 305, 307, 314, 315, TA #1, TA #2, TA #4, TA #5, TA #6, TA #7, TA #8, TA #10]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, said that one benefit to certification would be the possibility of gaining more work from INDOT.

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, indicated that there are some advantages to obtaining certification, one being that the pool of potential subcontractors (especially in the civil engineering field) has really expanded which makes for more competition which ought to make for higher quality projects.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that they have definitely seen the benefits of their certification because of the goals that exist; however, a very small percentage of their business comes as a result of being certified with the State. He said that a larger percentage of business results from their additional certification with the City of Indianapolis, primarily due to the City’s stronger goals.

Interviewee #111, a Hispanic owner of an engineering services firm, stated that he recognizes being certified would help his clients realize the MBE goals that are defined for their projects. He also reported that his firm has lost work before because clients who want to use them have had to hire a certified minority firm in order to get the work.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, indicated that he has experienced huge declines in sales since 2007. He attributes this to the economy primarily, but he said that the fact that he is a majority-owned firm hurts his business. He noted that minority-owned firms, qualified or not, are getting the little bit of masonry work that exists because of the goals that exist.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, explained that “it was one of our customers in 1990 who said we ought to be certified and in so doing we could keep this vendor as one of our customers.” He stated “It [certification] certainly opened a lot of doors for us because [a casino] was our first vendor to select us because we were MBE/WBE, and now about 80 percent of our business is with the gaming industry. Even though we did not intentionally set out to become a certified minority business, getting that certification has been good for us.” He noted that about 80 percent of their work is due to the certification.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, stated he was initially prompted to look into certification because one of his customers asked him if he was an MBE and suggested he look into it. As far as benefits of certification, Interviewee #119 commented “I know some of the casinos in our area have a requirement of using MBEs in their contracts and I guess that might be an advantage for me.”

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, said being certified forces him to set the best business goals and ensures he provides value-add to primes. He commented “It’s a good way to grow your business.” He stated that about 1 percent of his business resulted from projects with MBE/WBEs.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, reported that his firm is certified as an MBE with the State of Indiana and the City of Indianapolis and as a DBE with INDOT. He stated that there are some benefits to being certified, including that if prices are relatively close among bidders, the certified firm will win the bid if the customer needs “the percentages.” He added, “In the last year, it’s all about price.” He expressed that 50-70 percent of the firm’s sales are the result of being MBE/DBE-certified.

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, said “By getting certified I hope I can do more work in the public sector and for Indiana colleges and universities.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, commented on the benefits of certification by stating, “We’re in a network. We don’t have to spend hundreds of thousands of dollars chasing a dream. Many times, those dreams come to us. People knock on our doors. We’ve gone as far as to have people come right to that door and bring us drawings and say we need you to price this project. Without that certification, those people would not know we exist. We’d have to spend huge sums of dollars to find out who those people are.” Interviewee #205 said that in 2006, 100 percent of the firm’s work resulted from sales with MBE/WBE/DBE goals. In 2009, 20 percent of the firm’s work came as the result of projects with MBE/WBE/DBE goals.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, stated that approximately 10 percent of the firm’s work has resulted from sales with MBE/DBE goals, and that the percentage has been increasing. He said that the MBE/DBE certification has been beneficial because it provides “a better opportunity to get in on partnering and teaming with other firms that are more established, because some of the money is set aside specifically for those types of firms.” He added, “It provides a method whereby we can basically

show our expertise and show that we can do as good or better job as the other firms. It provides an assist to get your foothold in the door.”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that she became certified “to help get more jobs ... to help the company grow.” She said that 20 percent of her current annual sales have resulted from projects with WBE/DBE goals. She said that in previous years, that percentage has been as high as 33 percent.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that there are definite benefits associated with being WBE/DBE-certified, especially over the past four years. She said that she was told that being a WBE firm significantly contributed to her firm winning the Indianapolis Airport job, adding that her price was low, as well.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that she hopes that the benefits of becoming WBE-certified “will enable us to work as opposed to sitting at home.” She added that her business has only grossed only \$25,000 this year, so she is hoping that the WBE certification will allow her to significantly increase her firm’s revenues.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that although he has no experience with the MBE certification process, he believes that that having the MBE certification “puts you on the radar ... your company becomes listed as a potential vendor.”

Interviewee #217, an African American female owner of a commercial cleaning service, said, regarding the benefits of being MBE/WBE-certified, “From what I’m told, once I get certified, any State job — license bureau or anything in the State — I have an opportunity, and a good opportunity to bid and obtain that business.”

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that if she actually would have used her WBE certification, it would have been beneficial to the growth of her business. She said that she applied for her WBE certification to specifically go after a large State of Indiana contract for enterprise management software. She said that she never did actually bid on that contract because she determined that her business was too small to prime and that her business partners were out-of-State firms that would not qualify to prime. She said that she let her WBE certification expire because she never sees any requests for proposals on the IDOA website that apply to her business. She surmised, “I don’t know how to play the game.”

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that to realize the benefits of the WBE/DBE certification, a business owner really has to use it as a marketing tool to get in the door. She said that the WBE certification is meaningless unless one is willing to work hard to promote her business. She said that in 2008, 31 percent of her sales were the result of being WBE/DBE-certified and that in 2009, 40 percent of her sales were the result of being WBE/DBE-certified.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated the certification is “worth doing because a lot of times you have to have MBE/WBEs to meet the project goals.” However, she indicated that to date none of her

firm's sales are attributable to a project with MBE/WBE goals. She said that she gets on projects based on who she knows and who she has relationships with.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, reported that the certifications are helpful, especially with larger projects where the owner has set goals and incentives to utilize MBE/DBE firms. He said that approximately 10-15 percent of the firm's sales result from MBE goals.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said "The benefit of certification is a door for opportunity." She said that the company has done private work in addition to public work, but she added, "On the private side, certification is not required, and those opportunities (private sector projects) are not as available and don't come that often." She said that when you compare the two sectors, there are benefits to certification in the public sector "because of the goal, the expectations to meet the goal, and the desire to make sure there is a balance on who is actually building the project." She also reported, "The benefits of certification are the training and networking opportunities and the fact that IDOA and INDOT know you and your company. The certification also serves as an additional marketing tool." Interviewee #304 said, "I think the Federal DBE Program is one of the best programs that exists. That is why we're not in the private market so much and we are using our DBE status. There are advantages and more opportunities that have opened up in 2009 that have really helped us grow our business through INDOT."

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, reported that there have been no other owners of the firm, but his firm is not certified as an MBE, WBE, or DBE. "There are benefits to being certified and I have discussed it with a number of vendors I subcontract with. They have encouraged me to certify because of benefits particularly in State government bids because the set asides are really awesome, and in my area there are not others doing the kind of work I do."

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, stated that 30 percent to 40 percent of the firm's sales and contracts resulted from projects with MBE/WBE goals.

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said that there are benefits to certification. She said that the major telecommunications firms ask if they are certified because they cannot do business with them otherwise. She said that she believes 70 percent of their business comes from MBE/WBE goals with the major telecom carriers.

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, said "I think there are many benefits to certification. You can find out about projects. I think that would be a huge benefit. I don't know of any disadvantages."

Interviewee TA #1, a Caucasian male President/CEO of a regional chamber of commerce, said that although he does not have extensive experience with the State's MBE/WBE Program or Federal DBE Program, he understands that the benefits include "an opportunity to be aware of opportunities to bid and you can hopefully capture business."

Interviewee TA #2, an African American female Senior Vice president of Public and Strategic Affairs for a large metropolitan chamber of commerce, said that most of the women and minority businesses that are members of her organization are certified as MBE/WBEs by the State of Indiana. She said that the organization's members who are MBE/WBE-certified "recognize the value that it brings in terms of them doing business with larger corporations ... they know that it's required ... I think that message has made it throughout the community and people understand the value of that certification."

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, said that WBE/MBE certifications were set up to help women and minorities succeed in the market place. He stated "the certification allows for an identity so they are seen as meeting certain State-sanctioned standards, which can provide confidence to potential vendors and give the certified businesses a chance of success."

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, said "It [certification] gives our members opportunities for networking and getting out in front of decision makers, access to workshops, outreach to prospective clients, and a chance for some subcontractors to do work they might otherwise not get." However, she said "There might be the perception that certification gives subcontractors a bidding advantage even if they lack the necessary skills. I think that perception does not reflect reality, and it is something we are trying to dispel because just the opposite is true. Our certified owners are very capable, experienced, and experts in the products and services they provide."

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, said she sees lots of benefits for being certified. She noted that for her firm, certification is a criterion necessary to do work with a corporate member. She also said that certification facilitates networking, connectivity and puts things in place to connect MBEs with corporate buyers. She stated, "Obviously there are companies and contracts that have goals, and MBE certifications help companies who would not normally have an opportunity — provides a way into opportunities you might not otherwise be able to participate in."

Interviewee TA #7, the African American male representative of a civil rights agency, commented that there were several advantages to being certified. He said "whether [minorities] like it or not, [certification] gives minority businesses an opportunity to at least be put in the system so they are not overlooked, and to be used on opportunities the State has." He elaborated on the disadvantages of not being certified, stating "missed opportunities are one [disadvantage] if you do not sign up. Actually you miss an opportunity on teaching and training opportunities, and marketing your company. If people don't know you exist then you won't get any work. Another disadvantage is you might be getting a set aside amount even though we don't do set-asides. A plus on the DBE, once you reach your plateau of \$750,000 gross you're on to the next level."

Interviewee TA #8, an African American male president and female chief operating officer of an organization that provides assistance in the highway construction industry, said, "Benefits [of certification] are enormous. Certification gives you a competitive advantage. A lot of the firms wouldn't use the firms if they were not certified. We absolutely know this to be true. After the Croson decision as the first disparity studies were being done, some of the States shut down their

programs until the studies were completed. During that time the MBE/WBEs were telling us they were not being used....” He stated, “I think the DBE program is the best thing that’s ever happened to women and minorities....”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, stated that “Certification causes the industry to be aware of those firms seeking to do business in the State of Indiana by virtue of the requirements that the contractors seek certified businesses. If you have goals to meet, it verifies those companies to help the contractor meet the criteria.”

Other interviewees perceived limited or no value to certification. [Interviewees #: 100, 102, 108, 109, 110, 111, 112, 122, 124, 125, 126, 201, 202, 203, 204, 206, 216, 219, 228, 308, PF #12]. Interviewee #100, an Asian Pacific American male president of a water testing firm, stated that he did not completely understand the benefits of either MBE or WBE certification. He said that he presumed that the certification would help the company to access work projects, and that is why the company applied, but he said, “I really don’t know if it would have helped us get work or not.”

Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, stated that he has seen little advantage to being a certified MBE for the City of Fort Wayne and cannot point to any work that he has received because of that certification. Interviewee #102 stated, “This lack of any benefit is another factor contributing to my slowness in completing my State-level application.”

Interviewee #108, an African American male and previous owner of a commercial cleaning company, stated “I have received few benefits from the certification.” He indicated that he believes that the State assisted him in getting certified, but after that, the State did very little to assist him in securing projects, making contacts, or negotiating the bidding process. He stated that he did not acquire any public work projects because of his MBE certification with the State. He commented that he believes that he had more than enough experience and expertise to make a go of his business, but what he lacked was State help in obtaining leads for project opportunities. He indicated that he did receive multiple e-mails from I DOA regarding RFPs, but he had hoped that his particular skill and niche would have been promoted to local area businesses. He noted that he did not think that it was all that helpful to simply have his name listed on the State’s MBE/WBE website.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, reported that certification “doesn’t really seem to matter a great deal. The public sector projects we were able to bid on were few and far between, and we still had to really market ourselves even with the State’s certification.” He said, “We still had to find the work; there were no guarantees we’d be offered opportunities even with our certification.” He reported that with his current company he has received no sales results from projects with MBE/WBE goals. He added, “Right now, and probably for the foreseeable future, I will not seek public projects.” He commented that he was “not convinced the ‘benefits’ make the application process worthwhile.”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that she found very little value in certification and does not see any benefits of certification in her industry. She noted that she has only ever received two phone calls from prime contractors, so she did not think that it was worth the work that she had to put into the process. She added, “It wasn’t like I wasn’t actively out there.” She related that at times, she spent 40–50 hours a

week working on the certification and attempting to get business, adding that “when you are a one-man show, you just can’t afford that.” Interviewee #110 said, “The State buys from Dell ... They’ve deemed us too little, and maybe not reliable. They prefer to spend their money elsewhere and not within the State.”

Interviewee #111, a Hispanic owner of an engineering services firm, reported that he felt that he did not need to become certified.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that, thus far, they have seen no benefits from being certified. She reported that they have attempted to bid on State work, but “it just seems like the same people get the same contracts over and over.” She shared that it is almost to the point where they need to decide if they should continue to focus on something they know they are not going to get or go for work that they have a better chance of receiving. She noted that none of their work, so far, has resulted from their certification status. She indicated that they had hoped that their certification would have given them a better chance at getting the work at the [local] airport that they were not awarded.

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, noted her firm became certified by the State in 2003 and she added “I have not seen much benefit from the certification.”

Interviewee #124, an African American male and president of an MBE-certified promotional products company, said “I don’t go after bids. I’m too small. I can’t beat my larger competition who can offer better bulk rates than I can. I can’t really say that State certification has been all that beneficial.” But, he noted that about 85 percent of his sales are the result of MBE/WBE goals.

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, said getting certified has not resulted in business for them. She indicated they had submitted proposals to the State but no business resulted. She added “I suppose the certification provides us some legitimization, and some potential clients ask if we are certified, but it does not seem to make a great deal of difference to clients whether we are or not.”

Interviewee #126, a Filipino Caucasian American male owner of a full-service marketing and advertising firm, said “There just does not seem to be enough benefit to put the time and work into applying for [certification].”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she has not grasped the benefits of being certified, other than satisfying the diversity needs of the existing client that had requested her certification in the first place. She said that the reason she sought certification was because an existing client with diversity goals wanted to know if the firm was WBE-certified. She said that she did not want to risk losing a large client, so she applied for WBE certification with the State. She added that she went on the IDOA website to see what opportunities are available. She said she plans to attend an upcoming vendor fair sponsored by the Indiana Minority and Women’s Business Enterprise Division. She said that 20 percent of her firm’s annual sales have resulted from projects with WBE goals.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, stated “Having the WBE [certification] for the State hasn’t helped me terribly ... I

do feel like people seek me out to help them on projects, however they're seeking me out for the wrong things ... it's very hard for a services firm to capitalize on the WBE." She remarked, "I have plenty of industrial clients ... I can check their box that I'm a WBE and can back it up." She reported that she believes that having her State WBE certification made her WBE application for the City of Indianapolis easier. She added that she has received benefits from having her WBE certification through the City of Indianapolis. Interviewee #202 stated, "The WBE does you more good when you're a sub." She added that it is her understanding when her firm serves as a prime to the City of Indianapolis and the State of Indiana, they do not count her WBE status toward their diversity goals. Instead, she said, the City and the State want her to use MBE/WBE subcontractors, and they only count the subcontractors' work toward their diversity goals. She added that subcontracting out small jobs "becomes ridiculous ... if you have a \$5,000 project, it doesn't make sense to sub it out any further."

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that he has received no work as a result of his MBE/DBE certification. He said, "There should be set-asides in all areas." He mentioned that the only bid request that he has received in the past three years from the State of Indiana has been a request from the Indiana Department of Environmental Management (IDEM) to haul tires, a service that his firm does not perform. He said that he believes that the certification process should be simpler. He added that attitudes need to change, stating, "[IDOA] is the ultimate authority...the percentage has no teeth at all." He provided an example of work on which he bid that was funded by the Indiana State Revolving Loan Fund Program with a 10 percent MBE goal that his firm did not win in a Waynetown, IN. He said, "Whoever has influence in the town gets the work ... the State requires them to have a goal, but it's a meaningless one." He added, "The goal has to be a set-aside or mandatory requirement."

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, stated that his firm is certified as an MBE with the State of Indiana. He said, "I haven't seen any benefits" to being certified as an MBE. He added, "I thought it would be a little easier to team up with the larger firms, but that hasn't been the case; it seems like they all have a way around the MBE percentage." He stated that he has received no contracts as a result of his MBE certification.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he sought MBE certification "because people ask, contactors ask, owners ask...and it's not a bad marketing tool, I guess, to have." However, he said that his firm has not received any work as a result of the firm's MBE certification. He stated, "I don't know if there are" any benefits to certification. He said, "It's not to say it's not a good thing...I do not think that somebody should have the certification just because you're minority ... you should get work because you know how to do work, but I know that's not necessarily how it works, but that's my outlook on that." Interviewee #206 said that none of his firm's work has resulted from sales with MBE goals.

Interviewee #216, an African American male owner of a business consulting firm, said, "I just never really took the time to go through the [MBE certification] process." He said that he has several friends who have gotten MBE-certified with the State of Indiana, but have never been able to get any State contracts. He said, "I never was that enthused about going through that process because I don't see how it would benefit me." He said he does not think there are many State of Indiana

opportunities for MBEs in his area of social services consulting, anyway. He added that when he provides consulting services for the Indiana Division of Mental Health and Addiction, he suspects they get “credit” for his firm being a minority firm without his firm actually being MBE-certified.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that another reason she has not sought WBE certification is because “Most people that have [WBE certification] haven’t really seen much difference in things. Around here, the main potentials (prospective customers) would probably be government contracts and Purdue University. And Purdue University is a complex, large machine ... the people that have [become WBE certified] haven’t found it easy to get work from Purdue.” She said that there’s a “potential” benefit of being WBE certified, but that she does not see how it could be a great benefit. She said that the large businesses for which she provides services have never asked if her firm was or was not WBE certified. She commented, “It’s never a question that they’re asking.”

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that only one job over the past three years has been the result of a project with WBE goals, accounting for about 1 percent of her firm’s sales. She said that she sought State certification because, “We knew there were some State guidelines that may help in this industry ... I think it would help more if we had the DBE ... sometimes we do get a phone call saying, ‘Gee, are you a WBE?’ but not too often ... it doesn’t seem to be a real selling point for us at this point ... but it didn’t hurt to get [WBE certification] and it wasn’t hard to get.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said the firm is registered with the State as an MBE/WBE. She said that the reason that the firm became certified was, “We thought it might give us an edge up on contracts, but that hasn’t happened yet.” She added, “We saw the MBE/WBE certification as a possible means of increasing our business by giving us greater access to opportunities, but that has not been the case so far.” She said that none of her sales to date have resulted from projects with MBE/WBE goals.

Interviewee PF #12, the owner of an MBE-certified food services company, said “Since our certification, we have gone after various contracts. We are a food service company, and we provide various food services as well as products. We have been trying to acquire contracts. We’ve been in business here in Indianapolis for 16 years, and we haven’t really received one minority contract yet.”

Some interviewees identified certain disadvantages to certification. [Interviewees #: 104, 107, 110, 111, 202, 205, 206, 212, 214, 215, 220, 226, 228, 308, 314, TA #3, TA #6, TA #7, TA #8, TA #10]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, said that one disadvantage of MBE certification is the “stereotype held by some” that minorities ought not be given any advantage or that the quality of minority work does not meet standards.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, shared that overcoming perceptions that exist regarding MBEs is probably the biggest disadvantage to becoming certified.

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that the process involved with maintaining the certification is the biggest disadvantage to becoming certified.

Interviewee #111, a Hispanic owner of an engineering services firm, reported that he had a bad experience when he was certified as a minority contractor with a project in Goshen, IN. He said that the company had a problem on the job, and the contractor let his firm have it. He said, “One day we were meeting, and he just told me how he hated and didn’t like the minority program. [He felt] it was just easy money for minorities.” He also said that the contractor kept changing things on the project to make it more difficult for his firm to do its job. He mentioned that he felt like it may ultimately have been an attempt to make the “minority guy” look bad but that he has no proof of this. Interviewee #111 stated that he felt that the biggest disadvantage to becoming certified would be the perception of some that he was using it as a crutch. He said that some people feel strongly that all Hispanics should go back to Mexico, so there is a part of him that hates to make his ethnicity a part of his business.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, stated that the biggest disadvantage to being WBE/DBE-certified is, “some folks think people who are certified are just out there to get their piece of the pie ... without doing their part of the work.... I even tell people when you hire me you’ll absolutely get your money’s worth.” She stated that approximately 10-15 percent of the firm’s sales are the result of being WBE/DBE-certified.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, mentioned that there are disadvantages of certification and said, “If you are certified there’s an automatic assumption that you’re not equal to, not capable ... the only reason you exist is because you are a minority. That hasn’t been something we’ve had to deal with after our first initial meeting [with a customer]. He added, “A lot of times we’ll get the phone call ... ‘we’d like to talk with you’ ... you immediately pick up the fact that they’re there because the State says they have to and they should ... you pick that up within the first couple of minutes of the conversation ... we bid the project and our numbers are competitive then they realize we have competency.”

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that the disadvantage of being MBE certified is that “you get stereotyped.” He added that this has personally happened to him and that contractors have made comments such as, “Just because you’re an MBE ... you still [have to] be [the] low price.” Interviewee #206 said that he has seen the negative side of the MBE certification. He said he was told by a contractor ten minutes after he submitted a bid as an MBE subcontractor that he was the low bidder only to be told one week later by the same contractor that he was not the low bidder and that he never said he was. He added that contractors will use an MBE firm’s quote to win a bid, but will not necessarily give the work to the MBE after the bid is won.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that the only disadvantage of being certified is the amount of paperwork required. She added that she understood the need for such paperwork, however.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that the disadvantages of being WBE-certified include “a lot of time and cost” related to the certification process.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that a disadvantage of certification would include becoming labeled and having people think “you’re a small business ... you’re a small minority business.”

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that the only disadvantage of being WBE certified is that she did not figure out how the State procurement system works.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, stated that the firm’s ownership is and always has been Hispanic male. He said that although he would most likely qualify to be an MBE-certified firm, he has opted not to seek certification because he is not interested in “being classified as a minority.” He said, “If I classify myself as something, then I’m going to be categorized as that. I really just want to be looked at as a business person, not a minority business owner.”

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that the only disadvantage of being WBE certified is just “going through the process” of applying.

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said “Some businesses, it might scare them — they might hire another guy instead of you because they might think there is more red tape in doing business with an MBE/WBE.” However, she stated that she has not yet experienced this problem.

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said that there are certain disadvantages to certification. She noted the expense and all personal information required as two disadvantages.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that the only disadvantage she could identify related to being MBE/WBE-certified is that to be certified, the business owner must pay an annual fee.

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, commented on certain disadvantages to certification. She said, “It’s all about perception. One [disadvantage] is people might stereotype you if you’re labeled as a minority contractor and they only look at you to do that part of the work that is a component of the goal. They only look at you to do that work. That’s a mindset — they tend to want to pigeonhole people.”

Interviewee TA #7, the African American male representative of a civil rights agency, said that some businesses do not seek certification because of certain disadvantages such as the stereotype that the certification has the potential to create or they do not want to be exposed by turning over tax documents and other paperwork for certification.

Interviewee TA #8, an African American male president and female chief operating officer of an organization that provides assistance in the highway construction industry, said that one disadvantage to certification is that DBEs sometimes think that being certified is an “exclusive ticket to success.”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, said there is “an expectation that the certified businesses can perform the work. Just because they are certified doesn’t mean they have the capability to perform. I think this has challenged the industry because the primes have to get job done on time and budget — if a sub can’t perform it jeopardizes the entire project.”

Other interviewees were not aware of any disadvantages to certification. [Interviewees #: 100, 109, 112, 117, 119, 122, 123, 124, 125, 126, 200, 201, 204, 207, 210, 213, 217, 219, 222, 301, 304, 305, 307, 312, 315, TA #1, TA #2, TA #4, TA #5]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, said that she knows of no disadvantages to becoming certified adding, “I don’t think it hurts.”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that there are no real disadvantages other than that she thought it would be more helpful than it actually is in getting her more jobs.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, stated that she could see no disadvantages to certification. However, she said, “There might be the perception that certification gives subcontractors a bidding advantage even if they lack the necessary skills. I think that perception does not reflect reality, and it is something we are trying to dispel because just the opposite is true. Our certified owners are very capable, experienced, and experts in the products and services they provide.”

C. Recommendations Regarding the Certification Process.

Some interviewees recommended that the certification application and/or renewal process be simplified and/or condensed. [Interviewees #: 110, 118, 124, 201, 204, 220, 304, 305, 314, TA #5, TA #6]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, recommended that the State simplify the certification renewal process. She noted that site visits and surveys are fine, but she suggests that the State not require companies to gather so much information each time. She commented that it is too difficult and too time consuming for the very small firms to gather so much information each time.

Interviewee #124, an African American male and president of an MBE-certified promotional products company, recommended the State put the certification (and re-certification) process on line, put the required form in PDF format, and allow businesses to e-mail the forms to save paper.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that the State could improve its certification process by requiring “fewer papers.” She added that it seems like a lot of [paperwork] is redundant.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that the application process could be improved if the application were “thinned down.”

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that “less paperwork” would improve the certification process.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said “I have two recommendations for improving the certification process. One is to have a memorandum of understanding between IDOA and INDOT to streamline the process. The second recommendation is to have an addendum process for companies that add divisions to their companies. This will lead to more efficiency in the renewal process.” She said that for her company, the process was quick, but for other companies, the renewal process took a long time.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, recommended that the State improve the certification process by making “it easier and to communicate that it has been made easier.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, recommends improving the certification process. She said “The forms need to be updated to online web-based forms in some type of editable platform; I had to hunt down a typewriter.”

Interviewee TA #5 the Executive Director of the Indianapolis Chapter of a national business women’s organization, said that to improve the certification process she would suggest not requiring a complete filing of all paperwork every three years. She said, “That is too high an expectation and a lot to ask. I’d like to see the renewal term extended one year. I think they should retain the site visits, but not require the same paperwork if it has already been provided from the first certification, only if circumstances change would new paperwork be required.”

Interviewee TA #7, the African American male representative of a civil rights agency, recommended that the certification process could leave off having the MBE/WBE prove they pay taxes because, “you have another way of proving you’re an Indiana business. It’s not like we take that information and do anything with it.”

Some interviewees recommended the State perform an audit process on all DBE certifications.

[Interviewees #: 107, TA #8]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, shared that he would encourage the State to audit DBE certifications, to ensure that proper channels are always followed by applying firms. He said, “There are perceptions that political impact can influence the designation of the certification.”

Interviewee TA #8, an African American male president and female chief operating officer of an organization that provides assistance in the highway construction industry, recommends consistent enforcement of the federal regulations for the DBE program.

Some interviewees recommended that the State provide more help during the certification process.

[Interviewees #: 119, 205, 207, 222, 300, TA #3]. Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, said he thought the process seemed quite complicated when he downloaded the application form six months ago. He also stated that his one recommendation regarding the process was: “Give me the number of someone in the office I can call to walk me through the process. That would be helpful.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, recommends that the State of Indiana

have professionals who understand the financial side of business, such as CPAs, to assist individuals with their MBE/WBE paperwork. He commented that most of the people he knows who have had difficulty obtaining their MBE/WBE certification had difficulty completing the required financial paperwork. He added that he believes that the people who work in the State MBE/WBE office have not been business owners, so they do not know how to advise people on how to complete the financial paperwork required for the certification process.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, suggested that the State issue a guidance or an interpretive manual that better defines the rules and regulations regarding the DBE certification process.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that there should be greater access to State officials who could help answer questions. She said that the City of Indianapolis certification process was more difficult than the State's process, adding that she was initially rejected by the City because she did not submit her paperwork properly. She said that to resolve the problem with the City, she personally met with the Indianapolis Division of Equal Opportunity's Administrator.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said, "I recommend the State advertise and offer workshops frequently enough to help firms understand how to complete the paperwork correctly."

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, recommended that the State should make information about the MBE/WBE certification process more readily available. She added that the State should have advocates who go out and talk about the certification process throughout the State. She added that the MBE/WBE applications should be available in multiple languages.

Some interviewees expressed issues with staff who run the certification process. [Interviewees #: 307, 308]. Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, suggested, "The staff for the certification process should be fired. They have a list of 20 things that need to be submitted and they tick them off, but they don't read them. They need to read the documents that are submitted with the application." He indicated that he had submitted documentation with his application but that because he did not make copies for each place they asked for a specific document, they told him he had not submitted the document, despite the fact that he had attached it at a point earlier in the application where it was also required.

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said that in order to improve the certification process, "The State should hire competent people — I had an issue this year with my new certification and I just finally gave up."

Some interviewees recommended that the certifying agency give consideration to the firm's capacity to perform. [Interviewee #: TA #10]. Interviewee TA #10, an association of general contractors represented by its Caucasian male president, said that they believe the certifying agency needs to give consideration to the firm's capacity to perform (e.g., INDOT's prequalification process, which places a value on how much work the contractor can have with INDOT at any given time). Additionally he stated, "The capacity question needs to be analyzed and be a component of the

disparity study rather than viewing every contractor equally. Rather than viewing every contractor equally, go beyond looking at raw numbers of firms versus factoring in the capability of the firms as a baseline to set the goals for procurement opportunities. Capabilities can be either financial, experience, or past performance. Just because the firm is brand new doesn't mean it's not viable — you need to look to the capabilities of the individuals comprising the firms.”

One interviewee recommended that the certifying agency not show favoritism to certain applicants based on ethnicity. [Interviewee #: 212]. Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, when asked what she would do to improve the process of WBE/DBE certification, she said, “I think there's huge favoritism shown for ethnic reasons. If I were Asian or African American or Hispanic and a female, I think it would be easier. I think [the certifying agency], without question, show Caucasians less respect. I think the female thing takes a back seat to ethnicity, and I'm offended by that.” She added that she “had a difficult time in the beginning ... and it doesn't help because my name is spelled like a man ... because I had my son in the business with me and they frowned on that ... somehow they had a hard time believing that I could be in charge ... 'it's just a woman' ... I'm pretty sure that if I were of a different race, that would have been overlooked ... they made it hard on me.”

II. Prime and/or Subcontractor Work.

A. Anecdotes Regarding Businesses Acting as a Prime or a Subcontractor.

Some interviewees reported principal work as a prime contractor. [Interviewees #: 100, 101, 107, 108, 109, 111, 112, 113, 117, 118, 120, 122, 125, 126, 127, 128, 200, 202, 204, 208, 209, 214, 217, 218, 219, 220, 224, 225, 226, 227, 230, 231, 301, 302, 303, 306, 308, 309, 310, 311, 312, 314, TA #4, TA #10]. Interviewee #100, an Asian Pacific American male president of a water testing firm, stated that 70 percent of his company's work is as a prime contractor and 30 percent is a subcontractor. Interviewee #100 said, “We prefer to be the prime on contracts, and so that is what we pursue.”

Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, stated that they work as a prime 75 percent of the time and as a subcontractor 25 percent of the time. As a rule, if serving as a subcontractor, the firm does not hire subcontractors for themselves.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that when they include their work for local public agencies, 85 percent of their State work is direct prime contracting with INDOT. He said that for the geotechnical services that they provide, INDOT maintains control of all of those projects.

Interviewee #108, an African American male and previous owner of a commercial cleaning company, reported that his work was almost entirely as a prime. He said that he seldom bids on work as a subcontractor for any prime. He noted that there was no particular reason for this, just his preference.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, stated that his firm works as the prime contractor about 95 percent of the time. He said, “This is what we look for and how we've done it for so many years.” He reported that the reason for this was that “we are such a small firm and our work is rather specialized, and I only bid on the type of work projects I can actually do.”

He said that he does subcontract out some of his work. He commented, “In seeking out such subcontractors, I have to be very selective, especially if it’s a public sector project because of insurance and bonding issues.”

Interviewee #111, a Hispanic owner of an engineering services firm, indicated that his firm typically acts as a prime to the owner where the owner is the commercial developer. He stated that when his firm did State highway work, it was through the City rather than directly through the State. Interviewee #111 indicated that his firm occasionally has to hire subcontractors to do geotechnical engineering and environmental engineering, but he indicated that his company always chooses local firms to do this work. He said, “I don’t like dealing with people out of the area because it doesn’t help our economy.”

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that her firm is typically a prime contractor. She said that they have not really looked into subcontracting work thus far but would be interested in this. She also said that the company would consider hiring subcontractors if it needed to.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, stated that about 90 percent of his business is a prime. He said, “I guess I’m just set up to work better as a prime, but I do procure some projects as a subcontractor, but far fewer.” Interviewee #113 said that on occasion he also hires subcontractors to help with his projects.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, stated that the vast majority of their work was as a prime because they sell direct to their customers. He said they do not try to get on projects as a sub themselves. He said that they have not really done subcontractor work, but once in a while they do use subcontractors.

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated that more than 75 percent of their work is as a prime. He stated “Once in a while we perform as a subcontractor for general contractors, but we do not hire other subs when we perform as a prime or a sub.”

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, responded that all their work is as a prime. She said that the very nature of the consulting business pretty much dictates that all her business is as a prime.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that 80 percent of the time her firm serves as a prime contractor. She added that her firm serves as a subcontractor 20 percent of the time and also hires second-tier subcontractors. She stated, “The WBE [certification] does you more good when you’re a sub.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that his firm works as a prime contractor 75 percent of the time. He said that he mainly deals with commercial companies that call him directly when they need his services instead of going through a general contractor. He said that he works as a subcontractor approximately 25 percent of the time for large nationwide businesses. He reported that his firm does not use subcontractors for any work.

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that the firm serves as a prime contractor 100 percent of the time because they “like to take a project basically from start to finish.”

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that the firm serves as a prime contractor 90 percent of the time and as a subcontractor 10 percent of the time. He said that if 30-60 percent of a job is work that could be done by his firm, they will bid as a prime. He added that if a job requires less than 30 percent of the type of work his firm conducts, then they will bid as a subcontractor. He said that when his firm is a subcontractor, they never sub to a second-tier sub.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that the firm works as a prime contractor 95 percent of the time and as a subcontractor 5 percent of the time. She added that next year the mix will become 90 percent prime and 10 percent sub. She said that she is frequently the prime because they have the ability and capacity to provide a total solution for a client. She said they are serving as a sub on a DOE project because the prime contractor needed a firm that was “qualified to do the controls development with the test system platform.”

Interviewee #217, an African American female owner of a commercial cleaning service, said that she works as a prime contractor 100 percent of the time. She said that she has been trying to serve as a subcontractor under a national cleaning company that cleans two large local banks, but that she has been unsuccessful so far in obtaining any subcontracts. She said that she has not yet used any subcontractors, but plans to hire someone as a subcontractor in the future.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that his firm serves as a prime 95 percent of the time and as a subcontractor 5 percent of the time. He said that he usually serves as a prime because his customers do not have contracts with large computer consulting firms under which he could subcontract.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that firm always serves as a prime contractor, as that is the nature of her type of business. She said that the firm subcontracts out carpet-laying services.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that the firm works as a prime contractor 100 percent of the time. She said that she obtains leads and brings in her business partners, which sell their software directly to her customer. She said that she works according to a “dealer rep” model.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that the firm serves as a prime contractor 75 percent of the time and as a subcontractor 25 percent of the time. He said that the owners of the buildings they clean determine if his company will serve as a prime or as a sub. He said that although the company tries to self-perform as many services as possible, they sub-out 2 to 3 percent of their work on national jobs or jobs involving multiple locations.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that the firm serves as a prime contractor 90 percent of the time and as a subcontractor 10 percent of the time. He

said that when he subs, it is under a builder or another cleaning company that does not provide the services he provides.

Interviewee #230, an Asian-American male owner of a dry cleaning company, said that his company always serves as a prime contractor, given the fact that the business is a retail establishment. He said that he subcontracts out all of his leather cleaning business.

Interviewee #231, a Caucasian male owner of a plumbing company, said that he serves as a prime contractor 85 percent of the time and as a subcontractor 15 percent of the time. He said that he serves as a subcontractor under general building contractors, and that he usually serves as a prime for individual homeowners. He said that he sometimes subs out labor.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, stated that 80 percent of this firm's work is as a prime. He indicated that they act as a subcontractor primarily on public work. He reported that his firm prefers the prime role because "you can make more money and [it] builds [a] work portfolio."

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, indicated that when bidding for State contracts, the company customarily serves as the prime on the bid. Interviewee #302 said that his company does not serve as a subcontractor on any of the public or private work secured. He said that when his company submits a bid or proposal for work, the proposal does not include another organization as a subcontractor; however, he indicated that they may secure another organization to assist in the project after securing the work.

Interviewee #303, the Caucasian female owner of an electrical contracting business, indicated that the firm usually serves as the prime contractor. She reported that they bid on smaller renovation projects and that when bidding on City contracts, the company customarily serves as the prime on the bid.

Interviewee #306, a Caucasian male owner of a carpet and upholstery cleaning firm, indicated that he is almost always the prime contractor and stated that he has only served as a subcontractor on one occasion, and that was to a WBE entity. He indicated that the subcontractor arrangement that he entered into with a WBE prime contractor was "financially beneficial" and that, should the occasion arise again, he would re-enter a similar working relationship. He added, "She just had a job and knew that I could do it, so she called me up."

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said, "Probably 99 percent of our work is done as the prime Contractor — we are rarely asked to act as a sub ... you get into more paperwork and restrictions and we like to control our work."

Interviewee #311, a Caucasian male owner of a computer firm, stated, "We work exclusively as a prime contractor. We are not aware of subcontracting opportunities in this line of work."

Interviewee #312, a Caucasian female and Corporate Officer of a construction firm, reported that "We serve almost exclusively as a prime contractor and the only time we subcontract is if a prime actively seeks us out for a particular job. We only work as a subcontractor perhaps 5 percent of the time."

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said “We are the prime 80 percent of the time because of our core competencies and the scope of work described. We hire a subcontractor for about 20 percent of our work because the owner believes in helping smaller company. Also sometimes it may be miscellaneous work that we don’t normally do like call center, sales or rental projects.”

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, said he could not offer any specific numbers regarding prime work and sub work. He said, “I just have a sense that the majority of it is as the prime role.”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, said that generally the contractors are primes and subs are subs. He did note that a general prime might also serve as a sub depending on the contract. He said “One of the misconceptions, I’ve seen in the MBE/WBE/DBE program is the expectation that a sub wants to become a prime. I think that’s a ridiculous thought that a firm should always graduate from being a sub to a prime because the area of expertise a sub has may never rise to the level of being a prime contractor. For example, a firm in the area of reinforcing steel, there’s not a contract for them to bid in this arena, their business plan may be to grow in their area of expertise. On the building side, why should they be pushed into being responsible for the entire building?” He also noted potential downsides for subs taking on prime roles, “that push the firm into competition with firms they would typically sub to. [It] limits their business opportunities and impacts the relationship with the prime, and if they don’t have the capability to handle the broader role, they could be out of business pretty quickly.”

Some interviewees reported acting primarily as a subcontractor due to their size and sometimes due to an inability to secure bonding, insurance, or financing. [Interviewees #: 102, 104, 115, 205, 206, 213, 304, 307, TA #6, TA #7]. Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, indicated that 100 percent of his work is as a subcontractor. He reported that in order to be a prime he would need to be bonded, and he has not yet applied for bonding. He said that he believes that he still needs to show a higher level of income before he starts to bid as a prime and needs bonding.

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, indicated that 100 percent of his firm’s work is subcontracting. “I am just too small to be a prime on most projects.” Regarding the hiring of subcontractors, interviewee #104 said that he does hire subcontractors, for example, when he needs a licensed surveyor for a project.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, stated that about 40 percent of his business is as a prime, and 60 percent is a subcontractor. He said he finds it easier to seek work as a subcontractor rather than as a prime. He indicated that he subcontracts out work and receives guidance on finding subcontractors through the trade organizations to which he belongs.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that his firm works as a prime contractor 40 percent of the time and as a subcontractor 60 percent of the time. He said that the reason that the firm has to bid as a subcontractor on most projects is because the firm does not have the bonding capacity to serve as a prime contractor on very large projects. He cited an example of the

\$40 million Indianapolis Airport electrical package. He said that his firm is approved for a \$1.6 million bond, which forces his firm to have to serve as a subcontractor. He added that many projects are structured as unified bids, in that all of the subcontractors bid under one general contractor, and thus have no choice but to serve as a subcontractor. He indicated that the firm subcontracts out services including trenching, core drilling, and teledata installation.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that his firm serves as a subcontractor 100 percent of the time given the size of his firm. He said that the only work that his firm subcontracts out is trenching work for underground installation.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that her firm always works as a subcontractor under larger trucking firms. She said that she does not actually bid on jobs and that she “would not know how to do that.” She said, “With only having one truck, I don’t think somebody’s going to take my bid seriously, because you have to have trucks to do the job.”

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “We only work as a subcontractor. Our firm is a dump truck and hauling company, and that is a subcontractor’s role. We assist the general contractor.” She said that the company usually assists the prime or construction manager in outreach and construction management. She added, “We’re not of size to handle prime responsibilities.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, stated “I like to work as the prime but high insurance and bonding requirements sometimes make that impossible.” Interviewee #307 said that he prefers the role of prime contractor because as a prime “we get better jobs, and we have better control of the outcomes. When you get sub work, it is because somebody doesn’t want to do it.”

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, stated that she thinks the subcontracting opportunities prevail over the prime contractor ones. She stated that it depends on the contractor and their capacity. She noted that capacity-wise, they have more MBE/WBEs who fall into the subcontractor role than prime. She said she thinks this stems from a vicious cycle — lack of opportunity that does not afford the growth and capacity, sometimes she thinks it is a conscious choice not to grow beyond what they are, and a huge piece of this is the inability to access capital to allow that type of growth to prime contractor.

Interviewee TA #7, the African American male representative of a civil rights agency, stated that MBE/WBEs do more subcontracting work. He said that the reason why he thinks they act as subcontractors more is because they do not want to or cannot take on the full responsibility of the project because of the challenges and expectations they have to face on the job, such as bonding issues, etc.

Other interviewees reported acting primarily as a subcontractor for miscellaneous reasons.

[Interviewees #: 103, 105, 110, 116, 121, 210, 211, 212, 215, 216, 221, 222, 223, 300, 305,

313, 315, TA #8]. Interviewee #103, a male Caucasian owner of an excavating firm, stated that he almost always works as a subcontractor for residential building contractors. He said that he contracts himself out by the hour to builders and private residents.

Interviewee #105, a male Caucasian owner of a small concrete contracting firm, indicated that 20 percent of his work is as a prime and 80 percent is as a subcontractor. He stated, “If the job is big enough I will hire subcontractors; otherwise I can do the work with just my employees.”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that when she was certified, she primarily tried to get work as a subcontractor rather than a prime.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated, “I almost always hire out as a subcontractor. Once in a while I might need to hire some subs to wash the brick, but otherwise, I just go to the union hall and hire the guys I might need for my projects.”

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, responded “We produce and sell our products to other firms who use them for whatever device they are making. Unlike the construction business, I really don’t think in terms of us being a prime or a sub. All of our clients are manufacturers who use our castings for their businesses. If anything, I suppose we are like subs to these manufacturers.”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that the firm serves as a prime contractor 5 percent of the time and as a subcontractor 95 percent of the time. She stated that she usually serves as a subcontractor because the general contractors involved in construction do not usually own their own trucks and that hauling is one of the main jobs the contractors sub out.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that the firm serves as a subcontractor 70 percent of the time and as a prime contractor 30 percent of the time. He said that he primarily works as a subcontractor because the total jobs on which he works are very large, consisting of several smaller, subbed-out jobs. He said that his firm is almost always a prime contractor on private sector jobs. He added his firm never subs to second-tier subcontractors.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that the firm always serves as a subcontractor because the nature of her work lends itself to working under a general construction contractor. She said that her firm subcontracts to other firms for the installation of the products her firm fabricates.

Interviewee #216, an African American male owner of a business consulting firm, said that he “routinely” serves as a subcontractor under other consulting firms. He said he primarily serves as a subcontractor because he has not taken the time to market himself. He said that in some cases, he will subcontract portions of his contracts to others who have better skills than he might have. He said, “Quality and accountability are big things to me, so I want the product to be good and for people to really get what they ask for.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that he works as a subcontractor under general construction contractors 60 percent of the time and as a prime contractor 40 percent of the time. He said that on smaller jobs that do not have general contractors, he serves as the prime contractor. He added that when he primes, it is usually for farm and residential customers.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that he works as a subcontractor 90 percent of the time and as a prime contractor 10 percent of the time. He added that truck haulage firms usually serve as subcontractors under construction-related general contractors, providing just a small part of a multi-million dollar job.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said that 90 percent of the work that she performs is as a subcontractor because the work that she does supports the prime work that is completed by architects because they have to do the design and stamp the drawings. She reported that the architectural design work that she is now starting to do has also been in a subcontractor capacity, but she is looking for more opportunities to work as a prime. She stated that she does subcontract out to second-tier subcontractors when the assignment involves electrical, mechanical, or structural disciplines.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “I rarely go after work as a prime. It depends on the size of the contract. In most contracts I am a subcontractor under the general contractor.”

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company, said, “We work as a subcontractor all the time. The hauling and moving of materials is on the subcontractor level not a prime level.”

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, said “We work as a subcontractor all the time because the services we offer are subcontractor service....”

Interviewee TA #8, an African American male President and female COO of an organization that provides assistance in the highway construction industry, said most of their members are subs because highway jobs typically have a set amount of work that can be done by a prime.

A few telephone interviewees indicated that it is difficult for their firms to obtain work as a prime contractor for various reasons. One interviewee, representing a white male-owned firm indicated that finances have prevented his firm from acting as the prime contractor on projects, despite his firm’s desire to do so: “We want to do prime contracting. We want to bid on INDOT work and big projects. Our bonding company [says that our firm] doesn’t have enough liquid assets to bid, and the State won’t let us bid on work, because we don’t have big finances for them to turn in every quarter, and we can’t afford an accountant. We have more combined experience than anyone in the industry.”

Some interviewees reported acting equally as a prime and subcontractor. [Interviewees #: 119, 123, 200, 201, 203, 207, 228, 229, TA #5]. Interviewee #119, Hispanic male owner of a CD duplication, graphic design, and sign printing company, stated that he does not consider himself as being either a prime or a subcontractor due to his type of work.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, said that when they work in the public sector they do so as the sub about 99 percent of the time. When they work in the private sector they are the prime 80 percent of the time and are the subcontractor 20 percent of the time. He reported that about 55 percent of his work is in the private sector.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that the firm only serves as a prime contractor on engineering jobs, which account for 50 percent of the firm's work. He reported that the firm serves as a DBE subcontractor the other 50 percent of the time on jobs involving construction lay-out and surveying. He reported that the firm does not hire second-tier subcontractors.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that the firm serves as a prime contractor 50 percent of the time and as a subcontractor 50 percent of the time. She stated that the nature of their electrical specialty work lends itself to her firm serving in a subcontractor role, adding, "All we need to do is install equipment, so we don't have the need to go out and find the customer and do all of the other work that's necessary to retain them as a client."

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that his firm serves as a prime contractor 50 percent of the time and as a subcontractor 50 percent of the time. He added that he always serves as a prime contractor on the industrial jobs that the firm performs. He stated that instead of referring to the subcontractors that his firm uses as subcontractors, he prefers to view them as joint partners. He said that he selects the individuals with whom his firm partners based on their qualifications.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that since his firm has received its MBE/DBE certification, they have served as a prime contractor 50 percent of the time and as a subcontractor 50 percent of the time. He added that they serve as a DBE subcontractor on very large projects that the firm has recently won. He said that the firm serves as a prime contractor in technical areas for which the firm has a well-established reputation. He mentioned that they serve as subcontractors on large projects in which they do not have the capacity to perform the whole project or that are new areas of competency for them. He noted that the firm never hires second-tier subcontractors.

Interviewee #228, a Caucasian female owner of a WBE-certified cultural resource management investigation services firm, said that her firm serves as a prime contractor 50 percent of the time and as a subcontractor 50 percent of the time. She said that she serves as a prime contractor mostly for one coal company in Illinois. She said that she usually serves as a subcontractor under engineering firms for "complicated jobs that have multiple requirements," such as roads, bridges, and airports. She said that she does not subcontract out any work, but that she hopes to do so in the future, as the firm grows.

Interviewee #229, a Caucasian male owner of a safety training firm, said that he serves as a prime contractor 50 percent of the time and as a subcontractor 50 percent of the time. He said that when he has served as a subcontractor, it has been mostly for a large consulting firm based in Washington, DC.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, stated it was difficult to estimate how often their members work as primes as opposed to subs. She speculated that those owners who do government projects are more likely to work as subs, whereas when they do private projects they do so as primes. She speculated that work as a prime is evidence that the member had "grown enough to be capable of prime work."

B. Contractor Reported Utilization of DBE and Non-DBE Subcontractors in the Public and Private Sectors.

Some interviewees reported utilization of minority-owned and female-owned subcontracting firms in both the private and public sectors. [Interviewees #: 102, 107, 125, 128, 203, 205, 206, 212, 219, 222, 226, 304, 307, TA #7]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, said that if they are hired as a subcontractor, there are jobs for which they would hire subcontractors, including for survey work and traffic control. He indicated that they select subcontractors based on existing relationships, and they do solicit business from MBE/WBE subcontractors frequently. He mentioned again that they select these based on current relationships. He said that they like to promote MBE/WBEs and sometimes need to meet requirements and this does not differ between public and private sector projects for them. He noted that their subcontracting needs are often based on geographic locations, so this might define who they use and when. Interviewee #107 said that there are MBE/WBE subcontractors that they use for both public and private sector work. He said, “I think a lot of the market can be color blind after you’ve established relationships and credibility.” He reported that there are no MBE/WBE subcontractors that they use for public sector work that they do not use for private sector work.

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, stated “There are not WBE/MBEs we would use on a public sector project that we would not also use on a private project.”

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, said he does solicit WBE/MBE subcontractors, but “they don’t necessarily have to be certified.” He commented that this practice does not differ whether he is seeking public or private sector work. He stated that he hires subcontractors with due diligence and specifically tries to use minorities and women-owned businesses.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he always looks for qualified MBEs and WBEs to serve as partners on bids, adding that most of the partners with which his firm works are MBEs or WBEs. He added that he uses the same MBE/WBE subcontractors for both private and public sector work.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that his firm solicits quotes from MBE/WBE firms almost every time the firm needs a subcontractor. He said that there have been some times when the quotes from MBE/WBE firms were not competitive. He added, “MBEs have to come to realize that the business still requires that you have the best number ... Indiana does not have set-asides ... we have goals.” He said that when his firm bids on public sector jobs, and even though his firm is an MBE/WBE/DBE firm, he still has to find MBE/WBE/DBE subcontractors to perform the percentage of work based on the MBE/WBE/DBE goals established by the customer. He said that there are MBE/WBE subcontractors that his firm uses for public sector work that it also uses for private sector work.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he solicits quotes from MBE/WBE firms from time to time, depending on the nature of the work to be performed. He said that he finds the MBE/WBE firms through the IDOA website.

He said that the process for soliciting MBE/WBE subcontractors is the same for both public sector and private sector jobs, and that his process for soliciting quotes from MBE/WBEs is the same on MBE/WBE goal projects as it is on non-goal projects. He noted that there are MBE/WBE subcontractors that his firm uses for public sector projects that it also uses for private sector work and there are no MBE/WBE subcontractors that his firm uses for public sector projects that it does not use for private sector work.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that she frequently solicits MBE/WBE subs for quotes. She added, “Our main installer [subcontractor] is an MBE. So, it’s a nice package.” She said that she has been working with this same MBE sub for 15 years. “We use them because they’re good. It’s really nice that they’re also MBE.” She said that she uses the same MBE subs on private and public sector work, regardless of whether or not the project involves MBE/WBE goals. She stated that the MBE sub that she usually uses is better than non-MBE subs but more expensive.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that because she is active with the local association of women business owners, she always searches among that organization’s membership of women-owned businesses to find subs before trying other avenues. She said that, however, there are no WBEs in the membership of that organization that lay carpet.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that when she hires off the union bench, she always asks for women subcontractors to be assigned to her jobs, as long as they are qualified. She added, “We do like to see females on our jobs ... on the Convention Center job, we had two women on that job, painting off the bench.” She said that for any services she needs on private sector jobs and to support the administration of her business, her first source is the local chapter of the National Association of Women Business Owners (NAWBO).

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that he solicits WBEs as subs 100 percent of the time for both private and public sector jobs. He said that 80 percent of his subs are women. He said that he prefers to hire women as subs because they are “more reliable than men” and they “stick to the plan.” He said that the WBEs to whom he subcontracts work are more reliable and “more presentable” than non-WBE subs. He said that there are WBE subs that he uses for public sector work that he also uses for private sector work.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, indicated that there are MBE/WBE subcontractors that he uses for public sector projects that he also uses for private sector work, and there are no MBE/WBE subcontractors that he would not use for private sector work. He stated, “I do solicit MBE/WBE subs for bids/quotes as much as possible. I try to do it every time.” He said that he asks for bids from both minority and non-minority firms and selects the lowest bid. He indicated that he seeks bids from MBE/WBE firms because “I want to help minorities, and I expect reciprocity.”

Interviewee TA #7, the African American male representative of a civil rights agency, stated that primes in both the public and private sector solicit MBE/WBEs for quotes. He did note that there is more use of MBE/WBEs in the public sector which he attributed to a lack of accountability in the public sector. He said he believes that the non-MBE/WBE primes want the majority of the work —

they are already mad they missed out and have to meet goals and in their mind give away some of the work. He commented that MBE/WBEs do not really get used on private sector work as much as they do on public work. He said, “It all depends on the owner and the MBE/WBE coordinators.”

Some interviewees reported utilization of minority-owned and female-owned subcontracting firms in either the private or public sector but not necessarily both. [Interviewees #: 101, 102, 104, 125, 205, 209, 214, 223, 301, 313, 314]. Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, stated that he himself hires subcontractors and selects them on how low their bid is, their level of expertise, and their reputation. He said, “Yes, I do solicit bids from MBE subcontractors about 10 percent of the time.” He indicated that he knows of only one MBE subcontractor in his locale and usually contacts this subcontractor by phone.

Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, indicated that they have worked with DBEs on INDOT projects and found them very cooperative. Interviewee #101 said that at least one of these DBEs was also a certified MBE/WBE.

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated that he solicits work from both MBE and non-MBE subcontractors and he only hires MBE subcontractors about 5 to 10 percent of the time. In working with MBEs as subcontractors, Interviewee #104 said that his final decision regarding whether to hire must be based more on whether the subcontractor is appropriately licensed and less on whether he is a minority. He indicated that if it came down to equally qualified persons (one MBE, the other not), he would choose based on the dollar bid. However, he said that if the dollar bid were similar, he would want to give the minority subcontractor a break.

Interviewee #125, a Caucasian woman and Director of Operations of a WBE-certified advertising agency, said their firm will seek out a WBE or MBE to team with when bidding on a public contract that requires such participation. She commented, “I really don’t think it matters whether we use a WBE/MBE or someone who is not.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that there are some MBE/WBE subcontractors that his firm uses for private sector jobs that it cannot use for public sector jobs because of “price ... because they are not competitive, then they make us not competitive ... In the private sector, the owner can say ‘I’ll pay that the extra (amount),’ but in the public sector, it’s price.”

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that for public sector work requiring MBE/WBE/DBE participation, his company sends out scopes of work to several MBE/WBE/DBE subcontractors a few weeks before a bid is due to see which firms are interested in serving as subs and what their prices will be. He said, “The local offices will talk to the subs that aren’t (MBE/WBE/DBEs).” He said they talk with any subs that have any questions, make sure they know where to send their bids, and wait for the bids to come in. He said after the bids come in, they evaluate the bids, then they put their firm’s bid together to submit to the client. He also noted that they contact MBE/WBE/DBEs for quotes as subs on INDOT bid letting, which is approximately

twice per month. He stated that on private sector jobs, the firm generally serves as a sub, but that they may use an MBE/WBE/DBE trucking firm, if they need one.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that when she needs subcontract work done that is of a “general nature,” she seeks out MBE/WBEs as a “first approach.” She said that in the past, her firm was a part of a diverse, informal confederation of businesses that shared subcontract services with each other, so she frequently worked with MBE/WBEs from that group. She added that the group has since disbanded.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that he does not routinely solicit MBE/WBEs for quotes, but that last summer he hired a certified WBE. He said he has known the woman business owner for 30 years and that she is the firm’s dispatcher. He added that her husband and son are the firm’s drivers.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that they have had to hire MBE/WBE subcontractors on a public project to “satisfy MBE/WBE goals.” He stated that they often use a local subcontractor to serve as liaison architects on faith-based work.

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company, said, “I have tried to find some [MBE/WBE] companies but there aren’t many around here. Sometimes MBE/WBE companies will come from Indianapolis to work. But that’s on the big jobs.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said “We often solicit bids and quotes from other MBEs or WBEs by the qualifying packet. The owner believes in mentoring small companies and giving back.”

Some interviewees reported that there is no difference in hiring subcontractors for public and private jobs. [Interviewees #: 112, 116, 127, 128, 205, 216, 219, 223, 311, 313, 314, TA #10]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that they would use the same criteria for determining their subcontractors regardless of the goals that are on the bid.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, indicated that he asks subcontractors for resumes and calls their references. He indicated that to get on contracts as a subcontractor, you have to be low bidder and have a good reputation. He stated, “There is no difference whether I’m working on a public or private sector project.” He shared that he uses the same approach whether he is bidding on an MBE goal project or on a non-MBE project.

Interviewee #311, a Caucasian male owner of a computer firm, indicated that there is no difference in the process for private sector jobs versus public sector jobs. He stated that since he does not solicit bids for subcontracted work, he does not pursue bids or quotes from MBE/WBE entities and that this does not differ between the public and private sectors.

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company, commented that there is no difference in his use of MBE/WBEs in private and public jobs because “I use [MBE/WBEs] I know and who do good work.”

Other interviewees reported that there is a difference in hiring subcontractors for public and private jobs, including differences based upon MBE/WBE goals. [Interviewees #: 104, 113, 116, 125, 208, 209, 212, 221, 226, 301, TA #6, TA #8]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, offered that the selection of subcontractors for private sector work involves less restrictions, and the selection is made based on price. He reported that in the public sector, one has to very observant of the selection guidelines. He noted that the major difference that he sees between the public and private sectors is that the list of available MBEs for public work is much longer than what is available for local private sector projects.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, stated that his policy for hiring MBE and WBE subcontractors varies as to whether the project is public or private. He added, “The private sector often has stiffer project requirements, so I’m less inclined to hire the MBEs and WBEs. As a rule, the work ethic of many MBEs and WBEs does not meet my expectations.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that he especially looks for MBEs when he does work in the Chicago and Gary areas because that is very important there. He went on say, “It really is a scam because I have to pay more for materials that are purchased through minority businesses so they can get their share, so the whole project ends up costing more than it would have if I hadn’t been forced to use minorities.” He noted that he has to look for such MBEs about once a year. He said that he hires MBEs for public projects because that’s the only way to win the contracts. He said, “I have to use MBEs, or I won’t get the work.” He indicated this only applies to public, not private sector work. He stated that he does not use MBEs for private sector work. He went on to say, “When doing private sector work, my crew — the people I hire, are about 35 percent diverse anyway. I’m able to find good-working minorities, and we get along ok.” He said that in such public sector projects as schools and hospitals, it’s required that contractors must hire minorities from the area. He said, “That’s crazy because then I have to lay off the minorities I already have on the payroll so I can hire minorities who live in the area of the project. It just doesn’t make much sense to me. And I have to lay off the white employees who have been loyal to our company. In other words, I can’t be independent, I can’t do what I’d like to do regarding who I hire and who I get my materials from. And, what I’m seeing now is that some of these same requirements are beginning to spill over into the private sector too, and that’s scary.”

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that the process is a little different for selecting subcontractors on private sector and public sector jobs. He said that with the one public sector job they have received, there was a set price limit for the subcontracted work and that the subcontractor they selected had to agree to that price to be selected.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that the process is different for selecting subs for private sector jobs than it is for public sector jobs. He said that they are required to have much more documentation on public sector jobs than on private sector jobs. He said that if an MBE/WBE/DBE firm is not prequalified to work on State highway jobs, then they cannot use them. He said, however, that on private sector jobs, they can use firms that are not prequalified, unless the bidding guidelines refer to State specifications.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that the process for selecting subcontractors for private sector jobs is different from the process for selecting subcontractors for public sector jobs. She said that private sector customers do not require the amount of “paperwork and safety” from her subcontractors that public sector customers require.

Interviewee #221, a Caucasian male owner of an excavation firm, said that there is a difference in how he selects subs for public sector versus private sector jobs. He said that on public sector jobs, he is required to hire a subcontractor who is “known by the public entity or has had past experience with those public entities or they’re not going to let you hire them as subs.”

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that when he hires subcontractors for public sector jobs, that they must be insured.

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, said that their members select MBEs by asking them for referrals and for help pairing them up with qualified MBEs. She said “But, our members definitely have access to MBEs to fit their subcontracting opportunities through several different tools and methods we use.” She noted that prime MBEs also go through the firm to identify other MBEs. She said “Actually, our national organization is in the process of rolling out a tool to match prime MBEs with non-primers. But, in the meantime they can use the tools we have to match them up with other MBEs. Some of the tools are MBE to MBE specific, and some are more specific to the corporations.” She noted that the process is different between private and public. She stated that they do not really deal with public sector work. She said she was aware of bidding laws/codes of ethics for procurement. She noted that in the private sector, there is some compliance depending on the corporation as far as if they have a government contract, there are certain guidelines they have to follow — some mandated compliance.

Interviewee TA #8, an African American male President and female COO of an organization that provides assistance in the highway construction industry, said that businesses need to understand the marketplace they are operating. He commented that on goal projects, the primes are going to be looking for the MBE/WBE/DBEs, but on the private jobs the firm has to do the marketing.

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, noted that the only difference would be if it was a goal-based project because generally speaking private jobs do not set goals. He did note that there are some private companies who set goals for their private jobs.

Some interviewees reported that there is no difference in projects with MBE/WBE goals and projects without such goals. [Interviewees #: 101, 304, 307, 308]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, stated that there does not seem to be much difference between MBE/WBE goal projects and non-goal projects.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “There is not a difference in goal or non goal projects because the majority of the companies we use are minority companies. We use the same subs for all projects.”

Other interviewees reported that there is a difference in projects with MBE/WBE goals and projects without such goals. [Interviewees #: 210, 211]. Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said the process for getting on jobs with MBE/WBE goals is different from getting on jobs without the goals. He said that on jobs with MBE/WBE goals, his firm only receives a subcontract amount equal to the difference between the total hauling dollar amount on a project minus the amount the prime has to pay an MBE/WBE sub to meet the State's goals. He said, "I don't think the State [or] INDOT, is aware that they're really hurting the trucking companies that aren't disadvantaged or woman-owned."

Many interviewees reported utilization of subcontractors without regard to race, ethnicity, gender or MBE/WBE certification status. [Interviewees #: 103, 105, 109, 111, 113, 115, 117, 121, 125, 127, 203, 205, 208, 212, 219, 222, 223, 225, 226, 301, 304, 305, 311]. Interviewee #103, a male Caucasian owner of an excavating firm, said that he seldom needs to hire a subcontractor for his work, but if he should need a crane operator, he knows friends in the business who will help him out. He said, "I don't even know if any of my subcontractors are minority businesses." Interviewee #103 stated that he does not think in terms of "hiring MBE subcontractors."

Interviewee #105, a male Caucasian owner of a small concrete contracting firm, said, "I hire subs that I have worked with on other jobs, or, subs who have hired me to work with them as their sub."

Interviewee #109, a Hispanic male president of an industrial cleaning firm, said "I look for subcontractors who can do the job, not for a specifically certified firm. I usually know the people who have the experience and expertise, and those are the guys I get to do my work. The companies I select are those I've done business with for a long time and who have a good reputation."

Interviewee #111, a Hispanic owner of an engineering services firm, reported that his firm has never had to hire a WBE firm, and while they may have used MBE firms in the past, it was not because they were a minority-owned firm. He said that he simply hires good firms for the work, not because of their ethnicities or genders. He said that the fact that a firm is local is the most important factor when looking for a subcontractor.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, "When I hire a subcontractor, I carefully examine that company's experience and reputation, and then I consider pricing. The quality of their work is far more important to me than the bid numbers and whether they are certified MBE or WBE." He went on to State, "On occasion — 5 percent of the time — I do consider hiring MBE or WBE subs, but they must do quality work and have a verifiably superb reputation."

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, reported that he does not use MBE/WBEs very often. He said that he searches out subcontractors based on the quality of their work.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said they select subs they might need based on pricing, reliability, and service. He stated "We like to hire minorities." He shared that they do not directly solicit MBE/WBE subs, but on occasion they do by asking vendors who they might recommend. Interviewee #117 indicated that it did not matter if the sub was or was not an MBE/WBE.

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated they do subcontract most of their heat treating and plating work out to other companies. He said that they select their subcontractors by capabilities and past performance. He stated, “Many of our clients require us to be NAD-CAPed and that’s a qualification then for our subs too.” He stated that he neither solicits nor rejects MBE/WBE subcontractors. He added “We know who our subs will be and we use them because they are qualified to do the work we need done.”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, responded that the only reason they would not use a particular freelancer would be if that person were not a good writer, or designer, or did not meet their expectations. “It would not depend on whether that person was a WBE or MBE,” she said.

Interviewee #127, a Caucasian male and president of a marketing and communications agency, stated “No, I do not seek out MBEs or WBEs, nor would I turn one down if it was qualified and I did my usual due diligence with that potential sub.” He added, “Some of our clients want us to use an MBE or WBE and of course we would oblige such a request. But, when not required or requested, whether a sub is an MBE or WBE is not our first criterion in selecting our vendors.” He said, “I select my subs very carefully. I know what the markup needs to be, and how I have to justify it, so I interview my potential subs very carefully, I test them for responsibility and quality, and finally I use trial and error in determining whether I will use them a second or third time.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he looks for partners who are qualified, regardless of whether or not they are MBE/WBEs, for both private and public sector jobs.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that his firm selects subcontractors based on “all the same things we’re judged on ... knowledge of the business, capacity, and the projects they have done in the past.”

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that in selecting a subcontractor, they look for machine shops with capacity. He said that they usually subcontract to firms that the owner already knows from his experience in the racing industry. He said that he selects subcontractors based on their capacity to do the work, pricing, and their ability to maintain confidentiality.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that she selects subcontractors in the same manner that her firm is selected for jobs, specifically, performance and price.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she selects her subs through her “personal connection and knowledge of quality.”

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that she selects subcontractors based on their ability and quality. She said that on public sector jobs she uses all union labor and hires them “off the bench.” She said that on private sector jobs, she uses a non-union sub that has worked with her firm for eight years.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that he hires subcontractors to provide hauling services if he needs additional trucks, but that it happens very rarely. He said that he selects subcontractors from among a list he has of local people who own their own trucks and perform hauling services. He said, “I generally try to pick guys who won’t come in and undercut your work. You start using them and then they try to take your work. I mainly know guys I can trust.”

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that the company selects subcontractors based on word of mouth. He said that people in the operations division of the company interview the prospective subs, drug test them, and run a background check on them. He said that all subs are required to sign a subcontractor agreement form. However, he said that on very large bids, they will look for MBE/WBEs.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that he sometimes hires subcontractors based on their “reliability and reputation.” He noted that he solicits WBEs as subs 100 percent of the time.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, indicated that subcontractors are selected based on being local to the area and being a minority company. He reported that they often use a local subcontractor to serve as liaison architects on faith-based work.

Interviewee #304, the operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “If we are hired as a subcontractor we sometimes hire subs to assist with the work. We hire independent contractors and they come along side us to help provide services to the prime. They are considered our subcontractor.” She said, “We select subs by the project requirements of location, the shifts (day or night), union or non-union project and the type of materials being hauled. A potential sub would come to the company with their equipment, insurance, experience and whether they are a signatory to the union. An interview is conducted and we determine to hire the sub or not. Someone with an older truck 15 years may want to haul concrete and dirt. It’s a heavier material but their truck is used to hauling that and their truck beds are already worn. A newer truck may not want to do that type of haul. We also evaluate the risks for each project.” She said, “The difference is usually whether the project is a union project and if the driver has to be signatory to the union.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “I hired the subcontractor I work with now through a referral from a client and because they [were] close to the building project.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, reported that he hires subcontractors “most of the time.” He stated that he selects subcontractors for a project by “knowing the local market and getting the lowest bidder if there are no performance issues.”

Interviewee #311, a Caucasian male owner of a computer firm, said. “The factors that I use in selecting a sub are simple: cost, need and experience. I’ve had good experience with[some subcontractors], they need the work and do it at a good cost.”

Other interviewees reported that they do not intentionally solicit MBE/WBE-certified subcontractors. [Interviewees #: 123, 210, 215, 216, 221, 230, 309, TA #10]. Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated they hire subcontractors based on compatibility and client needs. He said generally that he does not solicit MBE/WBE subcontractors. The one exception is if their client has certain diversity requirements to meet, then he would specifically seek MBE/WBE subcontractors.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that she never intentionally solicits MBE/WBE subs for quotes. She said she selects subcontractor with whom she has worked in the past and who are dependable.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that he hires graphic design artists, website developers, street team associates, and printers as subcontractors. He said that he selects subcontractors “based on skill sets.”

Interviewee #216, an African American male owner of a business consulting firm, said that he selects subcontractors from among a “cadre of people” with whom he has worked over the past 30 years. He said he selects subs based on their competency. He said that he does not solicit MBE/WBE subs for bids or quotes. He said, “If it’s a mixed audience or predominantly Caucasian audience, then sometimes, I’ll try to choose a person of that ethnicity to balance that out.” He added that the person will still need to be competent, regardless of whether the person is “white or black.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that he hires subcontractors for paving, boring, and concrete work. He said that he selects subcontractors based on his prior experience with them. He said that he never solicits MBE/WBE subs for bids/quotes.

Interviewee #230, an Asian-American male owner of a dry cleaning company, said that there is really only one leather cleaning company in the Midwest to which he can sub and it has a monopoly on serving dry cleaners in Indiana, Michigan, and Illinois. He said that he never solicits MBE/WBEs subs for quotes because he is not aware of the existence of any MBE/WBE leather cleaning firms.

Interviewee #309, a Caucasian male owner of a printing and distribution firm, said that he does not solicit bids from MBE/WBE subcontractors, adding, “Not because we wouldn’t. I just like to work with people who treat me right — treat me nice. I don’t care if they are minority-owned or not, if they are going to take care of me. I don’t know of any [MBE/WBE subcontractors] — if I did and we established a relationship and their prices were competitive, I would [solicit bids from those firms].”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, noted that he could not speak specifically about how his members select subcontractors, but he imagines it is by: a) price, b) evaluation of whether they can perform (expectation and past history), and c) MBE/WBE/DBE when it is required. He said “We are frequently told the latter doesn’t enter into the decision unless it’s a goal-based project. I think the idea of race neutral selection has not gotten the credit that is due. I believe in today’s society that many decisions are based on race neutral factors.” He did note that primes are not inclined to solicit MBE/WBEs on jobs that do not have goals and on non-goal projects primes usually selects firms they have done business with in the past.

Some interviewees reported limited or no utilization of subcontractors in general. [Interviewees #: 100, 108, 110, 112, 114, 118, 119, 120, 122, 201, 211, 213, 217, 218, 220, 300, 302, 303, 305, 306, 309, 310, 312, 315]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said that his firm does not use subcontractors. If the firm needs help, he says, “We hire part-time employees.”

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that she would solicit subcontracting work from MBE/WBEs if they needed to hire subcontractors. She reported that her company has not yet had the sizable contracts awarded to them, so they have not had the need to hire subcontractors up to this point. She expressed that they would know certified individuals that they could hire as subcontractors if the right opportunity presented itself.

Interviewee #114, a Caucasian male and vice president of a company that sells copy machine materials to large companies, reported that the company does not use subcontractors, does not bid on public or State contracts, and does not seek work from MBE/WBEs. Interviewee #114 said that the company does not preclude working with such entities, but the business is such that it only deals with major corporations.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she never subs out work because “we can’t always keep our fingers on what’s going on.” She added that they intentionally wish to keep the firm small to be better able to guarantee quality.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she has not hired MBE/WBE subcontractors a lot, but she plans to as the firm starts to pursue more architectural work. She stated that she has worked with an electrical engineer on some of her projects but that firm is not an MBE/WBE.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, stated that they do not solicit MBE/WBE subcontractors for bids or quotes. Interviewee #302 stated that when submitting a bid or proposal for work, the proposal does not include another organization as a subcontractor; however, after securing the work, he said they may secure another company to assist in the project. Interviewee #302 said that his company has utilized WBEs on a couple of projects. He said, “The WBEs the company works with [are] structured just like [his company], with the wife/female being the majority owner.”

Interviewee #303, the Caucasian female owner of an electrical contracting business, reported that when they submit a bid or proposal for work the proposal does not include another organization as a subcontractor. She stated that the work that they secure is working directly with the contractor serving as the electrical company performing the work on the project. She stated that she has not had an opportunity to work with the WBE firm over the last three years because she is struggling in this economy also.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said “I rarely hire subcontractors. If I hire subcontractors, it’s in the area of technical labor.” Interviewee #305 has solicited MBE/WBE subs but rarely. He commented that he was introduced to an MBE firm, and it was a good time to work with that MBE firm. However, he reported that in his line of work, he is not aware of any WBE firms that work in audiovisual sales, service and installation. Interviewee #305

also commented, “Public work would more likely draw me to work with MBE/WBEs because it would be a requirement and an advantage.” He said that he has not had an opportunity to use MBE/WBE on public projects.

Some interviewees reported positive experiences working with minority-owned and female-owned subcontracting firms. [Interviewees #: 101, 112, 117, 212, 222, 226, 301, TA #4, TA #6]. Interviewee #101, a Subcontinent Asian American female engineering consulting firm, indicated that they have worked with DBEs on INDOT projects and found them very cooperative. Interviewee #101 said that at least one of these DBEs was also a certified MBE/WBE.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that her experience with working with MBE/WBE subcontractors in the past leads her to believe that certified firms seem to try a little bit harder. She said, “I think it’s a mental state of mind that they are in that they want to at least try to get on the playing field, so they do a little bit more.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, shared that they have not had any problems using MBE/WBE subs if they do quality work. He said there are some firms they do not work with, not based on minority status, but rather on quality of performance.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that when she hires WBE subs off the union bench, she believes that they outperform the men on the job.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said, “We prefer working with MBE/WBEs because they have higher quality responses, they work harder.” He reported that there is a perception that MBE/WBEs are trying to get handouts and are not able to obtain work based on experience. He said that “MBEs constantly have to prove themselves to primes regardless of how much experience they have or how long they have been in business.”

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, reported, “From what I hear, the work of MBEs and WBEs has been favorably received.”

Other interviewees reported mixed or negative experiences working with or attempting to work with minority-owned or female-owned subcontracting firms. [Interviewees #: 102, 107, 113, 116, 205, 219, 307, 311, TA #7]. Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, noted that some MBEs lack business experience. He cited the example of one subcontractor who wanted to partner with him, but when it came to bidding on a commercial job the subcontractor lacked estimating experience because he had only done residential electrical work and was not familiar with plan and speculative work projects in the commercial field.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that they have had some challenges with MBE/WBEs that do not perform at the same level as non-MBE/WBE subcontractors. He said, “There was one particular sub that we used recently for a

project, and we weren't getting the call-back responsiveness for scheduling and for promptness on the job to be onsite. I doubt if we'll use them again."

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said that as far as his experience working with MBE/WBEs, "I almost always can find better non-MBE/WBE subs to do the work I need. In general, I would say that MBEs and WBEs perform acceptable work, but not exceptional work. They just do not seem to excel like some of the non-MBEs or WBEs. I say that admitting that being federally-certified was how I got my foot in the door. But once in the door, you have to produce very well multiple times before you're viewed as a worthy company to be invited to bid."

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said, "About 20 percent of the MBEs are legit[imate], the rest are [not legitimate]. And, there are also some majority subs I won't work with too if they aren't reliable." He shared his impression that MBE primes do not seem to know what they are doing. He added, "At least 80 percent of the MBE primes have no idea of what's going on. That's true, and I hate to say it, but it's sad. You're only as good as the last job you did."

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that price is sometimes an issue in working with MBE/WBE subcontractors. He said that some MBE/WBEs may charge more than non-MBE/WBEs because they may be "lacking some of the skills necessary to properly structure a quote."

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that although she uses very few subcontractors, she has worked with one Hispanic male-owned subcontractor. She said she found that the quality of his work was good, but that his communications skills were poor.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said "Minority firms are usually new and need more guidance."

Interviewee #311, a Caucasian male owner of a computer firm, said, "I solicited one bid from a woman business enterprise and never got a response."

Interviewee TA #7, the African American male representative of a civil rights agency, reported that he has heard of some MBE/WBEs not being used because the specs were high, they missed out on the bid, or quality-of-work issues.

Some reported that there was no difference in working with minority-owned and female-owned subcontracting firms and firms. [Interviewees #: 123, 200, 206, 209, 210, 214, 223, 231, 304, 313, 314, TA #8, TA #10]. Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, commented "I have seen no difference working with MBE/WBEs as opposed to non-MBE/WBEs.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he does not see any difference between working with MBE/WBE versus non-

MBE/WBE subcontractors. He added, “Being an MBE or not, for me, doesn’t play a role in whether or not I think you can perform or can’t perform.”

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that there is generally no difference between MBE/WBE/DBE and non-MBE/WBE/DBE subs. He said, “There are good ones and bad ones ... you weed them out ... you try to stay clear of the ones you know can’t perform or aren’t financially in shape.”

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “There is no difference in work experiences of MBE/WBE subs and non-MBE/WBE subs. Both provide good services. Because I’m an MBE/WBE, I’m more interested in hiring those companies who are considered disadvantaged or minority companies.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said that the experience of working with MBE/WBE and non-MBE/WBE firms is not different.

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said that there should not be a difference in working with MBE/WBE subs and non-MBE/WBE subs. He commented that whatever difference there is, it is made up. He said, “I’ve heard stories from primes where they’ve said how good some of the subs are, and some of them even had the nerve to say, they were good even for a DBE.”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, said he does not know of any differences in experience working with MBE/WBE subs compared with non-MBE/WBE. But he did note that when you have a certified firm that does not perform, there are hoops you have to jump through to get rid of them.

Some interviewees reported that they prefer to use certain subcontractors with because of existing relationships and for other various reasons. [Interviewees #: 111, 116, 121, 123, 125, 127, 128, 202, 203, 205, 206, 208, 209, 210, 212, 213, 214, 215, 216, 219, 221, 222, 223, 225, 226, 230, 231, 300, 301, 302, 304, 305, 307, 313, TA #5, TA #6, TA #7, TA #8, TA #10].

Interviewee #111, a Hispanic owner of an engineering services firm, stated that there are definitely subcontractors with whom he chooses to work over and over again because they are local, and he knows that they will do the job well.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that there are definitely subcontractors with whom he has developed good relationships, and he tries to keep those relationships because they work well together. He noted that he utilized minority subcontractors on four out of five of his last projects. Minorities deserve a chance too, but they have to be qualified.”

Interviewee #117, a Caucasian male vice president co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said that there were some subcontractors they like to work with on a consistent basis (e.g., an MBE/WBE firm in Chicago).

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated that he has developed relationships with particular subcontractors, but that is not based on MBE/WBE certification.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, said that he has developed relationships with particular subs and likes to use them whenever he can. He cited a certain WBE firm as one of those subs.

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, said he has developed relationships with particular MBE/WBE subs and likes to use them whenever he can.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, stated that she hires subcontractors for the current contract that she has with City of Indianapolis and for any laboratory analysis work that she needs. She said that both the MBE/WBE and non-MBE/WBE subcontractors that she selects “are mostly people that I know ... and come with a good reputation.” She added that she uses the same subcontractors for both private and public sector work. Interviewee #202 indicated that she solicits MBE/WBE subcontractors “a couple of times per year.” She said that the MBE/WBE contractors are “people I know or people that I know that I know.” She added that she believes that because she selected subcontractors that she knows, they will be more tolerant regarding waiting for payment since they do not get paid until she gets paid for a job.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he always looks for qualified MBE/WBEs to serve as partners on bids, and he said, “I was in this business a long time, so I know them.” He said that there are subcontractors that he has known for a long time who are good engineers and upon whom he can rely, so he tries to use them as often as possible. He added that most of these partners are WBEs and MBEs.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that there are subcontractors with which his firm has established a good relationship and that he frequently hires as subcontractors.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he selects subcontractors based on “price and personal relationships ... if I know them, if I know I can trust them...they’ve done good for me in the past ... how responsive they are.” He said that the process for selecting subcontractors is the same for both private sector and public sector jobs. He said that there are subcontractors with whom he has established relationships, and he tries to use them all the time because “I know that I can count on them.”

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that there are subs with whom the firm has established relationships and tries to use all the time because they offer good prices and deliver on-time.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that there are subs with whom they have established relationships and like to use all the time. He said that they have a few trucks of their own, but that

they try to use MBE/WBE/DBE firms to meet their daily trucking needs. He said that by using these same firms as subs, it helps build the subs' financial capacity and then they are financially strong enough to be available to do the firm's subcontracting work whenever they are needed.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that in her case, she said that there are subs with which she has established relationships and tries to use all the time. She said she prefers to work with subs that are "good and dependable," because her firm is always "on a deadline."

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, she said that she would only use subcontractors that she already knows the quality of their work, so that her company does not get a "bad name." She said there is really only one sub that she has ever used or probably will use, adding that she has only worked with that firm "once or twice."

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that the subcontractors she usually uses are subcontractors that her primary customer has also used in the past. She said that to find subcontractors, they start locally, and then expand geographically until they find what they need.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that he has no experience working with MBE/WBE subs. He said that there are subs with which he has established relationships and tries to use all the time because of "quality of work ... level of efficiency."

Interviewee #216, an African American male owner of a business consulting firm, said there are subs with whom he has established relationships and tries to use all the time because of their specific subject-matter expertise, they are known to the audience, people respect them, they are good planners, and they always meet deadlines.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that there are subs with whom his company prefers to work and with whom the company has established a relationship. He said that the company prefers to hire subs who are former employees of the company who have decided to start their own businesses.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that when subcontractors are needed, she usually works with those she has worked with in the past, or she asks around for referrals.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, indicated that they typically do not solicit MBE/WBE subcontractors for bids/quotes because work is usually negotiated with firms that they have worked with in the past. He stated that the firm has established relationships with subcontractors and tries to use them regularly.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, said that when subcontractors are required, the company selects them based on the company's familiarity with the vendor and which vendor is the closest to the project.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, outreach and compliance monitoring, as well as trucking and hauling said, “We work with those [subcontractors] we have relationships with and some we met during some INDOT networking events.” Interviewee #304 said, “We use the same subcontractors for most of its projects.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “There is a sub I have an established relationship with and try to use all the time. He is an installer and I use him because of his expertise in the field. I’ve worked with him for many years.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said that he has established relationships with certain companies and tries to use them all the time.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, reported that there were members who had developed relationships with subcontractors and try to use them often. She named an engineering design firm that uses one of her member owners whenever it can. She stated “sometimes our subs establish relationships with other member subs and realize a positive working relationship.”

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female President/CEO, commented that there are subcontractors our members have established relationships with and the members use them all the time especially if they have had a good relationship with them. She recalled one success in which the good service one subcontractor provided on a smaller piece of business allowed them to obtain them a larger piece of business with a member.

Interviewee TA #7, the African American male representative of a civil rights agency, stated that some primes use the same subcontractor all the time because they are able to get along, manage the contract together, and they can guarantee their work. He added “let’s face it — the prime is comfortable with them.”

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said that primes use subs that they have a relationship with all the time. He commented that this is problematic for new firms, but that DBEs need to market themselves to make sure that the primes know who they are and that they add value.

One interviewee reported that there are no firms with whom they would prefer to work over others. [Interviewee #: 112]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that there are not subcontractors with which they choose to work over and over again because they try very hard to give people opportunities and share the business with three or four firms. She indicated that they look for bid opportunities that might allow them to partner with other firms.

Some interviewees reported that there are certain subcontractors with whom they would prefer not to work. [Interviewees #: 107, 112, 116, 121, 123, 127, 202, 203, 205, 206, 209, 210, 214, 219, 221, 222, 223, 225, 231, 304, 313, TA #5, TA #7, TA #10]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that there are subcontractors that they will not work with. “I don’t care what race, color, where they come from ... if you perform,

you perform. We want to be judged that way.” He indicated that he feels that this is true of working with MBE/WBE subcontractors and non-MBE/WBE subcontractors.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, said that there are definitely subcontractors with whom they would not work. She shared that the integrity of the business, rather than their certification status, would be the reason they would choose not to work with a company. She said that they try to work with everyone, and offer and encourage training to their subcontractors, but sometimes the subs do not make the effort to maintain the standards on which her company insists.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared there are some MBEs with whom he would not work, adding, “There are some MBEs who don’t pay employee benefits. The MBEs get paid promptly — whether they completed the work or not. They are treated with kid gloves because owners don’t want the charge of discriminating leveled at them, so the owners just pay off the MBEs and then hire a white crew to come and do the work right.”

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated, “Subs I would not work with are those that have a bad reputation or are not qualified to do the kind of work we need done.”

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated there are some subs he would not work with if they were not competent or if they did not add any value. This does not differ based upon a subcontractor’s MBE/WBE status.

Interviewee #127, a Caucasian male and president of a marketing and communications agency, said the only subs he would not work with are the non-qualified ones, and it makes no difference whether they are MBE/WBEs or not.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that there are some subcontractors with whom she would prefer not to work. She added that she will not hire a direct competitor as a subcontractor.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that there is only one subcontractor with whom he will not work because of a “lack of reliability,” stating that this subcontractor showed up late for a client meeting. He said that he attributed this lack of reliability to the person’s nature, not this person being an MBE/WBE consultant.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that there are some subcontractors with whom his firm will not work because of the subcontractors’ limited cash flow, but not because of quality. He said that this cash flow limitation issue applies to both MBE/WBE and non-MBE/WBE firms.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that there are subcontractors with whom he will not work because of “past performance,” regardless of whether or not they are MBE/WBEs.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that there are MBE/WBE/DBE subs and non-MBE/WBE/DBE subs that they prefer not to work with, mostly because they don't have the financial capacity to do "the size job we need them to do."

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that there are subs with whom she will not work because they provide poor service or because customers have complained about their work quality.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that there are subs with which she will not work because of "quality and delivery ... they have to be very dependable."

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that there are subs with whom she will not work because of poor quality, regardless of whether or not they are MBEs/WBEs.

Interviewee #221, a Caucasian male owner of an excavation firm, said that there are subs with whom he will not work because of their "subpar performance."

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that there are subs with whom he will not work because he does not trust them not to talk with the prime and try to take the work for themselves.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that there are "probably" subs, both MBE/WBEs and non-MBE/WBEs, with whom the company will not work, because the company has "standards."

Interviewee #304, the operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said that the only subcontractors with whom the company will not work are those that do not take care of their equipment.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, stated "I've heard there are [subcontractors that her members will not work with], but I will not name those subs. I will say it had to do with the subs' businesses practices, not their status as an MBE or WBE."

Interviewee TA #7, the African American male representative of a civil rights agency, said that there are subcontractors some primes will not work with because the subcontractor does not have the capacity or capability or has a negative track record.

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, stated that there are subcontractors his contractors will not work with, but that it is not based on MBE/WBE status; rather it is based on past poor performance and pricing.

Other interviewees reported that there are no subcontractors with whom they would not work. [Interviewees #: 111, 208, 209, 212, 215, 216, 220, 226, 305, 307, 314]. Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, stated that there probably are not many firms that they would actually refuse to work with, but they may require a subcontractor to bond a job if the sub has limited financial capacity.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “There are not any MBE/WBE firms that I would not work with. The only difference in working with an MBE/WBE would be my knowledge that they exist. It’s more of an awareness of their availability.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said she could not name any companies with whom they would not work, but rather they judge the work on high quality standards and the company on their reliability.

C. Subcontractor / Minority and Female-Owned Businesses’ Perception of Utilization in the Public and Private Sectors.

Interviewees who act as subcontractors reported a number of different ways in which they secure work with prime contractors. [Interviewees #: 100, 101, 102, 104, 107, 111, 112, 116, 118, 119, 121, 123, 128, 200, 201, 202, 203, 204, 205, 206, 207, 209, 210, 211, 212, 213, 214, 215, 216, 218, 221, 222, 223, 225, 228, 229, 231, 300, 301, 305, 306, 307, 308, 312, 313, 314, 315, PF #23, PF #24, TA #5, TA #6, TA #7, TA #8, TA #10]. Interviewee #100, an Asian Pacific American male president of a water testing firm, noted that the primes generally come to his firm, rather than his firm going out looking for work from primes. He stated, “Our firm is known in this field — water testing — and our reputation for good and accurate work is recognized.” Interviewee #100 said that he does attend trade shows and industry conferences to stimulate business in addition to marketing in a few publications. He stated, “Our focus is on water utilities around the country. I know who they are and I go after them.”

Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, said that they try to develop relationships with some of the larger primes as a way of marketing their services. Interviewee #101 stated that they inquire who the prime is when a project is announced and then submit a Statement of qualifications and hope to be chosen.

Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, said that he learns of bid opportunities through bid invitations, personal contacts, checking websites, and from supply houses.

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated that he gets his work by calling primes to find out what is available, generally on a monthly basis.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, said that they get work as a subcontractor through direct marketing and leveraging current relationships. He mentioned that this differs between public and private sector work stating, “The private world is totally different than the public world. There’s no question about that. Most of all the public work is price driven from professional services through construction. There [are] not as many professional or qualification-based selections on the public side.” Interviewee #107 explained

that they market to primes by doing project specific marketing, utilizing professional organizations, and through referrals. He said that most information on projects is available via e-mail distribution and that his company sees a better flow of professional service information through INDOT than they do through IDOA. He noted that he feels that INDOT does a better job on the contracting side of putting the plan-holder lists out.

Interviewee #111, a Hispanic owner of an engineering services firm, said that the work that his firm gets is not based on the fact that he is a minority-owned firm, especially because he is not certified. He said does not market directly to primes, but they know he is there. He indicated that 95 percent of the work his firm does is from word of mouth rather than from seeking to get on projects that they have heard about.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that they would seek to partner as a subcontractor or as a prime with firms who have the same kind of business-minded individuals that her firm represents. She said that it would not matter if they were certified or not. She indicated that, for her company, the most important issue is that they agree with their partners on the model that they are out there displaying to the community. She added that with their approach of cleaning for health and promoting a cleaner, healthier, and greener environment, not everyone focuses on those goals. She said that her firm does not currently market themselves to potential primes because they have not really searched for subcontracting work, but they might like to focus on this in the future. However, she mentioned that the company monitors the State website as well as local municipality websites and newspapers to find out about opportunities.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that he markets his firm to general contractors that he knows. He indicated that he finds his primes through the bid magazines. He said, "I used to get one in six jobs, but in the last year or so, I'm getting one in 30 bids." He added that his 20 years in the business and his good reputation are what help him get bids.

Interviewee #118, a Caucasian male president of a plumbing and heating company, said that on the few times their company has been hired as a subcontractor it has been because of personal contact with a general contractor or because of a good reputation they have developed in the area.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, said that on the few times his company has been hired as a subcontractor it has been because of word of mouth reputation.

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated that they get contracts through the sales staff they employ.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, said his firm gets on projects as a sub by soliciting and searching companies with needs he can fill, and by proving his firm's capability. He said that this does not differ between private and public sectors, or with MBE/WBE goal projects versus non-goal projects. When asked about marketing to primes he responded, "Yes, I market to primes. We market by using the FIA and by contacting incumbents." He added they also use FBO.gov and the State's procurement website.

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, said that “people call me” when they want a firm with his specialty, especially in the private sector. He did note that he will sometimes market to primes.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, stated that his firm looks at Indiana’s procurement website to see what State jobs are being bid. He said that for State projects in which the firm is interested in serving as a subcontractor, he sends a bid to all firms included on the plan-holders list. He also indicated that the firm uses a bid tool service to learn about private sector work and that the process is the same in getting on a bid in the public sector as it is for the private sector. Interviewee #200 also reported that if a project has an MBE/DBE goal, he receives more solicitations via fax requesting a quote to satisfy the good faith efforts required by the State. He added, “There are some clients that you can almost guarantee will never give you the job, but they send you the paperwork.” Interviewee #200 said that he does market his firm’s capabilities to primes. He reported that he identifies primes through the plan-holders list and that he is getting more opportunities to bid with primes, because more primes know of his firm now. He said that primes now contact him via fax, e-mail, and phone to request that his firm partner as a subcontractor. He added that he checks websites of cities and States and uses the paid bid tool service to find primes, and then, once he sends the firm’s bid to one prime, he also sends it to several primes.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that her firm gets on projects as a subcontractor for private sector energy monitoring through two companies with whom she has existing relationships. She has been contacted by prime contractors to serve as a WBE subcontractor on projects regarding lighting in the cities of Lafayette, Noblesville, Gary, and Evansville. The primes that contacted her for these public sector projects found the name of her company through the State’s on-line WBE directory. She said that once the primes contact her about a subcontracting opportunity, that the process of developing the bid is the same for both the private sector and the public sector. She said that she markets her firm to just a few primes with whom she and her husband have existing relationships. She said that she gets several bid opportunities from these firms because, “it’s not what you know, it’s who you know.” She said that she also receives e-mail and fax notifications from primes regarding bid opportunities.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, indicated that the way she gets on projects as a subcontractor is through referrals, random phone calls from strangers, random faxes, and people that she knows. Interviewee #202 said that she markets her firm to primes by calling them directly and then following up with lunch meetings and by talking with them at pre-bid meetings. She stated that she learns about jobs through e-mail alerts and by looking on IDOA and INDOT procurement websites.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, reported that he has no experience serving as a subcontractor, but he indicated that he would welcome the opportunity to do so. He said that he markets to prime contractors by calling them, sending them his firm’s qualifications, e-mailing them, meeting them, and attending various conferences where the prime contractors have booths. He said that the way he identifies prime contractors is by referring to a vendor booklet that the City of Indianapolis publishes and attending meetings that the City used to host quarterly in which subcontractors could meet prime contractors. He also commented that he knows many prime

contractors already, having been active in his industry for several years. He said there is no way to identify the prime contractors for the State of Indiana's jobs. He mentioned that the State has a listing on its website of prime contractors, but the list contains thousands of names, so "it doesn't make any sense." He added, "The State doesn't have any process that I know of [for subcontractors to meet prime contractors]."

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, reported that he attempts to get on jobs as an MBE subcontractor on publicly-funded jobs by approaching prime contractors approximately four to five times per year. He said he contacts prime contractors "when we see a job come across us that we think we can get and not compete with all the big people." He said that the general contractor is listed on the bid documents, so he faxes them an estimate on the project. He said he attends pre-bid meetings, but added, "Usually nobody wants to talk to you at that time." He said that the next time he hears from the contractors is via fax the morning the bid is due. He added, "That's how they get around it.... They say they contacted somebody and you weren't interested.... There's no conversation beforehand ... I guess they submit that they contacted us or they got no reply — I don't know how they word it." He said that no private sector contractor has ever put his firm on a bid because of his MBE status. Interviewee #204 said that he finds out about public sector opportunities to bid as an MBE subcontractor through word of mouth and Reprographics bid tools. He said he rarely finds out about jobs being available in the private sector, adding that if a job is not listed on the Reprographics website, he does not find out about it. He stated, "There's a lot of buildings going up around here and nobody knows who's building them or who's going in [on the projects]."

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that when his firm works as a subcontractor, he often gets phone calls from general contractors asking him to bid as a subcontractor. He also stated that his firm bids on many jobs that do not require MBE/WBE participation, citing a current bid of \$1,500,000 in which he was waiting for a response. Interviewee #205 said that he markets his firm to primes and his firm is attractive to primes because of his past work experience. He added that he frequently checks with other subcontractors to determine if a particular prime is a good employer. He said that he does not spend the money on any tracking services, such as Bidtool.net. Instead, he indicated that his firm has realized success by being registered on ISqFt.com, which general contractors use, causing him to be notified when construction bidding opportunities are available and allowing general contractors to know about his firm. He added that iSqFt.com is similar to bid notification services provided by IDOA.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he gets on projects as a subcontractor by trying to make personal contact with prime contractors. He said, "I make sure the people I'm going to bid to know ... who I am ... to build confidence in them that they know I know the job." He said that prime contractors usually have plan rooms, so he looks at the drawings there, and then asks questions and discusses any concerns that he has about the job with the contractor. He added that he then prepares a "clear scope" and presents it to the contractor. He said that this process is the same for both private and public sector work and for MBE/WBE goal projects and non-MBE/WBE goal projects. Interviewee #206 said that he tries to schedule half-hour meetings with primes to introduce himself and his firm. He reported that he takes brochures with him to those meetings, but he does not mail unsolicited brochures to primes. He said that after his initial meeting with a prime, he spends the next four to six weeks communicating with

the prime via phone and e-mail. He mentioned that he has been successful with some primes, and not successful with others.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he gets on projects as a subcontractor by being on the State's list of DBE-certified firms, by sending out flyers to prime contractors announcing their new MBE/DBE status, and by calling prime contractors on the phone. He said that the firm only serves as a subcontractor for public sector work containing DBE goals. Interviewee #207 said that his firm markets to primes by staying in touch with industry contacts that they have developed over the years. He added that they work at "keeping those relationships in place." He stated that the primary way he learns about specific projects is to look at INDOT's RFP list. He added that he also looks at INDOT's 18-month list of upcoming projects, but remarked that it is "hit or miss ... half the time the projects don't come up as scheduled or they drop off or something of that nature."

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that primes solicit them by phone, e-mail, and fax for asphalt or concrete quotes as subs in the same manner as they themselves solicit subcontractors for quotes. He said that they use a lot of websites and services, such as the INDOT website, Dodge Reports, Bid Tools, Reprographics, and Construction Digest, to know what jobs are being bid. He said that they are pro-active in contacting primes with which to sub. He added, "We don't rely on the phone ringing ... we track [primes] down." He said that their process is the same for getting on projects as a sub for both the public and private sectors. He said that because they are not MBE/WBE/DBE-certified, that primes are sometimes not interested in putting them on projects as a sub. He said in regard to when primes tell him they are not using him because his firm is not MBE/WBE/DBE-certified, "Sometimes you bite your tongue ... all you can do is give them the best price you have." He said that one thing they can do to help get on a bid as a sub when there is an MBE/WBE/DBE requirement is to use an MBE/WBE/DBE hauler as a sub under their firm. He said that although INDOT does not allow subs to hire subs on their contracts, that hauling services are excluded from this requirement. He also noted that they market their firm to primes primarily through their sales force. He said that the firm has "20 salesmen who are out beating the bushes trying to make personal contacts." He added that they have an outside consultant who helps them with business development. He said that they are active in professional associations and give back to the communities they serve. He added that they have experienced positive success and that their multiple locations have significantly contributed to their success. He commented, "If there's a job within our radius that we can reach, we like to feel we get our fair share."

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that she gets on projects as a subcontractor by bidding jobs or responding to contractors with which she has worked in the past. She said that she really does not market to the primes. Instead, she said she identifies primes through the INDOT website or through e-mails she receives from the State of Indiana. She added that she also uses information from Reprographics and the City of Indianapolis plan rooms to identify primes with whom to work. She said that she has been "pretty successful" in contacting primes through these sources

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, gets on projects as a subcontractor by having primes contact them. He said, "Our trucks market themselves ... we have a large number of trucks." He said that he really markets via the quality of his drivers and equipment.

He said that he forms relationships with primes by doing good work for them and really does not have to do any more marketing than that. He said that the fact his firm has been in existence for 62 years is evidence that his firm is successful in marketing to primes.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said she gets on projects as a subcontractor by providing bids or estimates for general contractors who contact her. She said that the process of getting on projects with MBE/WBE goals is the same as getting on projects without MBE/WBE goals. She added, "It's always about price." She said that she identifies primes via plan room websites, and then contacts them if they don't already contact her. She said that she also subscribes to three or four "very expensive" services that send her information about jobs being bid.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said to get on jobs as a subcontractor, "You call and beg and plead ... during Christmas I take them candy ... I take them fruit baskets ... we order pocket calendars — I take them those ... I sweet talk them ... I do anything I can do to get business." She said that she markets to primes by calling them and going to their offices. She said she subcontracts to trucking firms larger than hers and identifies them by seeing their trucks out on various job sites. She added that she generally knows who the primes are. She said that recently, she has been searching the Internet for jobs. She said that there is no difference between getting on private sector versus public sector jobs, adding that very little of her work is for the private sector.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that her firm serves as a subcontractor on only one project. She said her firm was referred to that prime contractor through her main client. She said she spent some time marketing in the mid 1990s, but it did not turn into anything because her business is so specialized. She stated that she came to the conclusion that marketing to prospective primes is a waste of time, so she waits for primes to contact her.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that when he previously served as a subcontractor, he got on projects by approaching the principals of the prime contractors and telling them about his background in telecommunications sales. He said that when he used to subcontract, he personally met with the primes. He said that he found the names of the primes through on-line resources and then he would make cold calls to the primes.

Interviewee #216, an African American male owner of a business consulting firm, said that he gets on projects for both public and private sector jobs as a subcontractor through word of mouth. He said that he does not think the process for getting on projects as a sub is any different for MBE/WBE goal projects versus non-MBE/WBE goal projects. He said that he markets to primes through word of mouth. He said that primes contact him and that he does no marketing. He said that his friends who are prime contractors tell him about projects, they then e-mail him the information about the projects, and then they follow-up with him.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that when he serves as a subcontractor, he gets on projects by having primes contact him. He said that he does not market to any primes at all.

Interviewee #221, a Caucasian male owner of an excavation firm, said that he gets on projects as a sub because he has past experience with several general contractors who allow him to submit bids to them. He said that there is no difference in how he gets on projects for private sector or public sector work. He added, however, that it is difficult to get on jobs with MBE/WBE goals. He said that because he has been in this business for 35 to 40 years, the primes know who he is and contact him directly. He said that this word of mouth, informal marketing has proved to be very successful for him.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that to get on a job as a subcontractor, she develops a scope of work first, and submits it to a prime one week before the bid is due. She said that to get on private sector jobs, she has to work harder at establishing relationships than on public sector jobs. She said that on private sector jobs, before she submits a bid to a prime, she asks who the other subs are that are bidding on the job. She said that there are some subs she will not bid against because they hire illegal workers and they do not self-perform, so she cannot compete on price against them. She said that she hopes that she gets on bids because her company is a good company, and not just because a prime is trying to fulfill a due diligence goal. She said that she markets her firm to primes by attending all the networking opportunities that are provided through the State, the City, the local school districts, and law firms for MBE/WBEs to meet primes. She said that she also attends the State MBE/WBE Commission meetings. She said that she also goes to plan rooms on-line through Reprographics to discover the primes that are bidding on upcoming jobs.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that he gets on projects as a subcontractor because the primes contact him by “going down their list.” He said that the process for getting on a project as a sub is the same for both private and public sector jobs. He said that because his firm is non-union, primes cannot use his firm if they are required to use union trucks on some public works jobs. However, he said that if no union trucks are available in the local area, primes are permitted to use his firm on an exclusively union job. He said that there have been circumstances in which a prime could not use his firm on jobs with MBE/WBE goals.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that the way they get on private sector projects as a subcontractor is through the primes contacting him. He added that his firm is on a certified vendor list used by many primes. He said that he discovers public sector subcontract bid opportunities through various websites. He said that his firm has to be prequalified to bid on most public jobs. He said that most of the public bids he submits are sealed bids with a public opening. He said that there are times in which a prime stipulates that all subs must be MBE/WBEs, which disqualifies his firm from bidding. He said that the way he markets to primes is by driving around and looking for buildings that he would like his firm to clean. He said that after he identifies a building in which he is interested, he calls the building owner and attempts to set-up a lunch appointment with him/her. He said that his goal at that point is to establish a relationship with the building owner so that the next time the cleaning contract comes up for bid, he has an increased chance of obtaining the business. He stated that his success rate for closing on sales with primes is about 11 percent, which is in alignment with the standard for his industry.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that she markets to primes by calling and e-mailing primes with

whom she has worked in the past. She said that there is no difference between getting on projects with MBE/WBE goals and those without MBE/WBE goals. She said that she markets to primes via phone calls, brochure mailings, and e-mails to prospective clients. She said that she identifies primes through word of mouth and looking at reports and industry-related websites. She said that she is starting to research the possibility of setting up a booth at trade association conferences to which her clients belong. She added that she receives e-mails from IDOA announcing the availability of a variety of bid opportunities.

Interviewee #229, a Caucasian male owner of a safety training firm, said that the way he gets on projects as a sub is through referrals to the primes from previous customers, resulting in direct contact to him by the primes. He said that he does not market to primes and that they contact him. He said that he has looked on federal websites for contract opportunities, but that he never pursued anything he found there.

Interviewee #231, a Caucasian male owner of a plumbing company, said that he gets on projects as a subcontractor through word of mouth. He said that he markets to primes strictly through word of mouth and his reputation.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that she gets on projects based on who she knows and with whom she has relationships. She reported that primes use her on public and private work because of the relationship she has with them, and their confidence with her work. She stated the process for getting on projects with primes differs from public to private in that “the primes look for subs on the public work to meet goals, and the private sector work comes to me because of my previous work with that firm or because someone referred me to the firm.” She stated that primes look for MBE/WBEs to meet the goals on projects with MBE/WBE goals. She said primes who use her on public sector work also use her on private sector work because of their experience with her firm, compatibility of the technology she is using, their familiarity with her and confidence she is going to perform. She reported that she markets to primes “by first knowing the companies and what they are going after. I find this a lot easier than browsing the various websites to find work and/or getting in at the right spot/time, is very confusing.” She stated that personal contact is also critical in marketing her services. She indicated that she had been fairly successful marketing with primes until December 2008 when the economy affected the marketplace and diminished the amount of work being subcontracted to her firm. She stated that she usually learned about projects through primes calling her until a few months ago but she now has to search for work more than she ever did before.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, stated that they have been successful working as a subcontractor with primes because they have established longstanding relationships with quite a few in Indianapolis and the other States where they work. He said that they also actively seek to team with primes on current RFPs and RFQs. He indicated that his firm markets to primes, but that had met with limited success. He said, “It’s hard to keep tabs on the different agencies, and the work they have. If you don’t check their websites every day you’ll miss something. Some of the agencies send out to all of the firms on their list, but some don’t. So, sometimes you hear from somebody else who has heard about an opportunity.” He indicated that they use the Indianapolis Business Journal list of largest firms as one of the resources to identify primes, and they search Internet websites, newspaper listings, various list serves and/or procurement opportunities coming

from the City of Indianapolis and IDOA offices. He stated some primes will call his firm when an opportunity is available, but usually that prime is doing its due diligence to find work.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said “Most of my subcontractor work is through vendor referrals. Referrals and word of mouth referrals from other clients make up most of my business. It does not differ from public to private projects. Because my company is not registered/certified as an MBE, there has not been a differentiation in how I obtain work.” He said, “I don’t market my firm to primes. I don’t have a marketing budget. I make cold calls to do sales calls ... if that’s considered marketing. Otherwise, my business is by word of mouth.” However, he noted, “I did market my business for a specific church project. I found out about the job through a networking association I joined and through Bid Clerk, an online service, which sends you bid request information.”

Interviewee #306, a Caucasian male owner of a carpet and upholstery cleaning firm, stated that he does not actively pursue a subcontractor role, but he would enter into such a relationship if contacted by another business entity. He stated, “I’ve entered into a subcontracting relationship with a prime contractor only once in the history of the company, and that came about as a result of networking.” He added that the prime contractor in that instance was a WBE. Interviewee #306 reported, “I typically market the business to face-to-face.” He stated that the one time he served in a subcontractor relationship he was called by the prime who had already secured a contract for the work he performed.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said “primes ask me to bid” and indicated that there was no difference between public and private sector work in this regard and no difference with MBE/WBE goal projects versus non-goal projects. However, he indicated that his firm markets to primes typically through personal contacts, letters, and people to people. He said that he learns about jobs and when primes are bidding on something through web-pages, and “I mostly stay in contact with primes- personal contacts and letters-and by word of mouth.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, stated that in the rare times the firm has served as a subcontractor, it got on the project by “Word of mouth. Again, the contractor knew us.” She said that she does not market her firm to primes and stated, “Even though we were pretty slow last year, we stayed busy — we don’t want to market too much. Word of mouth has been our main means of marketing and that has worked pretty well for us. We also have a website. We also get recommendations from other customers and other companies and from the Vibration Institute — we are a corporate sponsor. They have us listed on their website too.”

Interviewee #312, a Caucasian female and corporate officer of a construction firm, stated that they secure work as a subcontractor when the primes seek them out. She said they do not actively solicit subcontractor work. She said, “We don’t market our firm to primes, our current [large] contractor keeps us pretty busy, so we haven’t sought out other opportunities lately.”

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company, said “When prime companies find out about work [we] usually get a call from them to bid on a project. Sometimes if it is a public goal project I don’t get the job because MBE/WBEs are

needed for the prime to get the job. Other times I have to come down on the bid price because it is a public job.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said that the firm markets at trade shows and through personal networking. She said that they have a good business reputation and that other major telecom carriers know about them. She noted that most of the jobs they submit for are sent to them via a web-based subscription service.

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, commented on how his firm secures work as a subcontractor. He said “We advertise and call clients. We get referrals from our current clients. Most of the time we find out about jobs through our existing clients. Primes will contact us for base rates on a certain number of staff. We also do online searches at each State website for upcoming projects. We have been successful. If we contact 10 businesses we can get at least two or three jobs out of it.” He stated, “There is no difference between a private or public work. We handle getting work the same way.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, stated that her members get on projects as subcontractors the way any firm would: attend proposal meetings, outreach to prospective buyers and primes, marketing and staying in front of the decision makers. She stated, “Yes, our members market their firms to primes, especially those members that are subs, and they do this through standard vehicles — [for example,] proposal meetings, getting out there and selling themselves, developing good reputations, etc. Also, our members will hear of a job opportunity and will refer one of our subs to that prime.”

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, said MBEs get on contracts as subcontractors through existing relationships, responding to bids, and sometimes through the firm acting as a conduit. She said, “I would say there’s no difference in how MBEs get on projects as subcontractors between public and private sector except if it’s goal/non-goal projects it depends on whether the prime is going to be compliant.” She stated, that in her personal experience primes do not like being forced to work with MBEs. She said that a lot of times the corporation/end user wants to stick with the incumbent which may not be an MBE, and a lot of times they do not want to include different suppliers/diverse suppliers in their RFPs. She said that they seem to be resistant to supplier diversity.

Interviewee TA #7, the African American male representative of a civil rights agency, stated that MBE/WBEs market through Statewide networking events, pre-bid meets, personal networking, but that they do not do a lot of radio advertisements, fundraisers, victory celebrations, lunches or golf outings. He said that the subcontractors spend time developing relationships before they bid. He commented that MBE/WBEs do eventually end up getting subcontractor work with public entities because they were notified, went through the proper certification, and stayed on top of the opportunities.

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said that subs get on INDOT projects through past experience, people looking at the directory, and sending out solicitations for quotes.

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, said that the subcontractors secure work through, “bidding, knowing who is bidding and getting quotes to them, developing relationships with the primes. It doesn’t matter if it’s public or private.” He said, “There might be some majority firms who might want to work on a job with limited opportunity because the prime has to fill a goal. The disadvantage is to the majority subcontractor and could lead to the detriment to the overall cost of the project — having to pay more money to a sub versus taking the most competitive price.” He also stated that subcontractors should be more active in soliciting work from primes. He said “I think there’s a perception that many of the subs have that they should have the prime coming to them soliciting them to quote project, and what I’m getting at is there should be an expectation that these subs should go out and find work versus being solicited and expecting primes to come to them. There’s a lack of marketing by subs to primes. I think there’s an expectation that’s promoted by government that if you’re a certified firm the work is going to fall in your lap. When in fact, the certified firms need to have a business plan that includes acquiring work.”

Interviewee PF #23, the African American owner of a construction firm, indicated that primes are not interested in using him as a subcontractor on contracts that did not have MBE/WBE or DBE goals or other programs to encourage MBE utilization. “No, they don’t want to give it to you.”

Interviewee PF #24, the African American female owner of a construction and consulting firm, indicated that MBE/WBE subcontractors would not have had success to work on State construction contracts without the MBE/WBE Program. “Sometimes we do business with those people that we know and like, based on those building relationships. In many instances as a minority- or woman-owned business, we don’t have the opportunities to be in the network that other businesses might have when there’s an ongoing relationship. And business is about building relationships.” “I do have those relationships in place. It took years to build.” “If we can get beyond the fact that somebody may be different than you, look different, come from a different side of town ... I think those are challenges that I would like to stand here and say that are gone, but they are not.”

Some interviewees reported having worked with an MBE/WBE/DBE prime contractor.

[Interviewees #: 102, 107, 200, 205, 209, 210, 212, 213, 228, 300, 303, 305, 306, TA #5, TA #8]. Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, said he worked for one MBE prime and it was “a very positive experience.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, reported that they have served as a subcontractor to established MBE/WBE firms. He stated that they have not been a subcontractor to a start-up MBE/WBE firm, and therefore, they have not had any negative experiences with their MBE/WBE primes.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that in comparison to non MBE/WBE primes, MBE/WBE primes are “a lot more understanding and willing to go the extra effort to use MBE/WBE/DBEs. They’re a lot more willing to meet the goals ... a lot of the companies...send you out a thing requesting for a quote just to get a quote from you and they never have the intention of using the WBE/DBE whatsoever. And that’s their good faith attempt.”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that she sees no noticeable difference between working with MBE/WBE primes versus non-MBE/WBE primes, adding, “There are very few of them (MBE/WBE primes) ... typically small.”

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, reported that she has only worked for one WBE prime, who paid her four to five months late.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that she has worked for one WBE prime and that the experience was no different from working with a non-WBE prime.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated she has not worked with very many MBE/WBE primes, but she has not noticed a difference in the few with whom she has worked in comparison with non-MBE/WBE primes.

Interviewee #303, the Caucasian female owner of an electrical contracting business, stated that she has worked with a WBE prime and that the WBE prime was always struggling to secure dollars and struggling to get paid. She said that she is sure that the WBE prime would have a lot to say about the City and added, “Do I think she was having these problems because she was a woman? No, I think she was having these problems because she was working for the City.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said “I have worked for WBE firms ... one in Houston, Texas and one in Indiana. The experience was phenomenal, and both were great, high quality organizations, professional and proactive in their hiring process and diversity.” Interviewee #305 said, “I worked for a WBE prime. I provided a bid for a State police organization for audio/video equipment, and the organization was required to have the project go through an MBE/WBE-owned firm. I subbed the work through a WBE prime from Fairfax, Virginia. In fact, working on this project with the WBE prime established a great relationship. The paperwork and process were seamless. It opened up doors for me to work on other projects the Virginia firm had in Indiana.”

Interviewee #306, a Caucasian male owner of a carpet and upholstery cleaning firm, said that he has only served as a subcontractor on one occasion, and that was to a WBE entity. He indicated that the subcontractor arrangement that he entered into with a WBE prime contractor was “financially beneficial” and that, should the occasion arise again, he would re-enter a similar working relationship. He added, “She just had a job and knew that I could do it, so she called me up.” Interviewee #306 stated that his one experience working with a WBE was “good” and “mutually beneficial.” He added, “I would work with her as a subcontractor again if she called,” and he would renew the relationship in the future should opportunities to work together again arise. He said, “I do not actively pursue subcontracting with prime contractors but will participate in the opportunity when it is presented.” Interviewee #306 reported that the connection with the WBE prime was established as a result of a local Chamber of Commerce networking opportunity.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, reported that she was aware of MBE/WBE prime contractors. She said “I do

know of WBE primes who do not use WBE subs, which is certainly not in the spirit of our organization. I don't know how often this happens, nor do I know the reasoning for it."

Interviewee TA #8, an African American male President and female COO of an organization that provides assistance in the highway construction industry, said that DBE primes tend to have more compassion. He stated that "The non-MBE/WBE/DBEs fight the program because they don't want to give away any of the work unless they are giving it away to their wives, daughters."

Other interviewees reported having little or no experience working with an MBE/WBE/DBE prime contractor. [Interviewees #: 103, 104, 111, 112, 118, 119, 120, 121, 201, 204, 206, 207, 211, 214, 215, 216, 218, 221, 222, 223, 225, 229, 231, 301, 312, 315, TA #6, TA #10].

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that although he has never worked with an MBE prime, he believes that there is probably no difference between MBE and non-MBE primes because "they're all trying to keep it to themselves ... it seems like nobody wants to work together until the economy gets bad, then it's way too late ... everybody has a brilliant plan to get together and join forces when the economy gets bad, but as soon as it picks up they're off on their own again."

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that he has not worked for any MBE/WBE primes, but he has worked for MBE/WBE subs as a second tier sub. He has not had positive experiences in working with MBE/WBE subs. He said that these firms did not pay promptly and that they were not trustworthy.

Some interviewees reported that the same prime contractors solicit them for work in both the public and private sectors. [Interviewees #: 107, 116, 123, 128, 200, 201, 202, 205, 206, 207, 209, 210, 211, 212, 216, 221, 223, 228, 300, 307, 313, 315, TA #8, TA #10]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, said that there are primes that use them on public sector work who also use them on private sector work because of their performance.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that there is really no difference in getting on projects in the private versus the public sector. He stated that primes that use his firm in public sector work also use his firm in private sector work.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that primes that use his firm for public sector work also uses his firm for private sector work. He said that because there are no MBE/WBE requirements on private contracts, it is easy to be selected as a sub on private construction projects.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that primes use her on public and private work because of the relationship she has with them and their confidence with her work. She stated that the process for getting on projects with primes differs from public to private in that "the primes look for subs on the public work to meet goals, and the private sector work comes to me because of my previous work with that firm or because someone referred me to the firm." She said that primes look for MBE/WBEs to meet the goals on projects with MBE/WBE goals. She stated that primes who use her on public sector work also use her on private sector work because of their experience with her firm,

compatibility of the technology she is using, their familiarity with her, and that confidence that she is going to perform. She stated that in her line of public work, “primes seem more eager to work with you when they can use you to meet the WBE goal.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said that primes that use his firm on public sector work also use his firm on private sector work because “[t]hey know I can perform. Once you build a relationship, public or private doesn’t matter”.

Other interviewees reported that the same prime contractors do not solicit them for work in both the public and private sectors. [Interviewees #: 113, 207, 213, 222, 225, 229, 231, 301, 305]. Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said that he seldom gets calls from the public arena, and almost all calls come from the private sector. He added, “That’s why we have almost exclusively moved our focus from the public arena to the private. MBE and WBE primes seem totally disinterested in us.”

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that the primes that use his firm on public sector work do not use his firm on private sector work because all of the primes for which his firm works are associated with a particular building.

Interviewee #229, a Caucasian male owner of a safety training firm, said that primes that use him on public sector work do not use him on private sector work because his sub-contractual work is strictly performed for public sector clients.

Interviewee #231, a Caucasian male owner of a plumbing company, said that since he only works in the private sector, primes who use him on private sector jobs do not use him on public sector jobs.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that primes using this firm on public sector work do not use them on private sector work, and this is because of the requirement to meet goals on public work versus private work. He said that there is a definite difference in being a subcontractor on MBE/WBE goal projects versus non-goal projects in that the subcontractor work diminishes sometimes from what was agreed upon in the contract.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “I don’t have experience working with primes on public sector work who use my company’s services on private sector work. The focus for the primes I worked with is either strictly public sector or strictly private sector work.”

Some interviewees reported that they have been denied the opportunity to submit a bid or price quote to a prime contractor. [Interviewees #: 128, 202, 205, 207, 214, 215, 221, 222, 225, 226, TA #6]. Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, reported that he had been denied an opportunity to submit a bid or price a quote to a prime in the last ten years. He said “I’m pretty sure this was based on racial prejudice. You can just tell by the excuse these majority companies give for not selecting you. For example, ‘Your firm is just not big enough ... you just don’t have sufficient resources....’”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, stated that his firm has been denied the opportunity to submit a bid to a prime because his firm lacked the proper certification. He added that to work on a particular hospital's job, a firm has to be Clarian-certified, and his firm had let its certification expire.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that his firm has been denied the opportunity to submit a bid to a prime contractor. He explained that soon after he had established the firm, a prime asked him "to do some things that we thought were not illegal, but unethical ... and when we refused, their response was, 'We won't ask you to bid our work anymore.'"

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he has been denied the opportunity to submit a bid to a prime. He said that he speculated that the reason why his firm was denied the opportunity to bid was because the prime was able to fill its requirement through the services of another firm.

Interviewee #221, a Caucasian male owner of an excavation firm, said that he has been denied an opportunity to submit a price quote to a prime on a public works bid because his firm is not certified as an MBE or WBE, and he said that only MBE/WBEs were permitted to bid on the job. He said, "I don't think it's necessary [to have certified MBEs and WBEs] in this day and age. Maybe at one time women were discriminated against and I think at one time, minorities were. But, at this point in time in our society, I think that went away.... The State shouldn't have that in their laws anymore."

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that she was recently denied an opportunity to submit a bid to a prime. She said that when a firm that was not even listed as a prospective prime in the plan room won a bid, she contacted the firm and asked to submit a bid. She said they refused, and that they had already selected a non-MBE/WBE sub to do their painting. She said the firm, however, told the City of Indianapolis that they were planning to self-perform and, as a result, did not need to hire a sub at all. She then reported this problem to the City, but the City did nothing about it. She said she felt the prime lied to the City but there were no consequences to the firm for doing so.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that he has experienced several instances in which he has been denied the opportunity to submit bids to primes because he is not MBE-certified, and the primes wanted to hire an MBE-certified sub. He stated, "I guess it's a requirement to be a minority-registered business."

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that she has been denied the opportunity to submit a bid or price quote to a prime because the prime already knew who it wanted to use as a sub. She added, "People have their preferences for test technology even within a big company."

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female President/CEO, said "I have heard of some of our MBEs being denied an opportunity to submit a bid/quote. I usually hear about it after the fact, and I think it happens because some of the buyers are resistant to supplier diversity, they block opportunities, they want to stick with the incumbent."

Most interviewees reported never having been denied the opportunity to submit a bid or a price quote to a prime contractor. [Interviewees #: 101, 104, 107, 111, 112, 116, 118, 119, 120, 123, 200, 201, 202, 204, 206, 209, 210, 211, 212, 216, 218, 223, 228, 229, 231, 300, 301, 303, 305, 306, 307, 308, 312, 313, 314, TA #5, TA #7, TA #10]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, stated they have been subcontractors on between 10 and 15 projects, and at no time have they been denied the opportunity to submit a bid to a prime.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said, “I’ve never been denied the opportunity, but circumstances, such as high bond or insurance requirements eliminate our firm from competing for some larger jobs.”

Many interviewees reported that there are certain prime contractors that they prefer to work with due to established relationships or for other reasons. [Interviewees #: 100, 101, 102, 107, 116, 119, 123, 128, 200, 201, 202, 203, 205, 206, 207, 209, 210, 211, 212, 213, 214, 215, 221, 222, 223, 225, 228, 229, 231, 300, 301, 307, 314, TA #5, TA #6, TA #7, TA #10]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said “there are primes I prefer working with, especially the ones we’ve developed good relationships with through our good services.”

Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, stated that there are primes with whom they prefer to work because they have already developed a good working relationship, and the “comfort level” is high.

Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, stated that he has developed good working relationships with some prime contractors. Interviewee #102 reported that he considers some of these relationships very beneficial.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said there are primes who share his values, are committed to quality, and are fair, and those are the ones with whom he has established relationships.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, said there were some fellow printers with whom he had developed relationships and preferred to work with, although he does not necessarily think of fellow printers as primes.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, said there were some primes with whom he had developed relationships and preferred to work with, basically because “they know what we can do and they value that.”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that he prefers to work with clients that the firm has partnered with for a long time because “you know what they’re going to want.” He added that there is a “learning curve” in working with new primes.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that there are definitely primes with whom she prefers to work. She said, regarding those preferred firms, “they don’t pull any punches ... they tell you up front the way it’s going to be ... if something changes, they’re on the phone with you immediately saying ‘Hey, this has changed.’”

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that there are primes with whom she prefers to work. Specifically, she reported that she would prefer to work with those primes that pay her and that do a “nice job.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said he would serve as a subcontractor to any firm, but would prefer to work with the better engineering firms. He added that he wants his firm to be known for “engineering excellence.” He said that he knows which prime contractors are good and which are not based on his experience with them while working at IDEM.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that there are many primes with whom he prefers to work and has established a relationship, most of which are large, well-established firms.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that there are primes with whom he prefers to work because he can “trust them.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that his firm prefers to work with primes that “traditionally get the work...I guess you want to bet on a winning horse.”

Interviewee #209, the president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that there are primes with whom he prefers to work because they have established a “mutual relationship ... they know our abilities and we know theirs ... if they tell us that they’re going to have two miles of dirt ready for us to pave on next Tuesday, you can pretty well schedule to go next Tuesday. And there are some [primes] that tell you that and won’t be ready until a week after Tuesday. Some of them pay good and some of them work with you when you’re having trouble on a particular item.”

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that there are primes with whom he prefers to work because they are located in the ten counties he serves.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that there are primes she prefers to work with because they are dependable. Regarding one prime in particular, she commented, “We’re a customer of theirs and they’re a customer of ours... We sell them components and they do machining for us.” She said that there is one prime with whom her firm has established a relationship and with whom her firm prefers to work. She said, “We are the preferred test technology supplier for that prime already ... they announced that we have a loose partnership and we’re going after work together.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that there are primes with whom he prefers to work and with whom he has established a relationship. He said that working with primes that he has previously worked with makes the job “go smoother with a profit at the end of it.”

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that there are primes with whom she prefers to work and with whom she has established a relationship. However, a prime that she now has a strong relationship with did not start out that way. She explained that a prime to which she submitted a bid for the Indiana Convention Center won the job. She said that when she discovered that the firm had won the bid, she called to congratulate the owner and asked about getting her contract started. She said the business owner said that he had no intention of using her firm on the job, stating that he used her firm’s name, but not her price on the quote they submitted and won. She said that the prime told her that someone from the State put some pressure on him to hire her. She said that the prime now likes her firm’s work and they are collaborating on other projects.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that there are primes that he prefers to work with and with whom he has established a relationship because they “understand the plight of the vendor.”

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that there are primes with whom her firm has established a relationship and prefer to work with, especially those that pay on time.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that she has developed a longstanding relationship with a WBE electrical firm that she tries to use whenever she needs that type of work. She said that there are certain primes with whom she prefers to work stating, “it’s just building up a relationship with them, knowing they are going to pay me on time, will be reasonable with their requests, and not going to suddenly flip out and change deadlines [with her] for the heck of it.” She indicated that she has worked with some of these firms for 15 years.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, stated that there are primes that he prefers to work with “because of past work experience.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, stated there are certain primes that their member subs have developed relationships with, and that is because the prime pays a decent wage, pays on time, and is professional and reputable.

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, said “there are corporations our MBEs prefer to work with because of established relationships, and business they have gotten.”

Interviewee TA #7, the African American male representative of a civil rights agency, said he is aware of several primes that MBE/WBEs prefer to work with because “they know what they are doing, they trust them, payment will be on time, and they feel the prime will treat them fairly.”

Other interviewees reported that there are no primes with whom they would prefer to work. [Interviewees #: 111, 112, 118, 120, 204, 216, 218, 226, 306, 307, 308, 312]. Interviewee #216, an African American male owner of a business consulting firm, said, “I have people who I’ve worked with a long time that I’m comfortable with, but I wouldn’t say that I have any selected people that I prefer over one another.”

Some interviewees reported that there are certain prime contractors that they will not work or with whom they would prefer not to work for a variety of reasons. [Interviewees #: 101, 102, 104, 105, 107, 112, 113, 116, 123, 201, 202, 205, 206, 207, 210, 213, 221, 222, 225, 226, 231, 300, 305, 313, TA #5, TA #6, TA #8, TA #10]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, stated that there are primes that they prefer not to work with because that prime has a negative reputation or because there is a personality conflict between the prime’s team and their team.

Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, indicated that there are a few primes in the area whose jobs he will not bid on because they “peddle his numbers” to other subcontractors with whom they intend to do business.

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated that the only primes that he would even consider refusing to work with or to whom he might not submit a bid would be one that has a negative reputation regarding openness to minority businesses.

Interviewee #105, a male Caucasian owner of a small concrete contracting firm, stated that there are some primes that he will not work with. He described those primes as those primes that do poor work, who have not paid him on past jobs, and who bid low on a job, get half their money up front, and then don't show up for the job the second day and just disappear.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, said that there are primes with whom they do not want to work because of their selection process. He stated that some prime contractors will get bids from everyone, and they have no loyalty.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, indicated that there are primes with whom her firm would opt not to work because of the quality of work completed by these companies.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said that “there are some primes I refuse to work with, and that would be because some primes can be very unfair, arrogant, and have a very poor payment history.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated “Some general contractors find reasons not to pay you the final 10 percent of the contract.” Interviewee #116 named a firm in Chicago and one in Gary that he reported are not good about paying the final 10 percent of a contract to their subcontractors. He reported that they claim that they are not satisfied with the work, so they do not pay the remainder.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, indicated there were some primes he would not work with, and that would be if “the prime were just using us for a certification requirement and not for our expertise.”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that there are primes that she will not work with because they are slow to pay or do not pay at all and have poor project management skills.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, stated, “Any prime that I wouldn't work with is from a personal bias that I might have ... someone that I worked with before ... there's no chemistry there.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that there are some primes with whom he will not work, citing that they are “smaller guys” and “they don't pay.”

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that there are primes that he will not work with because of non-payment issues.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that there are primes that his firm will not work with, including those who “don’t have a good reputation with INDOT or their chances of getting a project are slim.”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, that there are primes she will not work with because they do not pay at all or that they are slow to pay.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that there are primes that she will not work with because they will not pay.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, stated that there are primes that he will not work with because they “don’t care about partnering and they often want the bids to come in at a pricing level that we just can’t perform the work at.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that there are firms with whom she will not work because they have not paid her on time.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “There are primes I prefer to work with because of established relationships with the supervisor/representative of the project and because they pay on time.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said “the primes our members will not work with are those primes who do not pay well.”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, said subcontractors have primes they will not work with because the subcontractor might experience, “problems getting paid, performance ... say if the prime is never on schedule ... [the subcontractor] can’t predict how the project is going to progress.”

Other interviewees reported that there are no primes with whom they would not work.

[Interviewees #: 118, 119, 120, 121, 128, 200, 204, 211, 212, 214, 215, 216, 218, 223, 229, 228, 300, 301, 303, 305, 306, 308, 312, 314, 315]. Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “There are not any primes I would not work with ... yet. If I learn or experiences a prime not paying on time or not paying at all I would not work with them again.”

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, said, “Work is work. Whoever is paying the salaries of my men is who we work with. There aren’t primes we won’t work with unless they don’t pay us. “

III. Experiences in the Private Sector and Public Sector.

A. Private Sector Work Experience.

Some interviewees reported that the majority of their work is in the private sector.

[Interviewees #: 101, 103, 104, 107, 108, 109, 110, 111, 112, 113, 115, 117, 118, 119, 120, 121, 122, 125, 126, 127, 128, 201, 202, 203, 204, 205, 206, 208, 214, 215, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 230, 231, 300, 301, 303, 305, 306, 307, 308, 309, 311, 312, 314, TA #2, TA # 4]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, calculated that their public sector work is about 90 percent of their total projects, with 10 percent in the private sector. He said that there has been no trend toward or away from the private sector, and the mix of private and public sector work varies only slightly from year to year.

Interviewee #103, a male Caucasian owner of an excavating firm, stated, “I will work for anybody.” He said that most of his work is in the private sector, but this past summer he worked on his first public sector project.

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, said that in the last 15 years, almost 100 percent of his projects have been in the private sector, but it varies little from year to year.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, indicated that 85 percent of their work has been in the public sector and this mix has been consistent from year to year. He stated that they are trying to build more private sector work.

Interviewee #108, an African American male and previous owner of a commercial cleaning company, said, “The majority of my work was in the private sector, mostly because that’s where I could find work. I tried a few public sector projects, which I liked, but I was not able to obtain very much public sector work.”

Interviewee #109, a Hispanic male president of an industrial cleaning firm, reported that he finds “it much easier to get work from private firms rather than public. There are fewer hoops to jump through. So, I just pretty much limit myself to private sector work.”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that her firm tends to do more work in the private sector than in the public sector. She added that that she can use word of mouth to get additional private sector business.

Interviewee #111, a Hispanic male owner of an engineering services firm, said that the process of getting work is much easier in the private sector. He reported that it is all based on word of mouth. He also stated that 95 percent of his firm’s work this year was in the private sector. He reported that there was a point years ago when 80 percent of his firm’s work was public, which he did not like, but when 9/11 hit, his firm was lucky to have public work because the private sector work stopped: “I don’t like to have all my eggs in one basket.... I don’t want to rely only on minority work either.” Interviewee #111 also said that most of the private work his firm does has to be approved by someone in the public sector.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that 100 percent of the firm's business in 2009 was in the private sector. However, she said that the firm recently obtained some work in the public sector. She indicated that they hope that there will be a trend towards receiving more public sector work in the future. She expressed that public sector jobs are a little bit harder to go after than private sector jobs. She indicated that her company is trying to develop a strategy to be better able to provide the quality that they offer within the budgets that the public sector can afford and the funding to which they are limited. She added that attempting to get work in the private sector has been much more fulfilling and exciting. She said "The more work we get, the more we're able to employ people." She indicated that attempting to get work in the public sector has been more disappointing for them. She added that working in the private sector has been a good experience and that they definitely have to carry out what they are selling.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, "When we started out, almost 90 percent of our work was in the public sector. More recently, it has moved in almost the complete opposite direction. Today, about 90 percent of our work is in the private sector. The current economic conditions have made this shift necessary."

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said that 95 percent of his work is in the private sector, and not even 5 percent is in the public arena. He stated, "I find working in the private sector easier because private companies are very specific in their work requirements and their RFPs are clear and far less complex than public-sector RFPs. There is also far less hierarchy to go through in the private arena than in the public."

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, shared that the vast majority of their work is with the private sector. He also stated that "Once you develop a relationship with a company, they then solicit our bids for work and we don't have to pursue them as much." He noted that the private arena is easier to work with, is more profitable, and word of mouth works well for them.

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated that 99 percent of their work is in the private sector, that this had been the case since they opened their business in February of 2006, and he anticipates this pattern will continue for the foreseeable future.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, stated that almost all of his business comes from the private sector. He noted that this has been the case since he opened his business and he anticipates this pattern will continue for the foreseeable future.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, responded that his company only does work in the private sector.

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated that his company does about 80 percent of its work in the private sector. He said that he markets his company through his sales staff.

Interviewee #122, an Asian Pacific American female President and CEO of a WBE-certified consulting firm, stated that 100 percent of her business comes from the private sector. This is because “the government structure is too hard to work with.”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, stated that 80 percent of their business comes from the private sector and the remainder from the public sector. She said that the public sector work seems to hold steady at about 20 percent.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she really has not noticed the local trends toward or away from private sector work, especially since there is currently no competition for the niche her firm has selected. She said that her preference is to conduct private sector work.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, stated that 20 percent of her firm’s work is public sector work and 80 percent is private sector work. She stated that her firm has seen no real trends toward or away from private sector work. She remarked that the mix between private and public sector work varies from year to year.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that it is easier to get private sector work than public sector work. He added, regarding private sector work, “If they need the work done, and they feel you are qualified, you get the work. There are no politics involved.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he has noticed a trend toward private sector work. He mentioned that he believes that the mix of public and private sector work stays the same each year.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that there has been a trend toward private sector work lately. He said that when he started the business, that most of the firm’s work was large public sector jobs, but those projects have been completed, and only smaller public projects are currently available.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that his firm typically performs private sector jobs. He said, lately 100 percent of his work has come from the private sector.

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that until this year, all of the firm’s work had been conducted in the private sector. This year, 25 percent of the firm’s total work has been generated through one contract in the public sector. He said that the firm plans to market more to the public sector in the future because he believes that “larger contracts with better opportunities” will come from public sector work. He said that the firm’s website is a way they market their firm. He is in the process of overhauling the firm’s marketing focus. He said that the firm uses Constant Contact to send e-mail blasts to prospective private and public sector clients. He said that he has discovered that there is a list of firms that are certified to supply engineering services to the aerospace industry. He said that he believes that being

on that list will be helpful in marketing the firm and he is working toward having his firm on that list.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that 90 percent of her firm's work is on private sector jobs and that 10 percent is on public sector jobs. She said that she has seen no real trends and that the mix of work has not varied much from year to year.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that 100 percent of his work has always come from the private sector. He said that he has noticed that there is a trend toward public sector work and that several of his clients are now starting to try to sell to government agencies.

Interviewee #217, an African American female owner of a commercial cleaning service, said that 100 percent of her firm's work is and always has been on private sector jobs. She said that she is not experienced enough to know if there is a trend toward or away from private sector work. She said that to obtain work in the private sector she mails packets to offices and distributes them personally. She did note that her success rate is better when she has face to face communication.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that 100 percent of his work has always come from the private sector. He said that he has never attempted to get work in the public sector. He said that to get private sector work, all he needs to do is to wait for the customers to call him because his business is well-established now. He said that when he first started his business, he advertised to prospective customers through flyers and by introducing himself to managers of businesses.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that 99 percent of her firm's work is on private sector jobs and that 1 percent is on public sector jobs. She commented that 75 percent of her business is in the residential sector. She said, "Public sector work has never been a huge percentage for us. All work has been down over the past year. Actually, some of the public [work] that we do seems to be going on despite of the [economic] downturn." She said that she really has not seen a trend either toward or away from private sector work. She added that the mix of work from year to year does not vary.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that currently 100 percent of her work comes from the private sector and that it has been that way for the past 15 years. She said that in the first three years of her business, she worked primarily in the public sector, adding that it was public sector jobs that initially caused her business to grow. She said 15 years ago, she decided to move exclusively into serving private sector customers. She said that to obtain private sector work, she uses her website, participates in trade shows, conducts cold calls, sends out direct mail pieces, networks, and gets referrals from existing customers.

Interviewee #221, a Caucasian male owner of an excavation firm, said that 25 percent of the work his firm performs is for the public sector and 75 percent of the work his firm performs is for the private sector. He said that he has noticed a trend away from private sector work. He said that his mix of public and private work has varied over the years, adding that in some years, he has performed no public sector work at all.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that in 2008, 31 percent of her business came from public sector jobs and in 2009, 40 percent of her business came from public sector jobs. She said that there is a trend away from private sector jobs. She stated, "If you're not going to do public work, you're not going to survive in this economy." She said that traditionally, her firm has done a lot more private work. She said that no one is even drawing building plans at this time.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that 80 percent of the work his firm performs is for the private sector and 20 percent of the work his firm performs is for the public sector. He said that he has noticed a trend away from private sector work lately. He said that the government work "is keeping us going." He said that the mix of public and private work is mostly the same each year.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that 97 percent of the work his firm performs is for the private sector and 3 percent of the work his firm performs is for the public sector. He said that he sees no trends either away from or toward private sector work. He said that the mix of private and public sector work does not vary from year to year.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that less than 5 percent of the work his firm performs is for the public sector and that over 95 percent of the work his firm performs is for the private sector. He said that there is currently a local trend toward private sector work.

Interviewee #227, a Caucasian male owner of a truck haulage company, said that about 2 percent of the work his firm performs is for the public sector and about 98 percent of the work his firm performs is for the private sector. He said that the public sector work he has performed has not been for State of Indiana agencies or higher education institutions. He said that there is a local trend toward private sector work, adding, "There's no money in government jobs." He said that this mix does not vary year-by-year.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she is willing to do either public or private work, although 80 percent of her work is private and 20 percent is public. She stated that the mix of work does not change from year to year at this time.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, reported that 75 to 80 percent of their work is private sector primarily because this has been their niche since the firm was started. He said, "We have started to focus more on the public sector in the last five to six months because the [private sector] work is drying up." He stated that the mix of work from year to year is about the same. He mentioned that they have had more experience working in the private sector with churches, and they prefer this medium because they get to work as prime, they have a portfolio that supports them being experts in this arena, and traditionally they have not had to chase this work.

Interviewee #303, the Caucasian female owner of an electrical contracting business, said that she has experience working in both the private and public sector, but the majority of the company's work is with the private sector, and very little is from the public sector.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said “95 percent of my business comes from private sector work,” although he indicated that his firm has done some work in the public sector. He also reported that there is not a trend toward or away from private sector work, and there has not been a mix year by year for his firm.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, reported that his work is split about 60 percent private sector and 40 percent public sector, and he has seen no trending toward or away from private sector work. He said that the mix of work varies by year, and “it all depends on budgets for organizations, agencies and companies.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, reported, “90 percent of our work is in the private sector with only about 10 percent in the public sector.” She said that there has been no trend toward or away from private sector work, and the mix does not vary year by year. She added, “We keep our prices low — this is a niche industry and when we do a good job others hear about us.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, stated, “90 percent is probably done for private sector companies. We do about 10 percent of our work for Vincennes University and the local hospital, and that is typical.” He said of consumers in the private sector, “more often they buy from friends — people we’ve established a relationship with — they like to buy locally.”

Interviewee #311, a Caucasian male owner of a computer firm, reported that his firm’s business is split “[a]bout 70 percent from the private sector and 30 percent from the public sector.” He continued, “That has held pretty steady over the years ... However, he indicated that there has been a movement toward more public sector work recently, commenting “It is up to about 40 percent of our workload now.”

Interviewee #312, a Caucasian female and corporate officer of a construction firm, replied that “100 percent of our work is private sector. We have done work both at Ivy Tech and the University of Southern Indiana (USI) but we worked for [a prime], not the schools.” When asked how they secure work in the private sector she stated that “[My father’s] connections usually get us in the door. They usually help us if there is a bid process.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said, “We only do private work now. It’s been four or five years since we did public sector work. So I can only say the trend for us is toward the private sector.”

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that she has seen a trend toward private sector work. She said that there is a real collaboration between the private and public sectors in the community. She stated, “I think people recognize that the private sector really is the economic engine and doesn’t rely as much on government assistance.” She said that she does not think that the mix of work varies from year to year.

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, stated that some of his larger

members have about a 60/40 split between government and private work. He said that many of the firms do business in the private sector only.

Other interviewees reported challenges in connection with pursuing or performing work in the private sector. [Interviewees #: 102, 108, 200, 203, 205, 206, 210, 302, 304, 306]. Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, said he finds it easier to work in the public sector because there is “less cheating” (e.g., peddling numbers) than in the private sector. He indicated that he wished there was greater enforcement of fairness rules in the private arena and that the bidding process was scrutinized more closely.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, indicated that half of the work that his firm performs is in the public sector and that half is in the private sector. He said that he sees a lot of private work bidding, but for very low prices. He noted that his firm bids a lot of private work, but it cannot compete because there are firms out there willing to do the work “for nothing.” He concluded that the mix of private and public sector work is based on the economy. He remarked that when people get their tax checks back, there is an increased demand for lot stakes. “Everything is money-driven,” he added.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that there is a lot less private sector work than in the past because of the slow economy. He said that he could not determine the percentage of his business that is private sector versus public sector work, adding that because the economy has been so bad over the past three years, he cannot identify trends regarding the sectors from which his work comes. He said, “Based on past experience, we had a lot of private sector work which we don’t have now.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that attempting to get work in the private sector is very different from getting work in the public sector. He said, “It’s called the gauntlet ... it is very difficult to get private sector work with our State certification ... because no private company uses the IDOA or the INDOT listing to search. However, this certification here (producing his firm’s IMSDC certificate) is all private sector, but we have to pay for this. [Certain private sector companies] will not accept your IDOA certification.... This is a national organization. It is the National Minority Supplier Development Council. Every one of the companies that is a member of this national organization gets points at the end of the year for doing business with the MBEs.” He added, “The gentleman who sits on the IMSDC board is the head procurement guy for IUPUI (Indiana University-Purdue University at Indianapolis). Yet, IUPUI does not solicit companies from the State certification list.... They are exempt from the Indiana Department of Education requirements. The universities in Indiana are exempt. They have over a two billion dollar budget at IUPUI, yet last year they spent less than 3 percent (on MBE/WBE businesses).... The only reason we get calls from [IUPUI procurement] is because of [IMSDC].”

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he has noticed a recent trend away from private sector work, which he said is not good for him because he typically performs private sector jobs. He said that the mix of private and public sector work generally is “pretty consistent” for him.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said, “It’s a lot harder to get on private work.” She added that private bids are not always open to the public, “so you don’t know about them.” She said that private firms do not have to take the lowest bidder, so they “pick and choose who they want to do the job.”

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, said that the company has had problems with the private sector reimbursing for services provided and is currently in litigation with a private company.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said that “Private companies won’t do anything because of fear of the economy.”

Interviewee #306, a Caucasian male owner of a carpet and upholstery cleaning firm, reported that attempting to get work in the private sector is a challenge, particularly in the current economy, and that “Getting jobs, marketing, and soliciting work is a pain ... but you’ve got to do it.”

Some interviewees reported fairly equal work in the public and private sectors. [Interviewees #: 123, 200, 228, 302, 310, TA #5, TA #6]. Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated that 55 percent of his business comes from the private sector and the remainder from the private sector. He said “there has been a recent trend toward the private arena, but it does vary from year to year.” He did note that one advantage of the public sector is its access to stimulus money which the private companies cannot always access.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that 50 percent of her firm’s work is on private sector jobs and that 50 percent is on public sector jobs. She said that she has seen a trend toward public sector work because of the federal stimulus funds. She added that the mix of work tends to vary year-to-year.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, reported that he has experience working in both the private and public sector. He stated that half of the company’s work is with the private sector. He said that his public sector work is either with IDEM as it relates to State work or with municipalities (e.g., fire departments and police departments). Interviewee #302 said, “We prefer public sector work. While they are slow in paying, you are always guaranteed to receive the funding.” He indicated that the company does not go after an enormous amount of State work, but when they do, they normally secure 75 percent of the bids.

Interviewee #310, a Caucasian male owner of a moving company, said, “It is probably 50/50 from civilian to government work, and that is typical. We have a storage contract with the federal government, and then we have a baggage contract.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said that if there is any trend, it is probably toward the public sector because there seems to be more funding in this sector as opposed to the private. She stated, “I think many are trying to keep a mix of work in each sector, a way of hedging bets so to speak.” She also said, “I might estimate that about 40 percent of our members do not carry a City, State, or federal certification and therefore they most likely seek and perform work predominantly in the private sector.”

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female President/CEO, said, “Most of our MBEs are working in both arenas. Obviously they are certified with us because they want to do business with the private sector. Last year we saw a major slowdown on private sector work, but that’s starting to pick-up. We saw an increase in public sector work through the ARRA — money infused into the public sector. During the bad economy the government was spending money so that sector increased from the end of 2008 through a major part of 2009 in certain industry sectors. Some industry sectors actually flourished.”

B. Public Sector Work Experience.

Some interviewees reported working predominately in the public sector. [Interviewees #: 100, 107, 111, 116, 124, 207, 209, 210, 211, 212, 213, 216, 229, 304, 309, 313, TA #1, TA #7, TA #8, TA #10]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, indicated that 85 percent of their work has been public. He said they are trying to build more private work, and that this mix has been consistent year by year.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that 95 percent of his work is in the public arena and 5 percent private. He stated, “There is no work now, and what there is, is because of the stimulus package, but with that you have to employ 58 percent minorities. They enforce this requirement by certifying payrolls.” He indicated that in his best year it was about 50 percent private and 50 percent public.

Interviewee #124, an African American male and president of an MBE-certified promotional products company, stated that 15 percent of his business comes from the private sector and 85 percent from the public sector. He said, “In the public sector the primary goal is to get the lowest price, and then it is a matter of politics. In the private sector, I can be a salesman. I can make my pitch for the best product and sell how it will fulfill my client’s needs. I can’t be a salesman in the public sector. It’s politics and lowest price, period.” He stated that recently his focus has been on the public sector because “that’s where the money is now.” He acknowledged that the public-private percentages do vary from year to year.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that 90 percent of his firm’s work comes from public sector work and 10 percent comes from private sector work. He said that since all of his firm’s work is transportation-related, the mix of public and public sector work has stayed the same throughout the years.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that 75 percent of their work comes from the public sector and 25 percent comes from the private sector. He said that there is a current trend away from private sector work since the fall of 2008, when the banking and housing problems began. He said that they used to do the paving for many new housing additions, but no one is building housing additions now. He added that the mix of work may vary by about 10 percent from year to year.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that 60 percent of her company’s work is on public sector jobs and that 40 percent is on private sector jobs. She said that the trend of late has been away from private sector work and more toward

public sector work. She said that when she started the company, she was doing much more private sector work.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that at least 70 percent of his work comes from the public sector. He said that there is a current trend away from private sector work because people have stopped building homes, subdivisions, and retail establishments. He said that the mix of public and private sector varies from year to year. He said that until recently “we’ve seen tremendous growth ... for years they were building apartments and subdivisions on every corner.” He said that construction is now “pretty well stalled here in this area.”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that there is a trend away from private sector work because of the bad economy. She said that the government is the only entity with any money right now. She said that 25 percent of her company’s work is on private sector jobs and 75 percent is on public sector jobs. She said that the mix of work between private and public sector work is the same each year.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that less than 1 percent of her firm’s work comes from the private sector. She said that there is a trend away from private sector work because of the bad economy. She said that the mix of work does not vary year by year.

Interviewee #216, an African American male owner of a business consulting firm, said that 95 percent of his firm’s work comes from the public sector and that 5 percent comes from the private sector. He said that he believes that there is a trend away from private sector work because lately the private sector has not been interested in the type of services his firm provides. He said that this mix of work has been the same each year. He said that he feels more “fulfilled” in working on public sector work than on private sector work. He said that on public sector jobs, he provides services to increase people’s knowledge and sensitivity. He said that, however, when he works in the private sector, it is usually because the client needs him to provide some compliance-related remedy which they must document.

Interviewee #229, a Caucasian male owner of a safety training firm, said that 100 percent of his work is and always has been performed in the public sector. He said that in the local marketplace, he has seen a trend away from private sector work. He added that in a slow economy, safety consulting and training gets cut from private sector budgets. He said that even in a slow economy, there is always federal work, because federal agencies still have to maintain safety regulations.

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company, said, “In 2008, [the proportion of work] was 75 percent public and 25 percent private. But it varies from year-to-year. In 2009, we did more private work.”

Interviewee TA #1, a Caucasian male President/CEO of a regional chamber of commerce, said that he does not know the percentage of his organization’s members’ work that is in the private or public sectors. He said that he is aware that extensive public sector work is currently driving the construction industry. He said that a new \$130 million arena and hotel is being constructed in downtown Evansville under a public-private partnership. He said that a new school is being built. He added that INDOT is building roads and bridges under the State’s Major Moves initiative. He said that

although the mix of public and private sector work “ebbs and flows,” he believes there is more public than private sector work right now.

Interviewee TA #7, the African American male representative of a civil rights agency, said “I think the majority of the work comes from public sector, and that is because we had more public projects going on, the stadium, highway work, IBM/FSSA utilization, etc.” He did report that he thinks there has been a trend away from the public sector to private sector because there are more private jobs.

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, he said that currently the private sector is not doing very well so more contractors have shifted to public work. He noted that there is more work in the highway market than commercial building market but generally it is pretty evenly split. He also noted that national and State economic forces drive whether a contractor performs in the public or private sector.

Some interviewees reported challenges in connection with pursuing or performing work in the public sector. [Interviewees #: 101, 104, 105, 107, 108, 109, 110, 112, 113, 117, 122, 125, 127, 200, 201, 202, 204, 205, 217, 218, 300, 303, 307, 309, TA #7]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, reported that 90 percent of his firm’s total projects are in the public sector. He commented that “with public sector work there are more hoops to jump through; private sector work is less time consuming.” He indicated that it is easier attempting to do work in the private sector, but he stated that profitability is higher with public sector work because “public agencies are qualifications-based and not cost-based like private sectors owners, so [our] firm’s fee can be higher.”

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, said that he believes that it is more challenging to get work in the public sector and cited his experience of bidding on a public project. He said that after bids were opened and the contract awarded, he called to see why his firm had not been selected. He was told, “Your bid was too low.” As a one-man shop he truly believed he could fulfill the project with half of the expense of a much larger firm that won the award at twice the dollar. Interviewee #104 thought the public entity was shortsighted in not exploring all the factors that made his particular bid so much lower than the other bids.

Interviewee #105, a male Caucasian owner of a small concrete contracting firm, indicated that he has never worked in the public sector and that all of his work is in the private sector. The reason for this division is that “I’m not union and most public sector projects are won by contractors who only hire union guys.” He stated that “on the rare occasion when I have tried for a public sector job I was told by the general contractor that I could not work on it because I was non-union.” He went on to say, “After a few times of being told that, I just gave up trying to get public sector jobs and just concentrate on jobs in the private sector.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, reported that the State is very stringent on deadlines, which makes it more challenging. In addition, the complexity on the public sector side is greater. He stated also that profitability is probably greater in the public sector, but they sometimes do more work and do not charge for it to maintain that relationship.

Interviewee #108, an African American male and previous owner of a commercial cleaning company, said “The majority of my work was in the private sector, mostly because that’s where I could find

work. I tried a few public sector projects, which I liked, but I was not able to obtain very much public sector work.”

Interviewee #109, a Hispanic male president of an industrial cleaning firm, said, “I do not seek or bid on public sector projects. I have found the insurance and bonding costs to be too costly for what my small business can afford.”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, indicated that she would have to charge less to get work in the public sector, and the amount that she would charge would not be enough to cover her overhead. She related that she does not believe that she has the resources that she needs to properly network for public sector business. She also indicated that she does not make campaign contributions, which she believes helps firms get public sector work.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that getting work in the private sector has been much easier for them than getting work in the public sector.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, “Public personnel seem arrogant and disinterested. Purdue University is one of the worst payers — slow and complicated process for getting paid.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, stated, “The private sector has open bids but the public [sector] does not really have any interest in competitive bidding. The public sector does not want to talk to us. I’ve just given up on them. Even our local government does not look to give contracts to the local folks.”

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, stated “I believe there are too many hoops to jump through in the public sector. It’s such nonsense. When I try to contact the State for questions or clarifications, I get no response. It’s all a waste of time for me, so I don’t bother anymore.” Interviewee #122 went on to remark, “In the private sector the people I deal with are so much more respectful toward me, their doors are open to me, I’m accepted for my competence and professionalism and not required to meet some degrading standards.” She stated, “So much of this is just a waste of my time. There is plenty of talk, but no results. The State says I should contact primes for work. However, I find the primes to be very arrogant and often disrespectful in the way I’ve been treated. They won’t listen to me. They tell me they already have somebody in mind for a contract and will not even listen to my pitch as to what we can do for them. The State wants us to talk to subs, but that is a waste of time and I’m sick of it. I have given up on getting work in the public sector. And I’ve pretty much set the public sector aside and still managed to grow, so I don’t really care anymore about State projects.”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, said “When working with local municipalities, we find they do not send out many details about the projects they want us to bid on. At times, there is not even a RFP. We also find that when bidding for State projects, especially if the State is spending federal money, there are a lot more hoops to jump through. There are lots of verifications about bonding, insurance, etc.” She stated that her company tried for several State projects over the last five years but has never won any.

Interviewee #127, a Caucasian male and president of a marketing and communications agency, stated, “In my experience, working in the public sector is like peeling away the skin of an onion. There is layer after layer of busyness to get through to finally reach the person or people who really know something about what you are trying to sell, and then reaching the person who can make the decision. I find the folks in the public sector to be very insular. Somehow they manage to keep themselves out of the mix of doing real business. When I approach the State or a public agency or school, they have no one who really understands business or what marketing is all about. The public model seems to always want to push the purchasing agent on us. The purchasing agent deals in commodities, not marketing. Purchasing agents know nothing of marketing strategies and business. To be blunt, it’s really not worth the effort to try and gain business in the public arena.”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that there have been more public sector opportunities this year than in the past and that there are now firms in the marketplace that have historically performed residential work and are now bidding on public sector work. He added that these firms do not know what they are doing, but they are getting the jobs. He said, “It’s only a matter of time before that comes back in my favor.”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that whenever she has attempted to obtain work in the public sector “it’s hard to know who you need to talk to ... who you need to contact for a particular [job] ... of course there’s no soliciting ... they switch you to 50 different people ... no one calls you back.” She said they really have not spent much time trying to explore public sector work but plan to look for those public sector opportunities in the future.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said, “I get so lost on the IDOA website ... I don’t even try the INDOT website ... I don’t even know what to do ... I don’t even understand the process ... I get confused.” She added, “People say you’ve got to get to know people at INDOT, but how do you do that?”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that his firm has never worked on a public sector project and has had no success at all in marketing the services of his firm to prime contractors on public sector bids, even though he attends pre-bid meetings. He added, “Everybody knows everybody ... there’s not that many ... it’s not like they don’t know you’re out there.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that [an employee] at Purdue University, told him that Purdue “is not required to do any MBE goals.” He stated, “[The employee’s] organization is strictly for show.” When asked if all the universities were like that, Interviewee #205 replied, “Yes, ma’am,” and added, “They are exempt [from the MBE/WBE goals].” He said, “We’ve been over to Ball State, Vincennes, Indiana State, IU, all of them. When you look at their goals as a whole you’re going to see that there’s a huge disparity between dollars spent overall with their budgets [and what they spend] with MBE/WBEs ... They’re going to tell you up at Purdue that there are no MBE/WBEs located in Lafayette.”

Interviewee #217, an African American female owner of a commercial cleaning service, said that it has been “very difficult” to attempt to obtain public sector work and that she has had difficulty identifying the appropriate people to speak with regarding specific projects.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said, “As I get older, I have less need to do public sector work ... because most public sector work does require quite a bit of paperwork and political connections ... and as I get older I find that less and less desirable ... it takes networking ... business networking.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that the public sector is very strict on their requirements on how they want to see projects done and what the deliverables should be. She added that “as far as the chain of command in the public sector it is more stringent than the private sector.” She stated that it is hard to find out where the jobs are advertised, especially going into architecture. She said that she usually finds out about the jobs when the construction is being bid, but it is more beneficial to find the work before the work is designed.

Interviewee #303, the Caucasian female owner of an electrical contracting business, reported that the company has never received any State work. She stated that on the jobs for which they considered submitting a bid, she learned that she did not have the knowledge needed going into the process to be competitive. For example, she said that she did not know that the jobs required prevailing wages. Interviewee #303 reported that the company has been able to team with an architectural construction company to go after larger bids. She said that this construction company contacted her from her ad on yellowpages.com and became very interested in working with her company when she advised them that her company was a female-owned company. She said that although the companies have jointly submitted several bids, sometimes three a week, they have never secured a contract.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, reported that the public sector is more difficult to navigate, primarily because of the requirements for comprehensive documentation. He reported, “The public sector is more difficult to work in because of bureaucracies.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, declared, “It is who you know in public sector work. Large private companies ask about prices more often than smaller companies.”

Interviewee TA #7, the African American male representative of a civil rights agency, reported what he believed to be unfavorable public sector conditions, such as the City of Evansville mandating MBE/WBEs have an office there before doing work. Additionally, “I believe sole sourcing can also be unfavorable, which eliminates competitive bidding and spreading the opportunities to other firms. Required goal setting creates favorable circumstances because ... you get a larger field of people to apply opposed to people not applying if it’s a private deal. And, it gives MBE/WBEs a feeling they have a chance.” He said that there was a situation on the stadium project where MBE/WBEs complained about trying to secure work on the project, but they were really not ready for the contract. He stated that many of these situations were not handled well by the MBE/WBEs and that they need to do a better job of presenting their organizations in a more professional manner.

C. Identified Differences in Securing and Performing Work in the Public and Private Sectors.

Some interviewees identified differences in the timeliness or certainty of payment for work in the public and private sectors. [Interviewees #: 104, 108, 202, 209, 210, 213, 224, 302, 303, 304]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated that in the private sector, “You do not always get paid.” He said that the public sector “is not premium-dollar, but you’re guaranteed to get paid.”

Interviewee #108, an African American male and previous owner of a commercial cleaning company, indicated that in his experiences with the public sector, he could always count on being paid on time. He noted that during his one and only contract with INDOT, his payment was direct deposited and always on time. He reported that he considers the public sector “more reliable” in the payment aspect than the private sector. He provided an example of problems in the private sector saying that in one instance he was only paid half of what was owed him and lost about \$12,000 on that particular “unreliable” private sector project.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that she is paid faster on private sector jobs.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that in the public sector, “you know you’re going to get paid.”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that there is more assurance that she will get paid on public sector jobs than on private sector jobs.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that the main difference between working in the public sector and private sector is that the private sector “pays right away.”

Interviewee #224, a Caucasian male owner of a square dance calling and specialty archery supply firm, said that the biggest difference between private sector work and public sector work is when he gets paid, adding that on private sector jobs, he gets paid when he provides the service. With public sector jobs, he said that he has to complete paperwork and then usually wait for a few weeks before he sees his payment.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, reported that the company has had problems with the private sector reimbursing for services provided and is currently in litigation with a private company.

Interviewee #303, the Caucasian female owner of an electrical contracting business, stated that in her experience, the City has been much slower to pay than the private sector. She said that she has worked with a WBE prime, and the WBE prime was always struggling to secure dollars and struggling to get paid.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “An advantage in public

work is you know when your payment will be coming. You always know someone is overseeing the funds, especially when there is the element of compliance and outreach. On the private side a company is at the mercy of the prime contractor and it's based on the relationship the company has created. It's quite a challenge getting paid in the private sector."

Many interviewees reported that the private sector is more profitable than the public sector.

[Interviewees #: 104, 108, 112, 113, 116, 124, 125, 200, 204, 205, 206, 207, 208, 211, 214, 223, 227, 300, 304, 313]. Interviewee #108, an African American male and previous owner of a commercial cleaning company, stated, "Public sector jobs are less profitable and often have a set budget that cannot be exceeded ... Private sector jobs are more profitable because there seems to be more flexibility in budgeting and adding on extra jobs for which they are willing to pay."

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that it is easier to get work in the private sector than in the public sector and that profitability is different between private sector and public sector work, adding, "Private is more profitable."

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, stated that if you can complete a job quickly in the private sector there is probably more profitability. He said that in the public arena, profitability depends on the project.

Interviewee #124, an African American male and president of an MBE-certified promotional products company, said that there is a higher profit margin in the private sector.

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, stated that the private arena is more profitable in her estimation.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that private jobs are more profitable than public sector jobs because the majority of the public work is more difficult than private sector work.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he believes that profitability differs between the public and private sector because in the public sector he competes with many more businesses and has to keep his rates down.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that profit margins are a lot bigger in private sector work.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, stated that the "private sector is a little bit more profitable than the public sector."

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that private sector work is more profitable than public sector work. He stated that that in the public sector, the fixed-price or not-to-exceed-price budgets are tighter.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, stated that public sector jobs are less profitable than private sector jobs.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that private sector work is more profitable, because public sector jobs “chisel down” the price.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said that the major difference between public and private sector work is profitability, which is usually greater in the private sector. She said that that is probably the case because “the private sector is not as highly regulated.”

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, stated that private sector contracts are more profitable.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said “It is more profitable on the private side.”

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company, said “The biggest difference [between working in the public sector versus the private sector] is the public jobs are bigger but you make more money on the private jobs.”

Some interviewees reported that the public sector is more profitable than the private sector. [Interviewees #: 121, 128, 221, 226, 301]. Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, said the profit margin is a bit higher on public contracts.

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, said, “The only benefit for the public sector is the opportunity to make more money than you can in the private.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, stated that “typically the public sector pays better with the exception of federal jobs.”

Many interviewees reported that it is easier to secure work in the private sector. [Interviewees #: 112, 113, 119, 124, 127, 128, 201, 203, 205, 206, 207, 208, 212, 214, 217, 219, 221, 223, 225, 226, 227, 300, 301, 305, 307, 309, 314, TA #1, TA #2, TA #4]. Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, stated that it is a bit easier to procure private contracts than public ones, especially when one is new in the business.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, indicated his company has not made a concerted effort to market to primes doing work in the public sector. He considered public sector work taking more time to win than private work.

Interviewee #127, a Caucasian male and president of a marketing and communications agency, stated “it’s much easier trying to get work in the private sector.”

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, said, “In the public sector, I find that the State and its agencies talk the talk but don’t walk the walk. In the private sector, there’s much more loyalty, dedication, and commitment between companies and vendors. In the public realm, you’re in one minute and out the next.” He said that it was easier getting work in the private sector because your reputation, brand awareness and performance counted for something, unlike in the public sector where it seems only the price matters.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she believes it is easier to get private sector work, primarily because they have spent more time working in the private sector.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that a firm’s qualifications are important to obtain private sector work, but to get public sector work one needs “connections and politics.” He said that private sector work is easier to get, especially because it is on a smaller scale.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that attempting to get work in the private sector is very different from getting work in the public sector. He said, “It’s called the gauntlet ... It is very difficult to get private sector work with our State certification ... because no private company uses the IDOA or the INDOT listing to search.” He said that it is easier to get work in the private sector now “because we’ve gotten past that assumption of incompetence that comes along with [being an MBE/WBE].”

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that public sector jobs are advertised and that “you know more about what’s being bid in the public sector than you know in the private sector.” He said that he believes that it is easier to get jobs in the private sector than in the public sector.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that getting private sector work involves developing relationships with contractors. He said, “It’s probably easier to get a foothold in particular private sector work, but once you’re established, it’s probably easier to get work in the public sector.”

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that obtaining work in the private sector has been easier than in the public sector because of the owner’s existing relationships.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that finding out about work in the private sector is more difficult than finding out about work in the public sector because she must rely on her relationships with the general contractors, as there are no website postings. She said that it is easier to work in the private sector because there are fewer regulations.

Interviewee #217, an African American female owner of a commercial cleaning service, said that so far it has been easier for her to get work in the private sector than in the public sector.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that there are substantial differences in working in the private sector versus the public sector. She said that she finds it easier to get work in the private sector because “it’s easy to get connected to the people who decide.”

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that it is easier to attempt to get work in the private sector than it is in the public sector because public jobs usually go to the larger firms that may not know him and that use union trucks which he does not have.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that obtaining public sector work requires “more bureaucracy, a lot more red tape to get through, the bid process is much more regimented. I’m sure that’s due to fairness and legality.” He said that the bid process in the private sector is more “fluid” than it is in the public sector, enabling the vendor to ask informal questions throughout the bid process of the person who is managing the bid. He said that it is easier to attempt to get work in the private sector because you can establish a relationship with the customers. He added, “Public officials aren’t nearly as interested in the relationship with you because they know that that relationship could affect the business and everything has to be so legal and so on the up-and-up that they almost hide themselves from having a relationship with you for fear that someone could come back and say, ‘Well, you gave them the business because you’re buddies,’ whereas in the private sector, you can be friends — that’s part of the game.”

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that working in the public sector involves “more paperwork and requirements” than working in the private sector. He said that it is easier to get work in the private sector because it is “more direct.” He said that in public sector there is “an overwhelming list of requirements that they ask you to do before you actually do the work.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that the selection process for firms from the public and private sectors is somewhat different because the public sector work goes through a bidding process, but the private sector work just hires whomever they want. Interviewee #300 stated that on the public jobs “the primes come looking for you to fill the goals, and this is not the same for private jobs because there are no goals to fulfill.” She said that it is easier to get private work than public work because it is not usually decided primarily on price or experience like it is in the public sector. She said the public process is a little harder, a little more involved; the primes cannot always go with the company they may want to go with because of the guidelines they have to meet. She said that the public sector uses the MBE/WBE businesses more than the private sector.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, stated, “It is simpler to get private work.” He said “Public sector work is always low bid” whereas the private sector will usually negotiate an agreement without the rigor of the public bidding process.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said “[the] public sector is entirely bid work based on price only. Private sector is a combination of price, expertise and relationships. It is easier to get work in the private sector for me because of established relationships

and reputation.” He said that the public projects want the most for the least amount of money. In contrast, he said the private sector wants expertise, service and the relationship.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, stated that it is easier to get work in the private sector than in the public sector due to the easier access to decision makers and relative flexibility when responding to bid specifications.

Interviewee #309, a Caucasian male owner of a printing and distribution firm, stated that the public sector is more price conscious than the private sector. He said it is easier to work in the private sector.

Interviewee #314, the female marketing coordinator of an MBE-certified Asian Pacific-owned telecommunications firm, said, “Getting work in the private [sector] means answering standard marketing proposals and marketing our strengths. I believe it is easier to obtain work in the private sector simply because there is less paperwork. Often the public work requires the business be a small or disadvantage business.”

Interviewee TA #1, a Caucasian male president/CEO of a regional chamber of commerce, said that his impression is that it is easier for his members to work in the private sector.

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that she believes it is easier for her members to work in the private sector than in the public sector. She said that in the private sector, “If you demonstrate that you are a qualified and responsible supplier ... who can create value for a customer, that’s a relationship that continues to grow.” She stated, “On the public side, it seems to be more of a project-by-project thing ... so that opportunity to really build something doesn’t necessarily exist on the public side as it does on the private side.”

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, speculated that “most of the smaller companies shy away from government work because the bidding and contract procedures are so complex and time consuming. It is more challenging to secure public contracts because of requirements which can be a real hassle for the smaller firms.”

Some interviewees reported that it is easier to secure work in the public sector. [Interviewees #: 209, 210, 211, 216, 220, 222, 302, 311]. Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that marketing is different in the public versus the private sector. He said that there really is not much marketing that happens to obtain public sector work and that the low bidder wins the job. He said that to get private sector jobs, you have to “establish relationships ... you try to get yourself into a position where they want you to do the paving and they’ll work with you to make sure you get the paving.” He said that it is easier to win public sector bids. He said that on private sector bids, there are small, non-union firms competing against his firm that offer lower pricing.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, stated that very few job opportunities are advertised in the private sector. She said that she learns about private sector jobs through word of mouth, the local newspaper, and by just driving around. She said that she learns about public sector jobs through the INDOT website, Reprographics,

municipal plan rooms, and e-mails from public entities. She said that it is easier to attempt to get work in the public sector than in the private sector because the low bidder wins the job and there is public disclosure of how bid selection decisions are made. She said that on private sector jobs, she never knows who she is bidding against or what the winning bid amount ultimately is.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that it is easier to get jobs in the public sector because there are more of them being bid. He said that it is more difficult to get a job in the private sector because customers are more price-sensitive and will ask four or five firms to make a competitive bid.

Interviewee #216, an African American male owner of a business consulting firm, said that there is more paperwork involved in obtaining public sector work than private sector work. He stated that it is easier to attempt to get work in the public sector than in the private sector.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that winning a bid in the private sector depends more on merit than on pricing. She said that trying to obtain work in the public sector may actually be a bit easier than getting work in the private sector because “it’s much more of a niche ... more word of mouth.” She added that there is more “vendor competition in the private sector.”

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that it used to be easier to get work in the private sector, but now that the private sector work has dried up, getting work in the public sector is easier.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, stated that it is more difficult to secure work in the private sector due to the “politics.” He said, “There is a lot of under table dealing in the private sector.”

Interviewee #311, a Caucasian male owner of a computer firm, said, “It is actually easier to get work in the public sector because they are looking for unique packages, and that is what we specialize in, so there is less competition.”

Some interviewees identified differences in performing the work in the public and private sectors. [Interviewees #: 101, 104, 115, 116, 125, 127, 200, 201, 206, 207, 209, 212, 216, 221, 307, TA #3, TA #4, TA #7]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, noted that the major differences between public and private sector work is that when dealing with private owners, the job is easier to get done because the owner is eager to get a project completed so they can start making money. With public sector work, there are more complex preparations and more review requirements. For example, on an INDOT project, he reported that his firm has been in the design phase for three years and more needs to be done.

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated that it is much more difficult to understand the compliance regulations, the insurance requirements, the bonding, and the certification process for public sector work. He said that in the private sector there are far fewer compliance requirements.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, stated, “I find working in the private sector easier because private companies are very specific in their work requirements and their RFPs are clear and far less complex than public-sector RFPs. There is also far less hierarchy to go through in the private arena than in the public.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that there is less paperwork, people work together better, and there is a better quality of employee in the private sector. He stated, “The private sector is less stressful than the public, which involves the minority requirements, and it’s very hard to lay the minorities off [because] you just can’t fire [minority-owned businesses].”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, said that private sector projects need fewer layers of approval, and generally proceed more quickly, whereas public work requires more approvals and proceeds more slowly.

Interviewee #127, a Caucasian male and president of a marketing and communications agency, commented “it’s more efficient to actually do the work in the private sector ... In the private sector, business people know how to get the best quality, and how to get the most bang for the buck. In the public sector, they are only concerned with the lowest price rather than looking for the best vendor.”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that public sector jobs are a little harder and sometimes the plans are not as good as those in private sector jobs.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she has noticed that the public sector has “a lot more rules” than the private sector.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he believes there is “more red tape” when working with the public sector. He added, “That’s not necessarily a bad thing, that’s just how it is.” He said in the public sector there may be more people who have a say in decision-making, causing the process to be slower.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that the biggest difference between performing private sector and public sector work is that there is more oversight in the public sector doing work for the INDOT quality control and quality assurance, as opposed to the private sector. He said that on private sector jobs the client “relies on you to do quality control/quality assurance.”

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that on public sector jobs, the specifications of the job are well-defined, whereas in the private sector, there usually is not a set of well-defined specifications. He added that it is a little easier working in the private sector because “you don’t have people standing over you 24/7.... I’m not saying that’s a bad thing, but some of the people standing over you in the public sector don’t [know what they’re doing].”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that it is easier to work in the private sector because there are fewer regulations. She said

that the paperwork for public jobs is “over the top.” She cited the following examples of the “cumbersome” nature of public sector paperwork: safety requirements, Self-Insured Owner Controlled Insurance Program (OCIP) documentation, payroll requirements, and utilization forms.

Interviewee #216, an African American male owner of a business consulting firm, said. “Working in the public sector, I usually get the sense that they’re really trying to accomplish something ... to actually use what they’re given ... to actually make a difference.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that he is “held to a little higher standard in the public (sector) and made to pay prevailing wages.” He said that doing work in the private sector is easier than doing work in the public sector because the inspection process is easier and there are fewer people to satisfy.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said that the public sector holds subcontractors to rigid specifications, and they have multiple layers of review and approval.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said she believes that if a professional exhibits poor performance in the private sector, that it is difficult to regain his/her credibility. However, in the public sector, that individual can have a second chance.

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, stated that “the public sector has a greater degree of accountability and transparency and documentation control than found in the private sector.” Interviewee TA #4 said that Work One has compliance monitors visiting all the time and each company has to decide if they will bear the burden. He said, “Some companies just choose not to deal with it. It is easier actually doing the work in the private sector.

Interviewee TA #7, the African American male representative of a civil rights agency, said, “I think it’s easier to work in the private sector than the public sector. When you’re trying to work in the public sector there’s a lot of extra selling of yourself to do. In the private sector, the processes are shorter and they get right to the point.”

Some interviewees identified differences in the timelines for performing work in the public and private sectors. [Interviewees #: 104, 207, 301]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated that he believes that the private sector has a shorter timeline.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, stated that one difference is in the turnaround time. He said that private sector clients expect a job to be completed faster than public sector clients. He said that in the public sector there is a “longer timeframe with which to play with.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, stated “the public sector has tighter timelines [and] schedules.”

Some interviewees identified other differences in securing and performing work in the public and private sectors. [Interviewees #: 107, 116, 121, 304, 313]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, explained that there is a substantial difference between working in the public sector versus the private sector. He said, “A lot of the public sector work, as it applies to professional services, is qualification-based. In the private world, it is price-based or relationship-based, depending on the dynamic and what you are able to negotiate with the owner.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that “it does differ if you’re bidding on a private or public sector job. You could be the low bidder on a public project, but if you don’t meet the minority requirements of the town, you won’t get the job. In the private sector, if you are the low bidder, then 99.9 percent of the time you will get the bid.”

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, said that the bidding process for military-related [public] contracts is more extensive.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said that public work is a low bidder environment and on the private side, it depends on who the prime contractor is and the sub’s relationship with the prime contractor.

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company, said “On public jobs it comes down to price. Sometimes we get shutout on public jobs because of MBE/WBEs. On private jobs, we are successful because we have a good bid price, do good work and have a good reputation. MBE/WBEs are not required on most of the private jobs.”

Other interviewees reported that there are similarities in their experiences pursuing and performing work in the public and private sectors. [Interviewees #: 111, 123, 201, 204, 210, 212, 213, 219, 220, 225, 301, 308, 311, 315, TA #5]. Interviewee #111, a Hispanic owner of an engineering services firm, stated that firms that have hired his company for public sector work have also utilized them for private sector work. He added, “We do good work.” Interviewee #111 said that doing the work in the private and public sectors is about the same. He reported that getting work in the private and public sectors both is based on who you know and word of mouth. He also indicated that profitability does not seem to be different for him in the public and private sectors.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated that it was not easier getting work in one sector or the other; in both it is a matter of developing quality relationships. He responded there was no difference doing work in either sector since “it’s always a matter of performance and adding value.”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that there is really no difference between performing private sector and public sector jobs. She added that in the public sector, she may have to file additional paperwork with the invoice she submits to the client, but other than that, there is no difference. She said that there is no difference between the profitability in the private sector versus the public sector.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that although he has not worked in the public sector, he does not believe that there is any difference between working in the public sector versus the private sector.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that there is really no difference in the actual performance of the work in the public sector versus the private sector, commenting that she tries to do the best job possible regardless of the customer. She said that there is no difference between the profitability in the private sector versus the public sector.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that there are several similarities between public and private work. She said that being selected to work on private sector and public sector jobs is the same, in that “It’s still all about price and performance.” She said that there is no difference between the profitability in the private sector versus the public sector.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that it is equally difficult getting work in both the private and public sectors.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that profitability is the same in both the private and public sectors.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that there is no difference in doing work in the private sector versus the public sector. She stated that the profitability is the same in both the private and public sectors.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that there is really no difference in performing services in the private sector versus the public sector. He said, “Once you’ve earned the job, cleaning is cleaning. The differences would be in the bidding process, how you go about acquiring that contract.” He said that the profitability is the same on private sector jobs as on public sector jobs.

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said that it was not easier to get work in one sector compared to the other, adding, “We just haven’t done much work in the public sector and usually they seek us out.” She said, “Our public sector experience has been very limited, but there were no real differences between working in the two sectors. The work is pretty much the same and the jobs pay just about the same.”

Interviewee #311, a Caucasian male owner of a computer firm, stated that there were “no major differences” doing work in the private sector and the public sector, that it was no more difficult or easy between the two, and that profitability did not differ substantially between the two sectors.

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, said, “For us, the profitability is about the same in both [public and private] sectors.”

Interviewee TA #5 the Executive Director of the Indianapolis Chapter of a national business women’s organization, stated, “I don’t see much difference [in the profitability of each sector]. I think there are many profitable opportunities in each sector.”

IV. Indiana State Agencies and Public Colleges.

Experience in General.

Some interviewees reported successful or positive experiences working with or attempting to work with the Indiana state agencies and public colleges. [Interviewees #: 101, 102, 107, 108, 123, 126, 127, 201, 207, 209, 211, 212, 213, 214, 216, 219, 223, 225, 300, 301, 302, 304, 305, 307, 309, 310, 313, PF #7, PF #15, TA #1, TA #2, TA #5]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, said that his firm has worked with the following public sector agencies: INDOT, Indiana-Purdue Fort Wayne (IPFW), and Ivy Tech. He indicated that his firm has been the subcontractor on most of these public sector bids and pointed to the company's current project (State Road 39 reconstruction) on which it is the prime contractor. He stated that it is good work to have because it has a larger fee and lasts for a longer period of time. However, he said that one disadvantage is that you sometimes have to hurry and wait on such projects. He indicated that there does not seem to be much difference between working with INDOT or with one of the Indiana colleges, except that IPFW did require an extensive interview process that was time consuming. He mentioned that one bonus of the INDOT project is that this department provides direct payment which saves time and worry.

Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, said that his firm has only worked on one public sector project, which was with Purdue University. He stated that his firm won a bid on a remodeling job, and he considered the working relationship to be quite positive. Interviewee #102 bid the project as a subcontractor and said that it was easy to work with the project owner.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, indicated that they have a very large mining engineering contract with IDOA. However, he indicated that most of their work with the State is through INDOT.

Interviewee #108, an African American male and previous owner of a commercial cleaning company, stated that he was successful in winning one bid with the INDOT. He reported that he bid as a prime and said, "Without the help of [IDOA], I would have never been in the position to win such a contract." He indicated that INDOT did not have any prequalification requirements. Interviewee #108 noted that he looked into a couple of bids with other public sector agencies, but these were for construction cleanup, which was pretty much out of the scope of his cleaning company's capabilities.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated that he has worked with IDOA, IDOT, Indiana University and Ivy Tech. He related that getting work in the public sector is challenging "but it can be done." He noted, "You have to prove that you have something the agency or college needs. Interviewee #123 did not believe it was too difficult finding out about work opportunities at agencies or colleges, nor did he think it was any more difficult bidding such public agency jobs.

Interviewee #126, a Filipino Caucasian American male owner of a full-service marketing and advertising firm, said about three years ago he did a project for the Ivy Tech in Indianapolis. He said this project was the result of a bidding process. He added, "It was a positive experience. We performed well and the client was pleased. We're trying to get more work from Ivy Tech but it is a very challenging task."

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, said he performed one consulting job for Purdue University. He noted that it was not a job that was put up for bid, but rather he knew someone in a particular department who asked him to present a proposal which was accepted. He added “It was a very positive experience.”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, reported that his firm has worked as a prime contractor for the City of Indianapolis, various other cities, and INDOT. He said that the firm has served as a subcontractor for INDOT, Indiana University-Bloomington, Indiana University-Purdue University at Indianapolis, and Ball State University.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, has never actively tried to obtain work with any Indiana state agencies or public post-secondary institutions. She said that her firm has conducted work for several municipalities throughout Indiana, including the City of Carmel. Her firm has served as a subcontractor at Purdue University, conducting the electrical work on a building renovation project. Her firm was not WBE-certified at the time they performed that job. She learned about that job because the prime sent out bid notices and she received one. The prime happened to be a firm with which she already had a relationship.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, stated that his firm has worked as an electrical subcontractor for IDOA, the Indiana Gaming Commission, the Indiana Department of Homeland Security (IDHS), and INDOT. He added that his firm has attempted to work as a prime with the Indiana Bureau of Motor Vehicles (BMV), Vincennes University (VU), Ball State University (BSU), Indiana State University (ISU), Ivy Tech Community College, Purdue University, IUPUI, IU-Bloomington, IU-East (Richmond), and IU-N (Kokomo).

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that his firm has frequently performed work many times as both a prime contractor and a subcontractor for INDOT and once as a subcontractor for Purdue University. He reported that the work that the firm performed for INDOT was road design, bridge design, bridge inspection, and structural rehabilitation. He said that the firm performed structural design on a building facility at Purdue University. He indicated that he has not attempted to get work with any other state agencies. He said that to quote as a subcontractor on an INDOT bid takes about eight hours of time, requiring a site visit and the development of a 10-12 page document. He said that in order to participate in the Purdue bid, he only had to send his firm’s qualifications to the prime contractor. He said that he was required to be pre-qualified for the INDOT job but not for the Purdue University job.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that his firm has performed hundreds of jobs for the State of Indiana. He said that they have attempted to get work at almost every state agency and public higher education institution, including INDOT; IDOA; Indiana University-Kokomo; Ivy Tech in Kokomo, Muncie, and Anderson; and Ball State University. He said that the work on which they have bid involves asphalt and concrete paving and providing annual supplies of Freight on Board (FOB) materials for patching potholes. He mentioned that next week alone, they are bidding on 25 jobs with one bid letting through the State of Indiana.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that he has worked as a subcontractor on projects for INDOT, IDEM, Indiana University, Ivy Tech, Vincennes University, and the University of Southern Indiana. He added that he has served as a prime contractor for the Indiana Department of Natural Resources. He said that all of the State entities for which he has worked have been equally easy to work with. He said, “It’s like tying your shoes ... nothing too hard.”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that she has attempted to work with and has actually worked as a subcontractor for several State of Indiana agencies and higher education institutions, including INDOT, the Indiana Department of Natural Resources, Indiana University, Ball State University, Indiana State University, University of Southern Indiana, and Ivy Tech. She added that she has done extensive federal and municipal work, as well. She said, “Universities are our bread and butter.”

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that she has never attempted to get work with any Indiana state agency or public college, but has actually worked for Indiana University (IU) as a prime contractor because IU approached her company. She said that she loved the bid process because she really was not part of the any competitive procurement process. She said that because her firm provides such specialized services, that there was no real bidding process involved. She said that she enjoyed working with IU and that IU paid her firm well and on time.

Interviewee #216, an African American male owner of a business consulting firm, said that he has worked as a prime contractor with the Indiana Division of Mental Health and Addiction, the Indiana Department of Education, and Indiana University-Purdue University at Indianapolis. He said that for one of his contracts he developed a summer mentorship program for high risk boys.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she has provided services as a prime contractor for the Indiana Department of Revenue and Purdue University. She added that she also has provided services for the Lafayette, IN office of the U.S. Social Security Administration. She said that she never actually solicited work from an Indiana State entity, but that the State entities contacted her. She said that she obtained these State of Indiana jobs as a result of the “quality of work in someone’s home” that her firm performed. She commented that Purdue University was more difficult to work with than the Indiana Department of Revenue. She added, “Once you’re in one (a State entity), as long as their decision-makers don’t change, they’ll tend to keep using you because they like the job.”

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that he has attempted to work with and has actually worked with the Indiana Department of Natural Resources (DNR) and the INDOT. He said that for DNR, he served as a prime, hauling stone to Whitewater State Park and Brookville Lake. He said that for INDOT, he hauled asphalt and stone for new construction on State Road 27. He said that he learned about the DNR jobs as a result of someone from DNR contacting him. He said that he learned about the INDOT jobs as a result of primes contacting him. He said that both DNR and INDOT were easy with which to work.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that he has attempted to work with and has actually worked with Ivy Tech Community College in Indianapolis and Fort Wayne and Indiana State

University (ISU). He said that he believes Ivy Tech's bid process is easier than the other State entities with which he has worked. He said that even though they do not currently have the cleaning contract with Ivy Tech, he still has a relationship with the procurement officials there. He made very positive comments about Ivy Tech's procurement processes, noting that he has limited experience in working with ISU. He said that the relationships he has developed with people at Ivy Tech seem very similar to him as the relationships he has developed with private sector customers. He said the Ivy Tech procurement staff members are "accessible."

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that she has done work for the Indiana Department of Natural Resources and some State universities as a subcontractor. She reported that she has not marketed her services or done work for INDOT, Indiana State University, University of Southern Indiana, Ivy Tech and Vincennes at this time. Interviewee #300 said that she was successful securing work with Purdue University and Ball State University as a subcontractor. She stated that the work was brought to her by a prime, so it was not a challenge to find the work. She said that an architect gave her the work as a subcontractor, so she did not have to bid for the work. She stated a prequalification was required to do both projects.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, described their experience performing work for agencies and colleges as positive overall. He mentioned that university work is a little more demanding because of tight deadlines (sparked by when the college work is scheduled with respect to when school begins) and lengthy review processes (because of in-house architects and engineers). He stated, "Purdue is our most successful university client. They gave us an opportunity, really liked our services and the quality of design, we completed the work, and they gave us more work. They came back to us subsequently without a bid process." He stated that they performed architectural design and project management work for new and renovation campus housing projects as a subcontractor on their first university job and then served as prime for the subsequent work, which was at Purdue. He said it was easier to bid and work with Purdue, and the relationship and work got better as Purdue awarded and the firm executed. He indicated that the subsequent work at Purdue was negotiated, not bid out. He stated, "Working at Purdue has been a great opportunity for our firm." He also said, "We have done some work with Ball State, but we haven't pursued them lately." He also said, "We were awarded work as the prime for the Ivy Tech parking garage intermodal facility." He mentioned that his firm had recently met with some people who are new to Vincennes and that they were positive and liked the firm's brochures. He said that he hopes that his firm will have a better chance of working with Vincennes now that these new people are in place.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, stated that the company has only worked with IDOA and IDEM. Interviewee #302 said that when a bidding opportunity is identified the first thing that they do is to conduct an on-site inspection where the work is to be performed. He said that they then make contact with the appropriate IDEM staff to secure answers to any outstanding questions, if appropriate, and develop a proposal as the prime. Interviewee #302 stated that the majority of work secured from IDEM is installing pre-assembled air monitoring stations and indicated that the company has had good experiences working with IDEM. Interviewee #302 said that "IDEM itself is good to work with, however, when you get out on the job there are a lot of things IDEM cannot control, like weather and the type of soil."

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, stated the firm has worked with IDOA and INDOT, but the company has not worked with or attempted to do business with any of the State colleges or universities. Interviewee #304 reported, “We’ve had some pretty good experiences in working with INDOT through some of our prime contractors. So that is one of the areas we have grown. The nature of the projects was on the trucking and hauling side, I-69, 65 and 465 NE projects. We bid as a sub on those projects. We are currently working on the Indiana Convention Center providing outreach consulting services, which is under Indiana State Convention and Building Authority oversight.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, stated he has not pursued work with the state agencies, Purdue University, University of Indiana, Ivy Tech, or Vincennes. He has attempted to get work from Indiana University, Indiana State University and Ball State University. Interviewee #305 said, “My experience in attempting to get work with all three is based on previous relationships with key contacts at the universities. All three had been previous clients when I was a salesperson with other organizations. Ball State was one of my biggest clients when I was a salesperson. My attempts have been to re-establish relationships with those contacts.” He stated that he bid as the prime on a single unit audio/visual equipment sale for technology classrooms, and it was easy to find out about the work at the universities because of the established relationships.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, stated that he did secure work on a small building design for Ivy Tech Southwest on which he bid as the prime and that he found the process easier, relative to other public sector work, because he had a personal relationship with the people at Ivy Tech.

Interviewee #309, a Caucasian male owner of a printing and distribution firm, reported that he has done business with Vincennes University and added, “I don’t have too much trouble getting work from them as a distributor.” He stated, “Most of the work we do for [Vincennes University] had been gobs and gobs of grading slips, but that has all gone to the Internet or they post them somewhere now because of privacy issues. They started their own print shop a few years ago that does for them what we do, but I think they will likely close that down as too costly. So someone is going to have to do their printing for them.” Interviewee #309 said that he only served as a prime on these jobs.

Interviewee #310, a Caucasian male owner of a moving company, said that, of the agencies and public colleges listed, he has only been “[i]nvited to bid on projects for Vincennes University.” He reported, “We bid on tearing houses down when they buy a property and moving the furnishings elsewhere and when they have a project on campus — we’ve moved things like pianos and that sort of thing.” He commented that it is easier working with Vincennes University than with the State, saying, “The University — they are smart shoppers. They aren’t going to contract with a mover from out of the area to come all the way down here to move a piano, but the State would. They are talking about saving money and cutting costs — well somebody start at the top in Indianapolis.” He reported, “Person to person contact, price and experience are all factors in being selected for a job by Vincennes University.” He stated that working with Vincennes University was easy, commenting, “They tell us what they want done and we do it.”

Interviewee PF #7, the vice president of a WBE/DBE-certified Indianapolis trucking company, said, “I would like to applaud the effort of IDOA to get the information out to the minorities and the women in business now. I get a lot of information in the last two years, a lot more than we used to get, the e-mail, a lot more meetings, a lot more gatherings, a lot more places to network and meet each other, and so I think you’re doing a great job there.”

Interviewee PF #15, the vice president of an MBE-certified Louisville management consulting firm, said “I’d like to kind of acknowledge the work that INDOT’s done over the last 15 years, [a staff member] has been vigilant in making sure that DBE’s have an opportunity in terms of providing training and know how.”

Interviewee TA #1, a Caucasian male president/CEO of a regional chamber of commerce, said that many of his organization’s members perform construction-related work for INDOT, the University of Southern Indiana and Ivy Tech Community College. He said that he is aware that many of his members are actively cultivating relationships with State of Indiana agencies and public universities and actively looking for State projects on which to bid.

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that many of her organization’s members perform work for State of Indiana agencies and public higher education institutions, but that she does not have information regarding the specific nature of her organization’s members’ work with State of Indiana entities. She said that she has not heard any complaints from her members regarding their work with the State of Indiana.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, reported positive experiences in attempting to get work or working for several Indiana state agencies and public universities, including IDOA, INDOT, Purdue University (PU), Ball State University (BSU) and Ivy Tech. She also mentioned an improving relationship with Indiana University (IU). She stated that her members’ experiences attempting to get work with these agencies and universities has been “Generally, okay. When not okay, they have access to the DOA about their issues. However, I’ve heard that the IOP did recently overturn a bid award to one of our members. Our member appealed and DOA is looking into it. PU has been a very positive experience. With IU we’re starting to make some inroads. BSU and IVY Tech I’ve heard good things but cannot be specific.” She said the nature of these projects was “Medical staffing, IT, audio visual solutions, construction, human resources, some public relations, etc.”

Some interviewees reported mixed or negative experiences working with or attempting to obtain work with the Indiana state agencies and public colleges including based upon a perceived lack of communication and outreach efforts on the part of the agencies and colleges. [Interviewees #: 104, 107, 110, 111, 112, 113, 115, 116, 117, 125, 202, 204, 205, 206, 207, 209, 210, 221, 222, 228, 229, 301, 309, 314, PF #3, PF #13, WT #7, TA #6, TA #7, TA #8, TA #10]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, said that since he has been in business since 1987, he has submitted between 30-40 bids for public jobs to such entities as IPFW, INDOT, and the Department of Commerce. He reported that he has never won a bid. Interviewee #104 offered one example of when he bid on a college project and was dismissed for never having designed office space in a school setting. He said, “I had designed offices for the City [of Indianapolis], for industry, so I knew how to design office space and the fact that I had never

designed in the college setting should not have been a detriment to being seriously considered for the job.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that they have not been successful in obtaining work with any of the universities and find that it is very difficult to break into that market. He stated that many of these state agencies and universities do not return calls and are very closed-minded. He said, “This is a major concern for us ... we do not feel like we are on equal grounds.” He indicated that he feels that the universities will not even give them a shot. He shared that he had a project that he had been working on for quite some time with Ball State, and he was waiting and waiting on the solicitation. He said that he called to check in on when the bid was going to come out, and they basically told him that they had already handed it to someone else. Interviewee #107 reported that he was not even aware that the bid was out. He stated that the only success that they have had with the universities has been through architectural companies. Interviewee #107 also described a situation in which his firm put in a submittal for a project at IU in which the company would act as prime for a new building project on the Bloomington campus. He stated that they had great qualifications and that their prices were lower, but they were not selected because the university had never worked with his company before, and Indiana University (IU) chose to go with the company that had the higher price instead. Interviewee #107 also indicated that it has been harder to work with the state agencies and colleges than other public sector work. He stated that their access to decision makers is on projects for other local public agencies. Interviewee #107 said that he has been unable to obtain work with the universities and recommended that all agencies and universities be more receptive to new or different companies. “I think it should be highly encouraged that decision makers take the time to return calls, take the time to sit down with new people.... That’s part of the job!”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she has not been successful in getting work with any Indiana state agencies. She stated that she has not attempted to get work with any of the public colleges because they have their own internal Internet technology departments and do not need to hire outside firms.

Interviewee #111, a Hispanic owner of an engineering services firm, reported that he attempted to get work at Purdue once. He said, “We tried to get some work at Purdue in Lafayette, but I think the Good Ol’ Boy Club just used our estimate ... and just showed it around and said, ‘You gotta beat this.’” He also indicated that his firm did a little bit of work for an architect at Indiana University, but that did not go anywhere. Additionally, he indicated that his firm had done work indirectly for the INDOT. He said that the work was for the City on a State highway doing traffic signal designs or transportation studies, so it had to be State-approved. He stated that his firm was the prime engineer for the Local Public Agency (LPA) through the City. Additionally, he reported that it has always been very easy to access information on INDOT work, but the bid process is much harder, particularly because there were pre-qualifications required. When asked about recommendations for INDOT, Interviewee #111 said, “I think they ought to just give you a shot at something and see how you work out.... When they hire somebody from out of the area to do a job right here ... they’ll hire a South Bend or Indianapolis firm to redo the traffic signals here.” He reported that he does not think this is a good practice.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that times have been tough, especially in the public sector. She said, “We cannot

even get through the doors at the City [of Indianapolis]; we get no opportunities to even bid on projects there. It's always the same people who are awarded the contracts. We cannot even get a meeting with the public officials.”

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, stated that his efforts at trying to get public contracts have not been positive. He noted, “Speaking of the colleges and universities you mentioned, I find Purdue University personnel to be very indifferent and haughty. They seem to have an attitude that we are beneath them somehow ... I find that to be the attitude of many, many State and federal personnel. They do not have a service attitude. Ball State University is one exception. I have found the personnel at BSU with whom I've worked to be very accommodating.”

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said that he had tried on two occasions to win a contract with IDOA, but did not win the award. He reported that he attempted once to win a contract from Ball State University but that he did not win that one. He mentioned that he sought two projects from Indiana Purdue, Fort Wayne, but won neither of them either. He summarized his efforts at securing public arena contracts by saying, “I really had a hard time knowing what they really wanted. It was hard for me to offer a specific solution when I could not decipher from their vague and unspecified RFPs what the institutions were looking for. In most of those cases I was simply informed by letter that I was not awarded the contract because ‘We found a more qualified resource than you.’ That is really not very helpful. How can I improve if I do not know the truth as to why I was not selected? At least in the private sector I can sit down with the customer and hear exactly why my proposal fell short. That is much more helpful.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that he has not done any projects for any of the Indiana state agencies, nor for any of the State's universities or colleges. He indicated that he has bid on a couple of State college bids, but he has never been awarded any. He stated, “I've had the opportunities to bid, that is for sure, but I've never had any success in that area.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said he seldom got any orders from state agencies because they will not accept 10 percent under runs or overruns, and over the years he had submitted at least 10 bids with Purdue but never got any of them. He recalled a “roundtable” he attended at Purdue where business cards were exchanged and business prospects promised, but in the end nothing ever came of it. He remarked, “They really do have a Good Ol' Boy Network. I guess they are afraid of competitive bidding there, but there is a big chunk of money they could save if they did open up the bidding.” He said he tried several years ago to get business with IDOA, but gave up on getting business with IDOA. He also noted that he has tried to get work at the local campus of Ivy Tech, but has had no luck. He said that it has been a frustrating process trying to get work with Purdue University and he has only been successful in securing one small (under \$1,000) project with the University. Interviewee #117 said he has done projects for Indiana Poison Control. He said he has not attempted to get business with INDOT, Indiana University, Indiana State University, Ball State University, University of Southern Indiana or Vincennes University.

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, reported she had not worked with IDOA even though they had tried numerous times to land projects. She could not elaborate on why their efforts with the DOA had not been more favorable. She stated that they had done some work for Indiana University and Purdue, but it was directly with one of their departments and not through any centralized bidding process.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, expressed great frustration in discussing her attempts to get work with INDOT. She said that she receives e-mails from INDOT announcing RFPs and the awarding of contracts. She reported that she has attempted to work with IDEM and INDOT, but she has never actually served as a prime or subcontractor for any state agency or university work. However, she indicated that she has been awarded contracts by the City of Indianapolis. She said that she was included as a WBE subcontractor on four IDEM bids, but one did not win any of these bids. She added that she has looked at several interesting bid opportunities with the Indiana Department of Natural Resources, but she has never formally bid on any of them.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that his firm has never worked on a public sector project and has had no success at all in marketing the services of his firm to prime contractors on public sector bids, even though he attends pre-bid meetings. He added, "Everybody knows everybody ... there's not that many ... it's not like they don't know you're out there."

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, stated that he has "never gotten a nickel worth of work from any of those State universities." As an example, he said that he attempted to obtain maintenance contracts at Vincennes University (VU), but those maintenance contracts are only awarded to firms that are in close proximity to VU. He said that there are no MBE electrical contractors in that area. He said that his firm would be willing to work under a maintenance agreement at VU but that his firm is only asked to perform work for VU projects in the \$1200 range, which is not cost effective for his firm. He said that any university project under \$2000 does not have to be bid out. He added that the majority-owned firm that receives the VU maintenance agreement was paid \$280,000 in 2008. He said that the scenario is similar at Indiana State University and Ball State University. He said that he has intentionally chosen not to seek work with the Indiana Department of Correction because of workplace safety issues

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, stated that he has attempted to obtain work as a subcontractor through IDOA, the Indiana Department of Natural Resources (DNR), INDOT, and Indiana University-Bloomington (IU). He said that he has not been as successful as he had hoped he would be, but that he has performed work as a subcontractor for DNR and IU prior to being certified as an MBE. He said that the work for which he bid was for lighting and power. He said, "There's a million people bidding ... but again, I don't think it's very different bidding public work than private work ... because we still deal with ... the same general contractors."

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said, "One of the biggest stumbling blocks is actually in the initial purchase orders." He said that although contracts are negotiated quickly, it could take up to one year

to get the funds encumbered and get a purchase order number if the project is a low priority. He said that it takes two to three months to get a purchase order number established for a high priority project.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that INDOT is the most difficult State entity with which to work. He explained that since INDOT has recently downsized, that they now outsource inspection services. He said that sometimes the inspectors are young college students working in a summer job “who know nothing about construction.” He added that these young student inspectors cannot answer any questions that someone from his firm might have. He said that with the cutbacks, that there is now only one inspector for about five paving jobs, forcing people from his company to have to “run around and find (those few inspectors) to get questions answered.” He added, “The quality of plans that we’re getting now is terrible.” He said that INDOT now has problems getting back timely test results. He explained that if his company paves a section of a road, and the test results come back a week later, and if those test results are bad, that they may have to re-pave the section of road that they have built during that entire week for no additional payment.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said the only difference in working with one state agency or university or another is the individual inspector assigned to a job, specifically “some are a lot easier to work with than others.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that he served as a subcontractor on a Purdue University job involving the excavation of steam tunnels. He said that it was difficult to get hired for the Purdue job and that it is “pretty tough to get in the clique ... you really have to know the people.” He said, “They’re going to use the people they want to.” He said that he really has not pursued opportunities at Purdue University or other State entities because it requires a lot of paperwork and management oversight, and that his firm is too small to deal with those added requirements.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that she has attempted to get on maintenance contracts with all of the state agencies, by sending an e-mail to every agency’s purchasing agent. She said that when she followed up with them that they were “dismissive” and told her that they would contact her if they needed painting work performed. She said that she has never heard from any of them. She said that she has attempted to work with Indiana University (IU), Purdue University, Indiana University-Purdue University at Indianapolis (IUPUI), Ball State University, and INDOT. Interviewee #222 said that she attended a diversity supplier symposium sponsored by BSU, but that she felt all of the white, middle-aged men there “had no clue” about what diversity really meant. She said that IUPUI has such a “good old buddy system” that it makes it impossible for her firm to compete. Interviewee #222 said that the diversity procurement specialist at IU has not been helpful. As a result, she said that they have stopped trying to pursue work with IU. She said that her contact at Purdue University is very helpful.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that in actually performing work, INDOT is difficult. She explained that INDOT often sends her firm lengthy feedback on the reports she submits, mentioning small errors such as the omission of a period or a misspelled word. She added that because INDOT has

staff who review her firm's work and it almost seems to her as though the INDOT staff have a conflict of interest in that they are her competition and are also reviewing her firm's work.

Interviewee #229, a Caucasian male owner of a safety training firm, said that he has conducted safety training as a prime contractor for Indiana University–Bloomington and Indiana University–South East. He said that he made an informal inquiry to find out about available contracts with the Indiana Bureau of Safety Education and Training. He said that the inquiry never turned into a bid opportunity because he discovered that there was a “Good Ol’ Boy Network” operating there that he could not break into. He added, “They didn’t want to share the goodies.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, stated that they have worked with or attempted to work with most of the State universities but not really pursued work with state agencies such as INDOT. Regarding their lack of pursuing INDOT, he indicated “We have not put a lot of effort into the DOT work because there’s very little to go after.” He said, “We have done some work with IU but not nearly as much as with Purdue. IU tends to use the same firms it has always used.” When asked about Indiana State University, he stated, “We attempted but have not been successful getting work with them.” He also mentioned that his firm has pursued work at Vincennes, but he said that the folks who had been in power there have always used the same firms. He said that his firm recently met with some people who are new to the university and that they were positive and liked their brochures. He said that his firm is hopeful that they will have a better chance of working with Vincennes now that these new people are in place. Interviewee #301 said that “some of the organizations on this list don’t walk the talk like Purdue. Some of the supplier diversity representatives are helping to make a difference and increase access to opportunity, but most are not serious about helping MBE/WBEs, and some of the organizations don’t have a champion to help small businesses.” He said that he was not the best person to provide more detail about their experiences attempting to get work with state agencies and colleges because he had just begun to do business development work for the firm. He focused most of his comments on the work they have done with Purdue.

Interviewee #309, a Caucasian male owner of a printing and distribution firm, said that Vincennes University has a printer that it often uses who is on the University’s Board. He said, “I don’t know what he is charging ... I just wish they would share a little bit of their jobs — which they could do.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said, “The company has attempted to do work with INDOT, Indiana State University, Purdue University, Ball State University and Ivy Tech Community Colleges. That has been a while ago.” She said, “Not qualifying for as an SBA and DBE-certified company has hampered our ability to work for INDOT. We tried to get communications equipment work. The opportunity came by e-mail but it was difficult to respond to because we don’t fit the narrow definition of a small disadvantaged business.”

Interviewee PF #3, the president of a northern Indiana MBE/DBE-certified construction company, said, “I’ve turned all of my paperwork in to Real Services [for the weatherization program], and called them and asked them about work, and I’ve left a message, of course, I’ve e-mailed them, and the guy never responded to my e-mail. It seems as if, though, they’ve got one contractor up there that’s doing the share work part ... and it seems as if, though, they want them to do all of that work.”

Interviewee PF #13, the CFO/owner of an Indianapolis-based MBE-certified food service business, said, “I just really feel like it’s been a waste of our time, energy and effort to bid on any of these contracts, because all of our business has come from non-MBE/WBE/DBE contracts. I don’t care to ever bid on another City or State contract, just because I feel, like I said before, it’s just a waste of my time.”

Interviewee WT #7, the employee of a WBE/WBENC certified technical writing and editing service firm, wrote, “I have submitted proposals in conjunction with a prime contractor but have never received a contract for the State of Indiana. I really can’t say if it was a discrimination issue or not.”

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female President/CEO, stated, “Good luck trying to get work with the University of Southern Indiana. I know firsthand they are the least responsive to supplier diversity. They are not interested.”

Interviewee TA #7, the African American male representative of a civil rights agency, stated that “There have been some MBE/WBEs who have been successful [at securing work with state agencies]. One of the problems we’ve had is convincing other state agencies outside of IDOA, INDOT, and Hoosier Lottery to do business with MBE/WBEs. These have been the top. When you look at the smaller state agencies, Auditor’s Office, ICRC, BMV, etc., it’s not their first mind to use an MBE/WBE. This practice has not been instilled in these agencies. I always thought if the message came from the Governor to use these businesses this will go a long way. I can see this being a factor ... I always hoped we’d have legislation that requires MBE/WBE participation be on all State contracts that go out. I think that will alleviate disparity. As minorities, we have to recommend we can’t be at every dog fight — you can’t be in construction one minute and in food services the next. You need to diversify in a way that makes you powerful. MBE/WBEs work as a major prime once in a blue moon unless it’s something like catering. But, now on major bigger contracts that’s just not happening — they get to be subs. If the opportunities are coming through IDOA it’s a beautiful thing, but if it’s not in the system and the firms are not aggressively marketing themselves, they are going to miss out. The bid process is the same — there’s a typical template that you [have to] know what they are looking for, who the decision makers are, and pricing — it’s not always the lowest bid.” He commented that as relates to colleges and universities, it is easier to get state agency work than other public work.

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said, “Working with the universities is like going through a maze — they don’t follow the rules, they do what they want to do.... Some of our contractors worked with BSU, and the experiences were pretty good. I have also heard good experiences with Purdue because of the person who is over the minority program there. But, what we’ve heard about IU has been negative. It seems it’s hard to get data on this, and they are given a pass and don’t have to do work with M/WDBEs. It’s important to get the universities to be more compliant in this area.”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, said that when it comes to performing work or providing goods for public agencies and colleges some projects go smoothly and others are problematic. He said “It depends on the owner, and the issues. Could be everything. All kinds of work, roads, schools, water treatment plants,

renovation, etc. performing the work as primes and subs in highway, utility and commercial building work.”

Notification of Work Opportunities.

Some interviewees indicated that the agencies and public colleges have good notification procedures in place to notify individuals of opportunities to bid. [Interviewees #: 101, 123, 200, 205, 206, 207, 209, 210, 211, 219, 220, 302, 304, 309, 313, TA #6] Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, stated that INDOT e-mails notices about open contracts, which he finds very helpful. He indicated that INDOT makes it easy to find out about upcoming projects.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated that he did not believe it was too difficult finding out about work opportunities at agencies or colleges.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, stated that his firm performs topographic surveys, road lay-outs, staking of roads and bridges, engineering, and geo-packages (soil borings, etc.) both as a subcontractor and as a prime for INDOT. He indicates that he believes that learning about INDOT bid opportunities is easier than most other opportunities because the INDOT website is good and user friendly. He favorably compared INDOT’s website to several cities’ websites, remarking that City websites “lock up sometimes.” He added that his firm is prequalified by INDOT to perform jobs over \$300,000. He also mentioned that he has no recommendations for how INDOT can improve its notification or bid process. He said that it is a “cut and dry” process, he can see an entire year of bid lettings on the INDOT website, and the website is updated every two weeks. He indicated that he hears about university jobs through the primes. He said that university work is almost like private work, because it involves building buildings and parking lots and is easier than INDOT work.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that the State has a great system for notification, but that it can be cumbersome with each department sending out notifications. He said that he attended a workshop on “Doing Business with the State,” which was sponsored by the Indiana MBE/WBE office, and met procurement officers from many state agencies that now frequently send him bid notifications. Interviewee #205 said that he has never received any information from IDOA about outreach events at State higher education institutions, but he did receive some information from the IMSDC. He said he attended an MBE/WBE outreach event, sponsored by the IMSDC, which enabled him to meet procurement officers from all of the State universities. He said that he speculated that IDOA does not sponsor State university MBE/WBE outreach events because “we know that they’re exempt from the Department of Education” MBE/WBE goals. He added that Purdue and Indiana University put on their own MBE/WBE outreach events.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, stated that he has attempted to obtain work as a subcontractor through IDOA, the Indiana Department of Natural Resources (DNR), INDOT, and Indiana University-Bloomington. He said that he has not been as successful as he had hoped he would be, but that he has performed work as a

subcontractor for the Department of Natural Resources and Indiana University-Bloomington prior to being certified as an MBE. He said that the work for which he bid was lighting and power work. He said that it was easy to find out about those opportunities. He said, “[Bid opportunities] are out there, so if you don’t see them or are not finding out, you’re not doing anything ... I get e-mails sent right to me.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said, “We pretty much know where to find the [INDOT] work that’s being advertised.” He stated that he learned of the Purdue University project through a relationship that he had with the prime contractor, adding that there was a DBE goal on that project. He said that he has not made much of an effort to learn about university bid opportunities.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that it is easier to learn about project opportunities at INDOT than at any other state agency or higher education institution. He said that INDOT does a “[very] good job of letting you know (about bid opportunities).” He added that the biggest problem with INDOT is that INDOT may advertise 25 jobs and then cancel five of them two days before the bid is due, causing his firm to spend time developing a bid, only to discover that the bid is canceled.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that she has attempted to work with and has actually worked as a subcontractor for several State of Indiana agencies and higher education institutions, including INDOT, the Indiana Department of Environmental Management, Ball State University, Indiana University-Purdue University at Indianapolis, and Ivy Tech. She said that of all the State entities, learning about job opportunities with “INDOT is by far the easiest.” She said that INDOT has a “website dedicated solely to every project that’s coming up ... anyone can log onto it to see...” She said that the way they learn about jobs at the other state agencies and universities is only through the prime contractors.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that it is easier to learn about project opportunities at INDOT than at any other state agency or higher education institution. He said he learned about Department of Natural Resources work through a fax or an e-mail requesting a quote directly. He said that primes called him directly regarding the college and university jobs.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she was aware that Purdue University has a website for posting its contracting needs, but she does not know if other State entities have similar websites. She said that although she checks Purdue’s procurement website occasionally, she never finds services listed there that her firm provides.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, reported that the company’s Indiana Department of Environmental Management (IDEM) work is identified either through an e-mail invitation to bid on a project from IDEM or by the owner reviewing the IDOA website. He said that relative to other public sector work, IDEM’s opportunities are easier to find.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “Finding out about

INDOT work opportunities is easy because you can go to their Web site and look at the work opportunities list. We track the list and use a lead log. Because we have relationships with many of the contractors, we find out about many of the projects in advance through phone calls, faxes, and follow-up e-mails.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, indicated that finding out about this university work was “[n]ot harder than any other work — we just keep contacting the right people — personal contacts make the difference.” He said, “The previous owner was the IT and printing person at VU in the mid-70’s, so we had the relationship established early on.”

Some interviewees reported challenges in connection with learning of opportunities to bid with the state agencies and public colleges. [Interviewees #: 104, 107, 108, 204, 301, 303, 310, TA #5, TA #8]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated that in his earlier experiences it was harder learning about public sector jobs. He said that the public entities posted notices in legal ads of the newspapers, many of which he would never know about because the public entity was in a different town. He said, now, public agencies are required to solicit MBEs, there are electronic bulletin boards where projects are posted, and INDOT has a pre-qualification process. He sees these provisions as helpful for small businesses.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that it is very difficult to find out about work opportunities with the universities.

Interviewee #108, an African American male and previous owner of a commercial cleaning company, stated, “I received many e-mail notifications from [Indiana University–South Bend] regarding work opportunities, but again, they were for construction cleanup. They put a lot of effort into keeping me informed of projects.” Interviewee #108 said that he wished that the University would notify him directly of not just construction clean up jobs but of the general janitorial jobs. He added, “Now the DOT is letting contracts to various non-profits around the area — for example, Logan Center in South Bend — which is more competition for my minority business. That makes it even harder for us.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he never gets any notifications about public sector jobs from the State of Indiana but that he frequently gets e-mail notifications from the City of Indianapolis.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, indicated that information concerning the university work and the bidding process is more difficult to find out about than other public agency work. He mentioned he feels this way is because opportunities sometimes go to the same firms with which the university staff has always worked, and the opportunities are not always posted in the same place. He also mentioned that some agencies reach out to MBE/WBEs and others do not. He said, “A central portal for all State work would make it simpler to know what opportunities are available.” He also recommended that the agencies/institutions e-mail the procurement opportunities to firms, post them in more places, and distribute the information in a more timely fashion. He said that some universities do not publish their RFPs and instead go to two or three firms for quotes. For this reason, he said that his firm is trying to meet with the decision-makers so they know us and so that we can become one of the two or three firms selected. He said, “For architects and engineers, I

wonder if there's a way to get the information out to us before the project is out for bid because by that time the design work has already been done.”

Interviewee #303, the Caucasian female owner of an electrical contracting business, said that she did not know how to identify or secure State work.

Interviewee #310, a Caucasian male owner of a moving company, stated, “It is easier working with Vincennes University than it is with the State. If you want to work with the State you have to read the Legal Ads in the paper every day, and they don't publish it in the Vincennes paper. I mean, they have an official paper, which may be in Indianapolis. They just don't come to the small business man and ask for a quote.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, commented on the notification her members get with bid opportunities. She said “It would be great to have some continuity and central organizing point. Also, if things were posted in a timely fashion, there would sufficient time to bid on them. Our subs have a hard time responding to short-term bids. I wish there were some continuity and standardization on coding so bidding would be easier for smaller firms. The State's system for tracking payment of State projects has been very helpful.”

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, recommended the following to improve notification: “The universities and other state agencies should be more in line with how INDOT does [notification] — have a five year plan, formal outreach [and] annual outreach telling what's coming up.”

Some interviewees offered recommendations to improve notification procedures. [Interviewees #: 117, 212, 216, 222, 228, 300]. Interviewee #117, a Caucasian male vice president and co-owner of a certified MBE/WBE that provides printing, mailing, and promotion services, recommends that “Public agencies need a better avenue of communicating with us when there are bid opportunities.”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that it would be wonderful if the State sent out a monthly bulletin listing the current jobs that did not require “logging in.”

Interviewee #216, an African American male owner of a business consulting firm, suggested that each state agency should have its own public web page announcing the training programs that it is interested in providing for its employees and the types of contractors they are seeking to provide the training.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that there should be one e-mail distribution list that would include the universities' and all of the state agencies' painting needs.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that learning about work at state agencies is the same across the board. She said, “It would be nice if [bid opportunities were] all in one place.” She said that finding

out about projects is difficult, because the work for which her firm would qualify is buried in a large bid package that engineering firms bid on in its entirety.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, recommended that the agencies advertise where they list the projects when they are going after consultants for the design process. She said, “Some of the university sites are a lot easier to negotiate than other ones.”

The Bidding Process.

Some interviewees reported positive experiences with the bidding process. [Interviewees #: 102, 116, 123, 124, 201, 209, 211, 220, 301, 309, 310, PF #11, TA #5, TA #10]. Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, stated that he had only worked on one public sector project, which was with Purdue University. He indicated that the bidding process was fair and said that he believes that his firm was awarded the job because it presented the lowest bid and not because it was a locally certified MBE.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that the bid process for college bidding was fair. He went on to say, “Their bid process is fine, and I have no recommendations. It’s fair, and it’s neither hard nor easy.”

Interviewee #124, an African American male and president of an MBE-certified promotional products company, related his only experience trying to get work from Indiana State University relates to two recent bids to provide certain promotional products. He was not awarded the contract, but commented, “The bidding procedure was just one page which I could fax in. That was very convenient and I wish the other state agencies would streamline the process in the same manner.”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that the bid process for the Purdue University job was no different from the bid process on private sector jobs. She said that as a subcontractor, she really did not know what the entire bid process entailed.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that bidding on INDOT jobs is easier than bidding on any other State jobs because it is all done electronically at INDOT. He stated that he believes that state agencies are required to advertise bid opportunities in at least two different places, such as in the legal notices section of various newspapers, but that it does not always happen consistently.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that bidding on INDOT jobs is easier than bidding on any other State jobs because all bid information is posted on the INDOT website. He said that it is easy to bid, with the only difference among the bids being fuel costs and wages.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, focused his comments on his bidding experience with Purdue. He said that “it was easy to understand Purdue’s process once we got our foot in the door on our first project.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, said that, relative to other public work, “It wasn’t any harder to secure the work. They just call for a price comparison to make sure you aren’t out of line.”

Interviewee #310, a Caucasian male owner of a moving company, said that he had no recommendations on improvements to the Vincennes University bid process, adding, “As far as I’m concerned they do a pretty good job.”

Interviewee PF #11, the president of an Indianapolis-based MBE/WBE/DBE-certified construction and transportation management business, said, “INDOT has ... continuously refined and reinvented their reporting process. [I]t used to be that you didn’t know if you were on the package, on their bid package, so we would never know, and primes could actually use you, and you didn’t know you did the work. They’ve refined that practice where ... you at least know that you’ve been included.”

Some interviewees reported challenges in connection with the bidding process. [Interviewees #: 107, 127, 204, 207, 217, 221, 302, 307]. Interviewee #107, representing a MBE-certified Asian Pacific American-owned engineering firm, shared that the bid process [for the state agencies and public colleges] is harder because of the solicitation process, the access to the information, and the selection criteria.

Interviewee #127, a Caucasian male and president of a marketing and communications agency, said that his biggest challenge with bidding projects was contacting the people who understood his business and were in a position to make a decision. He commented “I think it would be far wiser for the universities to have knowledgeable people in positions to make informed decisions. These key people need to get to the heart of what’s needed. Presently, the university and public agencies are so insular. Purchasing people are not the right people to interview marketing experts nor can they make the final decisions. They are good with commodities like light bulbs, but that’s a far cry from marketing services. Marketing decisions require a perceptive sense of what is needed, what tools to use, what philosophy to adopt, etc. What the public sector has in place for dealing with marketing people is not a good fit.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, stated that the only time he bid on any State of Indiana job was in the summer of 2003. He said that at first he bid on an Indiana Bureau of Motor Vehicles (BMV) job as a prime contractor, but he was unsuccessful. He noted that the contract entailed cabling of computer and phone lines in a new BMV office being built by the State. He said that approximately one month later, another cabling job was posted by the Indiana BMV. He said that he bid on that job as a prime contractor and won. However, he said that he turned that job down because he realized that he had bid the job at far too low of a price. He said that he bid on that job “just to see if we could actually get it ... just to see what other people were doing.” He mentioned that he believed that the only way to see the price at which jobs were being bid was to actually bid on a job himself. He said that he was not sure what the final contract price was, but he indicated that it was not much more than the price that he had quoted. He stated that others in his industry commented to him that his competitors were “low balling” their bids just to keep their employees working during the downturned economy.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he signed-up on the IDOA website, but that he is not as

familiar with it as he is with the INDOT website. He suggested that there be an orientation program offered to familiarize firms with how to navigate through the IDOA website.

Interviewee #217, an African American female owner of a commercial cleaning service, said that she has attempted to provide cleaning services for the Indiana Bureau of Motor Vehicles and the Indiana Department of Workforce Development at their local offices in Kokomo, but has been unsuccessful thus far. She said that she tried to inquire about who to contact to learn about how to bid on cleaning of the local offices of these two state agencies, but was never actually able to reach anyone to help her. She stated that she never got to the point of submitting any bid. She stated that the local BMV branch and WorkOne office managers should have explained the procurement process to her and given her a valid phone number and a contact name in Indianapolis.

Interviewee #221, a Caucasian male owner of an excavation firm, said that the bidding process should be made easier, since it is currently so complicated.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, recommended that the Indiana Department of Environmental Management reduce the paperwork in the proposal process. Interviewee #302 said, “The paperwork should stick to the actual job. There is a ten-page questionnaire ... that is used for every job. I believe the paperwork can be streamlined down to stick to the specific proposal.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, reported that he had not had much success in attempting to get work with any of the listed agencies/colleges, but he did secure one job designing a small building for Ivy Tech Southwest as a consultant. He indicated that it is harder to secure this work because “[t]he bid process is too rigid, and there are too many people to work through.” He indicated that the college did not have any prequalification requirements because “[t]hey know me, and I know them.”

Prequalification.

Some interviewees reported a positive or successful experience with the prequalification procedure. [Interviewees #: 101, 107, 301, 302]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, said that the colleges that his firm dealt with did require prequalification, which he said was a rather straight forward process.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that the universities do require prequalification and that INDOT has been the most straightforward with their prequalification process.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, reported that the prequalification process with the Indiana Department of Environmental Management includes proof of insurance, a ten-page application and business related information, such as how long a company has been in business and financial statements. She noted that her firm has generally had good experiences with IDEM.

Some interviewees reported challenges in connection with the prequalification process. [Interviewees #: 202, 203, 212, 222, 228]. Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, commented that colleagues in her

field recommended that she become DBE-certified, which she is, and prequalified, which she is still attempting to become. She reported that although she submitted her prequalification paperwork months ago, the INDOT website indicates that her application is still in process. She said that the only phone number listed on the INDOT prequalification website is for technical problems, not for inquiring about status updates. She said that whenever she calls or e-mails someone at INDOT, no one can tell her why she is not yet prequalified. She said she completed all of the INDOT prequalification documentation months ago and has not “heard boo from them,” adding, “I e-mailed INDOT several times ... got no response.... I feel I need to get prequalified, but can’t seem to get prequalified.” She added that she recently completed a five-day National Environmental Protection Act (NEPA) certification course offered by INDOT at which she obtained NEPA certification good for three years, and she thought that her prequalification process would be expedited because of this but it was not. Interviewee #202 suggested that INDOT conduct a half-day seminar regarding how to move through the prequalification process and that the agency should have a prequalification outreach person. She said that if she has questions for IDOA or the City of Indianapolis, she simply calls contact people there who provide her with the information she needs. She said that she does not understand why IDOA and INDOT have different websites and suggests that they be combined into one.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that he has tried to get work that is funded by the State of Indiana, but he has been unsuccessful. Specifically, he stated that he has submitted the firm’s qualifications to the Indiana Department of Environmental Management and INDOT for projects, but he has never been selected. He added that he has also unsuccessfully bid on projects in small towns throughout Indiana that are funded through the Indiana State Revolving Loan Fund Program, under the auspices of the Indiana Department of Commerce. He added that he has called on many towns to ask to be put on their bid lists, but he stated, “There’s no mandatory [diversity] requirement, and they don’t have to send you the information.... They are told by the town whom to send the requests for proposal to... There is no requirement that they have to send [them] to us or anybody else.... It is not possible for me to know the requirements.” He added, “We are well-qualified to do this work.... I have done it for 25 years.” He concluded that if the State does not require these towns that obtain new Indiana State Revolving Loan Funds to use MBE/WBE contractors, the towns will not do so willingly. Interviewee #203 said that he has tried to get work from State universities, specifying, “I’ve requested many times [to find out] what they do, but nothing happens.” He added that most of the work needed by universities involves construction, which his firm does not do. He mentioned that Purdue University has hosted open houses and that he has attended one of them. He said he attended one that was a full-week long and co-sponsored by Turner Construction. He said that the Director of Purdue University’s Supplier Diversity Program spoke to the participants at that meeting. He reported that he met a pipe contractor who said he would follow-up with him, but never did. He said he looks on the State of Indiana website every day, but he “can’t figure out” how to get public sector jobs. He referred to a large out-of-State firm about which he knows that won a large contract with the City of Indianapolis. He said that the reason the firm won the contract is because “they had one person, and his full-time job was to go to the City of Indianapolis every day. They got a big contract.... I can’t go every day.”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that she is required to be prequalified for all state agencies and universities, adding that the prequalification process is “exhausting ... time consuming.”

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that she was required to be prequalified on a City bid for less than 6,000 square feet of work, but not on any State jobs. She said that to be prequalified, she had to prove that she had performed five jobs in the past, each of which had been \$150,000 or more. She said that she believes that the prequalification requirements should be tiered, based on the size of the job and the size of the business. She said that the prequalification process seems “political” to her.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that INDOT was a difficult agency to attempt to obtain work from. She said, “The process for getting prequalified [with INDOT] is horrible ... They don’t explain it to you ... they assume you know everything.” She added that her firm eventually became prequalified with INDOT in 2008.

Some interviewees reported that they were not required to obtain prequalification.
[Interviewees #: 201, 206, 211, 213, 214, 216, 219, 220, 223, 224, 304, 309, 313]

Payment.

Some interviewees reported a positive or successful experience receiving payment on projects with or for the Indiana state agencies and public colleges. [Interviewees #: 101, 107, 123, 127, 200, 201, 205, 206, 211, 214, 216, 219, 223, 229, 300, 301, 304, 307, 309, 310, 313, TA #10].

Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, indicated that one bonus of the INDOT project on which his firm is currently engaged is that this department provides direct payment, which saves time and worry.

Interviewee #127, a Caucasian male and president of a marketing and communications agency, commented that Ivy Tech paid quickly.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that he has never had a problem receiving payment from the universities. He added that he bills the universities monthly, and they pay within 30 days.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he experienced no problems during the actual performance of the State contracts. He noted that it is easier to get paid on public sector work than on private sector jobs.

Interviewee #216, an African American male owner of a business consulting firm, said that the state agencies that have hired him are “routinely pretty good” when it comes to paying within 30 days. He said that sometimes he has received payment 60 days after performing the work. He said that all of the agencies for which he has served as a contractor are “pretty much the same” in terms of paying on time. He added that one time “DMHA took a little bit longer than I anticipated.” He recommended that each state agency should have a contract administration/payment system in place that operates a little “smoother and more seamlessly,” than it currently does.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she was paid within 30 to 60 days of performing the services, which, she said, is standard for commercial customers.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she was paid on time by the universities, and it was about the same when compared to other public sector work.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, reported that he was paid for the Purdue project according to milestones, that the payment was timely, and that it was easier than other public work especially because there was no lengthy board approval process to go through. When asked about recommendations to improve administration of contracts or payment methods, he recommended that the owner trust the project managers to manage the budget and approve payments within the confinements of the approved budget.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “We don’t have any problems getting paid on the State projects. On one of the INDOT projects, we negotiated payments with one of my main clients, and we have a quick turn around on the payments ... 15 days. Our main client understands the nature of our business and what we do, so we were able to negotiate that payment. It takes 60 to 90 days to get paid on an INDOT project through some primes. We don’t work for those customers anymore.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said, “Once you have a contract it is not hard to receive payment for work done for Ivy Tech.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, indicated that there is no real problem with Vincennes University’s payment timeliness or process.

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, indicated that his members get paid and attributed this to the existence of payment laws and regulations. He did indicate that one INDOT project might not pay as promptly as another depending on the contractor and/or the project manager. He suggested that INDOT needs to make sure estimates are issued when they should be.

Some interviewees reported negative experiences receiving payment on projects for Indiana state agencies and public colleges. [Interviewees #: 127, 200, 205, 207, 209, 210, 212, 213, 221, 224, 228, 302, TA #6, TA #7]. Interviewee #127, a Caucasian male and president of a marketing and communications agency, stated, “Purdue was very slow paying, sometimes up to 90 days plus. I guess they just don’t understand our cash flow needs.”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, indicated that getting paid on INDOT jobs is “a little bit harder” than getting paid on other public sector projects because they want to “pay by percentages.” He explained that if 5 percent of the total job is completed by the prime, the prime can bill INDOT for completing 5 percent of the total job. However, he said that that 5 percent may reflect 70 percent completion of a subcontractor’s total scope of work, but the sub only receives 5 percent of its total contract price. He cited an example in which he currently has \$70,000 into a job, but can only get paid \$10,000 for it because the billing is structured on the percentage of completion of the total job, not on what the subcontractor actually completes. He remarked, “Subs are basically fronting the job.”

He indicated that it takes a long time to get paid. He said, “As surveyors go, we’re the first ones in. I could have five, six, or 7,000 dollars into a job before they even start working ... we have to front our employees’ costs ... most of our money comes at the end of the job ... if it’s a yearlong job, it may be 12 months before I finally get my money back out of it, which in this economy is rough.” He added that he recently called a prime about increasing the percentage he gets paid when he completes a job and the prime agreed, but now he is waiting to receive his money. He said that the State needs to look into this practice of having subcontractors front the financing of INDOT jobs because “the subs are out money for months.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that his firm installed security cameras for the Indiana Department of Homeland Security (IDHS). He said that there are barriers for small firms in getting paid by IDHS because IDHS only pays by debit card. He said that it costs \$5000 to obtain the proper equipment to receive debit card payments, which is cost-prohibitive. He said that his firm was only able to receive payment from IDHS through a special arrangement that he made with his firm’s bank. He said that other state agencies pay by direct deposit or check, adding, “Direct deposit is a better option.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that as a DBE subcontractor, “we have to wait until the prime gets paid and then it basically trickles down to us.” He added the INDOT “has typically been fairly good at paying quickly.” He said that DBE firms “have to have the ability to tide over that interim period until you get paid.” He added, though, that the payment process is better on public sector jobs than it is on private sector jobs.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that INDOT’s payments have slowed down on jobs in which INDOT “is squeezed for help.” He said, “You know you’re going to get paid [by INDOT]. It may not be exactly when you want ... but you’re going to get paid at some point in time.” He added that INDOT recently changed its payment system, causing his company to get paid every 30 days instead of every two weeks. He said, “They need to go back to the two-week progress estimates.” He commented that his company may do \$15 million worth of work in a two-week period with INDOT, and that to change to payment terms of 30 days forces his company to have \$30 million in receivables at any one time. He added that this is especially problematic for their subcontractors, because his subs do not get paid until his company gets paid.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that she recommends that the State entities pay faster than they currently do. She said that she heard that INDOT has changed its payment policies from paying primes in 10 days to paying in 30 days after receipt of an invoice. She said that they do not get paid until after the primes get paid, so they are often waiting 60 days to be paid on State jobs.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that getting paid on State jobs is the same across the board. She added that getting paid is often a problem, in that she frequently has to wait 90 days to get paid after submitting the invoice. She said, “We have to be the bank.”

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that she often gets paid late on State contracts, but that it is probably not the fault of the State. She said that she suspects that the State pays their primes on a timely basis, but that the primes just do not pay their subs on a timely basis. She said that she would prefer to be paid weekly, not monthly, on State contracts. She said, “When you’re a small business, like me, and you have \$200 in your account, you need money every week, you can’t go a month at a time ... you have reports you have to send off every month ... you have payroll ... that’s paying four weeks of payroll that you don’t have because they’re paying monthly.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that he was paid 30 days late on a Purdue University job. He said that to improve the administration of State contracts and payment methods, he recommends that the ‘Prevailing Wage’ laws should be eliminated.

Interviewee #224, a Caucasian male owner of a square dance calling and specialty archery supply firm, said that when he called square dances for Purdue’s Extension Agency, the payment was quite late and that he had to place several phone calls to his contact there before he received payment. He said that the way the payment process can be improved at the universities is for there to be better communication up-front so that vendors would know how long it would take for them to get paid. He said that he was paid by Ball State University the night that he called the square dances and that he was paid by Purdue University approximately ten days after he called the square dances.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that the speed with which her firm gets paid depends on the prime contractor. She added that “some will take forever.” She added that when they primed for the Department of Natural Resources, that they received payment via direct deposit, which was prompt and convenient. She added that it would be beneficial to small firms such as hers if all state agencies paid promptly and by direct deposit.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, reported that the payment process for the Indiana Department of Environmental Management is lengthy. Interviewee #302 stated, “I do not know what takes so long for payment, especially since the dollars are already approved for the bid services. It would seem once the work is deemed satisfactory it should not take more than 20-days to receive reimbursement.” Interviewee #302 said that it takes an average of 90-days to receive payment from IDEM. He indicated that “it cost the State more because you have to figure that it is going to take at least 90-days after you complete the work to get paid.” Interviewee #302 stated that the State is slower than other public jobs in paying. He said that “counties generally have meetings once a month on funding. I submit my invoice on the 14th of the month, the county meets on the 15th, and on the 16th of the month I am getting paid. However, if I am late and submit after the 15th of the month, I will have to wait until the next month.”

Interviewee TA #7, the African American male representative of a civil rights agency, said that he had not heard of problems where firms were not paid, but that “there were a few problems with FSSA delays of pay/slow pays. But, that’s all I know. And, we do a good job telling businesses not to expect to get paid in short order because processing the paperwork takes time.” His recommendation regarding payment is, “If the individual does the work, it would be good to pay the businesses every

two weeks. Every business might not have a fat credit line to float the payroll. In order to keep capacity, they need to have money — that’s a key component to their survival.”

No Experience.

Some interviewees reported having limited to no experience pursuing work with the Indiana state agencies and public colleges. [Interviewees #: 100, 103, 105, 109, 118, 119, 120, 121, 122, 208, 215, 218, 220, 226, 227, 230, 231, 303, 306, 308, 311, 312, 315]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said that his firm just recently entered into a collaboration effort with Purdue University in South Bend. He said, “This collaboration is to design and manufacture specific machinery to help us produce water conditioning products to sell to municipalities.” He noted that, other than the above recent endeavor with Purdue University, his firm has had no other interaction with the other state agencies and public colleges.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, stated that he has had no dealings with any of the state agencies or public colleges with his present company. However, he reported that in his prior business he “did some work with IDOA, and that went pretty well.”

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated that they have only had one dealing with a State agency or public college or university. He recalled one attempt to bid by computer on a job Purdue University in Hammond had, and how at a certain point in downloading the blueprints his credit card was required, so at that he shut down the system and never tried to do any online bidding or seeking public projects.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, related his only experience trying to get work from the public sector was when he about 10 years ago when he bid on a project for WorkOne, which he lost. He stated that he had not worked with or tried to get work from any Indiana state agencies or public colleges.

Interviewee #122, an Asian Pacific American female President and CEO of a WBE-certified consulting firm, reported “Of the nine agencies and public colleges you mentioned, I have only worked with two: IU and PU. However, I have never bid on a project from either of them. They have contacted me for my services, I gave them a quote and they either accept or reject it. In dealing with these universities, our company’s skill set is what the universities are looking for and that’s why they seek my services. I have never bid on a public agency project and never will.”

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that she has never performed work for any Indiana state agency or public university. She said she initially considered attempting to obtain one contract with the State’s Office of Technology as a subcontractor, but was never actually included in any bid. She said that she considered bidding on a project involving the integration of an Enterprise Bus System. She said that she learned of this opportunity from an e-mail she received from IDOA. She said she chose not to bid because the prime she would have subbed under opted not to bid. She said she attended two pre-RFP sessions, which were “very informative.” She said that many people attended both of those sessions and that since the second one was in a very small room “overflowing” with a large number of people, she felt intimidated. She added that after the pre-RFP session, she received a list of everyone who attended it, which she found helpful.

Interviewee #231, a Caucasian male owner of a plumbing company, said that he has never attempted to work for and has never worked for any State of Indiana agency or higher education institution. He said that the reason he has not attempted to obtain State of Indiana work is because, “being as small as I am, I worry about the lag time on the government money, fronting it all out of my pocket.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said she has had no experience working with or attempting to work with any of the listed Indiana state agencies or public colleges. She said, “Most of their jobs are construction and are not in construction.” She added, “I’d sent out some of our brochures to some of the colleges, but never heard back from them, and that was about the only marketing we’ve done to any of them.”

V. Marketplace Conditions.

Multiple interviewees indicated that marketplace conditions correspond with the current state of the economy. [Interviewees #: 102, 103, 104, 105, 106, 108, 109, 110, 113, 118, 119, 120, 121, 122, 124, 125, 127, 128, 200, 201, 202, 203, 204, 205, 206, 209, 210, 211, 212, 213, 216, 218, 219, 220, 221, 222, 223, 225, 227, 228, 231, 301, 303, 306, 307, 309, 310, 312, 313, 315, TA #1, TA #2, TA #3, TA #4, TA #5, TA #6, TA #7, TA #8, TA #10]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated, “When the economy is good, both the private and public sectors thrive. When the economy is bad, the private sector suffers first and many businesses that had never been present in the public arena stampede into the public competition.” Interviewee #104 noted that in the public realm there are “funding cycles” that last from five to ten years and seem to rotate from architecture, to transportation, to public works.

Interviewee #105, a male Caucasian owner of a small concrete contracting firm, described the current market conditions as “very poor.” He said, “I have not seen the economy this bad since I was a boy and worked with my Dad pouring concrete.”

Interviewee #106, an African American male owner of a recently started firm, indicated there were a lot of engineers out of work in the Fort Wayne area, and engineering opportunities are rather limited in this “smaller market.”

Interviewee #108, an African American male and previous owner of a commercial cleaning company, said that presently he works three jobs to stay afloat. He reported that he gave up his cleaning business after his MBE certification expired. He said, “It was just too much to re-apply and go through that whole process while trying to work one full-time job and a part-time job.” He noted that given the major slowdown in the present economy, he does not see himself starting up the cleaning business in the near future.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, noted that the “economy is really tough. It’s a real struggle. Clients are not spending money like they used to. The cost of business keeps rising, and we still have to pay bills. It’s a real struggle.”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that her industry has struggled in the marketplace during the downward turn in the economy. She related that she believes that part of the problem stems from the fact that people who are out of work are working to fix computers out of their homes. She noted that these people are significant competition for her company because they are so cheap. She said that the individuals

working out of their homes are often not insured, but it is hard to educate customers on the risks that they take when working with some of these individuals.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, describes the growth of his company as “poor.” He cites the current economic environment and dwindling funding from the public arena. He admits, “I started my business [in March 2008] in a very difficult climate and I’m not surprised the market has declined more than grown.”

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated that as of 2010, there has not been much of a market anywhere. He said that there have been so many layoffs, everywhere you look people are hurting and doing no more housing maintenance than is absolutely necessary. He said, “As far as changes in the marketplace, getting payment is a problem, as is obtaining loans.” He noted that even if payments do come in, they are slow.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, commented that “obviously, the economy is down and we have felt it in our business but we are managing to hang in there. It’s not easy, and it would really be helpful if I could get an affordable loan so I could purchase the new equipment that would allow me to expand. I would also use the loan to rent a larger work space. That would help a great deal. Right now it’s really hard to get any loans from our banks.”

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, related that “the market is really tight, especially for janitorial service firms like ours. Everybody looks to cut back on cleaning, or expects us to reduce our rates while doing the same amount of work. But, we have been able to pick up some new clients.”

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, recounted the financial struggles that the economy created for his business. He said that he laid off almost one third of his employees and has lost millions of dollars in 2009. He said he doubts if he will see a return to the level of business that existed before the downturn.

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, said that the market is tough but she thought they would get through it.

Interviewee #124, an African American male and president of an MBE-certified promotional products company, related that “the market is depressed and I have not seen much improvement in it yet. I don’t see much difference between the public and private sectors in that regard.”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, related “the market is improving a bit in our area. Construction around here was just devastated, but it is now coming back slowly. There seems to be more money available for marketing in the private sector, which always seems to be the first item cut from budgets when things get tight. In the public sector, it seems like funding approvals are still lagging.”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that the actual price of jobs is down at least 25 to 30 percent, and now “is a great time to build something if you can get the bank to loan you money.” He added that he is seeing a lot of bids for both public and private sector work and that price is a huge

factor in determining who wins the job. He said that the stimulus package jobs are “re-surface jobs that are helping a few select paving companies.” He mentioned that private sector jobs are smaller right now because people cannot get loans. He said that he no longer sees 40 acre projects; instead, he sees four to five acre bank construction projects.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that the entire marketplace is slow right now.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, stated that her business experienced steady growth in 2006 and 2007, but between 2007 and 2008, she said that the growth was better than in the prior year. She noted that her sales have been down 20 percent in 2009, but added, “I’m as busy as I need to be ... I still play with hiring that next person ... that’s just a huge commitment.” She stated that even though sales are down in 2009, she has not lost any clients, but “the volume per client is down.” She said that she believes that this slowdown in her business is based on the slow economy and parallels what other businesses like hers are also experiencing.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that his firm has not experienced much growth because “of this bad economic time ... hopefully, when the economy comes up, we’ll be able to grow more.” He added that when industry grows, his firm will grow, as well. He also mentioned that a large electric utility company had been a large customer of the firm, but now the electric utility cannot hire outside consultants. He believes that the sluggishness that his firm is experiencing is mirrored by other environmental engineering consulting firms.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he believes that the market is slow right now in his industry, both for private and public sector jobs.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that there are “fewer and fewer projects out there now” in both the public and private sectors. He stated that he currently sees “more people bidding the projects.”

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said, “The last year has been tough.” He added that in this downturned economy, “The larger you are, the better.” He said that he has not done too badly in this economy because he provides specialized services and focuses on targeted types of customers. Interviewee #206 said that the local market is shrinking, and “may be leveling out.”

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that his company has experienced an 85 percent decline in private sector jobs in the past year.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that the private sector is slow right now “because people are scared to spend any money right now.” She said that public sector work is “steady, but not great by any means.”

Interviewee #216, an African American male owner of a business consulting firm, said that the current marketplace conditions in his local area “are pretty bad, at least for me.” He added that because his expertise is in such a targeted niche area, it makes it more difficult to find work. He said he believes that not much is happening in either the private or the public sector in his area of expertise in the local marketplace.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said, “In Kokomo, Indiana, the business climate today is to maintain. Most people do not have any money to expand. They do not have any money to buy their equipment ... we are an auto-based town and because of that ... our future is very uncertain, as is the auto industry.”

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that her firm has experienced a 30 percent decrease in business over the past two years. She said that she noticed that during the past year, people are starting to hold onto their money and not spend it, despite the fact that they are not in jeopardy of losing their jobs. She added that she has also seen that people working for good employers have lost their jobs. She said that over the past two months, she is starting to see “a little bit of a climb” in business. She said that she has been through several economic down cycles over the years, but that this is lasting longer than the others. She noted that she is seeing private sector commercial sector work begin to pick-up a bit. She stated that the marketplace trends that she has observed are the same for both the private and the public sectors.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that she has experienced “a spending freeze” for the previous six months, in that she has received no new work during that period. Since she only works in the private sector, she said that she can only comment on private sector work, which has been extremely slow.

Interviewee #221, a Caucasian male owner of an excavation firm, said that business is currently very slow in his local area. He said that business started slowing down 24 months ago, and that it is still slow.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that “last year’s been dead” for both private and public sectors. He clarified that there is virtually no business in the private sector and that there is some work occurring in the public sector because of the construction on State Road 27.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that the marketplace is “dropping off” in both the private and public sectors because of the downturn in the economy. He said, “Places are sacrificing cleanliness for a cheaper cleaning contract.”

Interviewee #227, a Caucasian male owner of a truck haulage company, said that business has been slow of late, but that it is now picking up. He said that in this economy, nobody is building any houses, so he is not hauling any dirt. His recent business has all been in hauling materials for factories, including industrial scrap.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that they remain somewhat successful

obtaining contracts with churches, but the public sector is more challenging, and political influences impact decision-making more in public than private sector work. He stated that they have been stereotyped and pegged into one niche — church work. He said, “More of the larger firms are now going after work the small/medium sized firms pursued in the past, and the larger firms are underbidding the smaller firms. Everyone is going after the same little pot of work, and the MBE/WBE cut is smaller than ever on some of these public projects.” He said that the public sector is challenging.

Interviewee #303, the Caucasian female owner of an electrical contracting business, reported that currently the company is only doing one-half of what it was doing prior to calendar year 2009. Interviewee #303 stated that according to what her husband is hearing from people in the supply houses, this is comparable to what similar businesses are experiencing. Overall, she stated that “there is not much opportunity to do much construction work.”

Interviewee #306, a Caucasian male owner of a carpet and upholstery cleaning firm, said that he has not communicated with others in his industry, but expects that everyone in the carpet cleaning business has suffered in the current economy. He said, “People and businesses are just not spending money, even on maintenance.” Interviewee #306 said that the marketplace conditions have deteriorated with the downturn in the economy, saying, “It is a no growth business environment for everyone, but I’m hoping that things will pick up as the economy improves.” He reported that he lacked specific data other than saying, “My earnings in the two most recent years have been at about a third of my peak year earnings.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, indicated that the entire market place has slowed somewhat, adding, “Every company is hurting nowadays” without regard to public or private sector, and the general trend has been a slowing in the marketplace.

Interviewee #310, a Caucasian male owner of a moving company, indicated that prior to last year, business had been climbing or steady, adding, “We didn’t have a season. In 08/09, I kept my people here, not working, but on payroll. But last spring I couldn’t do that anymore and had to let them go.”

Interviewee #312, a Caucasian female and corporate officer of a construction firm, described the current marketplace conditions and changes in the marketplace as “poor — there has been a steep decline and we don’t know day-to-day if they will have work the next day. We had about half as much work in 2009 as we had in the previous year.”

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that in the local marketplace, “things are tight ... contracts everywhere are difficult to gain because all businesses are buckling down and figuring out how to do with less.” She said that she has heard, though, that the economy is beginning to turn around and that businesses are starting to hire again.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that in the current marketplace, “it’s tough in both sectors, with the cuts, in the private sector as well as in the public sector.” She added that large companies which have traditionally exhibited steady growth are laying-

off people. She added that the construction sector is especially suffering. She said when the construction industry suffers, it impacts all other sectors.

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, stated, “Obviously, the economy has been tight, but it seems to me it is starting to show some signs of progress, but slowly. Public spending is driven by property tax revenue and managing cost in the services it provides. And, of course, the private sector is impacted by the economic conditions. When the economy goes bad, the private sector cannot engage in sufficient commerce and that impacts the public sector. I get to hear what business leaders are saying [at Chamber of Commerce meetings] and I’m picking up some encouraging indications that our economy is moving in the right direction. While new full-time hiring has not returned, at least there’s an increase in overtime and in the hiring of temporary workers.” He noted that in the area of construction, “Many of our residents are working outside the local market and many of our companies have washed out.” He also stated that “Department of Defense firms are doing ok and have not been hit too hard, but otherwise things are slow.” He noted that professional services and goods distribution have been negatively impacted by the market. He stated that “Many professionals, at least two to three call our offices a week [for help with contracting], whereas in the past it might have been two to three a month.” Specifically in regards to goods distribution, they noted “We’re doing ok, but not thriving. Consumer demand is down and fuel prices have moderated.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, stated that what she hears from members, whether they are working in the public or private sector, everyone is having a hard time, and it’s across the board. She said, “Things are difficult, whether it’s public or private. Budgets are tight, opportunities are limited, and economics are slow.” Regarding changes in marketplace conditions, she said, “I’ve not seen much movement in the last 12-18 months, and it does not seem that significant improvement is on the horizon. Both the public and private arenas are initiating a lot of cost-saving measures, and exercising a lot of budget accountability.”

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, said, “The economy, slow down in private sector, lack of lending to small businesses, banks freezing credit lines [and] not loaning [and] cash flow are the top challenging issues for businesses today. These issues are happening in the public and private sectors. I also think there is a lack of education and understanding about supplier diversity. There are some regional dynamics such as pockets of areas where discrimination is prevalent especially in the southern part of the State where the buyers are not open to using diverse suppliers.”

Interviewee TA #7, the African American male representative of a civil rights agency, said “If you look at it from overall economics, the marketplace affects private and public sector. Both have hits. The public sector has had to cut back. Same thing goes with the state agency side — what we can live with, what we can live without. Taking a step back to a couple of years ago, the economy was booming to now we are down to one to two projects. On the private sector, they can select who is going to do the work because the projects are privately funded. I’ve seen more sole sourcing without bid notification going on due to the fact of cost, and we’re trying to get the best bang for our buck. We know who can do this job at the money we want to do it for.”

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said that about a third of the DBEs across Indiana are about a third down from 2009 because the public funding is all the funding that is available. He stated that this means everybody in the marketplace has come over to INDOT for these available projects when in the past there were more private jobs. He said, “I think the marketplace is very different for everyone because credit is just so restricted so now the primary source of funding is through the federal government, that is, federally-funded projects.”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, stated that the economy affects the amount of work available and that the economy is driving down the public work because tax revenues are down. For example, he noted that on INDOT contracts over the last year or so, there have been more bidders because there is less work.

A few interviewees reported that they have performed well in the slow economy. [Interviewees #: 115, 123, 226, 305]. Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said his company was doing considerably better in the slow economy than it had been doing before. He stated, “We can provide technology solutions that save our customers from 9 percent to 40 percent. When times are good, companies tend to take whatever is offered. When times are leaner, companies are thriftier and our approach is to show them creative ways to use technology that will save them money. So, we are busy.”

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, related that “The market is fruitful if you know how to acquire business.” He went on to report that “the set-asides are good. We bidders have to make a good accounting of ourselves. I do think the State needs to demonstrate better compliance accountability.”

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that his business has fared well and actually increased during this tough economic period because of the customers he has targeted. He said that he has focused on providing cleaning services in medical-related facilities, such as physicians’ offices and clinics that have not been negatively impacted by the downturned economy. He said that he has intentionally avoided cleaning for car dealers and restaurants because those types of businesses have been hard hit by the slow economy. He said that in some of the office buildings he cleans, customers have asked him to cut back on the amount of times he cleans certain parts of the office and on the number of days per week that he cleans an office to save money.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “My vertical markets are churches, corporations and schools that buy audio visual equipment. Churches and corporations make up the majority of my company’s sales. It boomed over the last 12 months. There has been a change or drop in the volume of sales in the church market ... probably cut in half ... especially in simple projects like installation of a project and screen. The corporate market has picked up. The banking area has been a major market for my firm. I just finished work as a subcontractor on an eight-month bank project.”

Some interviewees reported that the economy has had a limited impact on their business. [Interviewees #: 100, 111, 203, 214, 215, 230, 308, 311, 314]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said the economic downturn has not affected his firm’s business very much, partly because of the EPA’s new regulations regarding surface water safety

requirements. “I know that this favorable condition could easily change for us, so we also need to explore other markets, but public sector business is generally down now.”

Interviewee #111, a Hispanic owner of an engineering services firm, said that conditions in the marketplace for his business have been pretty stable. “It just seems [that] when we lose public work, we’ve got plenty of private. And when we lose private work, for whatever reason, we’ve got plenty of public. So we’ve been fortunate. Very fortunate.” He also indicated that for his firm, he has not seen significant changes in the marketplace. However, Interviewee #111 also reported that there was a point years ago when 80 percent of his firm’s work was public, which he did not like, but after September 11, 2001, his firm was lucky to have public work because the private-sector work stopped. “I don’t like to have all my eggs in one basket.... I don’t want to rely only on minority work either.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that he has not seen any changes in the marketplace in the past few years.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that she has not observed any changes in the current marketplace conditions in the local area related to her firm.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that the local marketplace is good because many entrepreneurs are forming businesses and they need “limited print services.” He said that he has noticed a slight slowdown among existing businesses for the services he provides, but that they still need social media sites, mobile marketing, coupons, and flyers.

Interviewee #230, an Asian-American male owner of a dry cleaning company, said, “Bloomington seems to be less affected by the current market. I know other places in the United States that are more affected, a lot more affected than we are. We are still affected, but not enough that we’re concerned about it.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said, “Our area is pretty wide — the Continental U.S. — and we’ve been seeing a steady trending upward in our business, this year over last year. It was looking pretty pathetic for most of ‘09 until the fall when it started to pick up.”

Interviewee #311, a Caucasian male owner of a computer firm, said, “The market for IT has been fairly steady, perhaps because we offer a product [software for foreclosure sales] that has had fairly high demand in the down economy.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said, “We are a national company, so I believe because of that we have not been as affected much. We are an Indiana-based company but we don’t do a lot of Indiana work. We get a lot of market proposals from Texas. Indiana is pretty well hooked up. In places like Oklahoma and Kansas they’re trying to build up service capacity.”

Some interviewees reported that the marketplace conditions in the public sector are better than in the private sector. [Interviewees #: 101, 116, 207, 208, 218, 229, 304, 308]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, indicated that in the present economy, “there may be a slight advantage in bidding on public sector work because the public sector seems to be recovering from the slump a bit more quickly than the private sector.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that the only work now is in the public arena, but he is sure the public sector will soon be running out of money too. He said, “The public sector work in northwestern Indiana is with the schools, and that is drying up too.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that the firm’s public sector work has been going well over the past few years, but that the private sector work is “fairly dead.” He added that the State’s Major Moves projects and federal stimulus projects have provided a lot of work for firms such as his in the transportation sector. He speculated that construction work will continue for the next few years but that design projects will start drying up. He stated that he believes that his firm’s overall volume will decrease in the future, but he hopes that the firm will still grow through other avenues.

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that the biggest change he has noticed in the private sector marketplace is “the economic turndown ... research and development and design work ... [get] cut if you’re having economic concerns.” He added, “[Racing] teams aren’t spending the money this year.” He said that the public sector work his firm has been performing this year has been “smooth sailing.” He said that they have been receiving more and more purchase orders under their one existing contract.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that the public sector currently has more money to spend than the private sector. He added that there is more work in the public sector and that the public sector work is “much more lucrative.”

Interviewee #229, a Caucasian male owner of a safety training firm, said that in the current economy, there seems to be less work in the private sector, but that the public sector is still active. He added, “The Feds still keep going along.”

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, commented that, as with all businesses, the economic climate has hindered some of the private sector work. Interviewee #302 stated, though, that they remain successful in obtaining emergency management work, but they still have slow times throughout the year.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “The markets have shifted, and now 90 percent of our work comes from the public sector. The private sector has really shrunk.” She said, “We are looking for work in the private sector because we always like to have a balance. There is a different type of opportunity there and a different profit margin. There is more risk and challenges in certain sectors, and we are trying to find the right balance.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said, “The public sector is the one which pretty much kept us going last year but the private sector is where we are really seeing a comeback in terms of jobs.” She added, “For a while there, private sector companies weren’t doing any maintenance at all and if they did call you they looked over your shoulder all the time and watched the clock. Companies are starting to spend money now and we are seeing more business.”

Other interviewees reported that the marketplace conditions are now better in the private sector than in the public sector. [Interviewees #: 107, 112, 117, 202, 217, 311]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, explained that there is a lot more opportunity in the private sector right now.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that times have been tough, especially in the public sector. She said, “We cannot even get through the doors at the City; we get no opportunities to even bid on projects there. It’s always the same people who are awarded the contracts. We cannot even get a meeting with the public officials.” She said that private sector businesses are more interested in getting the most for their money, so they appreciate her firm’s commitment to efficient work habits that reduce hours on the job and, thus, save money for their companies.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, noted that the types of products have changed in the marketplace due to technology. “It used to be that 70 percent of our business was in forms, now it’s just 30 percent.” He stated that the public arena has not changed in the last 30 years. The public entities still don’t want to talk with them. In the private sector, he feels like at least there is a chance to win a bid based on competitive bidding. He commented, “The private businessman wants to save as much money as possible, whereas in the public arena they don’t care what they spend, they will just raise tuition or fees or taxes.”

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, stated that the marketplace is very competitive right now because of the economy. She said that she has private sector clients who are very loyal to her and continue to give her business, adding that they are not as price-sensitive as public sector clients. She noticed that contractors working on public sector jobs have lowered their prices considerably because of the slow economy.

Interviewee #217, an African American female owner of a commercial cleaning service, said that there seems to be more private sector work in her local area than public sector work.

Interviewee #311, a Caucasian male owner of a computer firm, indicated that the software development aspect of his business is more robust in the private sector. He reported, “There aren’t many opportunities for software development in the public sector.” He commented on changes in the marketplace that he has seen, stating, “The private sector has many more competitors for hardware. Some start-up companies, trying to get their foot in the door, will undercut us on price but will go out of business in short order. This does put pressure on our pricing models, though.”

Interviewees identified various factors that affect a business's success in the local marketplace. [Interviewees #: 100, 101, 104, 105, 107, 109, 110, 112, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 127, 128, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 225, 226, 227, 229, 230, 231, 300, 301, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, TA #1, TA #2, TA #3, TA #5, TA #6, TA #7, TA #8, TA #10]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said that “the market is price driven, [and] we have to cut and control our costs [in order to compete as a small business]; we have to provide good-quality work and foster good client communications.”

Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, commented that to stay competitive “in the public sector, qualifications-based projects, knowing the right people and having them on your side is a key to success.” He said it often is “who you know” that makes all the difference. He reported that you first have to be known, then given an opportunity, and then market your good reputation.

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated, “In the public sector, politics is still the main ingredient for business success, not the quality of work; it remains who you know.”

Interviewee #105, a male Caucasian owner of a small concrete contracting firm, said that to remain competitive “I just do piecemeal work and keep hoping I get work by word of mouth.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, reported that he believes that relationships, prior project experience, and pricing play a major part in being competitive in his line of business.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, reported that it takes “experience, quality service, and working efficiently” to remain competitive in today's market.

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, expressed that it takes stamina and tenacity to survive in this business, and one must have more resources to survive within the public sector.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, reported that to stay in business, “We have to provide customer service to the max. We've been able to do that by putting our employees through a five-week training course. We have kept our fees reasonable by training our staff to get into a building and get it cleaned in two hours when in the past it might have taken four hours. We try to satisfy our customers by our efficiency and quality of work.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that the only way to stay in business during these hard times is to work at cost and try and stick it out until you get through the recession.

Interviewee #117, a Caucasian male vice president and co-owner of a certified MBE/WBE that provides printing, mailing, and promotion services, said that they get 10 bids first, sift through them,

select the best, are honest with customers, and know what their true costs are and how much they have to make.

Interviewee #118, a Caucasian male president of a plumbing and heating company, said that to stay competitive “You have to keep your expenses to a minimum, you don’t buy a piece of equipment unless you really need it, you can’t keep a lot of stock on hand, and you have to watch every penny.”

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, stated that to stay competitive you have to have a product others do not have or a service that other printers will not do.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, stated that “To stay competitive you have to have a good knowledge of the cleaning industry, you need the right equipment and products, you have to be efficient in your work practices, you have to be honest and dependable, and you have to be a servant.”

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated that “To stay competitive you have to keep training people, keep buying the most up-to-date equipment, and keep stirring up business.”

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, said that to stay competitive you have to have a skill, know your niche, and keep pursuing it.

Interviewee #123, an African American male, CEO and president of an MBE-certified staffing firm, stated that “To stay competitive you have to demonstrate past performance experience, quality relationships, cost benefits, and sufficient funding.”

Interviewee #124, an African American male and president of an MBE-certified promotional products company, said that to stay competitive you have to come up with the right price. “It’s all price” he emphasized.

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, stated that “To stay competitive you have to be good at what you do. Our pieces have to be award-winning. Our staff has to really work hard.”

Interviewee #127, a Caucasian male and president of a marketing and communications agency, said to succeed in this marketplace you have to promote an awareness of who you are and what service you offer, create a preference for your product, and then perform.

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, stated that “To be competitive in this line of business you have to be a one-stop-shop. You have to deliver on service, quality, and price.”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said, “It doesn’t matter what you did in the past ... it’s all about the almighty dollar right now.” He concluded, “To be competitive over the long term, you have to

sell service to the clients. This year, you have to get your price down; you have to cut overhead...to keep your price down.”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that her firm is competitive because they do not have much overhead, unlike larger competitors. She said that personal interactions with the client are critical to their success. She added that when the company gets a job, she and her husband both meet the client face-to-face. She said that she finds it helpful to get repeat business if she becomes acquainted with the accounts-receivable people and the project managers at the clients’ offices.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, stated that to be competitive in her line of business, one has to have technical knowledge, have a decent pricing structure, know the market, and know to whom proposals should be submitted.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that to be competitive in the private sector, it’s all about your qualifications, adding, “If you design a building, make sure it doesn’t fall on the customer’s head.” He reported that in his opinion it takes “contacts and political contributions” to be competitive in the public sector.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that being competitive in his business requires “good work and word of mouth.” He added that most telecommunications companies price their services at about the same rate, so it is the quality of one’s work that will enable a firm to be selected for a job.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said, “To be competitive you really have to have a good understanding of what the market is ... you’re going to have to find people (to employ) who will work for less than what they worked for in the past.” He said, “The State ... they say they want the best, but they want the cheapest.” He said that firms that hire well-paid individuals with many professional certifications will not win bids in the current marketplace.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that the local market is shrinking and “may be leveling out.” He added that most of the work is not in the Indianapolis area, stating that he has to travel more to obtain the type of work that he performs. He said that to be competitive in his line of business, one has to be “competitively priced and you have to do a better job marketing. Obviously, be able to perform the job. You have to get out and play the game.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that the current marketplace is very competitive. He said that to be competitive, “You have to have the qualifications, you have to have people who know what they’re doing, you have to have an established reputation with the agencies and with the people from the agencies. It’s hard for people coming in from the outside to get a foothold. There’s a strong tendency to go with the people who have done good work in the past.” He added, “You have to have a solid past-performance record. If in the past you have performed badly on a job, the word gets out, it’s harder to recover.”

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said “the relationship part is key” to being competitive in this line of business. He said that most of the firm’s business is “referral-based or job performance-based.” He said “We don’t have much room for error ... and we don’t want to have a job go sour, especially in the racing community, because it is a constant soap opera.” He added that quality, pricing, and job turn-around times are also critical to the success of firms like his.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that their people, their location, access to raw materials, and the fact that they provide both concrete and asphalt paving (as opposed to just one of the two) enable his firm to be competitive in his industry.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that to be competitive in this marketplace, a firm has to be “on-time and they do their work.” She added that pricing currently plays a big part in being competitive. She said that in the past, if her prices were a bit higher than the competition, but the customer knew she did quality work, she would get the job. Now, she said, “If they can save a dime, they’re going to do it.”

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that the truck rates vary “quite a bit” throughout the state. Specifically, he said, the best rates a trucking firm can get are in the north, average rates are in his area, and “dirt-cheap” rates are in the south of the State. He said, “You don’t try to be competitive, you just figure out what [pricing] you have to have to make some money ...and that’s your rate no matter what your competitors [are] charging ... hopefully it’s a competitive price ... price is not always everything.”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that the private sector is very slow right now because of the economy. She said that being competitive in her line of business requires her to have low prices, high performance, and high quality.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that being competitive in her line of work requires having a nice-looking, newer truck and a courteous driver.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that to be competitive in this line of business, “You have to deliver what you say you’re going to deliver ... they want it delivered on time — that’s a high priority ... they [customers] push and push on cost ... there’s a free-flow sharing of ideas.”

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that to be competitive in his line of work requires “energy ... one-on-one relationship management ... a marketing sense.”

Interviewee #216, an African American male owner of a business consulting firm, said that to be competitive in his line of work, “The entities that you work for continue to say that you delivered what you said you would deliver ... that’s the best way to keep your worthiness out there that you’re a good consultant and that you provide a good product ... In this field, if you get sniped once really bad, it will have a long lasting [impact] that’s negative ... it’s pretty brutal.”

Interviewee #217, an African American female owner of a commercial cleaning service, said that to be competitive in this line of business, “You have to be at the top of your game. You have to be very good at what you do.... You have to be professional. You have to be able to do an excellent job. You have to have excellent employees and you have to be consistent in the work that you do.”

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that to be competitive in his line of work requires “knowledge ... you have to stay abreast of current trends ... you have to be able to ... tell the client the approximate cost of the job, and you cannot do that without knowledge.”

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that to be competitive in this line of business, “You have to have a reputation for good work and you have to be affordable.”

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that to be competitive in her line of business requires, “differentiating yourself and niching.” She said that her local presence helps her obtain work with Indiana firms, because the large [computer] business partners that actually provide the software to her customers are not located in Indiana, and she can serve as the local point of contact.

Interviewee #221, a Caucasian male owner of an excavation firm, said that to be competitive in his line of work requires having good employees and a good reputation.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said to be competitive, a business needs to have all of its insurance up-to-date, training, safety, office support, an actual physical location, and its own equipment.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that to be competitive in this line of business, “Keep your expenses down and be smart.” He said that he’s fortunate that his business was started years ago when it was easier to run a truck haulage firm. He said that he is still trying to recover from when the cost of fuel rose above four dollars per gallon.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that to be competitive in this line of business, “You have to be able to manage the process. The act of cleaning isn’t rocket science. But, it’s how you manage the people who are doing the cleaning — keeping them productive, keeping them on task, dealing with the issues that that unskilled labor brings to their job every day ... there are a lot of [personnel-related] issues when your workforce is getting paid between \$8 and \$11 an hour.” He said that his company has a higher percentage than the industry average of people overseeing the cleaners, which leads to a better end result.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that to be competitive in this line of business requires excellent communication with the customers. He said that if a customer has a complaint, a request, or a concern, that he gets back with him/her by the following day at the latest. He said that he clearly tells his customers that he is not the cheapest cleaning service in the marketplace, and if they want cheap service, they should look elsewhere.

Interviewee #227, a Caucasian male owner of a truck haulage company, said that to be competitive in this line of business, “You have to be smarter than the guy you’re working with ... and fix things [that break] yourself.”

Interviewee #229, a Caucasian male owner of a safety training firm, said that to be competitive in his line of business requires him to know his subject, be an interesting presenter, get repeat business, and keep his rates down.

Interviewee #230, an Asian-American male owner of a dry cleaning company, said that to be competitive in his line of business, he has to provide quality cleaning and good customer service and have a good location.

Interviewee #231, a Caucasian male owner of a plumbing company, said that to be competitive in his line of work, one has to be “honest, dependable, reliable, deliver what you say you’re going to give them, price.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said that low overhead costs (being able to keep prices down) and staff to meet the deadlines is necessary to be competitive.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that the public sector is challenging, and if a company does not have a solid team to go after projects, it will not be successful. He went on to say a good solid team typically occurs when “the prime has someone connected politically, worked with the client in the past, or solid experience in that type of work.”

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “The way to stay competitive in the construction industry is have a sharpened pencil and stay lean as possible. Be creative, and don’t try to use the same strategy on two different projects. Be flexible. And pray. That is a part of our strategic planning.” Interviewee #304 said, “Relationships are key on this issue. There has been an influx of out-of-state firms com[ing] to the Indianapolis market. They don’t know the rules, and if they can try to get away with not working with MBE/WBEs, they will. They don’t know what the State has done to make things better for the MBE/WBEs. It is important to know who you are working with and have a relationship with them.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “I think for a firm to be competitive in the audio/visual business, it requires an established reputation of integrity, friendliness and good price. Although, I don’t believe price is as critical as whether or not you are the go-to person.”

Interviewee #306, a Caucasian male owner of a carpet and upholstery cleaning firm, reported that effective marketing and positive word of mouth were the most significant factors in being competitive in this line of business. He said, “When a customer is satisfied with the job I’ve done, they tell other customers. It is a real word-of-mouth business.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said that it takes being “cutthroat competition” to be competitive in this line of business.

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, reported, “Pricing, knowledge and experience are the key elements it takes to be competitive in this line of business.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, commented that to be competitive in the printing business, “Number one is to provide quality services and be there when needed to resolve any problems. You have to know your strong suits and stick with them.”

Interviewee #310, a Caucasian male owner of a moving company, said, “The big thing is cost compared to competitors.” He reported, “We have so many regulations that if you want to be a quality firm and competitive enterprise, you follow the rules and regulations. Then you have these Mom and Pop companies that don’t play by the rules and undercut you on price. Then you turn them into the State, and they don’t have any money for enforcement. There is nothing worse than being in a regulated state without enforcement. You have all the regulations and everything is fine, but there is nobody there to enforce it, so ... we are at a disadvantage here in Indiana.”

Interviewee #311, a Caucasian male owner of a computer firm, said that in order to be competitive, “You need to be specialized, have a highly competent staff with a wealth of product knowledge, and you need to stay in business long enough for word of mouth to kick in.”

Interviewee #312, a Caucasian female and corporate officer of a construction firm, speaking about what it takes to be competitive in this line of business, emphasized customer service, saying “Good customer relations [are] most important. Meeting with people on a regular basis, submitting accurate bids that reflect low prices and providing high quality work are all important. If there are customer complaints, we make sure we fix the problem and get it right. Our reputation is important.”

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company, said, “I think to be competitive in this business you must do good work and have a good reputation. You must be competitive and give a good price because the bottom line is what counts.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said that the way for a firm to be competitive in their line of business is high quality and low cost to the customer.

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, commented on what it takes to be successful in today’s marketplace. He said, “Getting the right people for each job is very important. Giving a good rate for the staffs and making a profit are also important.”

Interviewee TA #1, a Caucasian male president/CEO of a regional chamber of commerce, said that to be competitive in his local marketplace, businesses need to have strong relationships with each other, because their geographic area is so isolated from the rest of the state. He added that being competitive boils down to having a relevant product or service, competitive and competent employees, strong

leadership, and understanding of changing market dynamics. He stated that to be competitive, “Know your industry, have the best people you can possibly get ... and have effective leadership.”

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that to be competitive in the local marketplace requires an understanding of the client’s brand and strategy and providing superior products and work.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that to be competitive in the local marketplace, “The price has got to be right. Your service or your work has got to be better or the same level as the other person. You’ve got to be able to sell yourself.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said, “With regard to staying competitive, it takes now what it has always taken: outstanding service, quality product, a good price point, and integrity.” She said that in regards to construction, “It requires a low bid, on-time project completion, eliminating project creep, and communication with subs and project managers to ensure there are no surprises to remain competitive.” For engineering firms she said, “The same as for construction: a low bid, on-time project completion, eliminating project creep, and communication with subs and project managers to ensure there are no surprises to remain competitive.” For professional services she stated, “this is such a competitive area, it’s hard to say what sets one owner apart from another, but certainly low prices while keeping some profit, and giving more than the client asks for.” She said for goods distribution it takes “quality and being on time.”

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, said firms will need to focus on providing quality services, and holding their costs down to be competitive.

Interviewee TA #7, the African American male representative of a civil rights agency, said that to be successful in this market place, MBEs need to have everything they need to be a full services business. Specifically he said, for the construction industry “they need to be licensed, bonded, be able to deliver, and close it down when it’s supposed to be delivered. I think engineering is different. They need to have credible work already out there so people know who they are. Professional services are on the same vein as engineering. They need to have viable partnerships. Be able to market themselves. People need to know who they are. Goods distribution is on the same line. Being able to guarantee they can deliver the products and goods on the due date, and be able to understand that a sense of urgency is extremely important.”

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said, “I think it takes real creativity to be competitive these days. If you define yourself by competition you will be limited, but if you define yourself by creativity and what you can do and how your organization can respond, then you create new opportunities for yourself.”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, said, “In my view, I believe the businesses that are well-managed, know their costs [and]

what it costs to do business will be competitive and last for the long haul. Many firms don't know what it costs until it's too late. Same thing across those sectors.”

VI. Anecdotes Regarding Whether or Not There are Potential Barriers and/or Discrimination Based on Race, Ethnicity, or Gender.

The interviewees were asked whether they were aware of or had experienced any barriers to pursuing work in the local marketplace, and, if so, whether they believed that discrimination based on race, ethnicity, or gender had contributed to such a barrier. The interviewees were then asked whether they were aware of or had experienced certain specific barriers identified below.

Some interviewees identified the existence of barriers in general to pursuing work in the local marketplace. [Interviewees #: 104, 115, 209, 302, TA #7, TA #8]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, indicated he had experienced many barriers when he was trying to get his business up and running. He said, “Most of those barriers would probably not be considered ‘discriminatory’ in the official sense, and were obstacles that any small business might encounter simply because the very nature of a small business implies less financing, resources, time, manpower, etc.”

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said that one sure barrier that most small businesses face is the lack of clear communication of available resources, at both the local level and the State level. He noted that the word does not seem to get out to minorities, women, and small entrepreneurs regarding what great tools are available to them. He stated, “The SBDC (Small Business Development Center) in Fort Wayne has wonderful resources, but learning about them is a challenge. I did not know about all of them, and I even worked with them. But because I failed to ask the right questions, I was taking out loans on my personal line of credit rather than building up business credits. I never learned about that until just a couple years ago and I had been working with the SBDC for several years prior to that. Either the City — in this case — or the State is not doing a good job at advertising their capabilities, or start-up companies are just ignorant as to where to look for valuable help.”

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that he sees discrimination “in reverse.” He said, “Sometimes we know we're low bidder as a sub, for example, and they say, ‘Well, we couldn't use you because we needed a DBE to meet our goals.’ And we had to pay premium in dollars to try to meet our goals. And they say those are just goals, but you don't meet it and there's a 90 percent chance you're not going to get the job. And sometimes we have to give away our own work ... just to get the (DBE) percentage.”

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, said that the major barrier with whom the company has or had to deal is the political business issues and under-the-table dealing. Interviewee #302 stated that, in the beginning, people in the banking industry in the local area were uncertain as to what an environmental excavating company was, and, therefore, education was needed in order to secure financing.

Interviewee TA #7, the African American male representative of a civil rights agency, commented that “Yes, there are real and perceived barriers. This is a big, major [problem]. If you don't have any

collateral or the books to show you've accumulated the wealth to support your business." He also noted that he believes discrimination influences these barriers.

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said, "You don't have to be a genius to know race is a problem in America. Race is clearly the most significant part in terms of discrimination — the data shows this. You can look at who is getting the work, and know the ethnicity and gender are fairly neutral compared to race."

Other interviewees reported that they were generally unaware of barriers to pursuing work in the local marketplace. [Interviewees #: 202, 300, 301, 303, 305, 306, 310, TA #4]. Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said, "I haven't felt like I've been discriminated against or even heard any stories from people who have."

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that there are enough women in this field now that many barriers have been broken. She stated that she has not experienced many of the barriers because the work that she has obtained in the past has been through people she knows who work for firms with whom she has relationships.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, reported that he is not aware of any barriers that his firm has experienced with respect to financing, obtaining insurance, etc. He stated in general, "I don't think discrimination necessarily falls into the decision-making most of the time. It's really more about our experience and expertise."

Interviewee #303, the Caucasian female owner of an electrical contracting business, said that she has never encountered problems or barriers because of her gender. She said that the reason that she has not had any problems due to her gender may be because "I am assertive and I would be in your face, if I thought that was the reason." Further, she indicated that she has never been treated as though she could not get credit or a loan because she was a woman. She said she was treated as though she could have credit because her credit is already good and she pays her bills. She said that it does not have anything to do with being a woman. Interviewee #303 also stated that she has been in business for over 25 years.

Interviewee #306, a Caucasian male owner of a carpet and upholstery cleaning firm, stated that he was not aware of any of the listed barriers being problematic for his or others firms in the local marketplace in either the public or private sectors. He also said that he has not had any personal experience with nor does he believe that discrimination based on race, ethnicity, or gender has created a barrier to his trying to grow or stay in business. He said, "I don't have any problems [with barriers], but I do wish they would start using white male companies again." Interviewee #306 said, "I feel discriminated against as a white male. There are better opportunities for women and minority businesses than there are for white males."

A. Financing.

Some interviewees identified obtaining financing as a barrier to pursuing business opportunities. [Interviewees #: 104, 106, 110, 115, 118, 119, 123, 124, 126, 127, 128, 205, 214, 215, 217, 222, 227, 304, 307, 308, PF #1, TA #1, TA #2, TA #3, TA #5, TA #8]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated he experienced many barriers when he was trying to get his business up and running. He stated “With regard to financing, I always had the feeling that because I was labeled an ‘MBE,’ potential contractors had negative stereotypes about me and misjudged my qualifications as being inferior to someone who was not an MBE.”

Interviewee #106, an African American male owner of a recently started firm, emphasized that a lack of capital was his biggest barrier to his business development. However, he said that he does not believe that this barrier is related to race.

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that years ago, she had had a very difficult time obtaining financing, and she felt that a predominate reason for this was that she was a woman in what was predominantly a man’s field. She stated that she believes that the fact that she was also a Hispanic woman made the discrimination worse. She noted that because this difficulty occurred years ago, she had difficulty remembering concrete examples to demonstrate the discrimination she felt. She later reported that obtaining financing was her biggest hurdle as a small business and as an MBE/WBE.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said that he had experienced obtaining financing as a barrier because he was using his own personal line of credit to purchase company equipment and supplies because he had no idea that he could be developing a business line of credit. He said that he has heard others speak of this same barrier.

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated he had not experienced any barriers in obtaining financing based on racial discrimination, but noted the difficulty of getting business loans was a general plight for most small businesses in the area.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, stated that getting loans for equipment and bigger space to rent is a problem. He commented that he could not say it was because he was a minority. “I doubt it was,” he stated. “I think everyone around here has the same problem around here.”

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated “Obtaining financing is a horrific barrier, but it is not due to race, in my estimation.” He thought this pertained to other small businesses across the board.

Interviewee #124, an African American male and president of an MBE-certified promotional products company, stated that the biggest barrier to getting financing was simply the fact that banks were reluctant to take a risk in lending to small start-ups. He stated that he thought this was the case for most small businesses, and not something based on race or ethnicity.

Interviewee #126, a Filipino Caucasian American male owner of a full-service marketing and advertising firm, stated “Obtaining financing is hard, but it’s not based on race, in my view. I don’t know what others have experienced, but I can’t imagine it has much different than my experience.”

Interviewee #127, a Caucasian male and president of a marketing and communications agency, stated that obtaining financing is a very real and ongoing barrier, but not necessarily based on gender or race. He considered financing a difficulty for most businesses.

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, stated “Obtaining financing is abysmal, a real barrier. And, yes, it is a racial thing. I’ve experienced it. How? I just know. When I speak to a prospective lender by phone, because I have no ‘accent,’ because I have an Irish-sounding last name, and because I sound intelligent, some people are really surprised to see in person that I’m an African American and they cannot hide the surprise. It’s written all over their face and in their body language. That’s when I hear the excuses like, ‘Oh, your firm is just big enough.... I’m sorry we can’t do anything for you.’ Yes, such discrimination has happened and is still happening, not just to me but to others too. I’m 130 percent sure of that.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that obtaining financing has not been a barrier for his firm but that he knows of MBE/WBE firms for which it has been an issue.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, believes that there are barriers related to obtaining financing, but that race, ethnicity, or gender discrimination does not contribute to those barriers. She said that it is difficult for small businesses, especially niche firms like hers, to get financing. She said that her firm’s assets are its people and knowledge, and that “isn’t very meaningful to the bank.” She added that to get financing, she has to turn to family and friends.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that although he has never sought financing, “I believe there is ... ethnic bias as far as obtaining financing.... I’m sure that does exist.... Does it exist here in Indiana? I’m comfortable to say I wouldn’t be surprised if I run across it myself once I come to that point.”

Interviewee #217, an African American female owner of a commercial cleaning service, said that she believes that there are barriers related to obtaining financing, although she has not tried to get financing yet. She said that she has been working with a business professor at Purdue University who is helping her to obtain financing. She said that the professor told her that there may be financing available through the City of Kokomo. She said that she does not believe that the barriers are related to any race, ethnicity, or gender discrimination.

Interviewee #222, a Caucasian female owner of a WBE/DBE-certified commercial and industrial painting company, said that there are barriers relate to financing, but that those barriers are not related to race, ethnicity, or gender discrimination.

Interviewee #227, a Caucasian male owner of a truck haulage company, said that there are barriers to obtaining financing that are related to ethnic discrimination. He said, “If you’re a [person of Japanese descent], you can get anything ... Japanese people [are treated very well].”

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, identified cash flow as a barrier. She said, “Banks got very tight with loans. Banking wants you to show a greater profit. Your established relationship with your bank is important because hopefully they will understand your business.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said “I haven’t had a problem, but a lot of firms experience problems ... in financing.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said that she thinks there is some discrimination against women. She stated, “I think a little bit there with a woman approaching banks. Sometimes banks are a bit reluctant to loan money to a woman business owner.”

Interviewee TA #1, a Caucasian male President/CEO of a regional chamber of commerce, said that there are barriers related to obtaining financing but that those barriers are not based on race, ethnicity, or gender discrimination.

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that obtaining financing is a barrier and that race, ethnicity, or gender discrimination contributes to that barrier. She said that she has heard from the minority community that obtaining financing “is more challenging” for them than it is for non-minority-owned businesses. She said that one of the reasons that minority-owned businesses cherish their membership in her organization is because affiliation with her organization enables the minority-owned businesses to establish relationships with banks and lenders.

Interviewee TA #3, an Asian American female Executive Director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that obtaining financing is a barrier if the business owner does not have a sound business plan and cannot explain how he or she will use the financing. She said that she does not believe that this barrier is related to any race, ethnicity, or gender discrimination, however.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said “Access to capital is tough no matter who you are. I’m hearing from some members that some banks are advertising opportunities specifically for small businesses, but when WBEs make an application, money is not available. I don’t know if that’s true for everyone, but I know loan criteria have become more stringent.”

Several telephone interviewees identified obtaining financing as a barrier to pursuing business opportunities. Both MBE/WBE and non-MBE/WBE firms indicated that access to credit is very limited, particularly in the current economy. For example, a representative from a white male-owned firm commented: “You need to have a lot of financial security [to run a business]. Banks have really tightened up and it is harder to get money.” Similar to those comments, another firm, representing an MBE, said: “Basically, you probably would have to have private lines of credit, because when you go to the bank to get a line of credit, what theyre willing to give you, you can find it somewhere else.”

Other interviewees did not perceive obtaining financing as a barrier to pursuing or obtaining business opportunities. [Interviewees #: 100, 107, 108, 112, 113, 116, 117, 120, 121, 122, 125, 201, 203, 204, 206, 207, 208, 209, 210, 211, 212, 213, 216, 218, 219, 220, 221, 223, 224, 225, 226, 228, 229, 230, 231, 300, 303, 306, 309, 310, 311, 312, TA #4]. Interviewee #112, representing MBE-certified Hispanic American-owned professional cleaning services firm, expressed that there is not currently enough information given by the State regarding financial opportunities for new businesses. However, she reported that she does not believe this has been a barrier and simply feels like there is perhaps a lack of information available. She said that they went to their local banks on their own to obtain financing. She indicated that the process has been fair but involves a lot of red tape.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, expressed that he had no problem presently because he has a good line of credit, and he thinks that the present situation regarding financing is fair. However, he did mention, “I think some firms have issues with financing, but that’s because they think they ought to be taken care of by the State. They think they should be paid up front.” He said that he does not believe barriers or discrimination exist in this area.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, does not believe that obtaining financing is a barrier. He said that he believes that obtaining financing has more to do with a firm’s ability to get credit, regardless of race or gender.

Other interviewees reported that obtaining financing was a barrier in the past but is not currently a barrier in pursuing or obtaining business opportunities. [Interviewees #: 109, 111, 202]. Interviewee #109, a Hispanic male president of an industrial cleaning firm, said that obtaining financing was “not presently” a barrier in pursuing or obtaining business opportunities. However, he stated that “in the past, it would have been helpful to have our credit line increased.”

Interviewee #111, a Hispanic owner of an engineering services firm, shared that he has not experienced direct discrimination with his current firm when attempting to obtain financing. However, he said that when he was a contractor, he felt like he had. He said, “I think they looked at me like, ‘Eh, he’s going to run off with that money to Mexico any minute, so we’ve got to keep a good eye on him.’” He reported that his loan officer called him every month to remind him to pay the interest on his loan.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said she could not get financing early on, but does not attribute this to any gender- or race-based discrimination.

B. Bonding.

Some interviewees identified obtaining bonding as a barrier to pursuing business opportunities. [Interviewees #: 104, 109, 116, 204, 205, 221, 304, 307, 311, TA #5, TA #7]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, identified obtaining bonding as a barrier in the local marketplace and stated, as a small business “I would have to pay a fixed fee to become bonded, but unlike the larger firms that could spread that cost over many jobs, my firm did not have that possibility. It is not really discriminatory, but small businesses certainly received no breaks in that area.”

Interviewee #109, a Hispanic male president of an industrial cleaning firm, stated that bonding is a barrier and that “this is always a factor, especially for larger bonding requirements for public projects.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that in the last couple of years the bonding requirements have gotten so restrictive that a mid-sized firm like his cannot even get bonded anymore. He noted that he sees bonding as a definite barrier, but he indicated that it is not based on race or ethnicity. Although, he stated, “I think it is harder for white guys to get bonded than it is for some minorities. I’ve heard there are some states where the government is paying for minority bonding. But I can’t get bonded anymore. Now, the only way I can get a public job is if I’m under a prime, but even then I must get my bank to stand behind my risk. The market on bonds is really screwed up.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that obtaining bonding “is a problem for most firms.... I think it has to do with credit.... I believe a bunch of MBEs have an issue with bonding.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has not experienced any problems related to bonding since his firm is not required to obtain bonds. However, he said, that he believes that bonding is a problem for other firms and that discrimination based on race, ethnicity, or gender contributes to the barrier. He said that if a business is located in a Free (Urban) Enterprise Zone, it will have a problem with bonding and financing. He stated, “Your address for your business determines whether you’re bonded or not ... I can tell you companies that are located in Indianapolis in Free (Urban) Enterprise Zones that are minority-owned that are having problems.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that there are barriers related to bonding requirements and obtaining bonds, but that they are caused by the type and size of his business, not race, ethnicity, or gender discrimination. He said, “Our small size is a deterrent to most bonding companies. Bonding is a problem for almost everyone in the excavating business.”

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said that her company does not bond, but she said that they are aware of other companies for which bonding is an issue.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, cited bonding requirements and obtaining bonding as barriers he has experienced for his firm in the local marketplace, but he said that he did not feel that there was discrimination involved.

Interviewee #311, a Caucasian male owner of a computer firm, indicated that bonding requirements are sometimes a barrier to small companies. He said, “Many small construction firms, for example, must have bonds for public construction projects but can’t afford it.”

Interviewee TA #7, the African American male representative of a civil rights agency, said that bonding is a barrier. He stated that discrimination definitely touches bonding from the standpoint of possessions and assets, looking at credit, types of ratings on bonds they could get and how much that costs, and not able to get enough coverage. He asked, “If limited coverage is provided, what [is] the

smaller firm going to do? Is the larger firm going to pick up the tab?” He said “Discrimination in [bonding] is rampant and this type of denial is also designed to keep you off projects.”

Some telephone interviewees indicated that bonding requirements are a barrier to pursuing business opportunities in the public sector. Both MBE/WBE and non-MBE/WBE firms identified bonding as an issue to doing business in the public sector, particularly for small businesses. For example, a representative from a white male-owned firm said: “I’m small and I can’t get bonding. If I could get bonding, my business would increase three-fold ... we don’t have a lot of equity yet, so that’s the main reason why we can’t get bonding.” Another interviewee, representing an MBE firm, stated: “The biggest problem is funding and that leads to bonding problems. As a sub, this has become increasingly problematic because the prime contractors have been requiring the sub to bond their own work.”

Other interviewees did not perceive barriers in connection with obtaining bonding. [Interviewees #: 100, 107, 108, 110, 111, 112, 113, 115, 117, 118, 119, 120, 121, 123, 124, 126, 201, 203, 206, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 300, 302, 303, 305, 306, 308, 309, 310, 312, TA #1, TA #2, TA #4, TA #10]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, indicated that his company’s historical significance plays a key role in ensuring that bonding requirements do not pose a barrier to his firm. He stated that because his firm is well-established and has a proven track record, he does not believe that barriers exist for them, even though barriers might exist for other, newer MBEs. He said, “For a firm that is 82 years old with 200 employees and nine offices, those challenges haven’t been, that I’m aware of, a barrier that we’ve had to overcome.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, stated that bonding has never been a barrier, and they have experienced no discrimination in this area.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “This is a legal issue and paperwork. It has nothing to do with race or gender.”

C. Insurance.

Some interviewees identified insurance requirements as a barrier to pursuing business opportunities. [Interviewees #: 100, 104, 109, 123, 205, 214, 215, 304, 307, 311, TA #3]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said “[insurance] is a real challenge. Some of the bigger cities require professional liability, and this is very expensive, and for a small firm like us it is out of the question.”

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, identified obtaining insurance as a barrier in the local marketplace and said that obtaining insurance was pretty much the same as bonding; it is a fixed expense, and a small business has less financial reserves or cash flow to meet this expense.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, said that obtaining insurance is a barrier “especially for smaller companies.”

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated he had experienced “reasonable” barriers regarding liability insurance requirements, and just considers it part of the cost of doing business.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has not personally experienced any barriers or discrimination related to obtaining insurance. However, he said that he was told by his insurance agent that some insurance companies will not insure minority-owned companies located in Urban Enterprise Zones. He said that he looked into locating his business in an Urban Enterprise Zone in Indianapolis, but the cost of doing business would have been too high.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that there are barriers related to obtaining insurance, but that race, ethnicity, or gender discrimination does not contribute to those barriers. She said that insurance analysts view her firm as a high risk because they do not truly understand what her firm does.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that there is discrimination based on race, ethnicity, or gender related to getting the best prices on insurance products.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “Insurance prices have increased significantly, but we have searched for and obtained some good deals.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, cited insurance requirements and obtaining insurance as barriers that he has experienced for his firm in the local marketplace, but he said that he did not feel that there was discrimination involved.

Interviewee #311, a Caucasian male owner of a computer firm, said that insurance requirements are sometimes a barrier to small companies. He said, “Many small construction firms, for example, must have bonds for public construction projects but can’t afford it. The same is true for insurance requirements.”

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that there are barriers related to insurance requirements and obtaining insurance that stem from ethnicity-related discrimination. She said that language barriers for non-native English speakers create difficulties in understanding insurance documents and the process for obtaining insurance.

A few telephone interviewees identified insurance requirements as a barrier to pursuing business opportunities in the public sector. For example, a representative from white male-owned firm indicated that worker’s compensation is a large operational cost: “Work compensation rates cost too much money. General taxes, insurance and liabilities make it impossible to run a business.” Another interviewee, representing a white male-owned firm, commented that: “Insurance requirements [in the public sector] are outrageous.”

Other interviewees did not perceive insurance requirements as a barrier to pursuing or obtaining business opportunities. [Interviewees No. 107, 108, 110, 111, 112, 113, 115, 116, 117, 118, 119, 120, 121, 122, 124, 125, 126, 127, 128, 201, 203, 204, 206, 207, 208, 209, 210, 211, 212, 213, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 300, 302, 303, 306, 308, 309, 310, 312, 313, TA #1, TA #2, TA #4, TA #5, TA #8, TA #10].

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, noted that did not feel she had been discriminated against while obtaining insurance.

Interviewee #111, a Hispanic owner of an engineering services firm, shared that he has not experienced discrimination when obtaining insurance.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that they have not seen any issues or barriers regarding insurance requirements and obtaining insurance.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that he has had no problems with barriers on insurance. He said, “It does present problems for some companies because it depends on the workers’ compensation modifier. Starting out, the average modifier is point one. With each accident the modifier goes up, and the highest it can go is two. Good firms can keep their modifier at between point eight and point nine and get rewarded by the insurance firms and can get up to a 20 percent discount. It only hurts the people who are unsafe and who have a lot of accidents.” He reported that he does not see issues with discrimination in this area.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, stated he had not experienced any barriers regarding insurance requirements and was not aware of it being a problem for other small companies. However, Interviewee #120 stated “I realize that requiring liability insurance is almost a standard operating procedure, but we suspect we have lost some business to companies that underbid us, and my suspicion is that these companies are not paying unemployment taxes or other tax obligations.”

D. Equipment.

Some interviewees identified access to equipment as a barrier as a barrier to pursuing business opportunities. [Interviewees #: 115, 116, 118, 119, 128, 205, 304, 313, TA #1]. Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, stated that obtaining equipment was a barrier for him because “my personal line of credit was really stretched.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that obtaining equipment was not a barrier for him because he took all his profits and bought his own equipment. He added, “If firms have to rent equipment, then that can be a barrier because that’s a higher cost than what I would have because I already own the equipment.” He does not see issues with discrimination in this area.

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated he had not experienced any barriers regarding equipment based on discrimination, but he added, “There is the obvious difficulty in getting \$100,000 to purchase the truck, trailer, excavator and skid loader that would allow us to expand our business.”

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, stated he had not experienced any barriers regarding equipment based on discrimination, but he added, “There is the problem of getting loans to purchase the equipment I’d like to have.”

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, responded that obtaining necessary equipment had been a problem for him. “If you don’t have the money and can’t borrow the money, purchasing computers and other pieces of equipment can be a barrier.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has not personally experienced any barriers or discrimination related to obtaining equipment. However, he stated, “I have heard of some situations with [MBE] companies that want to purchase equipment, but can’t get financing.” He added that currently there are MBE firms in the local marketplace that are purchasing equipment and renting it to MBE firms that cannot get financing to purchase equipment. He believes that this practice is not a good one because the equipment is leased at a very costly rate.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “In the trucking industry, equipment is key. This can be a big barrier if you can’t update or repair your equipment.”

Interviewee TA #1, a Caucasian male president/CEO of a regional chamber of commerce, said that there are barriers related to obtaining equipment but that those barriers are not based on race, ethnicity, gender, or discrimination.

Other interviewees indicated that access to equipment is not a barrier to pursuing or obtaining business opportunities. [Interviewees #: 100, 107, 108, 109, 110, 111, 112, 113, 117, 120, 121, 122, 123, 124, 125, 126, 127, 201, 203, 204, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 300, 302, 303, 306, 307, 308, 309, 310, 311, 312, TA #2, TA #3, TA #4, TA #5, TA #8]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, noted that she did not feel that she had been discriminated against while attempting to obtain equipment.

Interviewee #111, a Hispanic owner of an engineering services firm, said that he has not experienced discrimination when obtaining equipment.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, stated that there were no equipment barriers or discrimination.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, stated he had not experienced any barriers regarding equipment based on discrimination.

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated he had not experienced any barriers regarding equipment based on discrimination. He noted that has bought plenty of equipment, and the only obstacle is money.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he does not believe that there are any barriers or discrimination related to obtaining equipment. He stated, “There’s no problem with [obtaining equipment] if you have money or credit.”

E. Labor and Personnel.

Some interviewees perceived access to labor and personnel as a barrier to pursuing business opportunities. [Interviewees #: 100, 104, 115, 120, 124, 207, 214, 218, 221, 226, TA #2].

Interviewee #100, an Asian Pacific American male president of a water testing firm, said “Sometimes it’s hard to find [qualified] college grad[uates], and ... they still need to be trained for our specific purposes, and then after a few years they leave and we have to go through the process all over again.”

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, identified drawing personnel as a barrier in the local marketplace and said that the larger firms can attract better talent because they have more financial resources, whereas the smaller businesses can only draw the talent they can afford.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “Yes, this is a serious problem in Indiana. Qualified labor in this State is at a very low ebb. I find that the necessary skill sets I’m looking for are just not available, not even in our college graduates. I’ve heard the same complaint from many other small business owners too.”

Interviewee #120, a Caucasian male president of a small commercial custodial cleaning firm, indicated they had experienced some barriers to finding dependable employees, but that was not racially or ethnically motivated. He said it is difficult to get people who want to work.

Interviewee #124, an African American male president of an MBE-certified promotional products company, indicated they had experienced some barriers to finding dependable employees because, in fact, he was his company’s only employee.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, reported that he believes that there are barriers related to obtaining personnel/labor on jobs. He stated that it is difficult to get good employees in general and that some prospective employees choose not to work at firms that are minority-owned.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, stated that there are many barriers related to obtaining personnel and labor on jobs but that race, ethnicity, or gender discrimination does not contribute to those barriers. She stated that it is difficult to find employees because her business is so specialized. She said that she cannot hire people right out of college because they do not have the skills she needs. She added that the reason the company employs high school interns is to enable them to grow their future workforce themselves.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that there are barriers to obtaining personnel/labor related to age discrimination, but not race, ethnicity, or gender discrimination. He stated, “Younger people want to be able to feel empowered when working with older people.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that there are barriers related to obtaining personnel/labor, but that those barriers are not related to race, ethnicity, or gender discrimination.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that he has experienced barriers related to obtaining personnel because of discrimination related to ethnicity. He said that he has found that Caucasian males do not want to work for Hispanic males. He said that women will work for a minority-owned company, but that Caucasian males generally do not want to.

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that access to personnel and labor is a barrier that is caused more by the lack of quality in the local education system than any race, ethnicity, or gender-related discrimination.

A few telephone interviewees perceived access to labor and personnel as a barrier to pursuing business opportunities. For example, a representative from a white male-owned firm said: “The biggest difficulty is finding individuals who can work in this industry, especially the college student. We could expand if we could find the help.” Another interviewee, also representing a white male-owned firm, indicated that finding employees with industry-related experience can be difficult: “A lot of what people are looking for is experienced technicians in the area. There [are] a lot of people out there getting degrees but not getting the experience they need, and so they’re not being able to provide the right kind of work.”

Other interviewees perceived no barriers in connection with access to labor and personnel. [Interviewees No. 107, 108, 109, 110, 111, 112, 113, 116, 117, 118, 119, 121, 123, 125, 126, 127, 128, 201, 203, 204, 205, 206, 208, 209, 210, 211, 212, 213, 215, 216, 217, 219, 220, 222, 223, 224, 225, 227, 228, 229, 230, 231, 303, 306, 307, 308, 309, 310, 311, 312, 313, TA #1, TA #3, TA #4, TA #5]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that she did not feel she had experienced discrimination while attempting to hire personnel.

Interviewee #111, a Hispanic owner of an engineering services firm, stated that he has not experienced discrimination when obtaining personnel or labor.

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, indicated that finding workers was no problem for him, noting that he has 80 laid-off individuals waiting to be called back. He said he did not know if other manufacturers had difficulty finding laborers.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, said that “If you have the money, you can find all the experienced and dependable employees you need.”

F. Working with Unions.

Some interviewees perceived working with unions as a barrier to pursuing business opportunities. [Interviewees #: 109, 111, 118, 120, 205, 206, 213, 221, 223, 225, 226, 227, TA #7, TA #8]. Interviewee #109, a Hispanic male president of an industrial cleaning firm, said that

“Working with unions is a real pain.... Why? Because for a small company, there’s no advantage to being in the union. You have to pay a higher wage and pick guys from the union roster, and it’s hard to find qualified people.”

Interviewee #111, a Hispanic owner of an engineering services firm, shared that unions are a barrier for his company. He said, “They are a hindrance to development.... They don’t have to be that way. I think we could probably employ a lot more people if they weren’t so greedy. And we could develop bigger and faster. We could be like Indianapolis, if they weren’t so greedy.”

Interviewee #118, a Caucasian president of a plumbing and heating company, stated the difficulty he has encountered regarding working with unions is from other union contractors who do not want the competition from new union start-ups.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, noted the difficulties on working with unions. He related that at one time the company bid on a cleaning job and was required to put all union employees on the project. He recounted “We went to the union hall to get workers, but 50 percent of them never showed up. We went back to get more, but most of them never showed up to work. We went back to the union hall and they had no more folks to give us. It was very frustrating trying to fulfill that contract given the union requirement.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that “at one time,” his firm thought that there were barriers or discrimination related to working with unions.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that his firm is non-union and that he has experienced issues with unions in the past.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, believes that there are barriers related to working with unions, but that those barriers are not related to race, ethnicity, or gender discrimination. She said that she only works union jobs ten times per year, yet she is required to pay annual union dues and purchase insurance through the union.

Interviewee #221, a Caucasian male owner of an excavation firm, said that there are barriers related to working with unions, because his firm is non-union and not because of any race, ethnicity, or gender discrimination.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that there are barriers related to working with unions, because his firm is non-union and not because of any race, ethnicity, or gender discrimination. He said, “[The unions] run you off a job, or try to, if you’re not union and it’s a union job.”

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that there are barriers related to working with unions, because his firm is non-union and not because of any race, ethnicity, or gender discrimination. He said that his company has decided to stay non-union and that union customers will not hire his firm.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that there are barriers related to working with unions, because his firm is non-union and not because of any race,

ethnicity, or gender discrimination. He said that his company is currently non-union, but that the union has contacted him with an offer to join the union.

Interviewee #227, a Caucasian male owner of a truck haulage company, said that there are barriers related to working with unions, because his firm is non-union and not because of any race, ethnicity, or gender discrimination. He said that working with unions is not pleasant.

Interviewee TA #7, the African American male representative of a civil rights agency, said that working with unions is a barrier. He stated that firms have to pay their dues and make sure the insurance is covered. He commented that wage and time have to be covered and determining which man gets classified to do the project versus the work-sharing agreement are all barriers. He commented that “discrimination, especially relating to gender and race, is part of the union culture.”

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said “A lot of the DBEs have adjusted to working with unions — so, many of them are doing quite well. Conversely, there are some DBEs having a hard time. I think it can be a barrier for DBEs. The fact that some of the DBEs [are] so small — sometimes your voice in the union is not heard. The unions require so much paperwork, and this can be a challenge for smaller DBEs.”

Several telephone interviewees indicated that prevailing wage and union requirements are a barrier to doing business in the public sector. For example, a representative from a white female-owned firm indicated that the State of Indiana only awards contracts to union contractors, which makes it very difficult for non-union firms to work with the State: “For state work, unless you’re union, you’re locked out. The state wants it to be union, and the unions block us out.” Other interviewees said that prevailing wage and union requirements prevent their firms from pursuing work with the State of Indiana. For example, a representative from a white male-owned firm said, “[We stay away from [State] projects because they’re union and prevailing wage, and we can’t afford to work that way.”

Most interviewees reported that working with unions does not pose a barrier to pursuing or obtaining business opportunities. [Interviewees #: 100, 107, 108, 110, 113, 116, 117, 123, 124, 125, 126, 128, 201, 203, 204, 208, 209, 210, 211, 212, 214, 215, 216, 217, 218, 219, 220, 224, 228, 229, 230, 231, 302, 303, 304, 306, 307, 308, 309, 310, 311, 312, 313, TA #1, TA #3, TA #4, TA #5, TA #10]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she is a non-union employer and that she does not feel that this has affected her work.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that unions have been beat down, and unions seem more willing to change so they can work with the requirements of the times. He does not see barriers or discrimination in this area.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, stated that working with unions was not a problem. They have experienced no discrimination in this area and have seen no barriers.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, does not believe that there are any barriers or race, ethnicity, or gender discrimination related to working with unions. He

added, “As long as they leave me alone and let us do our work, we’re fine ... as long as you send them a check every month for your health and your pensions, they don’t seem to bother you too much ... they try to help you every once in a while.”

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “Working with unions is not a barrier for our firm. Everything goes back to cash flow because you have to pay union wages, your insurance, and be in compliance with health and welfare. You know you must do things, so it’s not a problem.”

Interviewee #311, a Caucasian male owner of a computer firm, said of working with unions, “It doesn’t pose a problem, but public projects must pay union scale, and that can create competitiveness issues.”

G. Being a Union or a Non-Union Employer.

Some interviewees identified their membership in a union or being a union employer as a barrier to pursuing or obtaining work in the local marketplace. [Interviewees #: 102, 109, 116, 118, 222, TA #5, TA #7]. Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, identified his classification as a union employer as a barrier to pursuing work in the local marketplace. He stated that he has been a union member for most of his 24 years as an electrician, and his employees are union members, although he also hires non-union workers as subcontractors. He said that his “gut feeling” is that his status as a union employer puts him at a disadvantage in his particular niche of the market (light commercial) because the majority of contractors are looking for small businesses that provide more financial flexibility, which is easier to accommodate if one is not a union shop, especially with regard to employee wages. Interviewee #102 believes that he also gets his “numbers peddled” more often because he is a union employer, but not because he is a minority owner.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, indicated that membership in a union or being a union employer was a barrier in pursuing or obtaining work in the local marketplace. He stated, “I’m a union member.” Nevertheless, he reports that he is a “non-union employer,” and that “for a small company, there’s no advantage to being in the union. You have to pay a higher wage and pick guys from the union roster, and it’s hard to find qualified people.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that being a union employer is a barrier. He reported that union costs are at least 25 percent higher, so it’s very difficult to compete. He stated, “Now unions have overpriced themselves, especially with compensations and benefits. The problem is that union workers cannot get more, but they can’t take less either. The unions and their funds have been mismanaged. The average union benefit amounts to about \$30 per hour.” He said that he does not see issues with discrimination in this area.

Interviewee #118, a Caucasian president of a plumbing and heating company, stated that the major barrier he has experienced regarding being a union employer is that pricing is tough when it comes to employing union members. He said that union dues and benefits are passed on to the employer, who has to pass it along to the customer, thus raising the cost to do business.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that there are barriers relate to being a union employer but that those barriers are not related to race, ethnicity, or gender discrimination.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, said, "I hear it's tough to be a union employer. The majority of our membership is not hiring union personnel."

Other interviewees felt that the fact that they were not a member of a union or a union employer operated as a barrier to pursuing or obtaining work in the local marketplace.

[Interviewees #: 105, 111, 121, 204, 201, 206, 209, 213, 221, 223, 226]. Interviewee #105, a male Caucasian owner of a small concrete contracting firm, stated, "In general, I've not experienced discrimination based on race or gender because I'm white and a man. However, I face barriers as a small, non-union firm. Union shops will not hire me. The 'Big Guys' have shopped my bid to one of their buddies who will submit a bid \$500 lower than mine, get the job, and I'm left out. I have had at least two times when I was not paid for the work I did. Two years ago, I was never paid the \$25,000 I was owed for a job I completed. Last year, I put in a driveway at a company that closed its doors and never paid me the \$10,000 I was owed."

Interviewee #111, a Hispanic owner of an engineering services firm, shared that he is a non-union employer and his firm will not do any of the union surveying because it is just more paperwork, and they do not really need it. He said that he often gets union workers wanting to work for him in the winter, since his workers work all year round, but he questions why they suddenly do not care as much about their union membership.

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, related that the company was not a union shop and at times has had difficulties because of that, but presently was not having any difficulty being a non-union shop. He declared "Union shops are likely to go out of business more quickly during these lean times than non-union shops."

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she has experienced discrimination because her business is non-union.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said, "If you're trying to sub for a union company, they typically don't use non-union companies."

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, stated that his choice to be a non-union employer has caused him problems. He did not specify if these problems were related to any racial or ethnic discrimination.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, does not believe that there are any race, ethnicity, or gender barriers or discrimination related to being a union or non-union employer. He said that it is more of a barrier, however, for non-union companies. He commented that his company is a union shop.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, believes that there are barriers related to being a union or non-union employer, but that those barriers are not related to race, ethnicity, or gender discrimination. She said that a firm will be kicked off a job site if the contractor knows the business is non-union.

Interviewee #221, a Caucasian male owner of an excavation firm, said that there are barriers related to being a union or non-union employer, but the barriers are because his firm is non-union, not because of any race, ethnicity, or gender discrimination.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that there are barriers related to working with unions, but the barriers are because his firm is non-union, not because of any race, ethnicity, or gender discrimination. He said that the union got tough with non-union truckers last year in his local area.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that there are barriers related to being a non-union employer, because his firm is non-union and not because of any race, ethnicity, or gender discrimination. He said that this barrier only exists in public sector jobs.

Other interviewees perceived no barriers in connection with being a union or a non-union employer. [Interviewees #: 100, 108, 112, 113, 115, 117, 119, 120, 123, 124, 125, 203, 205, 207, 208, 210, 211, 212, 214, 215, 216, 217, 218, 219, 220, 224, 225, 227, 228, 229, 230, 231, 303, 306, 307, 308, 309, 310, 311, 312, 313, TA #1, TA #2, TA #4]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said, “We are a non-union employer, and this has not been a barrier.”

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that they have had no issues with being a union or non-union employer. However, she indicated that they do not have to deal with unions.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, stated that he had no problems with not being a union shop and did not think it was a barrier for others he knew. He stated that he does not have enough people to qualify as a union shop.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he does not believe that there are any barriers or discrimination related to being a union employer. He added, “It’s been good to be union.” He explained that being a union shop enables him to have access to many skilled workers and to ramp up or cut back as the market dictates.

H. Obtaining Inventory or Other Materials and Supplies.

Some interviewees identified obtaining inventory and other materials and supplies as a barrier to pursuing business opportunities. [Interviewees #: 115, 215, 300, TA #7, TA #8]. Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said that “this has not been a problem for me. I’ve heard that other small businesses do have this problem. They say it’s because the number of warehouses has declined. For that reason, inventories have declined.”

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that there are barriers to obtaining inventory and other materials and supplies related to poor credit and lack of financing. He said that he does not believe that these barriers are caused by race, ethnicity, or gender discrimination.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that she has heard stories about other firms being denied opportunities because of their race and other barriers when trying to purchase inventory, material and supplies. She said that she has not experienced this type of barrier.

Interviewee TA #7, the African American male representative of a civil rights agency, said that small businesses normally do not have the capacity to store large quantities of supplies and equipment.

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said “Yes, you can easily have discrimination prevalent when it comes to getting inventory and materials and supplies because smaller firms don’t usually have the capital to purchase in bulk, which means what they pay for an item is likely to be higher than someone who is purchasing large amounts.”

Most interviewees reported that obtaining inventory and other materials and supplies is not a barrier to pursuing or obtaining business opportunities. [Interviewees #: 100, 107, 108, 109, 111, 112, 113, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 201, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 302, 303, 306, 307, 308, 309, 310, 311, 312, 313, TA #1, TA #2, TA #3, TA #4, TA #5] . Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that he has not encountered any barriers with regard to obtaining inventory or other materials and supplies “as long as you pay your bills.” He said that he does not see issues with discrimination in this area.

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated he had not experienced any barriers regarding obtaining materials or inventory but thought that it was possible for other companies to experience this as a barrier.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he does not believe that there are any barriers or discrimination related to obtaining inventory or other materials and supplies. He added, “Some guys are having issues with those things because they don’t have access to credit.” He mentioned that some of the companies owned by his MBE friends are paying prime plus 2 to 3 percent for their lines of credit to obtain inventory. He said, “There’s no way that could be anything but [racial, ethnic, or gender discrimination].” He said that many MBE firms are only able to get loans from banks to obtain their inventory, materials, and supplies, but not lines of credit. He said that with a loan, the business must start paying interest as soon as the loan is signed, as opposed to with a line of credit, when a firm doesn’t have to start paying interest until it accesses the funds. He said, “If it’s not race driving that, then tell me what is.”

I. Prequalification Requirements.

Some interviewees identified prequalification requirements as a barrier to pursuing business opportunities. [Interviewees #: 104, 107, 203, 205, 222, 228, 300, TA #7, TA #8]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, reported that some prequalification requirements can discriminate against the small businesses person because “I have less opportunity to demonstrate my qualifications because I win far fewer bids. And why should I have to prequalify [because] I’m already licensed by the State as a professional engineer.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, indicated that certain perceptions exist about MBE companies that might affect prequalification requirements. He explained by saying, “I don’t put MBE on my business card. When I direct market, I do not direct market as an MBE.” He said that this is, in part, because of the perceptions that primes have that some MBE firms are just a “pass-through” for work, and do not actually perform any of the work themselves. Additionally he indicated that the perception is that the quality of work from MBEs is not always what it should be. He said, “Perceptions are that minority firms have been handed work because the State has forced these requirements down their throat. They are required to do it, they have to gently distribute the work to kind of spoon-feed them a little bit, in essence, and not feel like the [MBE/WBEs] that are hired would be able to come in and have the kind of qualifications and experience needed. Many contractors are not happy that these requirements are in place.” He noted that he speaks with firms frequently who “don’t know where to go” to find qualified firms. He stated that it can become a “real throw the dart at the wall and hope for the best” process when looking at the lists of certified MBE/WBE firms and selecting one.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that the State of Indiana’s prequalification requirements “have been so cumbersome ... totally unnecessary questions they ask.” He added that the prequalification software has serious problems, citing an example of when he typed a word incorrectly on the DBE application that the software would not enable him to go back and correct it.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he does not believe that there are any barriers or discrimination related to prequalification requirements for men, but he does believe that barriers exist for women. Interviewee #205 said that he is aware of other related forms of discrimination against minorities or women. He said, “We’ve recently seen something new come in the marketplace, and it’s called prequalification. And that’s where a majority firm requires that the MBEs to bid portions of their projects be prequalified. Their muscle behind it is that the Department of Education does the same thing. However, you were performing their work beforehand, now you’re no longer prequalified to bid their work.” He mentioned that the owner of an MBE-certified firm told him of a situation in which a prime for which he had subcontracted in the past required him to submit financials and then, based on those financials, decreased the dollar amount of the jobs that subcontractor can bid to that prime in the future.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that there are barriers relate to prequalification requirements but that those barriers are not related to discrimination.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that she has experienced barriers related to prequalification requirements. She said that this barrier could be related to gender discrimination, adding, “It’s sort of that Good Ol’ Boy Network ... ‘you don’t know and I’m not going to tell you’ ... that is always I how I felt when I’d call down [to INDOT in Indianapolis] and try to get help.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that “the [fact that the] prequalification requirements [are a barrier] is not because I’m a woman-owned business but more because we don’t currently have the credentials to meet the prequalification requirements. We’re working on securing those credentials at this time.”

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said “I don’t think prequalification is a factor as far as race and discrimination goes, because it’s based on the health of the company. The \$300,000 limitation of work on the books at INDOT is constraining. We think the limit should be raised to \$500,000 to give DBEs more opportunity to work with INDOT before the prequalification requirements kicks in. “

A few interviewees identified prequalification requirements as a barrier to pursuing business opportunities in the public sector. A representative from a white male-owned firm indicated that becoming qualified to do business with the State of Indiana is expensive and time consuming: “It took us 2 years to be qualified to do any business with Indiana. There were so many hoops that we had to jump through. It also is a very expensive process to apply for and be accepted. And to this date we have not gotten anything out of it. Indiana says they want to keep business in Indiana and provide work for businesses in Indiana, but I have not seen any results.” A representative from a white women-owned business indicated that qualified small businesses like hers find the paperwork to become qualified with the State to be time consuming and difficult.

Other interviewees identified no barriers in connection with prequalification requirements. [Interviewees #: 100, 108, 109, 110, 111, 112, 113, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 201, 204, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 223, 224, 225, 226, 227, 229, 230, 231, 303, 306, 307, 308, 309, 310, 311, 312, 315, TA #1, TA #2, TA #4, TA #5, TA #10]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, indicated that she has not experienced discrimination with regard to prequalification requirements.

Interviewee #111, a Hispanic owner of an engineering services firm, indicated that he has not experienced discrimination when satisfying pre-qualification requirements.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, does not believe that there are any barriers or discrimination related to prequalification requirements. He said that a company has to have the “right financials” to get prequalified. He added, “[The State of Indiana] work[s] pretty hard at trying to get minorities in a position to do work. There’s not enough [MBE/WBE/DBEs] ... [The State of Indiana] work[s] hard at trying to bring in minority companies.”

J. Experience and Expertise.

Some interviewees identified experience and expertise as a barrier to pursuing business opportunities. [Interviewees #: 100, 107, 112, 125, 126, 127, 128, 201, 203, 206, 207, 214, 218, 300, TA #3, TA #7, TA #8]. Interviewee #100, an Asian Pacific American male president of a water testing firm, identified experience and expertise of his employees as a potential barrier stating, “It takes time to find and train employees, and they seem to stay for only a brief time, and we have to begin our search over.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, indicated that barriers with regard to experience and expertise absolutely exist because of the firms that do not perform or do not have the level of qualifications that his firm has. “If you have an established relationship with a firm and they know you, and they know you’re qualified, it gets beyond your MBE status.”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, stated at times possessing the necessary experience and expertise was a handicap in running the company, and she presumed it could be for others too.

Interviewee #127, a Caucasian male and president of a marketing and communications agency, stated that getting up to speed with experience and expertise was always a challenge when trying to establish a new business of your own. He estimated it would be a problem for other small businesses too.

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, stated he had experienced barriers regarding gaining experience and expertise in running the company. He said it was a problem for other minority businesses too. He remarked, “It’s not a fair playing field out there.”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, has experienced barriers related to experience and expertise because of her gender.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said prospective clients question his academic preparation when they say, “Your undergraduate degree isn’t from here.” He reported that he has an undergraduate degree from a post-secondary institution in India and a master’s degree from a post-secondary institution in the U.S.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he has experienced barriers and discrimination related to experience and expertise. He cited an example of how at the end of a job, a customer said, “Wow, you *do* know what you’re doing.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, indicated that he has experienced barriers and discrimination related to experience and expertise. He said that in addition to people not wanting to work for his firm because it is minority-owned, he has heard that other MBE/DBE firms have experienced the same barrier.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, believes that there are barriers related to experience and expertise, but that race, ethnicity, or gender discrimination do not contribute to those barriers.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that there are barriers related to experience and expertise that are caused by age discrimination, but not race, ethnicity, or gender discrimination.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she has heard about other firms that have been denied work because of their lack of experience and expertise.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that there are barriers to obtaining the experience and expertise needed by business owners that are caused by language barriers among non-native English speakers.

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said “Yes, I think there are some barriers relating to experience and expertise. I think for gender and race, a lot of times the prime contractors use the same subs repeatedly — because they like working with people they know or people who look like them.”

Some telephone interviewees commented that experience and expertise are necessary in order to start and run a successful business. A number of interviewees commented that gaining the necessary experience and expertise to start a business can be quite challenging. For example, a representative from a white women-owned business said, “Starting a business of this nature requires a lot of time before you actually open the business, and it also requires a lot of people with qualifications. It isn’t something that can be started quickly.” Similarly, a representative from a minority-owned firm commented, “Before you start a business, do business with [state] agencies. You need to have a fair amount of experience. You really need the experience to know what you are getting into.”

Other interviewees indicated that experience or expertise is not a barrier to pursuing or engaging in business opportunities. [Interviewees #: 108, 109, 110, 111, 113, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 204, 205, 208, 209, 210, 211, 212, 213, 215, 216, 217, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 303, 306, 307, 308, 309, 310, 311, 312, 313, TA #1, TA #4, TA #5]

K. Licenses and Permits.

Some interviewees identified obtaining licensing and permits as a barrier to pursuing business opportunities. [Interviewees #: 116, 212, 213, 227, 230, 302, TA #7]. Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that he had not seen any barriers with regard to licenses and permits required for his work. However, he said, “It is very tough to get a permit in Gary if you’re a white firm. That’s the only place I’ve had a problem.”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, believes that there are barriers caused by discrimination related to obtaining licenses and permits. She said that she finds it interesting that the WBE certification process is very discriminatory toward Caucasian females.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, believes that there are barriers related to obtaining licenses and permits, but that those barriers are not related to race, ethnicity, or gender discrimination. She said that she experienced difficulties in attempting to get the various licenses she needed to start her trucking business.

Interviewee #227, a Caucasian male owner of a truck haulage company, said that there are barriers related to licenses and permits, but the barriers are not related to any race, ethnicity, or gender discrimination.

Interviewee #230, an Asian-American male owner of a dry cleaning company, said that he has experienced barriers regarding licenses and permits that are related to racial and ethnic discrimination. He said that in 2004, when he was getting ready to open his first business location in Bloomington, someone from the City of Bloomington posted a “Do Not Operate” sign on the building. He stated that he asked his [Caucasian male] landlord why this was happening, and the landlord was able to resolve the matter immediately, and the sign was removed. He said he felt that the sign was a form of intimidation based on the fact that he and his father are Asian-American.

Interviewee #302 the male president of a primarily female-owned excavating and environmental clean-up company, reported that in some areas of the State licensing agencies are only allowed to give out so many licenses or permits, and sometimes the limit on the number of licenses or permits allowed is a barrier.

Interviewee TA #7, the African American male representative of a civil rights agency, commented that he thinks licenses and permits may have some barriers with respect to getting tested, keeping them renewed and the cost factors associated with doing this.

Other interviewees indicated that obtaining licensing and permits is not a barrier to pursuing or engaging in business opportunities. [Interviewees #: 100, 107, 108, 109, 110, 111, 112, 113, 115, 117, 118, 119, 120, 121, 123, 124, 201, 203, 204, 205, 206, 207, 208, 209, 210, 211, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 228, 229, 231, 303, 304, 306, 307, 308, 309, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #5, TA #8]. Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “I’ve had no experience with this. I think it’s quite easy to obtain licenses and permits in Indiana. I don’t know what others have experienced.”

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated that they had never experienced discrimination when obtaining licenses or permits. He recalled a number of negative experiences in the City of Gary where an extra \$25 is required before you can even apply for a license or permit. He said that this was not a case of discrimination, just a standard practice for the City.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “No, licenses and permits

are not a barrier for us. However, the State should change the time of year when licenses are due. They are due in February when there is little activity and little cash flow.”

L. Notification of Work Opportunities / Marketing.

Some interviewees identified notification of work opportunities and marketing as a barrier to pursuing business opportunities. [Interviewees #: 111, 122, 124, 126, 127, 128, 203, 207, 209, 213, 215, 216, 217, 221, 222, 226, 227, TA #1, TA #2, TA #3, TA #5, TA #7, TA #8]. Interviewee #111, a Hispanic owner of an engineering services firm, expressed that the “Good Ol’ Boy Club” probably prevents his firm from hearing about opportunities. He said, “People deny opportunities to minority people because of their nationality or the color of their skin. It’s just a way of life. I feel bad for people that complain about it all the time.”

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, said she had experienced the usual barriers regarding learning about work and said, “I presume it has been the same for other WBEs.”

Interviewee #127, a Caucasian male and president of a marketing and communications agency, said learning about work was always a challenge.

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, said he had experienced barriers in trying to learn about work opportunities, and he knew it was a barrier for many others in similar circumstances, especially for African Americans.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he experiences discrimination in learning about work opportunities. He reported that there is no way to find out about work funded by the Indiana State Revolving Loan Fund Program in small communities throughout the state “unless you look at every newspaper ... which is not possible.” He commented that if the use of MBE/WBE-certified firms is not mandatory, the communities will not contract with MBE/WBE-certified firms.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, reported that he believes that there are barriers based on race, ethnicity, or gender discrimination related to learning about work or marketing his firm’s services. He commented, “I wouldn’t say it’s overt, but if you want to find out about jobs, you basically have to be established and have relationships.... I believe that for minority individuals, I believe it’s harder to get those relationships established.... Unless you have a relationship, people are ... reluctant to tell you, ‘We’re doing this project, and why don’t you submit something?’”

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, believes that there is reverse discrimination related to learning about work and marketing his firm’s services. He said that majority firms are required to notify MBE/WBE/DBE-certified firms that they are bidding a job, and furnish them with plans, but MBE/WBE/DBE-certified firms are not required to contact the majority firms to let them know that they want to bid as subs. He said, “It’s gone, in my opinion, too far the other way. If there’s a good minority company, they ought to have the ambition to find out what the work is, just like anyone else would.” He added that his firm has to document all the MBE/WBE/DBEs they contact for bids. He said, “For example, if it calls for 10 percent WBE on a job, and we work hard at trying to get 10

percent but we can't get it, we've got to go through an appeal process with the State.... [We] gotta go down and show them everything we did to try to go out and find [a WBE-certified firm].... And being low bidder doesn't fly.... You gotta go down there and got to have records of how you contacted them, how many times you contacted them ... and after all that's said and done, that still may not be good enough.”

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, believes that there are barriers related to learning about work and marketing her firm's services, but is not sure if those barriers are related to gender discrimination. She said she knows that companies are “obligated” to hire WBEs on public jobs and wonders if she is not getting work because contractors know that she is a woman and they do not have to hire her because she is not certified.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that there are barriers to learning about work opportunities and marketing. He said that he does not believe that these barriers are caused by race, ethnicity, or gender discrimination.

Interviewee #216, an African American male owner of a business consulting firm, said that learning about work opportunities and marketing is a barrier. He said that he was not sure whether this barrier was a result of discrimination based on race, ethnicity, or gender.

Interviewee #217, an African American female owner of a commercial cleaning service, said that there are “big barriers” to learning about work and marketing. When asked if those barriers were related to race, ethnicity, or gender discrimination, she said, “I try not to think that way, but I have to say ‘yes.’” She cited two examples of interactions with high-level decision-makers at two different prospective customer sites in which she had “just a feeling” that they were not interested in her services because she is African American. She added, “You can never know for sure.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that there are barriers related to learning about work and marketing, but the barriers are not because of any race, ethnicity, or gender discrimination.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that there are barriers relate to learning about work and marketing but those barriers are not related to discrimination.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that there are barriers related to learning about work and marketing, but the barriers are not related to any race, ethnicity, or gender discrimination.

Interviewee #227, a Caucasian male owner of a truck haulage company, said that there are barriers related to learning about work and marketing, but the barriers are not related to any race, ethnicity, or gender discrimination.

Interviewee TA #1, a Caucasian male president/CEO of a regional chamber of commerce, said that the members of the Minority Business Council told him that they experience barriers related to learning about work and marketing their products and services. He said that he doubted that the lack

of awareness of how to market and network effectively experienced by the members of the Minority Business Council is related to any race, ethnicity, or gender discrimination.

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that learning about work and marketing is a barrier related to race, ethnicity, or gender-related discrimination. She said, “We can do a better job of notifying people of where to look [for work].”

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that there are barriers to learning about work and marketing that are caused by language barriers among non-native English speakers.

Interviewee TA #5, the executive director of the Indianapolis chapter of a national business women’s organization, when asked whether learning about work or marketing is a barrier responded “It’s hard to say whether it’s because of ethnicity or just not being in the pipeline.”

Interviewee TA #7, the African American male representative of a civil rights agency, identified marketing as a barrier to small businesses, especially “not understanding the true meaning of what marketing does. They don’t want to spend the money that needs to go towards marketing or branding themselves to stand out from others. I don’t think there’s any discrimination associated with this. The barrier is unwillingness to reinvest back into the business.”

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said “As far as learning about work, when there aren’t any goals on projects, sometimes MBE/WBE/DBEs are not being used. The primes have to be aggressively seeking MBE/WBE/DBEs.”

Many telephone interviewees identified notification of work opportunities and marketing as a barrier to pursuing business opportunities with the State of Indiana. For example, a representative from a white male-owned firm indicated that the State should do a better job of letting firms know when work is available and what the work involves: “It would be [beneficial] to know when work is available, [but] a lot of the bid notifications do not go into detail about what is involved in the project.” Another interviewee, representing a white male-owned firm, indicated that it is very difficult to learn about bid opportunities with the State: “We are never contacted or informed in any way about any [State] projects. We usually have to find them ourselves, which is difficult when you don’t know where to go [to look]. [It would be beneficial] if they did direct mailing to contractors on projects that are listed in Indiana”

Other interviewees indicated that notification of work opportunities and marketing is not a barrier to pursuing or engaging in business opportunities. [Interviewees #: 100, 107, 108, 109, 110, 112, 113, 115, 116, 117, 118, 119, 120, 121, 123, 125, 201, 204, 205, 206, 208, 210, 211, 212, 214, 218, 219, 220, 223, 224, 225, 228, 229, 230, 231, 300, 303, 304, 306, 307, 308, 309, 310, 311, 312, 313, TA #4]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that she does not feel that she has experienced discrimination with regard to learning about work with the State. She related that marketing her work is difficult because she does not have the budget to attend marketing events. Nevertheless, she said that she does not feel that this difficulty is a result of her race or gender.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “No, I’ve had no problems in the marketing facet. I’ve heard that others have, and I think a lot of that is because they do not know how to define who their real audience is. They need to have a well-targeted focus on whom they want to reach.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said, “No, learning about work and marketing was not a barrier.” However, he stated that notification of their type of work with the public could be better. He also stated that they had not experienced discrimination in this area.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he does not believe that there are any barriers or discrimination related to learning about work or marketing his firm’s services. In fact, he said, “Today, [customers] are more eagerly seeking you out [because of being an MBE/WBE-certified firm].”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said that she has not experienced any problems/barriers associated with learning about work or marketing. She stated that the work came to her because of her relationships. She indicated that it might be much more difficult for someone without the relationships to secure some of the work she has, but she did not believe that it was based on discrimination. She stated that the major barrier she’s experienced is “just trying to figure out where all of the opportunities are advertised for my line of work.”

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “This is not a barrier for this firm. Information about public work is easily available. Private project information is difficult to locate. You can pay a service to get the information for you, but sometimes you won’t find out about a private project until they are breaking ground.”

M. Contract Specifications and Bidding Procedures.

Some interviewees identified unnecessarily restrictive contract specifications and bidding procedures as a barrier to pursuing business opportunities. [Interviewees #: 100, 104, 112, 115, 116, 117, 120, 124, 126, 127, 128, 203, 204, 205, 213, 214, 221, 226, 231, 305, 308, 315, TA #3, TA #7, TA #8]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said that “some public requirements for professional liability insurance put our firm at a real disadvantage.”

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, indicated that, depending on the size of the contract, some contract specifications can be restrictive for small businesses to meet simply because they are too small.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, expressed that they have seen barriers with regard to unnecessarily restrictive contract specifications and bidding procedures. She mentioned that one of the recent State bids that they were going to pursue required firms to put a certain amount of money down in order to bid. She said that this requirement gave a huge advantage to larger firms that have been in business for longer and have

been able to obtain large contracts and, therefore, have more capital available to them. She added, “I think it is unfair, having to put that money down for that bid.”

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “Yes, this has been a major frustration for me. My experience with the City of Fort Wayne has been very difficult. Their RFPs are very vague and not nearly specific enough [and] far too complex to really understand. I won a contract with Michigan State University and found Michigan’s bidding process to be far easier and clearer than Indiana’s. Both the State and all public entities need to give us specific expectations, like they do in the private sector.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, expressed that if the minority requirements go up to 50 or 60 percent, then his firm would have drastic problems staying in business. He said that he sees this as a barrier and reverse discrimination.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, repeated that their ongoing problems with a university demonstrated a barrier with regard to restrictive contract specifications and bidding procedures. He expressed that these barriers may be due to his race, but that the bigger reason probably had to do with the university’s reluctance to try someone new.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, stated the only time he experienced any barriers regarding restrictive contract specifications was in his attempt to get a contract with WorkOne. He said he was not aware of it being a problem for other small companies.

Interviewee #124, an African American male and president of an MBE-certified promotional products company, stated he has experienced barriers regarding restrictive contract specifications from the State, when the agency says it will decide the contract on the lowest price. He said that the contract will instead go to the contractor who has “greased the skids.”

Interviewee #126, a Filipino Caucasian American male owner of a full-service marketing and advertising firm, stated, “Yes, especially with the State I’ve experienced barriers regarding restrictive contract specifications. When we are forced to complete RFQs that are more than 20 pages, it takes a lot of time and effort, and then when you get nothing from them they prove to be just a big waste of time.”

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, stated, “Definitely, restrictive contract specifications have been a barrier for me and for other minorities.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he believes that discrimination exists with unnecessarily restrictive contract specifications and bidding procedures. He stated that the barrier occurs when a firm has to prove its financial ability to manage a project. He said, “If they require that an Indiana firm has to prove worth in excess of \$10 million.... You’re disqualified right there. It was intended to exclude minority firms.” He added that the design/build projects that are put out to bid by the State are too large for a small MBE firm to do, the same that these firms are too small to

handle both the engineering and construction components of a total job, but they could handle smaller pieces of these types of jobs.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he might have been discriminated against because of unnecessarily restrictive contract specifications and bidding procedures, but it may not have been because of race. He said that he attributes any discrimination in this area to contractors wanting to “keep all the money to themselves.” He added that right after he had started his business, he was approached by a large general contractor regarding the establishment of a mentor program with his firm. He said a representative from the general contractor said to him, “What can you do for me?” Interviewee #204 said he told the man that he couldn’t provide anything other than good quality work. He added that nothing further happened with that mentoring program offer after that comment was made. Interviewee #204 reflected, “Here I am just starting my business and what exactly could I do for [him]? [He’s] a multi-million dollar company.... I just took it like [the man meant], ‘Why should I help you? How’s it going to benefit me if I help you?’ They can get all the union labor they need.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that there definitely is race, ethnic, or gender discrimination because of unnecessarily restrictive contract specifications and bidding procedures. He said that although his firm has annual sales of \$6,000,000, he is prohibited from bidding on \$15 million jobs in Indiana. He said that in Ohio there would be no problem with his firm bidding on a \$15 million bid. He stated that if his firm formed a joint venture with a larger firm to enable him to bid on a \$15 million job in Indiana, his MBE/WBE re-certification would be jeopardized. He stated that the State MBE/WBE program is “... really structured for you to remain not a prime, but a sub.”

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, believes that there are barriers related to unnecessarily restrictive contract specifications and bidding procedures, but does not believe that this barrier is related to race, ethnicity, or gender discrimination. She said that she was not allowed to work on a particular job because the prime told her that the State would not allow his firm to hire subs on the job.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, believes that there are barriers related to unnecessarily restrictive contract specifications and bidding procedures. She said she believes that age discrimination contributes to those barriers. She cited an example of being denied an opportunity to work with a [large equipment] company because she was told that her employees “were long in the tooth.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that there are barriers related to unnecessarily restrictive contract requirements and bidding procedures, but those barriers are not because of any race, ethnicity, or gender discrimination.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that there are barriers regarding unnecessarily restrictive contract specifications and bidding procedures that are related to race, ethnicity, or gender discrimination. He said that because he is not an MBE-certified business, there are jobs for which he does not qualify.

Interviewee #231, a Caucasian male owner of a plumbing company, said that he experienced the barrier of unnecessarily restrictive contract specifications and bidding procedures. He explained that a few months ago, he received a bid opportunity regarding the government-funded renovation of homes in Bedford, Indiana. He said that he did not bid because he received the bid request on a Friday, the bid was due on Monday, and there was no time to submit a proper bid. He said that he did not believe that race, ethnicity, or gender discrimination contributed to that barrier.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, reported “I’m not a native of Indiana. I’m from the West Coast. The West Coast is color- and gender-blind as compared to the Midwest. I have seen subtle and not-so-subtle discrimination here.... Do I think discrimination happens here more than on the west coast? Yes.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said, “Sometimes contract specifications and bidding procedures were unnecessarily restrictive,” and the bidding process can be “pretty involved.”

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, said that the most restrictive specification they have dealt with is citizenship requirements for the workers. He stated that he thinks it is a little unfair because people have to work in order to eat. He stated that he is going through the citizenship process right now.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that there are barriers related to unnecessarily restrictive contract specifications and bidding procedures that are caused by language barriers among non-native English speakers.

Interviewee TA #7, the African American male representative of a civil rights agency, identified unnecessarily restrictive contract specifications and bidding requirements as a barrier. He said “I’ll use the Evansville arena [as] a prime example. We created “Buy Indiana” — and the City of Evansville says you can only buy Evansville and I think that’s a little bit much, especially since you know there’s not a lot of minority and women businesses to do the work. This is an additional barrier. What keeps this from not being discrimination is they put this requirement in a City ordinance. There are all kinds of hidden racism.”

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said “I think when you’re dealing with certain levels of public work, a lot of firms just don’t bid on the work [because of the contract specifications]. Sometimes it’s more work than most contractors want to do. Well, I guess if you go back to bidding procedures one could say there’s a reason for the specifications being what they are and discrimination is not a factor. However, it could be a barrier with State procurement if the rules are not applied consistently.”

A few telephone interview respondents identified unnecessarily restrictive contract specifications and bidding procedures as a barrier to pursuing business opportunities. A representative from a white male-owned firm indicated that contract specifications seem to be written to prevent non-union firms from bidding on public sector projects: “The language that is being presented in the bid documents restricts work to union members — we are kept completely out. This

is general stealing.” Another interviewee, representing a white male-owned firm said: “It’s often too complicated and takes too many steps [to bid on State projects.]”

Other interviewees reported that unnecessarily restrictive contract specifications and bidding procedures do not pose a barrier to pursuing or obtaining business opportunities.

[Interviewees #: 107, 108, 109, 110, 111, 113, 118, 119, 121, 123, 125, 201, 206, 207, 208, 209, 210, 211, 212, 215, 216, 217, 218, 219, 220, 222, 223, 224, 225, 227, 228, 229, 230, 303, 304, 306, 307, 309, 310, 311, 312, TA #1, TA #2, TA #4, TA #5]. Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “Unnecessarily restrictive contract specifications and bidding procedures [are] not a problem for us. There is more paperwork on some projects, but in order to survive as a business, you must do what you have to do to get the work.”

N. Bidding Process.

Some interviewees identified challenges in connection with the bidding process as a barrier they encounter in the local marketplace. [Interviewees #: 104, 107, 111, 115, 117, 118, 119, 121, 124, 126, 127, 128, 204, 214, 222, 225, TA #3, TA #7]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, said that regarding the bidding process, smaller firms have more challenges just because they are small, but not necessarily because they are a minority firm.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, said that with regard to the bidding process, some of the firms looking for MBEs to contribute are looking to just meet the absolute minimum limit. He said, “They are not going to go above and beyond, and that could limit, based on the number of folks who are pursuing work, your opportunity. That is one of the reasons, sometimes until the very end, I might not even mention I’m a minority. Perceptions in the marketplace, honestly ... more than anything, are the most prevalent barrier.”

Interviewee #111, a Hispanic owner of an engineering services firm, expressed that there are restrictive bidding procedures at times, but they are not restrictive just to minority firms. He said that it sometimes appears that the owners already know who they want to hire, and he feels that this is sometimes obvious by the time frame they give vendors to complete the bidding process.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “Yes, this has been a major frustration for me. My experience with the City of Fort Wayne has been very difficult. Their RFPs are very vague and not nearly specific enough [and] far too complex to really understand. I won a contract with Michigan State University and found Michigan’s bidding process to be far easier and clearer than Indiana’s. Both the State and all public entities need to give us specific expectations, like they do in the private sector.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, noted challenges with the bidding process as a barrier. He stated that “Yes, we have never gotten a chance to offer bids at Purdue. And the same goes for getting City [of Lafayette] bids.”

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated he had experienced a barrier regarding the bidding process, and it involved a general contractor who wanted him to get a \$5 million bond on a project worth only \$1,100, and the amount of paperwork was unreasonable.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, noted he had experienced a barrier regarding the bidding process, although he had very little experience with bidding in the public sector. He said that he did not know of other small businesses that had had problems submitting bids.

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, noted he sometimes experienced barriers regarding the bidding process, especially with regard to those occasions when he was manufacturing a piece that went into a component slated for military application. He clarified that these requirements may not be “barriers” so much as they are very detailed specifications required to satisfy the military. He did not know if other businesses had problems submitting bids.

Interviewee #124, an African American male president of an MBE-certified promotional products company, noted he has experienced barriers regarding the bidding process, saying “It’s supposed to go to the lowest bidder, but in reality it does not.” He did not know if other small businesses had problems with the bidding process.

Interviewee #126, a Filipino Caucasian American male owner of a full-service marketing and advertising firm, noted “The bidding process with the State is just like jumping through hoops and is not a bit productive. We have to make a major effort to comply with the bidding procedures, but we get so little from it. I think the State simply creates a giant smoke screen. They talk a lot but there is no action to go with it.”

Interviewee #127, a Caucasian male and president of a marketing and communications agency, noted, “The bidding process with the State and public universities is overly complex, inefficiently handled, and often a useless expenditure of our time and money.”

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, noted he had experienced barriers regarding the bidding process. He added “The bidding process takes so much time, the timeline is so drawn out, and the whole process is so messy, it is a very real barrier. I’m sure it is for other small and minority businesses.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he believes that there is “probably a lot of discrimination in the bidding process.” He said that contractors “want to give (contracts) to a guy maybe they’ve already worked with or somebody they know ... they don’t really give you a chance ... sending out the bid notifications the same day as the contract is bid so that you don’t actually have time to prepare for it ... they’re just sort of clearing (themselves) to say I did contact an MBE and got no response.”

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, stated that there are barriers in the bidding process, but that race, ethnicity, or gender discrimination does not contribute to those barriers. She said that she has experienced a lack of fairness in one company’s bidding process because “they have a preference toward someone else.”

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that there are barriers relate to the bidding process caused by gender discrimination. She said that primes use a WBE's price to shop around for a lower price, then the prime will not use the WBE when it wins the job.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that there are barriers in the bidding process and that those barriers are related to race, ethnicity, or gender discrimination. He stated that his firm is disqualified from bidding on jobs that specify that the vendor must be an MBE or WBE.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that there are barriers related to the bidding process that are caused by language barriers among non-native English speakers. She added that small Asian communities, such as Indiana's large, talented Burmese population, do not understand any of the processes involved in bidding on jobs.

Interviewee TA #7, the African American male representative of a civil rights agency, commented that the bidding process is somewhat fair, but then stated, "It's the scoring you really want to look at — if you put minorities and women on the contract with the State you get 20 more points. But, what happens if you don't have that scoring option — would you see minorities and women?"

Several telephone interviewees identified challenges in connection with the bidding process as a barrier to pursuing business in the public sector. Many telephone interviewees indicated that excessive paperwork and cumbersome bid processes are a barrier to working with the State of Indiana. For example, a representative from a white women-owned firm said: "I think the bidding process is extremely difficult and hard to understand, and I cannot find any resource to help me with that because I am not a minority. There are resources for minorities but not white females that I know of." Similarly, a representative from a white male-owned firm commented: "It's been our experience trying to get involved with the state or public colleges that it requires too much paper work and restrictions. As far as the restrictions, they try to tell [you] how much you have to pay your employees."

Other interviewees indicated that bidding processes and procedures are not barriers to pursuing or engaging in business. [Interviewees #: 100, 108, 109, 110, 112, 113, 116, 120, 123, 125, 201, 205, 206, 207, 208, 209, 210, 211, 212, 213, 215, 216, 217, 218, 219, 220, 221, 223, 224, 226, 228, 229, 230, 231, 300, 303, 304, 306, 307, 308, 309, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #8]. Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he does not believe that there is any discrimination in the bidding process. He stated that in Indiana there are "clear rules ... you never question it ... there's none of that back-door stuff that goes on [with State of Indiana jobs]."

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, "Unnecessarily restrictive contract specifications and bidding procedures [are] not a problem for us. There is more paperwork on some projects, but in order to survive as a business, you must do what you have to do to get the work."

O. Factors Public Agencies or Others Use to Make Contract Awards.

Some interviewees identified various factors public agencies or others use to make contract awards as a barrier to pursuing business opportunities. [Interviewees #: 112, 116, 117, 126, 127, 128, 203, 207, 209, 211, 215, 216, 217, 225, 307, TA #3, TA #8]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, expressed that there do seem to be barriers in certain cities, especially in Lake County, with regard to the factors that public agencies use to make contract awards. She mentioned that the work is often “given to the same people that we know are related to those individuals in the cities. It is very unfair, and it never changes. It’s a situation where ... you just don’t fight it, you just kind of move on. Even if you come in lower with better quality, it doesn’t matter.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that white firms might be able to bid cheaper, but minority participation requirements often add up to a 25-percent cost increase, and that could be a barrier.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said he was not sure how public policies work because public officials do not seem to follow any procedures; he stated that they just hire the same old vendors. Interviewee #117 recounted his one experience of calling the MBE/WBE office to complain about unfair bid opportunities at Purdue and in Lafayette, and how within a couple of weeks someone from the office came and investigated their firm and their MBE/WBE status. He stated that their MBE/WBE status was investigated because he called rather than his wife, a Hispanic female. He said he never called that office about anything again.

Interviewee #126, a Filipino Caucasian American male owner of a full-service marketing and advertising firm, stated, “It appears to be a foregone conclusion who will be awarded State contracts. The State favors the larger companies and those it is more familiar with. The rest of us really don’t stand much of a chance.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that there is definite discrimination regarding the factors that public agencies use to make contract awards. He said that contract award decisions are based on “connections and political contributions.” He added that the same firms always get the work, and that their employees do not even have master’s degrees.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, reported that he believes that there are some barriers related to discrimination regarding the factors that public agencies or others use to make contract awards. He said, “They basically make decisions based on previous relationships.”

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, believes that there are barriers and discrimination related to the factors that public agencies or others use to make contract awards. He said, “There are some jobs that you’ve got to be a minority even to bid them or you’ve got to be a small business.”

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said he believes that there are barriers and discrimination related to the factors that public agencies or others use to make

contract awards. He said, “We’re discriminated [against] big time.” He said that he might be the number-one pick of the prime, but he ends up being the second choice of the prime because the prime is required to include a certain percentage of work with an MBE/WBE firm in its bid to the State.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that there are barriers regarding the factors public agencies use to make contract awards. He said that he does not believe that these barriers are caused by race, ethnicity, or gender discrimination, but instead are caused by the fact that his business is small.

Interviewee #216, an African American male owner of a non-certified business consulting firm, said that there could be barriers and discrimination based on race, ethnicity, or gender related to factors which public agencies or others use to make contract awards. He said that there could be individual bias among employees who make contract selections.

Interviewee #217, an African American female owner of a commercial cleaning service, said that there are large barriers regarding factors public agencies or others use to make contract awards, although she does not believe that these barriers are related to race, ethnicity, or gender discrimination.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that there are barriers in the factors public agencies or others use to make contract awards that are related to race, ethnicity, or gender discrimination. He stated that his firm is disqualified from bidding on jobs that specify that the vendor must be an MBE or WBE.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, stated that “[Public agencies] are just not comfortable with someone they don’t know,” but this is not related to discrimination

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that there are barriers related to factors public agencies or others use to make contract awards that are caused by language barriers among non-native English speakers.

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said, “Now I see some connection to race and discrimination as far as contract awards goes, especially if there’s a goal on the project, because then the public agency is promoting participation and awarding points for meeting their goals like [IDOA] does. If there are no goals on the project, we believe the DBEs get locked out.”

A few telephone interviewees recommended that the State no longer base contract awards on low bidder status. Both MBE/WBE and non-MBE/WBE firms suggested that contract awards should be based more on qualifications than on price. For example, a representative from a minority-owned firm commented: “It gets kind of complicated, but basically one thing I wish that public colleges would consider ... make a selection based on the qualifications rather than just placing a bid.” Another interviewee, representing a white male-owned firm, said, “It seems like people like to get the cheapest bid and not the best job. They are all more worried about getting the cheapest job and are not worried about the quality of the job.”

A few telephone interviewees indicated that it is difficult for local contractors to win work with the State of Indiana. For example, a representative from a white male-owned firm commented, “I think bids and contracts should be awarded to local business rather than [to] out-of-state or out-of-country businesses.” Another interviewee, also representing a white male-owned firm said, “There seems to be more out-of-state people getting work than the local people. I think it’s mostly due to some of the large out-of-state firms that can afford to wine and dine versus giving the local people the opportunity.”

Other interviewees identified no barriers posed by the factors that public agencies or others use to make contract awards. [Interviewees #: 100, 107, 108, 109, 110, 111, 113, 118, 119, 123, 124, 125, 201, 205, 206, 208, 210, 212, 213, 214, 218, 219, 220, 222, 223, 224, 226, 227, 228, 229, 230, 303, 306, 308, 309, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #5]. Interviewee #111, a Hispanic owner of an engineering services firm, shared that for contractual services, the firm that is the most qualified is chosen, as opposed to choosing the lowest bidder. He reported that this means that there is a fair amount of objectivity involved in the selection process.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, stated he had not experienced any barriers regarding public agency award granting, but noted that he had no public bidding experience. He said he was not aware of it being a problem for other small companies.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he does not believe there are any barriers or discrimination related to the factors that public agencies or others use to make contract awards. However, he added, “Some of it lends itself to being abused by the prime on bid day.”

P. Bid Shopping.

Some interviewees identified bid shopping as a barrier to pursuing business opportunities or that bid shopping is a frequent occurrence. [Interviewees #: 100, 102, 107, 109, 111, 112, 115, 116, 118, 125, 126, 127, 204, 205, 206, 207, 209, 210, 212, 217, 219, 222, 223, 225, 231, 304, 305, 307, 308, 313, 315, TA #7]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said “I’m sure we have lost some bids [due to bid shopping and bid manipulation], but we just have to deal with it. It seems to be part of the process.”

Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, stated that he believes that he gets his “numbers peddled” more often because he is a union member and not because he is a minority owner. He said that “bid shopping” is not something he would ever be able to prove, but he believes it goes on, and this angers him. Interviewee #102 reported that when he learns that a prime contractor has peddled his numbers, he refuses to submit any more bids to that contractor.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that everyone has their bid shopped.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, stated that he was aware that bid shopping was occurring, saying, “There is a lot of that.”

Interviewee #111, a Hispanic owner of an engineering services firm, shared that it is very common to receive calls for bid shopping. He said, “Everybody does it.”

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that they have experienced the barrier of bid shopping in the public sector. She mentioned that she was aware of a couple instances when firms contacted them and then used their bid to get better rates from others.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “Yes, this goes on the public and private sectors. Over the course of my 20 years in the business, there have probably been at least ten times when my bid has been shopped. Others have told me the same has happened to them also. In the private arena, complaints about bid shopping seem to be taken seriously and action is taken against such offenders. In the public sector, there seems to be no such compliance enforcement.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that bid shopping is a 90-percent occurrence. He said that he felt this is probably a barrier, but he said that it is not discrimination-based.

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated, “I have heard of bid shopping being a problem for some other companies, but it has never been an issue for us.

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, said that she suspected there had been some bid shopping going on around her, but “I have no way of proving that.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he only responds to the bids on the day they are due because, “If you send them in any earlier, like the day before, the good old guys get with their good old guys and say, ‘This is what I got, what can you do?’ So, that’s why I send them in that morning (that the bids are due).” Interviewee #204 said that he has experienced bid shopping based on discrimination.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has experienced bid shopping based on discrimination “all the time.” He said that he learned how to get around bid shopping from something he learned from an employee of the Indiana MBE/WBE office. Specifically, he said that when he now receives a request for a bid from a prime on the day a bid is due, he simply writes on the bid request form that he did not have adequate time to respond, but he would be interested in bidding to that prime in the future, given adequate time to respond. He said that he then becomes the first firm that prime will contact on future bids.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said he has experienced bid shopping but did not specify whether he believed that this barrier was based on racial or ethnic discrimination. He said, “The door is open for primes to shop bids.” He stated that during the 24 hours before a bid is due, primes will take the lowest bid price they received from a prospective subcontractor and will ask other, higher-priced prospective subcontractors if they

can beat that price. He added that the prime will then include the lowest price in its bid, regardless of whether or not the bid is from an MBE/WBE.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he has experienced bid shopping, but he does not believe this barrier is based on racial or ethnic discrimination.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, believes that there are barriers and discrimination related to bid shopping. He explained, “We get that done to us. It all goes back to relationships. If I know you personally and you know I can do a good job and [another firm] beats me by 2 percent, you’re going to call up and say ‘Can you do it for 2 percent less? I want to use you.’ That’s typical. We don’t like to do business that way. Pretty soon if I know you do that all the time, I’m going to quit bidding to you. So, it’s not a good practice. Does it happen? Sure, it happens.”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that although bid shopping is a common practice, there is no discrimination related to bid shopping. She added that she receives up to ten bid requests daily via fax and e-mail.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that bid shopping is “definitely” a barrier and it is getting worse. She does not think, however, that there is gender discrimination related to bid shopping. She said, “You take all this time to bid the jobs and then years ago it used to be that if you were the price they used, then you got the contract. But now, the contractors are using a price and then shopping. They’re not honoring all your work. And they go to somebody else and say, ‘Here’s what I got. Can you do it for less?’ and they do.”

Interviewee #217, an African American female owner of a commercial cleaning service, said that there are barriers related to bid shopping, but that those barriers are not related to race, ethnicity, or gender discrimination. She said that she had to bid extremely low to beat out an incumbent, but she did so because if she won that job, there was a possibility of cleaning ten more offices for that client.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that there are barriers related to bid shopping, but those barriers are not a result of discrimination.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that bid shopping is a barrier and it is caused by gender discrimination. She stated that many primes will cut a WBE’s bid amount so that it equals the required percentage and will not give the WBE “a dime more” than the minimal percentage.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that there are barriers related to bid shopping, but the barriers are not because of any race, ethnicity, or gender discrimination. He said that the primes conduct a lot of bid shopping. He said that your first price “doesn’t mean a whole lot ... they just want to get it done as cheap as they can ... find somebody to do it for nothing.”

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that bid shopping exists, but there is no race, ethnicity, or gender discrimination related to it. He said that bid shopping is “part of the game.” He added that bid shopping happens as much in his favor as against it.

Interviewee #231, a Caucasian male owner of a plumbing company, said that bid shopping is a barrier but that it is not related to any race, ethnicity, or gender discrimination.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “Yes, bid shopping and bid manipulation are barriers. We all know it’s being done, but people don’t talk about it loudly. They don’t talk about it in public.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “In the private sector, bid shopping happens all the time. I may give a bid to a potential client and that client then takes the bid to another vendor to obtain a lower bid. Then the client does not call back because the other vendor beat my bid by a few dollars. Many times the other vendor completes work the client doesn’t need, leaving the client unsatisfied. Then the client will call me to fix it. That’s what you get for a lower bid.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, indicated that she has had some experience with regard to “bid shopping” and “bid manipulation” in the private sector, saying, “Yeah, we’ve run into that in the private sector. We are pretty sure in one instance that another company was shown our bid before they prepared their lower bid, and they submitted it after the deadline.”

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, said, “We experience bid shopping all the time. A guy will call and ask for a rate for five workers with asbestos certification, for example; we provide them a rate and then never hear back from them.”

Interviewee TA #7, the African American male representative of a civil rights agency, identified bid shopping as a barrier and said that there is a hint of discrimination in this barrier.

Other interviewees indicated that bid shopping is not a barrier to pursuing or engaging in business. [Interviewees #: 108, 110, 113, 117, 119, 121, 123, 124, 128, 201, 208, 211, 214, 215, 216, 218, 220, 221, 224, 226, 227, 228, 229, 230, 303, 306, 309, 310, 311, 312, TA #1, TA #2, TA #4]. Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, when asked about bid shopping, said that his reputation was excellent and while some clients complain about costs, they usually end up taking his bid. He was not aware if it was a problem for others.

Q. Bid Manipulation.

Some interviewees identified bid manipulation as a barrier to pursuing or obtaining business opportunities. [Interviewees #: 100, 107, 112, 115, 116, 117, 128, 203, 205, 210, 212, 222, 231, 304, 305, 307, 308, TA #7]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, said that he has a feeling that situations are manipulated, but said

that there would be no way to know this for certain. He explained that he has had situations where they bid on work and knew that their pricing was good and their qualifications were strong, but the prices were only negotiated with another team. He added, “Was I set up to fail from the beginning? Was it a total waste of time? In the end, people will work with who they want to.”

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that she believes that they have experienced the barrier of bid manipulation. She reported that she was surprised about one contract award in particular. “The firm that got it ... I just couldn’t even believe it. They had no training, nothing.” She said that she believes that there is no possible way that any firm could get the work done in the amount of hours and the rates they were proposing. She added, “So I question that one.... You’re so used to the way some of the cities work.... I do think we face that barrier [with the cities].”

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “I think this is more prevalent in the public sector. I’ve had more than a few majority contractors ask me to submit fake bids — \$10,000 lower or higher than theirs — so their own bid would appear to be reasonable. Whatever the payoff for such fake bids, it’s not enough if you end up in jail. I say this is more prevalent in the public sector because they don’t seem to take any corrective action.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, expressed that bid manipulation happens about as much as bid shopping, about 90 percent of the time. He said that this is probably a barrier, but it is not based on discrimination.

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, stated he had experienced bid manipulation and was aware it had been a problem for other minority companies.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he believes that bid manipulation occurs, and claims that he has not been able to determine how various firms win bids. He said that when he has inquired as to why he has not won a specific bid, he has been told that his firm is too small or that the person he asked does not know. He reported that he does not believe that he has ever received discriminatory treatment in the private sector but has in the public sector.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he believes that there are barriers and discrimination related to bid manipulation. He said, “I know for a fact there are majority firms that add in factors for MBEs that they wouldn’t put on any other firm ... it’s usually dollars....” He clarified that majority firms may add 10 percent to an MBE’s bid because they know that they will have to pay the MBE firms every 30 days or they will complain to IDOA.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that bid manipulation happens, but she does not believe that there is any discrimination related to bid manipulation. She said that primes frequently call and ask them to reduce their price by 50 cents or a dollar per hour to beat out another sub’s bid. She added, “They’re [primes] always trying to beat you down on price.”

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that bid manipulation because of gender discrimination happens “all the time,” but that people are careful to cover it up.

Interviewee #231, a Caucasian male owner of a plumbing company, said that bid manipulation is a barrier but that it is not related to any race, ethnicity, or gender discrimination.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “Yes, bid shopping and bid manipulation are barriers. We all know it’s being done, but people don’t talk about it loudly. They don’t talk about it in public.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “Bid manipulation happens in the beginning when the specifications are made. Sometimes they try to narrow it to the point where they eliminate competition.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, indicated that she has had some experience with regard to “bid shopping” and “bid manipulation” in the private sector saying, “Yeah, we’ve run into that in the private sector. We are pretty sure in one instance that another company was shown our bid before they prepared their lower bid, and they submitted it after the deadline.”

Interviewee TA #7, the African American male representative of a civil rights agency, identified bid manipulation as a barrier and said that there is a hint of discrimination in this barrier.

Other interviewees indicated that bid manipulation is not a barrier to pursuing or engaging in business. [Interviewees #: 108, 110, 111, 113, 118, 119, 120, 121, 122, 123, 124, 125, 127, 201, 204, 206, 207, 208, 209, 211, 214, 215, 216, 217, 218, 219, 220, 221, 223, 224, 225, 226, 227, 228, 229, 230, 303, 306, 309, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #5]. Interviewee #111, a Hispanic owner of an engineering services firm, indicated that he has not seen blatant bid manipulation in his industry. He said that it may be going on, but he cannot give specific examples.

R. Treatment by Prime Contractor or Customer During Performance of Work.

Some interviewees identified treatment by prime contractors or customers during the work performance as a barrier to pursuing or obtaining business opportunities. [Interviewees #: 104, 107, 115, 116, 201, 205, 209, 213, 218, 225, 300, 305, 307, PF #3, TA #7]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated that “primes seem to have two sets of standards” with regard to work performance and work approval. He commented that they tend to demand stricter requirements from MBEs than what they expect from non-MBEs. He said, “My experience as a sub with primes is that some have higher expectations of [minorities] and hold us to a higher standard because the prime’s presumption is that our work is not of the same quality as a majority sub. In reality, of course, the level of quality of most minority firms is as high as, if not higher than, majority firms.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, said that treatment by primes or customers during performance of the work is completely dependent on the company. He indicated that there might be a red flag that goes up with the prime, but “our

personal experience has been that once we start to perform, we're very strong, and typically any trepidation they had will go away pretty quickly once we start to perform."

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, "Maybe in the private arena I've experienced what I thought might be mistreatment just once in 20 years. I don't know about other businesses."

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that ten years ago your general contractors used to show up on the job, pat you on the back, and tell you what a good job you were doing, and build you up so you would do more extras for free. Then, he said that in the last two weeks of the project, they would try to get all that they could out of you. He said, "Now, they tell you the first week that you're already two weeks behind and threaten to fire you and pull your bond if you don't hire more workers." He said that this is a barrier, but it is not discrimination-based.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she has experienced barriers based on gender discrimination related to how she is treated by a prime or customer during performance of the work. She said she encountered a male customer who did not like working with women and who said to her, "You must be PMS-ing" and screamed at her on a regular basis.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, reported that he has experienced discrimination related to how he is treated by a prime or customer during performance of the work. He cited as an example a private sector job in which he was told that he personally had to oversee a job because the customer "did not want my black project manager on the job." He added that this was something that that firm "never would have demanded from a white firm."

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that he has not experienced barriers based on race, ethnicity, or gender discrimination related to how he is treated by a prime or customer during performance of the work. He said, however, that personality issues may cause barriers that are not related to race, ethnicity, or gender.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that she has experienced one barrier regarding how she is treated by a prime or customer during performance of the work, although she does not believe it was related to any race, ethnicity, or gender discrimination.

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that the company's employees have definitely experienced race, ethnicity, or gender discrimination on the part of the prime or customer during the performance of the work. He said that given the ethnicity of many of their employees, many customers will specifically request English-speaking cleaners for their buildings.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that "there [are] still some times when you're not always looked at by male-run firms as being equal. There's still a little bit of difference based on what [male-owned firms] perceive as your capabilities."

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, commented, “In the technical world I have seen gender bias where a female electrician or data tech may be discriminated [against]. There may be a tendency to doubt the work based on the gender of the worker.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, indicated that he has experienced situations where “some just look at you differently.” He also stated that the toughest part of his job is “just getting your foot in the door.”

Interviewee PF #3, the president and owner of an MBE/DBE-certified construction company in northern Indiana, said that he had a disagreement with a prime over the spec standards for a driveway. He said that the prime thought the City’s standards applied and he thought the State’s standards applied. He said that there was a heated discussion regarding the applicable spec standards and at some point during the discussion the prime called him the “N” word. He said that he then wrote a letter to INDOT to document the situation. He said this occurred in 2002 and INDOT has not followed up with him.

Interviewee TA #7, the African American male representative of a civil rights agency, identified treatment by a prime or customer during performance of work as a barrier and said that there is some discrimination related to this barrier.

Other interviewees reported that they had no experience with and were unaware of barriers in connection with treatment by a prime contractor or customer during the work performance. [Interviewees #: 100, 108, 109, 111, 112, 113, 117, 118, 119, 120, 121, 123, 124, 125, 126, 127, 128, 204, 206, 207, 208, 210, 211, 212, 214, 215, 216, 217, 219, 220, 221, 222, 223, 224, 226, 227, 228, 229, 230, 231, 303, 304, 306, 308, 309, 310, 311, 312, 313, TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #111, a Hispanic owner of an engineering services firm, reported that he has not experienced discriminatory treatment by primes. He said that he knows that he needs to get into the project, work hard, and deliver more than what is expected.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “Treatment by the prime contractor is not a problem for us. This goes back to the established relationships. We have good relationships with our clients.”

S. Approval of the Work by the Prime Contractor or Customer.

Some interviewees identified approval of the work by prime contractors or customers as a barrier that they have experienced or are aware exists in the local marketplace. [Interviewees #: 104, 116, 205, 207, 214, 222, 228, 305, PF #3, TA #7, TA #8]. Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that work approval is not a problem except for the final 10 percent. He reiterated that some firms refuse to pay the final 10 percent, claiming dissatisfaction. He said that this can be a barrier, but it is not based on discrimination.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he does not believe that there are any barriers or discrimination related to approval of the work by the prime or customer in the

public sector. However, he said that he has experienced discrimination in the private sector, stating that a customer said, “We want you to do this for free.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, reported that he believes that there are barriers related to discrimination regarding approval of work by the prime or customer in the public sector. He said that the approval of the work often depends on the relationship the subcontractor has with the prime. He stated, “If they know you, and they’re familiar with your work, in my opinion, they’ll probably be easier on you than somebody who’s coming in out of the blue, and that basically goes back to establishing relationships, which, in my opinion, is harder to do for minority individuals.”

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that she has experienced barriers related to approval of the work by the customer, but that race, ethnicity, or gender discrimination does not contribute to those barriers. She said that sometimes they make a delivery to a customer on time, but that it takes the customer a long time to make the final acceptance.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that approval of the work by the prime or customer is a barrier and related to discrimination.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that she has experienced barriers related to approval by a prime or customer but that those barriers are not related to race, ethnicity, or gender discrimination.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, commented, “In the technical world I have seen gender bias where a female electrician or data tech may be discriminated [against]. There may be a tendency to doubt the work based on the gender of the worker.”

Interviewee PF #3, the owner of an MBE/DBE-certified construction company in northern Indiana, said an excavating and demolition contractor worked on a demolition project for the City of South Bend, but as they excavated to get the foundations out up near the sidewalk, the sidewalk fell in through the hole also, and then the City construction engineer told him he must replace the sidewalk. He said that there was another contractor who was already scheduled to replace the sidewalk as part of this project. He commented, “You give a guy a job, he’s successful in getting that job, but once he gets the job, you try to force him to quit.”

Interviewee TA #7, the African American male representative of a civil rights agency, identified work approval by the prime or customer as a barrier and said that there is some discrimination related to this barrier.

Other interviewees indicated that approval of work by a prime contractor or customer is not a barrier to pursuing or engaging in work. [Interviewees #: 100, 108, 109, 110, 111, 112, 113, 115, 117, 118, 119, 120, 122, 123, 124, 125, 126, 127, 128, 201, 203, 204, 206, 208, 209, 210, 211, 212, 213, 215, 216, 217, 218, 219, 220, 221, 223, 224, 225, 226, 227, 229, 230, 231, 300, 303, 306, 307, 308, 309, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #5]. Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “I’ve never experienced any difficulty in getting work approved.”

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated he had not experienced any barriers regarding prime or customer work approval because “I get 99 percent customer satisfaction” and was not aware of it being a problem for other small companies.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he does not believe that there are any barriers or discrimination related to approval of the work by the prime or customer. He added that all that matters is “the quality of work.”

T. Payment by the Prime Contractor or Customer.

Some interviewees identified issues related to payment by a prime contractor or customer as a barrier to pursuing business opportunities. [Interviewees #: 100, 111, 116, 118, 119, 120, 121, 123, 126, 127, 128, 206, 210, 212, 213, 214, 217, 221, 222, 223, 226, 228, 229, 231, 302, 304, 305, 308, PF #2, PF #5, TA #1, TA #5, TA #7, TA #8]. Interviewee #100, an Asian Pacific American male president of a water testing firm, stated that payment “is always a problem. Some clients need to be prodded — a lot. I’d guess that 80 percent of our clients do pay eventually. There are a few who are generally 90 days past due.”

Interviewee #111, a Hispanic owner of an engineering services firm, shared that everyone is having trouble with payment for work, but, again, he said this is not discrimination-based.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that timely payment is horrible in his field. He commented that “the owners will pay the general contractors, but the general contractors hold the money from the subs as long as they can. It’s just horrible.” He said that this is a barrier, but it is not based on discrimination.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, stated he has had problems with a few customers who have been very late in paying and there have been a few who have stiffed him altogether.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, stated, “I’ve had problems with a few customers who have been slow in paying, but I eventually got paid. Now, we generally get paid within 30 days.”

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated he always has some clients who want to string out their payment, some after 30 days, others longer than 60 days. He said he did not know how other companies were faring in the payment issue.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated, “In this slow economy I’ve encountered some customers who are very slow in paying. The State is probably the slowest at paying.”

Interviewee #126, a Filipino Caucasian American male owner of a full-service marketing and advertising firm, stated, “Getting paid is always a problem.”

Interviewee #127, a Caucasian male and president of a marketing and communications agency, stated, “Getting paid by Purdue has always been a problem.”

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, stated he had encountered some customers who are very slow in paying. He said this was not a racial issue, but based on some people’s ignorance of how to conduct business.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that an additional barrier that he has faced was that he performed work and the prime contractor chose not to pay him. He said that he believes that this non-payment was “because of the way they did business,” and was not related to any form of racial or ethnic discrimination.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, has experienced the barrier of lack of timely payments by the customer or prime, but does not believe that discrimination has anything to do with it.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, has experienced the barrier of lack of timely payments by the customer or prime, but does not believe that it is based on discrimination.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, has experienced the barrier of lack of timely payments by the customer or prime, but does not believe that discrimination has anything to do with it.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said she has experienced the barrier of lack of timely payments by the customer, but does not believe that discrimination has anything to do with it. She said that slow payments are becoming more of an issue and that customers are setting their own payment terms because of current tough economic times.

Interviewee #217, an African American female owner of a commercial cleaning service, said that there are barriers related to timely payment by the customer or prime, but that those barriers are not related to race, ethnicity, or gender discrimination.

Interviewee #221, a Caucasian male owner of an excavation firm, said that there are barriers related to timely payments by the customer or prime, but the barriers are not because of any race, ethnicity, or gender discrimination.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that timely payments by the customer or prime is a barrier, but that such barrier is not related to race, ethnicity, or gender discrimination.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that there are barriers related to timely payments by customers or primes, but the barriers are not because of any race, ethnicity, or gender discrimination.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that there are barriers related to being timely payments by the customer or prime, but the barriers are not related to any race, ethnicity, or gender discrimination.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that she has experienced barriers related to timely payments by a prime or customer but that those barriers are not related to race, ethnicity, or gender discrimination.

Interviewee #229, a Caucasian male owner of a safety training firm, said that he has experienced barriers to getting paid, but that the barriers were not caused by any race, ethnicity, or gender discrimination. He said that on one occasion, one public entity paid him six months after his payment was due.

Interviewee #231, a Caucasian male owner of a plumbing company, said that timely payments by a prime or customer is a barrier but that it is not related to any race, ethnicity, or gender discrimination.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, said that the firm is currently in litigation over a payment dispute with a private industry customer.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “The greatest barrier for already established companies in construction is waiting 60 to 90 days for payment. The project requirements of capacity for the number of trucks and working double shifts can blow you away in a two week period. By the time you pay your subcontractors, you’ve taken money from one project to pay for this one, or you are not paying your subcontractors at all. Payment terms and cash flow are the biggest concerns.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “This is more of an issue of how the general prime views your ability to demand payment. This one doesn’t have anything to do with gender, race or ethnicity, but [rather] ‘are you a big enough sub that if we don’t pay you on time will we get in really big trouble, or are you a small mom-and-pop store that it won’t matter if we pay you on time?’”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, indicated that she has experienced “slow payment” from a private sector job. She said, “That was just the bad economy last year. Companies were just sitting on their money.”

Interviewee PF #5, the owner of an MBE-certified psychiatric services firm, said that he performed two contracts for State hospitals in 2008 and after almost two years he has still not received payment for those contracts.

Interviewee TA #1, a Caucasian male president/CEO of a regional chamber of commerce, said that timely payments by the customer or prime is a barrier, but that the barrier is not related to race, gender, or ethnicity discrimination.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, said, "I know of some circumstances where subs have to pressure primes to pay, and that puts the subs in a touchy situation."

Interviewee TA #7, the African American male representative of a civil rights agency, identified timely payment by a customer or prime as a barrier and said that there is some discrimination related to this barrier. He said that one of the things about pricing "is when we do bids we're always going to have a higher mark-up than primes; having the accessibility, majority firms can under-bid minority businesses. The MBEs have to go to the middle man, and when it comes to pricing, minorities may have to pay more for the same product than a majority firm because of past credit records or they find out you're minority. Or, the majority firms keep pushing the smaller firms to come in lower and lower until you determine you can't do the job and make funding, or, worst-case scenario is [that] the smaller business ends up going out of business because they didn't make any money off the job. The Stadium had that early on. There were some who didn't want to work with the joint-venture piece because the capacity side of one firm is definitely larger than the majority firm and the fact they would be doing the same amount of work with less pay. There was a firm put in to do [work] on the Stadium, and the majority company told the minority firm they were going to get paid one rate but the minority firm found out the prime got paid more for the same work. The minority firm didn't make a big stink about it because they didn't want to get blacklisted, it was more than what they'd been paid on similar projects in the past, and they wanted to do work in the future. When a prime and a sub get together and renegotiate what the sub was really supposed to have — sometimes the sub is threatened and might accept less than what they should for the services they have been brought to the table to do. To be intimidated or feel threatened as a sub in any shape is unfair practices. But it happens all the time and drastically impacts MBE/WBEs. Overall, these types of practices impact us negatively and discourage us from even attempting bidding on anything."

Interviewee TA #8, an African American male President and female COO of an organization that provides assistance in the highway construction industry, said that timely payment by a customer or prime is a barrier, but that it is most likely a reflection of the prime's management style and financial stability.

Several telephone interview respondents indicated that slow payment from prime contractors and public agencies is problematic, particularly for small businesses. Both MBE/WBE and majority-owned firms indicated that receiving payment from prime contractors and public agencies can be a time consuming process. For example, a representative from a white male-owned firm indicated that payment is quite slow in the public sector: "The [slow] pay thing is the biggest [barrier] because the suppliers want to be paid in 30 days, but [payment] typically [takes] 60 days [with the state] ... because you have more paperwork." An interviewee representing a female-owned firm said that payment is so slow in the public sector that the firm does not typically bid on public sector projects: "With [the State of] Indiana, they are so slow to pay so we don't work with them."

Other interviewees identified no barriers in connection with payment by a prime contractor or customer. [Interviewees #: 107, 108, 109, 112, 113, 115, 117, 122, 124, 125, 201, 203, 204, 205, 206, 207, 208, 209, 211, 215, 216, 218, 219, 220, 224, 227, 230, 303, 306, 307, 309, 310, 311, 312, 313, TA #2, TA #3, TA #4]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that since the majority of their work is in the private sector, they have not seen any barriers with regard to timely payment by the customer.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “I’ve not experienced failure of payment. I’ve had a few delayed payments, but I think that had less to do with the fact that I am a minority, and more to do with the fact that a prime simply wanted to keep his money as long as possible. This was a private sector project. I don’t [know] about other businesses.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said stated that he has not seen any discriminatory practices regarding timely payment by a customer or prime contractor.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he does not believe that there are any barriers or discrimination related to timely payments by the customer or prime. He said, “If they’re slow paying, they’re just a slow paying firm.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he does not believe that there are any barriers or discrimination related to timely payments by the customer or prime. He said that his firm has actually experienced favorable payment terms on some public sector jobs.

U. Other.

Some interviewees identified additional barriers to pursuing or engaging in business.

[Interviewees #: 100, 107, 126, 207, 210, 304, 305, 306, 309, TA #4, TA #5, TA #7, TA #10].

Interviewee #100, an Asian Pacific American male president of a water testing firm, said, “Our firm’s largest barrier is [a competitor in the State]. They are large, have money for new equipment, can do much more research and development than we can.” He also stated that “Indiana needs to protect its small businesses. For example, Illinois, Michigan, and Wisconsin require their health department laboratories to subcontract their work out to in-state labs. Indiana should do the same.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, reported that the absence of MBE goals for INDOT professional services or design contracts are a barrier to pursuing or engaging in business opportunities. He said, “What has been confusing to us here is that some of the prime designers we work with ... might prefer to work with [our firm], but there is no MBE requirement on [the project, though there is a DBE requirement]. Interviewee #107 indicated that because there is a DBE requirement, but not an MBE requirement the prime designer may have “their hand ... forced to go to another company to [meet the DBE requirement],” even though his firm can do the work. He stated that “this has been very confusing to us why there is very little MBE requirement on these DOT contracts for design and professional services. I would like to know the reasoning why ... and our prime designers would like to know why.”

Interviewee #126, a Filipino Caucasian American male owner of a full-service marketing and advertising firm, said, “I just want to be a good corporate citizen. As a minority, I find myself in a double bind. I don’t want to be given unfair advantages because of my race or color. At the same time, I want a fair shot at business opportunities for which I’m qualified. I just want there to be a level playing field. I don’t want to play my minority status as my lead card. I want to be considered, evaluated, and hired because of the quality and value I can add to a project.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, stated, “The biggest (obstacle) is in establishing relationships and becoming accepted as one of the people who know how to do the work.”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that she has experienced discrimination based on race, ethnicity, or gender regarding the unfair denials of contract awards. She said that there are many companies that are not paying the approved prevailing wages that are required on certain jobs, and that nobody at the State oversees it or ever checks on violators. She said that with jobs created by Stimulus Package funds, that contractors are supposed to pay at the prevailing wage rate, but many do not and nothing happens to them. She said that her company tries to uphold the prevailing wage policies, but that doing so cuts her company out of winning jobs. She added that she could provide “a laundry list” of companies that violate the prevailing wage policy.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “The goals are seen as a challenge to the primes, but I’d like to see that turned around. Let’s all see it as an opportunity based on our [MBE/WBEs’] ability to work. The State gives this small piece of the pie, but it’s very hard to grow a business on a few small slices. Let’s see if we can get some greater opportunities past that initial goal.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “Age is a potential barrier we did not talk about. The downturn in the economy has caused the layoff or lost jobs of many 52-, 53-, and 54-year-olds who have many years of experience in their fields. But now they can’t find jobs.”

Interviewee #306, a Caucasian male owner of a carpet and upholstery cleaning firm, said, “I don’t have any problems in those areas, but I do wish they would start using white male companies again.” Interviewee #306 said, “I feel discriminated against as a white male. There are better opportunities for women and minority businesses than there are for white males.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, said, “There are a couple of times where a company got a job because it was a WBE the last ten years, but only a couple of instances. My wife used to be active in the business, and I just kinda wondered if selling the business to her might be advantageous. But I never looked into it. I would be doing all the work — she would just be the owner.”

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, said, “I have noticed that the communication skills of [certain] immigrants are totally different than what we are used to. But, they

do tend to be entrepreneurial and are willing to take financial risks to succeed. The community focus should be on access to capital for such groups.”

Interviewee TA #5, the executive director of the Indianapolis chapter of a national business women’s organization, said “I know some members fear their WBE certification may carry a stigma of not being qualified or sufficiently skilled, so we have to fight against that perception.”

Interviewee TA #7, the African American male representative of a civil rights agency, identified working for a Caucasian male prime as a barrier. He said, “We have to recognize that the prime who is usually white isn’t going to give [minorities] anything. They don’t want to give up anything; they are trying to figure out how they don’t have to pay anything to a minority firm. And, if [the MBE/WBE goal is] not required in writing, the participation is not going to happen. If you don’t make them it won’t happen. And, they don’t want to look. There are double standards in that the primes hold the MBE/WBEs accountable for stuff they don’t do themselves. It’s not a level playing field.”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, stated that the majority members of his association feel that the goals for use of MBE/WBEs are a barrier.

Several telephone interviewees identified increased competition in their industries as a barrier to pursuing business in the public sector. A number of interviewees indicated that there are more firms looking for work than there is work available. For example, a representative from a white male-owned firm said, “Our business segment, especially today, is overly competitive, so right now the capacity to do work exceeds the availability of work.” Similarly, a representative from a white women-owned firm commented, “It is quiet difficult right now. It’s as competitive now as it has been in decades. There aren’t too many contracts than what is available right now.”

Many other telephone interviewees indicated that the current economic conditions have made it particularly difficult to pursue business opportunities. For example, a representative from a white women-owned firm commented, “[The market is] super saturated. A person would be crazy to start a new business. There are new guys starting businesses, and they are having so [many] problems — it just oversaturates the market. It would be best to go to a bigger town.” Another interviewee, representing a white male-owned firm, said, “The economy makes it hard to expand or start up right now. It’s difficult for everyone to find work. I haven’t bid on any state agencies or public colleges in awhile, so I don’t look into that as often.”

Some interviewees reported no other barriers or potential discrimination in the local marketplace. [Interviewees #: 101, 103, 108, 109, 113, 117, 118, 119, 120, 121, 122, 123, 124, 125, 201, 205, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 303, 308, 310, 311, 312, 313, TA #1, TA #2, TA #3, TA #8].

VII. Additional Information Regarding Whether or Not Any Race, Ethnicity, or Gender Discrimination Affects Business Opportunities.

The interviewees were asked whether they were aware of or had experienced discrimination in the local marketplace based race, ethnicity, or gender.

A. Price Discrimination in Obtaining Financing, Bonding, Materials and Supplies or Other Products or Services.

Some interviewees reported being aware of or having experienced price discrimination in obtaining financing, bonding, materials and supplies or other products or services.

[Interviewees #: 109, 128, 205, 300, 304, 308]. Interviewee #109, a Hispanic male president of an industrial cleaning firm, reported that he had not personally experience price discrimination in obtaining financing, bonding, materials and supplies or other products or services, but that he has “heard that others have encountered this barrier.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he is aware of discrimination based on race, ethnicity, or gender regarding pricing but that he has not personally experienced it. He said that he believes discrimination based on race, ethnicity, or gender exists in getting insurance, financing, and bonding if one’s business address is in a location such as an Urban Enterprise Zone.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said that she is not aware of nor has she experienced any barriers or discrimination based on race, ethnicity, or gender with respect to obtaining financing, bonding, insurance, equipment, in the bidding process, or approval of the work by the prime or customer. She reported that discrimination due to race or gender is usually not something designers face, but she has heard of it being a problem in the construction industry. She stated that she heard stories about other firms being denied opportunities because of their race and other barriers when trying to purchase inventory, material, and supplies. She stated that she has not experienced this type of barrier.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “I know many MBE/WBE firms that don’t get the same prices on materials or services as majority firms.”

Other interviewees reported having no awareness of or experience with price discrimination in obtaining financing, bonding, materials and supplies or other products or services.

[Interviewees #: 100, 107, 108, 110, 111, 112, 113, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 201, 203, 204, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 302, 303, 305, 306, 310, 311, 312, 313, TA #1, TA #2, TA #3, TA #4, TA #5, TA #8]. Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, indicated he had not experienced any price discrimination with regard to obtaining financing, bonding, materials and supplies or other products or services, and was not aware of for other businesses. He added “But, I was turned down for a loan in 2009, and once prior to that. I don’t think it was racially-based, though.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that he has not experienced any discriminatory

practices in the areas of obtaining financing, bonding, materials and supplies or other products or services.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he is not aware of any discrimination based on race, ethnicity, or gender regarding pricing. He said that he believes that large companies get better pricing, and that any pricing differentials are based on the size of a business.

Interviewee #303 the Caucasian female owner of an electrical contracting business, said that she has had more problems with price discrimination while getting her car repaired than she has had in the supply houses. She indicated that she was the one that calls the supply houses and orders the supplies.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “The market is such that any vendor would be crazy to charge one person more than another now. They would be out of business.”

B. Denial of the Opportunity to Bid.

Some interviewees reported an awareness of or experience with being denied the opportunity to submit a bid. [Interviewees #: 111, 115, 203, 205, 219, 222, 304, 307, TA #3, TA #5].

Interviewee #111, a Hispanic owner of an engineering services firm, shared that he feels that the new prequalification application that the State is requiring could, in a way, be deemed a denial of opportunity to bid on work. He reported that his business has done these transportation studies for private companies for years, but now it has to go through this cumbersome process with the “higher authority in Indianapolis” just to be eligible to do that same work for these private entities.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “No. But, others have told me they have been denied the opportunity to bid, but I cannot verify that.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, indicated that he believes that he has been denied the opportunity to bid on projects because of discrimination based on national origin. He added, “We cannot make our qualifications known ... unless they tell us there’s an opportunity to submit our qualifications.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he believes that there is discrimination based on race, ethnicity, or gender regarding the opportunity to bid. He added that primes really do not want you to bid when “they call you up the day of the bid and they give you five minutes for you to bid a job that they’ve been looking at for three weeks.”

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she has experienced discrimination related to the denial of the opportunity to bid, but that it has not been related to opportunities with Indiana state agencies or universities. She said, “In this line of work, people are used to dealing with men and the best thing we have going for me is my age because there is a higher trust that I’ve been around this for a long time and I do know a lot about it ... there is still definitely a small community, kind of a Good Ol’ Boy Network.”

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “The public side is open opportunity to bid they can’t discriminate. On the private side they can do whatever they want. They don’t have to send you an opportunity to bid. I don’t know where they get their working list from.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, stated, “buyers have their preferences,” adding that this includes customers who do not want to work with minorities or women.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said she was aware of denials of opportunities to bid based on language barriers.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, when asked whether there have been denials of opportunities to bid said, “Yes, some have in the sense of feeling uninformed.”

Other interviewees reported no awareness of or experience with being denied the opportunity to submit a bid. [Interviewees #: 100, 107, 108, 109, 110, 112, 113, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 128, 201, 202, 204, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 220, 221, 223, 224, 225, 226, 227, 228, 229, 230, 231, 302, 303, 306, 310, 312, 313, TA #1, TA #2, TA #4, TA #8]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that if there were discrimination with regard to denial of opportunity to bid, the parties involved would never admit to it.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said, “I think that it is just the reverse. With less work, companies will work with whomever they need, to get jobs. There’s now more discrimination against the white guy, especially with the stimulus money projects, so the minority contractor has a better chance to get work because he’s in a better position to meet all the minority requirements attached to the projects.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, stated, “Other than my experience at Purdue, we have not experienced discrimination by means of denial of the opportunity to bid.”

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, stated that she has never been denied the opportunity to submit a bid to a prime contractor. She stated that she has not been denied any opportunities to bid on any State of Indiana work because of her race or gender, citing that partners say, “If you’re a WBE, we want to work with you.”

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, is not aware of any discrimination based on race, ethnicity, or gender regarding the opportunity to bid. He added, “I think about everybody will take your bid. And what they do with it after that you don’t always know. I don’t think we’ve hardly ever been told ‘No, don’t waste your time even giving us a bid.’”

C. Stereotypical Attitudes on the Part of Customers and Buyers.

Some interviewees reported having experienced or been aware of stereotypical attitudes on the part of customers and buyers. [Interviewees #: 104, 107, 110, 111, 115, 116, 117, 128, 200, 202, 203, 205, 206, 207, 215, 217, 219, 222, 226, 227, 228, 300, 301, 304, 307, 315, TA #3, TA #6, TA #8]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, indicated he experienced many barriers when he was trying to get his business up and running. He stated, “With regard to financing, I always had the feeling that because I was labeled an MBE, potential contractors had negative stereotypes about me and misjudged my qualifications as being inferior to someone who was not an MBE.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, indicated that stereotypical attitudes on the part of customers and buyers clearly exist. He noted that these attitudes can come more in the form of off-the-cuff remarks that at professional organization meetings. He said, “There is clearly a perception out there that minorities or MBE/WBEs are not as qualified. And again, I think a lot of these folks feel like these goals are being forced down their throat[s], and they don’t understand the value of what the State is really trying to do, and the real purpose of it.”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that she believes there are stereotypical attitudes on the part of customers or primes. She also reported that everyone is surprised that she is a WBE in this industry.

Interviewee #111, a Hispanic owner of an engineering services firm, shared that he thinks that human nature dictates that there will always be stereotypical attitudes on the parts of customers and buyers.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “Yes, I experience this all the time. They look at me, think I am Indian, and confide that I must be smart because all Indians are smart. So, for me, my ethnicity works to my advantage, most of the time. I don’t know how other minorities fare.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that Gary is the worst place for white contractors to get work. He said, “Gary practices stereotypical attitudes in reverse against us white contractors.” He stated that the only person who gets work in Gary is a particular contractor who has connections with Purdue.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said that some stereotypical attitudes are manifested by the African Americans at trade shows and conferences who walk by him and just ignore him, and he attributes this to the fact that he is white.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, stated, “You still have some stereotypes in the whole United States ... I’m not specific on anything, but you’re still going to have it.”

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that she has experienced unfavorable work environments with “girly posters” in factory shops, but she added that work environments have improved over the years.

Interviewee #203, an Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that he has been subjected to a discriminatory “attitude and mindset” regarding his experience and expertise. He said that prospective clients have said, “‘Hey, when did you learn English?’ In India, the official language is English. Of course, we learn British English. Of course, I speak with an accent. When they give an excuse that they didn’t select our firm because of communication problems ... I have heard that 200 times ... I do not know how to work on that. Discrimination because of national origin is still in existence and you cannot change this without enforcing the law.” Interviewee #203 said that he believes stereotypical attitudes are “always there” on the part of customers and buyers.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has experienced discrimination based on race, ethnicity, or gender regarding stereotypical attitudes on the part of customers and buyers.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, reported that he has experienced discrimination based on race, ethnicity, or gender-based stereotypical attitudes on the part of customers and buyers. He said, “You can tell sometimes when people aren’t sure. There have been instances when [electrical contractors are] looking for the boss, ‘Hey, where’s the boss,’ and I’m in the room, and I’m working.... So, you get the look.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, reported that he has experienced discrimination based on race, ethnicity, or gender regarding stereotypical attitudes on the part of customers and buyers. He said, “It’s not overt, but because of accents or because of gender there is a perception that the quality of work is not as high.”

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said he has experienced discrimination based on race, ethnicity, or gender regarding stereotypical attitudes on the part of customers and buyers. He said that sometimes when he talks with a prospect on the phone, and then meets him or her personally, “you can tell the shock on their face” when they see that he is African American and then “they lose interest.” He commented, “One gentleman actually told me ‘Oh, you’re not what I thought you would be.’”

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she has experienced discrimination related to stereotypical attitudes on the part of customers, but that it has not been related to opportunities with Indiana state agencies or universities. She said, “People like to hire someone they know and they play golf with [one of my competitors], so it’s kind of that Good Ol’ Boy Network kind of stuff....”

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that she has experienced stereotypical attitudes on the part of customers and

buyers. She said that in such a “male-dominated industry,” she has been accused of running a business that is not legitimate and is a “pass-through business.”

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that he has experienced stereotypical attitudes on the part of customers related to race, ethnicity, or gender discrimination. He said that a stereotypical attitude prevails that “if you’re Hispanic, you’re going to be in some sort of cleaning environment.”

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that she has experienced discrimination related to stereotypical attitudes on the part of customers. She stated, “This is a man’s industry ... sometimes when [my husband and I are] out and about together ... I’m sometimes ignored ... they think a woman can’t do this or shouldn’t be involved.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, indicated she is not aware of nor has she had any personal experiences where discrimination has affected business opportunities for her personally. However, she said, “There’s a little bit of stereotypical attitudes on the part of customers and buyers in that there’s some discrepancy on how our capabilities are viewed in comparison to male-owned firms. I say ‘a little bit’ because there are enough women in the industry that it’s not as blatant as it was before.” She added that she has heard about cases where MBE/WBE firms have experienced discrimination. She stated that her experience is more of a perception than a case study where her firm has experienced discrimination. She stated that usually, when she has felt that there was a discrepancy in the worth of her work over a male-owned firm, it has been in the public sector. She reported that most of the time when this happens it is in the construction industry.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that discrimination is shown through stereotyping. He stated, “We are stereotyped because we have traditionally worked for African American churches. Some owners don’t think we can do other work. So, we have to help boost their confidence in us.” He also mentioned, “I think some customers might not use us because we’re a black-owned firm, but I’m not sure I can point to one that has discriminated against us in that way.” He indicated that stereotyping occurs, especially for them, with respect to the type of work potential customers think the firm can perform. He reported that, on occasion, they have had customers who think that they can only do one type of work. He said that some white churches have chosen not to select his firm even though the work that they wanted performed was the same kind of work that the company had done for a black church previously. He also reported that some customers have devalued their work. He provided an example of one customer who wanted office space designed. He said that his firm has designed office space for churches, but the client did not see that as equal. He said, “I think race keeps clients from wanting to talk with us. There are examples where we’ve gone to predominantly white churches and not been received as openly or positively as black churches.”

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “Stereotypical attitudes are a problem. The main violators are usually the procurement [people]. Often they are the most narrow-minded because they don’t know what MBE/WBEs can bring to the table. They have not been adequately educated.”

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, commented on stereotypical attitudes on the job. He said, “We have experienced stereotypical attitudes toward our workers. I have a prime tell me he ‘didn’t want any lazy black people working on this site.’ I’ve had a Hispanic supervisor tell me he only wants Hispanic[s] on the job site.”

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that discrimination based on stereotypical attitudes on the part of buyers and customers definitely exists. She said, “[People] see the foreignness, they see the minority groups and ... immediately have preconceived ideas that these people are not qualified ... not as good as ... a white person.”

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, stated there are a number of barriers, including “[a] perception of an MBE and what they are capable of, perception of what fields MBEs are in — some people still tie it back to certain sectors [like] janitorial and pest control versus more knowledge-based businesses. I think MBEs are under more scrutiny in some cases. The success or the failure of one MBE affects business for many MBEs.”

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said, “Yes, there is some stereotyping out there, and this is always the case until you prove yourself, especially for most minorities and women.”

Other interviewees reported no experience with or awareness of stereotypical attitudes on the part of customers and buyers. [Interviewees #: 100, 108, 109, 112, 113, 118, 119, 120, 121, 122, 123, 124, 125, 201, 204, 208, 209, 210, 211, 212, 213, 214, 216, 218, 220, 221, 223, 224, 225, 229, 230, 231, 302, 303, 306, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #5]. Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said he has not experienced discrimination regarding stereotypical attitudes because of discrimination based on race, ethnicity, or gender, but he has experienced stereotypical attitudes based on age discrimination on the part of younger customers and buyers.

D. Unfair Denials of Contract Awards.

Some interviewees reported awareness of or experience with having been unfairly denied a contract award. [Interviewees #: 100, 112, 115, 116, 128, 203, 205, 209, 213, 215, 217, 227, 304, TA #5]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said, “In Illinois, Michigan, and Wisconsin I have been denied contracts because I was an out-of-state firm.”

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said that he did not have personal experience with this barrier; however, he reported that “many others tell me they have.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, expressed that he does feel that he has experienced unfair denials of contract awards and cited an experience with a Caucasian prime in Gary, Indiana, saying, “The only guy who gets work in Gary is [a Caucasian contractor] ... He’s a general contractor and he gets work just because of his color. He

wanted me to use my white guys for inside work and he wanted to use his black guys for outside work — using my equipment. I said no. I’ve been on his [bad] list ever since.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, indicated that he believes that he has been unfairly denied contract awards by the City of Indianapolis and the State of Indiana.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has experienced unfair denials of contract awards due to discrimination based on race, ethnicity, or gender.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, reported that he is aware of discrimination based on race, ethnicity, or gender regarding any unfair denials of contract awards. He said that his firm has “been denied work because we couldn’t meet our minority goals.”

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, says she has experienced discrimination based on race, ethnicity, or gender regarding the unfair denials of contract awards. She cited an example of how she was promised a job that lasted three years that only ended up lasting three days.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, has experienced unfair denials of contract awards because of discrimination based on race, ethnicity, or gender when he started his business, but not recently. He said that customers used to think, “Small minority business ... can he really fulfill (the order)?”

Interviewee #217, an African American female owner of a commercial cleaning service, said that it is possible that she has experienced an unfair denial of a contract award because of racial discrimination. She said she encountered a “very rude” bank branch manager to whom she had been referred for a cleaning job. She said that she does not often say that someone’s rudeness is attributed to discrimination, but in this case, she said that she felt his rudeness was definitely caused by racial discrimination.

Interviewee TA #5 the Executive Director of the Indianapolis Chapter of a national business women’s organization, when asked about the presence of unfair denials of contract awards responded, “Possibly, with some state agencies.”

Some interviewees reported a difficulty in discerning whether a denial of a contract award was in fact “unfair.” [Interviewees #: 107, 204]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, said that it was very hard to answer the question of whether he has experienced or is aware of discrimination with regard to unfair denials of contract awards. He said, “You don’t know what their decision-making process was. If there was a perception along those lines, the reasoning that you’re going to get for the denial is clearly going to be dialogued on a totally different platform.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said “you wouldn’t know” if there are unfair denials of contract awards because of any discrimination based on race, ethnicity, or gender.

Other interviewees reported no awareness of or experience with unfair denial of contract awards. [Interviewees #: 109, 108, 110, 111, 113, 117, 118, 119, 120, 121, 122, 123, 124, 125, 201, 206, 207, 208, 211, 212, 214, 216, 218, 219, 220, 221, 222, 223, 224, 225, 226, 228, 229, 230, 231, 302, 303, 304, 306, 310, 312, 313, TA #1, TA #2, TA #4, TA #8]. Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, expressed that he did not think unfair denials of contracts have been a factor because of race or ethnicity.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, stated he had not experienced any unfair denials of contract awards, but he noted that he has never submitted a bid on a public project. He also stated that was he not aware of that being a problem area for other small businesses.

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that her members have not experienced any unfair denials of contract awards. She explained that women- and minority-owned businesses have now been in existence long enough to have demonstrated success. She said she believes people can now differentiate between a bad contractor, who can come in any race or gender, and a stereotyped perception about all women- and minority-owned businesses being bad.

E. Unfair Termination of Contract.

Some interviewees reported awareness of or experience with having a contract terminated unfairly. [Interviewees #: 116, 226, 301, TA #3, TA #8]. Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that he believes that some contracts should be terminated, but it seems that minority firms are never terminated.

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that he has experienced an unfair termination of a contract related to race, ethnicity, or gender discrimination. He said that he received a call one day from a customer, firing him from a job and requiring him to remove his cleaning supplies and equipment from the premises immediately. He later discovered that the customer hired the former building manager, who had since started his own cleaning business, to take over his cleaning contract.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said, “As much as we try to think we’re being selected based on qualifications, we know some organizations and primes only select us to fulfill goals. So, our work is scrutinized more, and the smallest mistake or rub with a staff architect results in our release.”

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said, “Yes, I think unfair contract terminations happen. Sometimes when the DBE goal is met they will terminate the contract.”

Other interviewees reported no awareness of or experience with the unfair termination of a contract. [Interviewees #: 107, 108, 109, 110, 111, 112, 113, 115, 117, 118, 119, 120, 121, 122, 123, 124, 125, 128, 201, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 227, 228, 229, 230, 231, 302, 303, 304, 306, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #5]. Interviewee #111, a Hispanic owner of an engineering services firm, said that he has not experienced unfair terminations of contracts because of race. However, he reported that he has experienced unfair terminations due to political affiliations. He said that he ran for a position and he was told that he would lose all of his work concerning particular projects if he did not pull out of the race. He indicated that he did not pull out, and three weeks later he was terminated from those projects.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, responded he had not experienced any unfair contract terminations. He cited one time when a client did not renew a contract because they wanted to give the business to some family members who were starting up a cleaning company. He stated that he did not consider that termination to have been based on prejudice. He said he was not aware of that being a problem for other small businesses.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “We have not experienced unfair termination of a contract. They just give a reason, but I guess you just don’t know.”

F. Double Standards in Performance.

Some interviewees reported being aware of or having experienced double standards in performance. [Interviewees #: 107, 110, 111, 115, 128, 203, 205, 206, 207, 211, 222, 301, TA #5]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, felt that in the engineering community, the expectations of performance on all MBE/WBEs is the same, and that primes would expect MBE/WBEs to perform at the same level, which he believes is fair. However, Interviewee #107 indicated that he felt that there may be a double standard on the side of the MBE/WBEs. He stated that he thinks that there may be an attitude that MBE/WBEs are owed something. He said, “You gotta give me the work, you’re required to do it, and whatever I do in the end ... you’re going to be forced to take whatever I give you.”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that she feels that expectations of performance on MBE/WBE firms are always greater. She also reported that she feels that women outperform men most of the time, and she has never missed a deadline, so she does not mind this expectation.

Interviewee #111, a Hispanic owner of an engineering services firm, said that he feels that double standards in performance do exist. He shared a story of one of his employees who had an oil compressor that was leaking a very small amount of oil, but not enough to make a puddle. He said that the contractor told him he needed to put a pan underneath it. He indicated that a couple of days later, the larger majority-owned subcontractor had a compressor leaking oil “like a sieve,” but no one bothered mentioning it.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “I don’t think I have experienced that. I know that others have expressed they have experienced double standards.”

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, stated, “Definitely, I’ve experienced double standards in performance. We are held to higher standards, and if we fail, then the easy charge to make is ‘see, they can’t do this kind of work.’ Here’s an example: normally for a project we are paid 30 percent up front but, because we are a minority, they try to tell us they will only pay us 25 percent up front. The normal balance due is 30 days after completion, but I’ve had [majority] clients stretch out the payments for 90 days and beyond. It’s almost like the majority folks are just daring us to succeed and then setting us up for failure.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he believes that there are double standards in performance, citing that to win a large contract, a firm has to submit a federal form proving that the firm “has done work in excess of \$20 million ... or \$100 million.... You’re excluded right there.” He added that he believes that state agencies and public post-secondary institutions are “not evaluating the (MBE’s) qualifications fairly.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has experienced discrimination based on race, ethnicity, or gender regarding double standards in performance.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, reported that he has experienced discrimination based on race, ethnicity, or gender regarding double standards in performance. He said, “It’s assumed that you aren’t going to perform as well.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, reported that he believes that double standards in performance exist due to discrimination based on race, ethnicity, or gender. He said, “Minority people are held to a higher standard ... for non-minorities, you would let things slide (if there was a problem with a project) ... or chalk it up to something else.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that there is discrimination based on race, ethnicity, or gender regarding double standards in performance on public sector contracts. He said that he hears from the primes all the time that the standard of work performed by MBE/WBEs is less than that of non-MBE/WBEs and that their sub-standard work is accepted anyway. He said that this is the fault of the State of Indiana, not the primes.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that she has experienced double standards in the performance of her firm’s work. She added that sometimes a customer will stick his nose up to a wall to inspect it, as opposed to standing four feet away, which she says is normal. She said that she cannot say for certain that gender discrimination contributes to this double standard, but that she suspects that it does.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said, when asked if a double standard

exists, “I would say yes, there were a couple of projects, private and public, where we were unfairly held to a higher standard.”

Other interviewees reported no awareness of or experience with being held to double standards in performance. [Interviewees #: 100, 108, 109, 112, 113, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 201, 204, 208, 209, 210, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 223, 224, 225, 226, 227, 228, 229, 230, 231, 302, 303, 306, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #8]. Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, is not aware of any discrimination based on race, ethnicity, or gender regarding double standards in performance on public sector contracts. However, he believes there are double standards on some private sector jobs because of the large size of his company. He said that because his firm is large, private sector customers will sometimes ask them to fix something that they probably would not ask a smaller firm to do.

G. Discrimination in Payments.

Some interviewees reported being aware of or having experienced discriminatory practices with respect to payment including slow and non-payment. [Interviewees #: 116, 128, 211, 231, PF #2, TA #3]. Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that the general contractors will make the weekly payments to the minority subcontractors but hold the white firms’ payments for up to 60 days.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm has experienced discrimination in payments. He said that when he subbed under a WBE and an MBE sub, and his payment was several months past due, he had to call the prime to be able to get the money that he was owed.

Interviewee PF #2, the president/owner of an MBE-certified heating and cooling firm, recalled a conversation he had with another firm last spring. Interviewee PF #2 remembered the other firm saying, “Our hands are tied because we have to use minorities in contracting, okay? We’ve got to do this, so that now that we have to do it, we’re going to hold as much of their money as we can, because we know they don’t have the money it takes to withstand, you know, the three or four months it’s going to take to get paid on these projects. So, if we hold as much of their money as we can, when they do close their doors, we’ve got the money to pay another contractor to finish the project.”

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that there is ethnic and racial discrimination in payments. She said that members of her organization often receive lower payments than others because they are in a minority group.

Other interviewees reported no awareness of or experience with discrimination in payment. [Interviewees #: 100, 107, 108, 109, 110, 111, 112, 113, 115, 117, 118, 119, 120, 121, 122, 123, 124, 125, 201, 203, 204, 205, 206, 207, 208, 209, 210, 212, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 226, 227, 228, 229, 230, 302, 303, 306, 310, 311, 312, 313, TA #1, TA #2, TA#4]. Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, “No, other than the university I referred to earlier which was very slow at making their payments. They seemed to have an overly complicated process.”

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said that “this has not been a problem. I don’t know for others.”

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated he had not experienced any discrimination in payments. He did note that some clients try to string out payments for 60 days or longer. He was not aware whether that was a problem for other businesses.

One interviewee reported that they were unsure as to whether their late payments were a result of discrimination. [Interviewees #: 213]. Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that she is not sure if she has experienced any race, ethnicity, or gender discrimination regarding payments. She said she has experienced late payments, but is not sure if her gender contributed to that situation.

H. Other Predatory Business Practices.

Some interviewees reported being aware of or having experienced predatory business practices. [Interviewees #: 100, 111, 112, 115, 218, 227, 229, 304, 308, TA #3]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said, “There is always the company that underbids a contract, and I mean considerably underbids it. I don’t know how that works out for them.”

Interviewee #111, a Hispanic owner of an engineering services firm, shared that on the first job he ever did as a contractor for the State of Indiana, prior to starting this company, he quoted his prime a number for the work. He said that he admittedly under-quoted for the project and bid the job wrong, but he was eager to get the work. He said that the prime contractor that got the job knew that he quoted wrong, so the prime proposed that he step aside and stay out of its way, and that the contractor would give him a certain percent to walk away. He said that he refused, and the prime contractor tried to convince him that he was going to lose money by doing the work, but he knew that he needed to do the work to get paid, and he was willing to lose money to get the experience. He said that he did lose some money, but it was well worth the experience. He mentioned that he was told that this kind of thing (i.e., paying minority firms to walk away) happens all the time.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, expressed that she has experienced discrimination through other predatory business practices. She said that she feels that it is often the same people getting the work over and over again, and sometimes the financial barriers of having to put money down to get a large contract has the feel of a predatory practice, even if it cannot be proven.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said that “this used to happen a couple times a year. Guys would approach me and ask whether they could run a contract through my company. I guess I’ve said ‘no’ enough times that fewer people are asking me to participate in fraudulent practices.”

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said he has observed predatory business practices based on gender discrimination toward women at some large retail stores. He said that these stores prey on women by selling them service contracts that they do not need and telling them to buy what they do not need to buy.

Interviewee #229, a Caucasian male owner of a safety training firm, said that he experienced discrimination regarding predatory business practices. He said that he lost his five-year contract with Indiana University when it went up for re-bid. He said he lost the bid to a WBE whose owner was a former student of his.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said “A predatory practice is someone who infringes on your desire to do work in an ethical and moral way. A prime contractor who is not in compliance with the contract calls you when the project is almost complete, saying I have to complete the MBE forms; what can we do? Your company never worked on the project. That is predatory. I know some companies who experienced [it]. It’s everyone’s fault.” Interviewee #304 added, “That’s why sanctions are key, so firms know there is a penalty if they do things like this.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, stated that “a competitor has been watching us pretty closely — checking up on us online at places like Dunn & Bradstreet.”

Other interviewees reported no awareness of or experience with predatory business practices. [Interviewees #: 108, 109, 110, 111, 113, 117, 118, 119, 120, 121, 122, 123, 124, 125, 201, 203, 204, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 219, 220, 221, 222, 223, 224, 225, 226, 228, 230, 231, 302, 303, 306, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #5, TA #8]. Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, stated he had not experienced predatory business practices (other than clients wanting him to reduce the quality of his work so he would then reduce his costs and fees). He was not aware of that being a problem for other small businesses.

I. Unfavorable Work Environment for Minorities or Women.

Some interviewees reported being aware of or having experienced an unfavorable work environment for minorities or women. [Interviewees #: 112, 115, 128, 203, 205, 206, 211, 215, 222, 223, 225, 231, 301, 304, 305, 315, TA #1, TA #3, TA #5]. Interviewee #115, a Subcontinent Asian American male owner and president of a technology consulting, deployment and management firm, said that this happens “All the time. I often hear from my subs that our client’s staff members make derogatory remarks about Blacks and Hispanics to them. Of course, my subs realize that behind their backs, these same clients are probably making fun of Asians too. But, I just laugh it off. What else can you do?”

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, stated he had experienced unfavorable work environment situations based on race, and was aware of that being a problem for other minority businesses. He cited an example of five years ago when he was recruiting for a private company in Arkansas. He said that, while at their plant, he spotted a drinking fountain with a sign above it that read “Whites Only.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he frequently experiences unfavorable work environments because of his national origin. He said that he is often asked, “How do you pronounce your name?” and “Can you submit a sample of your writing?” He said that he doubted that other firms were being asked to submit writing samples.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, stated that he has experienced one incident of an unfavorable work environment based on race. He cited an example with a private sector job in which he was told that he personally had to oversee a job because the customer “did not want my black project manager on the job.” He added that this was something that the firm “never would have demanded from a white firm.”

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, stated that he has experienced incidents of an unfavorable work environment based on race “here and there.”

Interviewee #211, a Caucasian male owner of a dump truck haulage firm believes that there is discrimination based on race, ethnicity, or gender that creates an unfavorable work environment. He said, “There’s a difference [between how minorities and women are treated from how he is treated] ... because there’s no choice.”

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, stated that he has experienced one incident of an unfavorable work environment based on race. He cited an example regarding a commercial cleaning job with a construction company in Bloomington in which someone from the company made a derogatory racial comment “in a joking manner.”

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that a young woman who works for her in the office recently experienced an unfavorable work environment. She said that while on a job site in a project meeting, she was told “You don’t know anything, you just sit in the office.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that she has heard about cases where MBE/WBEs have had to endure unfavorable work environments, but that has not been her personal experience. She stated that most of the time when this happens, it is in the construction industry.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, mentioned that goal-based programs have been advantageous for MBE/DBEs and commented, “When agencies use goals to remedy discrimination, this has worked to the advantage of MBE/DBEs because it sets an expectation that we’re going to be utilized.” He expressed concern that some primes do not support goal-based programs, and concluded by saying that some primes have tried to sabotage his work while the firm worked as a subcontractor on public work. He reported that, unfortunately, some clients listened to the primes, and in one case, their firm was fired from the team without the opportunity to share their side of the story. He also mentioned that he has heard of some businesses, mostly contractors, working in unfavorable work environments, but he has not personally experienced this behavior.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “The work sites have been fine. Every now and then you’d get one person to make a silly comment. It’s subtle but it’s a male-dominated industry. In the technical area a female in the workplace means someone would want to double check the work.”

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, said, “We hear dirty jokes all the time. There aren’t a lot of women on the job sites, though. Many times the racial comments come from inside the minority communities. Like the Mexican person will [say] the Honduran worker does not work hard enough. We discredit our own.”

Interviewee TA #5, the executive director of the Indianapolis chapter of a national business women’s organization, stated that she has experienced unfavorable work environments for women and minorities. She said, “Of course, at every job I ever had. More innuendos regarding sexual harassment. If anything, being a non-minority, I feel I have to prove myself to the minority members.”

Other interviewees reported no awareness of or experience with an unfavorable work environment for minorities or women. [Interviewees #: 100, 107, 108, 109, 110, 111, 113, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 201, 204, 207, 208, 209, 210, 212, 213, 214, 216, 217, 218, 219, 220, 221, 224, 226, 227, 228, 229, 230, 302, 303, 306, 307, 308, 310, 311, 312, 313, TA #2, TA #4, TA #8, TA #10]. Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said, “We don’t think the work environment is unfavorable for minorities or women, and certainly it’s not different than any other marketplace. That said, I do think minorities and women are less represented in the work place, especially on construction projects, and there’s more likelihood they will feel isolated and not included like non-minorities.”

J. The ‘Good Ol’ Boy Network’ or Other Closed Networks.

Some interviewees reported knowledge of or experience with a ‘Good Ol’ Boy Network’ or other type of closed network. [Interviewees #: 101, 104, 105, 107, 108, 109, 110, 111, 112, 115, 116, 117, 123, 124, 128, 200, 203, 204, 205, 206, 207, 210, 213, 215, 216, 217, 219, 221, 222, 225, 226, 231, 300, 301, 302, 303, 305, 308, TA #2, TA #3, TA #5, TA #8]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, stated that some City, county, and State work opportunities “seem” to favor the people who have already done work with the agency, and it can be hard to break into that network.

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, said, “Some primes still have negative stereotypes regarding consideration of a minority business. We minority businesses seem to have to prove ourselves more. The ‘Good Ol’ Boy’ mentality still exists in the public sector much more so than in the private sector.”

Interviewee #105, a male Caucasian owner of a small concrete contracting firm, indicated that most of the barriers that he has experienced are due to his being “non-union.” He said, “The ‘Good Ol’ Boys,’ the ‘Big Guys,’ have a way of keeping the money in the family. They only want union people, and I think they get something in return for hiring only union guys.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, indicated that the ‘Good Ol’ Boy Network’ does exist in Indiana. He said that this business is built on relationships. He said that he felt that this climate may be changing because of more people being relocated to the State, working on INDOT projects, and engineers coming in who may be a little more open-minded. Ultimately, though, he said that people in the State are going to work with who they want to work with.

Interviewee #108, an African American male and previous owner of a commercial cleaning company, said “In Indianapolis, there is one guy who seems to get all the janitorial business. I’m not sure what to call it. Maybe he is just in the right place at the right time. I just know it seemed to be an insurmountable obstacle as far as my opportunities for janitorial jobs there.”

Interviewee #109, a Hispanic male president of an industrial cleaning firm, said that he has not had much contact with a ‘Good Ol’ Boy Network’ while working with his current company. However, he stated, “I believe it exists because in my earlier company, when working with INDOT, which had multi-million dollar projects that had minority requirements, the ‘Big Boys’ would always get the bids and then use their buddies’ trucking companies to fulfill the minority goal. But these trucking companies were all funneled through one WBE who just happened to be the wife of one of the trucking contractors. So, yes, they know how to work the system so the paperwork meets requirements, but in reality the work is done by the same old majority companies.”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that the ‘Good Ol’ Boy Network’ is very alive in Lake County, Indiana, especially in the Lake County Government Center. She stated that a competitor is a subcontractor used for data processing on government projects. She indicated that this competitor either could not or would not perform some work within the budget provided by the County. She reported that she was once asked to help perform the work, which she did at a very good price, but that she was later told by the competitor that she “had better not come back.” She indicated that her company was competition, even though the competitor has million-dollar contracts. She reported that the competitor is very entrenched in that location and that she is just a small firm. She stated that she felt that they should not feel so threatened by her but that they apparently did. She reported that “[the competitor] is definitely part of the ‘Good Ol’ Boy Network’ in there.” Interviewee #110 stated that the competitor is a local majority company that is owned by some “pretty heavy political hitters,” so they have some influence.

Interviewee #111, a Hispanic owner of an engineering services firm, expressed that the ‘Good Ol’ Boy Network’ is alive and well. He said that it presents barriers of entry for any firm, not just those owned by minorities. In fact, he acknowledged that Hispanics probably try to stick with and help out other Hispanic firms, and African Americans probably also have their own network as well. He stated that his firm used to be able to receive a recommendation to do a study and get the work. He said, “I spent a lot of time with proposals with State highway procurement ... and nothing. I know what it is. You have to have an office in Indianapolis. You have to invite them over now and then ... be nice to them.... Those are the companies that get the work.” He reported that getting work in the private and public sectors both is based on who you know and word of mouth. Interviewee #111 also reported that he attempted to get work at Purdue once. He said, “We tried to get some work at Purdue in Lafayette, but I think the Good Ol’ Boy Club just used our estimate ... and just showed it around and said, ‘You gotta beat this.’” Interviewee #111 mentioned that one must buy tickets and political fundraiser tickets to be competitive to do public work in this market. Interviewee #111 expressed that the ‘Good Ol’ Boy Club’ probably prevents his firm from hearing about opportunities. He reported that he has been a member of three country clubs where they do their networking. He said, “Occasionally, they’ll bring in a minority guy just to say they are diverse.” He said, “People deny opportunities to minority people because of their nationality or the color of their skin. It’s just a way of life.” He stated, “On the surface, everything is fair,” but he indicated that he believes that when it comes down to it, people are going to want to choose firms that they already know.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that she absolutely believes that the ‘Good Ol’ Boy Network’ exists and is led by massive media like the newspaper. She indicated that she believes that some people in the public sector then partner up with that kind of thinking. She said, “It’s unfortunate. Therefore, the rest of the minority companies suffer based on that.... The mentality of “sticking together,” whether it is right or wrong, [causes] a spiral in the community and we never change our thinking. We are never open-minded.”

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said a ‘Good Ol’ Boy Network’ “[d]efinitely [exists], but I think it has less to do with race or gender, but more to do with just the group you’re in. Whatever group you’re in, there are some who believe they deserve some advantage because of their seniority or tenure or authority.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that he gets a list of MBEs from the City or the general contractor, and he stated, “Generally those MBEs are friends of the City officials.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, stated that he absolutely believes that the “Good Ol’ Boy Network” is alive and well in many of the public entities he has encountered. He added, “And that is probably because they just do not want to look at any other possible subcontractors, preferring to stick with the ones they have used in the past and it is just easier to keep using the same folks. What irritates me is that it has every appearance of being a hand-picked black selection at the end of the process.”

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated he experiences the ‘Good Ol’ Boy Network’ “everyday.” He said that he has heard stories from others, but was not sure how much of a problem it was for other small businesses.

Interviewee #124, an African American male president of an MBE-certified promotional products company, recalled an experience when bidding on an airport RFP to supply sweatshirts for their various shops. He and another MBE partnered to bid but could not even “get into the system.” Interviewee #124 said he viewed this as an example of being shut out by the ‘Good Ol’ Boy Network.’

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that there is definitely the presence of the ‘Good Ol’ Boy Network,’ adding, “It’s who you know, not what you know.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that the ‘Good Ol’ Boy Network’ definitely exists, but stated, “I do not know how anybody could overcome that.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he believes that there is discrimination based on race, ethnicity, or gender in the ‘Good Ol’ Boy Network.’ He said, “It is what it is.” He said, “I have no idea how to break through that.” He added, “You really have no way of proving it, either. We know it goes on.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he believes that there is discrimination in the 'Good Ol' Boy Network' based on race, ethnicity, or gender. He said, "It exists." He mentioned that the 'Good Ol' Boy Network' exists in organizations such as The Associated General Contractors, the National Electrical Contractors Association, The Columbia Club, and the Skyline Club. He said that Clarian Hospital (Indiana University) used to require that all contractors be certified with the Metropolitan Indianapolis Coalition for Construction Safety (MICCS), which he reported costs \$20,000 to join. He said that he told Clarian Hospital that MICCS membership was prohibitive to small MBE/WBEs, and, as a result, Clarian Hospital waived the MICCS membership requirement for MBE/WBEs.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, reported that he believes that there is discrimination based on race, ethnicity, or gender in the 'Good Ol' Boy Network.'

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, reported that he believes that there is discrimination based on race, ethnicity, or gender regarding the 'Good Ol' Boy Network.' He stated, "Establishing relationships and the ability to do that is harder if you don't have the same background to break into that."

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that there is definitely discrimination based on race, ethnicity, or gender regarding the 'Good Ol' Boy Network.' She said, "A lot of times people just use their friends or family ... use who they want to use ... and never even give you an opportunity to bid on a job. That actually happened here with the City of Anderson ... never even gave us an opportunity to bid on a project."

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, is definitely aware of discrimination regarding the 'Good Ol' Boy Network' and other closed networks. She said, "There's a lot of that going on ... that's probably why we're not working ... it's hard to get in...." She added that she believes the discrimination has more to do with the fact that she is not related to certain people in trucking firms, as opposed to being a woman.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, believes that there is discrimination based on race, ethnicity, or gender regarding the 'Good Ol' Boy Network.' He said, "You have Caucasian males who are very well-acquainted with each other and that is who they are going to give business to and anybody outside that of circle is a referral from somebody within that circle. The end."

Interviewee #216, an African American male owner of a business consulting firm, believes that there is discrimination based on race, ethnicity, or gender regarding the 'Good Ol' Boy Network.' He said, "I know it exists, but I can't say I've experienced it."

Interviewee #217, an African American female owner of a commercial cleaning service, said that discrimination related to the 'Good Ol' Boy Network' absolutely exists. She commented, "'Good Ol' Boy [Networks]' don't have women in [them] ... and normally don't have African Americans in [them] either."

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she has experienced discrimination related to the “Good Ol’ Boy Network,” but that it has not been related to opportunities with Indiana state agencies or universities.

Interviewee #221, a Caucasian male owner of an excavation firm, said that he is aware of the ‘Good Ol’ Boy Network’ and that he has experienced it at Purdue University.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that the ‘Good Ol’ Boy Network’ exists. She said that when she attends networking events and approaches groups of men talking, that they seem that they are going through the “motions of taking your card,” but that they are not really interested in talking with the WBEs. She added that she has followed up to see why her firm wasn’t selected to be included in some bids, only to discover the male-owned firms put their male friends in the bid instead.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that the ‘Good Ol’ Boy Network’ still exists. She said, “I think there is still a little bit of that still going on. Certain firms seem to always get the work while other people don’t even get the opportunity. I don’t know if that means the firm getting the work is all that great to the point where other firms don’t get the chance to bid.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said, “When the church work was prevalent, we really didn’t have to deal with this challenge much.” However, he reported that the more the company ventures outside of its niche (Black churches), the more it understands that the ‘Good Ol’ Boy Network’ is alive. He said, “A few choice firms seem to get all of the work, and firms like ours usually always have to be subs to satisfy the MBE/DBE goals.”

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, reported that the “‘Good Ol’ Boy Network’ is alive with some of the politics within the fire stations.” Interviewee #302 stated that the “firemen and EM 8 Secretaries ... would not use me if the spill was right outside my door. They are all buddies and they won’t use me.”

Interviewee #303, the Caucasian female owner of an electrical contracting business, said that the ‘Good Ol’ Boy Network’ is alive and well, and she specifically mentioned that it exists in the supply houses.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said “The ol’ boy network is alive and well.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said, “I’ve had some experience with the ‘Good Ol’ Boy Network’ — that was clearly in effect when a job went to a competitor who was given access to our proposal before he submitted his own proposal.”

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that the ‘Good Ol’ Boy Network’ exists, but that there are now minority faces in those networks. She said that small businesses need to be better represented in the ‘Good Ol’ Boy Network.’

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, said she was aware of the 'Good Ol' Boy Network'. "Yes, [the 'Good Ol' Boy Network'] was in an e-mail from [the Indiana Office of Technology]. It's everywhere, but it's improving, even in State government. I often felt I needed to prove myself in the private sector."

Several telephone interviewees reported knowledge of or experience with a 'Good Ol' Boy Network' or other type of closed network in Indiana. A number of interviewees indicated that the existence of such networks makes it difficult for smaller firms to obtain work, particularly because the State of Indiana seems to award contracts to the same group of firms. For example, a representative from a minority-owned firm said, "I've had people ask me to put ... bids in. I kind of feel that they already know who's going to do those jobs. I don't even bid on them anymore. ... They already know who they're going to pick. ... They already know what companies they're going to use. I'm not saying there's a kickback going on there, but ... that's just the way they do it." Similarly, another interviewee, representing a white male-owned firm, stated, "I think that a lot of times, public and state companies already have their certain firms that they are comfortable with, and therefore they just stay with that kind of idea."

Some interviewees indicated that they had no knowledge of or experience with the 'Good Old Boy Network.' [Interviewees #: 100, 103, 113, 116, 118, 119, 120, 121, 122, 125, 201, 208, 209, 211, 212, 214, 218, 220, 223, 224, 227, 228, 229, 230, 306, 310, 311, 312, 313, TA #1, TA #4, TA #10]. Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that he absolutely believes that the 'Good Ol' Boy Network' went out after September 11, 2001. He said, "I've seen this change with all the governmental involvement in public contracts."

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, is not aware of any discrimination based on race, ethnicity, or gender regarding the 'Good Ol' Boy Network.' He said, "I don't think you can afford to do it in this business ... you just don't discriminate anymore ... it's against the law and if you get caught, it's not good news ... you probably work harder at not doing it."

Interviewee #311, a Caucasian male owner of a computer firm, in responding to the question of whether a 'Good Ol' Boy Network' was a barrier said, "No, I don't think so, but the same firms seem to be selected over and over again."

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company, said "[The 'Good Ol' Boy Network'] doesn't exist around here. Again, it's all about that bottom dollar."

Interviewee TA #1, a Caucasian male President/CEO of a regional chamber of commerce, said that he does not think there is any discrimination among his members' companies related to the 'Good Ol' Boy Network' or other closed networks. He said, "I kind of recoil a little bit [when I hear the term 'Good Ol' Boy Network'] ... that's sort of become the way of describing established relationships in the marketplace ... that's changing ... it's clearly a new day down here ... the landscape is changing."

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, stated that what people perceive as the 'Good Ol' Boy Network' really just goes back to

past performance and using those people with whom you have an established relationship. He reiterated that it has nothing to do with race.

K. Governmental Resistance to Use of MBE/WBEs.

Some interviewees reported being aware of or having experienced governmental resistance to the use of MBE/WBEs. [Interviewees #: 110, 113, 203, 204, TA #5]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she has experienced governmental resistance to working with MBE/WBE firms, especially with majority companies doing everything they can to keep smaller firms out.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, “Definitely. No one will admit it, but there is an unspoken perception that public officials have toward MBEs and WBEs, and that is they are inferior, these businesses are only here because of their certification, they have no other claim to fame.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he believes that there is government resistance to the use of MBE/WBEs. He stated that just making a goal does not mean anything.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, stated, “I hear that the government wants to use MBEs, but I don’t think they make it any easier for us. They don’t really show us the way. For instance, I started my business, and they say there’s a bunch of government contracts out there, but I don’t know how to access it. There are a lot of companies selling information on how to bid government contracts, but none of them pans out.” He said that he learned of these companies selling information about how to win government contracts through television, websites, and a seminar that he attended in Louisville, KY. He said that when he checked out the firm conducting the seminar in Louisville by asking a State of Indiana government agency representative if that agency uses such a procurement list to find vendors, the state agency representative said that they look for vendors via Google, not through that procurement list. As a result, Interviewee #204 said that he did not pay to be placed on the vendor list being marketed through the seminar.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said there was governmental resistance to use of MBE/WBEs. She stated that she experienced it in her prior role in State government.

Some interviewees reported that they were aware of or had experienced governmental resistance to the use of MBE/WBEs on the federal level but not at the state level. [Interviewees #: 205, 216]. Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that there is no governmental resistance to the use of MBE/WBEs on a state level, but he said that there is resistance on a federal level. He said, “If anything, the state here pushes real hard ... the problem is that they’re goals, not set-asides ... they have no bite ... they have no teeth.”

Interviewee #216, an African American male owner of a business consulting firm, said that he is aware of discrimination based on race, ethnicity, or gender regarding governmental resistance to the use of MBE/WBEs at the federal level, but not at the state level. He said, “They have a propensity to

go with certain consultant contractors.... I did try to work my way into the federal system ... but I couldn't break that ceiling for some reason.”

A few telephone interviewees reported being aware of or having experienced governmental resistance to the use of MBE/WBEs. One interviewee, representing a minority-owned firm, said, “The colleges in Indiana — IU, Ball State, Ivy Tech, Purdue — they talk a whole lot of garbage [about MBE utilization], but they don't have the real desire or show the desire to really support minority business. They have lots of shows, and they have a whole lot of running around and nothing to offer. I don't think they are doing good offering opportunities for minority businesses. Sometimes they think [MBEs] are mascots. We don't have a good feeling about them helping minority businesses. IU [considers] Guy Brown ... a minority business, and they are a big company and ... Guy Brown is eating up the diversity dollar opportunities for Indiana minority business. Guy Brown is a company in Tennessee. That is detrimental for diversity in business here, and they don't do anything to help. Another interviewee, also representing a minority-owned firm, commented: “State agencies and public colleges ... just won't give me a chance, because I'm a small minority-owned business. They won't give me the opportunity to prove myself. That is the biggest obstacle I have with any large institution.”

Other interviewees reported no awareness of or experience with governmental resistance to the use of MBE/WBEs. [Interviewees #: 100, 107, 108, 109, 111, 112, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 128, 201, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 302, 303, 304, 306, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #8]. Interviewee #111, a Hispanic owner of an engineering services firm, reported that he has not experienced governmental resistance to working with MBE firms. He said that he was told several years ago by a contractor that he did not like the fact that there were minority goals, but this was not governmental resistance.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that she does not believe there is governmental resistance to the use of MBE/WBEs, though the process is a little challenging.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that he does not believe that there is governmental resistance to the use of MBE/WBEs. He said that he believes that just the opposite is true. He stated, “The white apprentice is extinct. Maybe the white guys don't want to work as hard, but certainly the Hispanic guys want to work.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, shared that he does not believe there is governmental resistance to the use of MBE/WBEs, but more a resistance to using new vendors.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that there is too much governmental emphasis on the use of MBE/WBEs.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “There is no resistance in using MBE/WBEs with IDOA and INDOT. Both agencies have really good people in place. Still, the sanctions piece needs to be put in place.”

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company, stated that he has no experience with government resistance to MBE/WBEs. He commented, “It almost seems like the opposite.”

L. MBE/WBE and DBE Fronts or Fraud.

Some interviewees reported experience with or awareness of the existence of MBE/WBE or DBE fronts or other fraud. [Interviewees #: 104, 107, 109, 110, 111, 113, 115, 116, 122, 128, 200, 201, 202, 203, 204, 205, 207, 210, 211, 215, 216, 218, 219, 224, 226, 227, 228, 229, 230, 231, 300, 301, 302, 304, TA #2, TA #5]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, said that MBE/WBE and DBE fronts “openly exist.” He noted that local officials have set up bidding and project guidelines, but they are much broader and less precise and strict than the State MBE/WBE requirements. He stated, “A business may not qualify at the state level for an MBE but would have no problem qualifying at our local level.” He commented that local officials say, “We don’t want the hassle of set-aside lawsuits,” so they open the certification up to just about anybody. He indicated that, locally, the requirements use “emerging businesses” language, rather than “small businesses,” for classification purposes, so the owner of a big firm can front his wife as an “emerging business” (less than 10 years in existence and revenue less than \$10 million), and her business becomes WBE, and the owner of the big firm can steer business to “his wife’s firm.” He noted, “As a result of such actions, the better-connected and larger firms get the contracts, and the small firms get nothing.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, said that there are definitely firms that would be considered a true “pass-through” that are doing very little work internally. He said, “I don’t know to what extent INDOT or the designers audit that work. We’ve always been very curious of that.” He added that he wonders if the auditing of post-design or post-construction is done at all.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, reported an awareness of MBE/WBE or DBE fronts or other fraud in the context of a ‘Good Ol’ Boy Network.’ He reported that while working “with [INDOT], which had multi-million dollar projects that had minority requirements, the ‘Big Boys’ would always get the bids and then use their buddies’ trucking companies to fulfill the minority goal. But these trucking companies were all funneled through one WBE who just happened to be the wife of one of the trucking contractors. So, yes, they know how to work the system so the paperwork meets requirements, but in reality the work is done by the same old majority companies.”

Interviewee #111, a Hispanic owner of an engineering services firm, said that he questions how some of the companies that are certified have gotten through the process when they are clearly a front. He said that he had attended a seminar recently where there was a Caucasian man sitting next to a Hispanic man, and the Caucasian man knew all the answers about the company. He said that he questions how this company became certified when his was turned down. Interviewee #111 expressed that he is aware that minority or women business fronts or frauds exist. He reported that at a seminar that he attended, he felt like many questionable minority-owned businesses attended thinking perhaps it was a self-certification process. Instead, he indicated that it is quite an arduous process that will hopefully deny most of those fronts or frauds from becoming certified.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, “Yes. Some are not real businesses, they are just fronts through which money is funneled, and the WBE or MBE just scrapes a percentage off the top.”

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said that a couple of years ago, “Guys would approach me and ask whether they could run a contract through my company. I guess I’ve said ‘No’ enough times that fewer people are asking me to participate in fraudulent practices.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated, “Oh, yes, I have certainly encountered MBE/WBE or DBE fronts. I believe about 70 percent of women firms [in my industry] are a front. And the government encourages it by setting up so many of these businesses. Twenty-five percent of the work force is getting preferred treatment for 48 percent of the job opportunities.”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, mentioned that he has heard of MBE/WBE/DBE fronts, adding, “A couple of guys own a company. Then, they become an MBE/DBE because they sold 51 percent to a minority of some background. Whether he’s truly an owner or a front owner is up for grabs.”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she is aware of one company that she believes is a WBE fraud. She said that this one business claims on its website and in its printed materials that it is a woman-owned business, but the owner has never bothered completing the paperwork to become WBE-certified.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said she has seen a few examples of MBE/WBE and DBE fronts, explaining, “I have met some firms that were pushing it to get their certification ... maybe [the father] is the expert and the daughter owns the company ... things like that.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that he is aware of MBE/WBE fronts because he knows of large firms that “changed their wife to CEO, so now they’re getting the work ... and there’s nothing they can do to stop them ... legally you cannot say that is fraud ... their wife has a perfect right to become CEO ... morally, in our mind, it was a deceptive practice, but not legal fraud.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he is aware of instances of MBE/WBE and DBE fronts or frauds. He said, “There’s a few of those companies around ... usually Caucasian males own a business before or start a new one and put it in their wives’ names ... there’s a bunch of that....”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he has heard of instances of MBE/WBE and DBE fronts or frauds, but he said that he has not “experienced any directly.”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that she is aware of MBE/WBE and DBE fronts or fraud. She said, “You hear about them all the time.”

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she is familiar with a WBE front/fraud that provides masonry services. She said that the business was intentionally established as a WBE, but is actually run by the husband.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that she knows about a DBE front which was charging three times more than any other firm, but was getting a lot of work. She said, “The clients didn’t care [that the DBE was charging excessive prices] because they met their [DBE] percentage quota.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she did know of fronts or frauds but then said, “Well, actually I do know of a case where this did happen. The firm was set-up as a WBE, but that wasn’t quite true.” She stated that the firm was dissolved. She said, “Fronts are wrong — if you can honestly say you’re a WBE that’s one thing, but it hurts everybody when the husband sets up a fraudulent business because it destroys the whole reason for the programs being in place. In this case it didn’t make sense, because the primary business was already an MBE.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that “it seems like some of the agencies put a goal in the project because they had to but don’t do as good a job as others to enforce the goals.” He reported that some agencies set goals but do little to enforce the goals/programs. He indicated that some entities encourage higher goals. He also said, “I’ve seen fronts or fraud[s] more on the contractor side than professional services.” He said, “I am aware of some situations where a husband or father sets up his wife or daughter, who has no or limited experience in the field as the WBE, and they have nothing to do with the daily operations.” He also stated he has seen more prevalence of fronts being set-up in the construction industry.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company stated he knows of several companies that the wife is a partner and majority owner in the business.

Interviewee TA #2, an African American female senior vice president of Public and Strategic Affairs for a large metropolitan chamber of commerce, said that she is aware of MBE/WBE and DBE fronts. She said she believes that the state should do a better job of ensuring that these MBE/WBE and DBE fronts do not exist.

Other interviewees reported no knowledge of or experience with MBE/WBE or DBE fronts or fraud. [Interviewees #: 100, 108, 112, 117, 118, 119, 120, 121, 123, 124, 125, 206, 208, 212, 213, 214, 217, 220, 221, 222, 223, 225, 303, 302, 303, 306, 308, 310, 311, 312, 313, TA #1, TA #4]. Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, stated that while he did not know of any fronts or frauds personally, he was sure that they existed. He said, “I’m sure there [are], but I don’t know personally of any.”

M. False Reporting of MBE/WBE Participation or Falsifying Good Faith Efforts.

Some interviewees reported that they were aware of or have had personal experience with false reporting of MBE/WBE or DBE participation or falsifying good faith efforts. [Interviewees #: 107, 109, 128, 200, 202, 203, 204, 205, 206, 207, 210, 222, 226, 307, PF #7, PF #8, PF #13, TA #1, TA #5, TA #8, WT #3]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, felt that the falsifying of good faith efforts does occur in his industry. He noted that he has had follow-up calls specifically with regard to this issue. He explained that one such call was to check on a company that was awarded a contract but did not meet their goal. He said, “They had said they had contacted me for a project, but I had never heard of the company. INDOT asked us what we had been paid ... and we said we had never even heard of that company.” However, he stated that he recognizes that from the contractors’ and prime designers’ perspectives, the good faith effort process can be very labor-intensive, because if the primes do not have relationships with MBE/WBEs and are required to submit at a certain goal, the process can be quite challenging.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, said that he was aware of false reporting in the context of the ‘Good Ol’ Boy Network.’ He stated that “when working with [INDOT], which had multi-million dollar projects that had minority requirements, the ‘Big Boys’ would always get the bids and then use their buddies’ trucking companies to fulfill the minority goal. But these trucking companies were all funneled through one WBE, who just happened to be the wife of one of the trucking contractors. So, yes, they know how to work the system so the paperwork meets requirements, but in reality the work is done by the same old majority companies.”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that he feels that there are firms that falsify good faith efforts, adding, “I feel like they play the game.” He said, “I see a bunch of good faith coming in the door. If they send paper and call, they can write down on their sheet that they have good faith, even if they’re under the [MBE/DBE] percentage of the contract.”

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, reported knowledge of false reporting of DBE participation, which she termed “bid shopping.” She said that people are “bid shopping to get their checkmark checked ... I can’t prove it, but if you were to just get a bunch of these checkmarks checked, you’d send it to a bunch of people who couldn’t do the work ... something’s going on there.... I don’t know if it’s purposeful or accidental.” She added, “I get tons of [bid request faxes from primes] that couldn’t possibly even apply to me.” Interviewee #202 stated that she frequently receives solicitations via fax requesting a quote to satisfy the good faith efforts required by the state. She added that these requests are usually for products that she does not provide. She identified such a particular fax, “Hay bales, nitrogen, phosphate, pot ash, and guard rail ... and I don’t do any of that.... I don’t sell stuff, I sell services.”

She added that it is her opinion that the prime contractors merely want her to sign the form refusing to bid to prove that they made a good faith effort to find an MBE/WBE subcontractor. She added that she believes that primes bidding on projects should only be permitted to use MBE/WBE firms with North American Industry Classification System (NAICS) codes attached to their certifications to count toward good faith efforts. She concluded, “If I sign, maybe I’m helping them cheat the system.” She said, “The way that the contractors have defaulted to ask the question [on the M/WBE and DBE participation forms] is not working....”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, reported having experienced contractors falsifying their good faith efforts, which he called bid shopping. He said that he has experienced bid shopping in that over the past three years he has received faxed requests from construction and paving companies to be included as an MBE/DBE on bids for work that his firm does not perform. He said that these contractors are just including his response “for window show.” He stated that he is aware of false reporting of good faith efforts, adding that he once asked a state agency representative for a list of the MBE/WBE firms that a contract award winner submitted under a good faith effort, and he could not get the requested list. He stated there is no consequence if a firm falsifies the good faith affidavits.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that the general contractor is listed on the bid documents, so he faxes them an estimate on the project. He said he attends pre-bid meetings, but added, “Usually nobody wants to talk to you at that time.” He said that the next time he hears from the contractors is via fax the morning the bid is due. He added, “That’s how they get around it.... They say they contacted somebody and you weren’t interested.... There’s no conversation beforehand.... I guess they submit that they contacted us or they got no reply. I don’t know how they word it.” Interviewee #204 said that contractors “want to give [contracts] to a guy maybe they’ve already worked with or somebody they know ... they don’t really give you a chance ... sending out the bid notifications the same day as the contract is bid so that you don’t actually have time to prepare for it ... they’re just sort of clearing [themselves] to say I did contact an MBE and got no response.” He said that he frequently receives a request for a quote for his services from general contractors on the morning a bid is due. He said, “You hadn’t had time to plan for this job. They got their participation by just sending that fax out.” Interviewee #204 said that he believes that there is a lot of false reporting of MBE/WBE participation and falsifying good faith efforts.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he believes that there is false reporting of MBE/WBE participation and falsifying of good faith efforts. He related a story concerning an Indiana Gaming Commission and said that he learned that the casinos were only counting MBE/WBE dollars spent during construction toward their MBE/WBE goals, but that they were not meeting their MBE/WBE goals the rest of the time.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he believes that there is false reporting of MBE/WBE participation and falsifying of good faith efforts. He said, “I think the intent is good ... but some use loopholes to get around it.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he has heard of “certain situations” of false reporting of

MBE/WBE participation and falsifying of good faith efforts, but he said that he has not experienced it directly.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that she has experienced false reporting of MBE/WBE participation or falsifying good faith efforts on a bid opening for the Indianapolis Airport. She said that a firm that won a bid reported that they did not have any qualified WBEs submit bids, when, in fact, she submitted a bid to that firm. She added that she frequently gets requests for a bid the day before a bid is due. When she told one prime that she refused to provide a bid because of a lack of time, he responded, “Look, we all know that you’re not qualified to do the job. We have to go through these motions ... that’s how the game plays.”

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said, “How the people beat the system, for one thing, I get some proposals from Northern Indiana, for example. They know that I’m not going to bid on a \$5,000 job there, plus the criteria is you have to know the local people, know the local systems — it’s 20 marks for this. So if someone wants to beat the system it is very easy.” He continued by giving another example of a job 50 miles north of Louisville. He said, “I didn’t think I had a good shot, but they said that I had a good shot and that I should put a bid in.” He said, “There were three bidders, one local and two MBEs. My price was one third of the price of the local guy, but he got it. And I tried all those state agencies [for a remedy], but they said there was nothing they could do. All I’m saying is it easier to beat the system and people do that left and right. It is common.”

Interviewee PF #7, an employee of an MBE/WBE/DBE-certified company, said “I’m contacted by contractors in Terre Haute and South Bend and Evansville, and they would like me to give them a quote for this job. They’re not going to pay me to take my trucks all of the way to Evansville. They know they’re not going to pay me to do that. I can’t drive to Evansville every day. So, is that really due diligence on their part? I usually refer them to the website where they can find a local trucking company to do that for them, and when I say, ‘you’re not going to use me. What are you calling me for?’ he says, ‘Nobody else returns my paperwork.’” He said “I was talking with some people regarding a job in the past, but they said, ‘Oh, yeah, you did all of the trucking for us on that job,’ and I turned — they had all of the paperwork, everything was in order that showed us as the trucking company for that job, and we never hauled one stone, we never hauled one grain of sand on that job. People put your name down on you — on the paper. They have no intention of using you, or when you try to follow up, you get the runaround.”

Interviewee PF #8, an employee of an MBE/WBE/DBE-certified company (type of company not mentioned in transcript), said, “I guess one of my major issues with primes, whenever they put a solicitation out to invite me there because I’m a WBE or a DBE, [is that] they really often aren’t interested in my number. I think they play a game with doing due diligence, saying, ‘We’ve done our due diligence to seek out participation,’ when they really don’t intend on even using those numbers.” He said, “We tried to bid on a particular job for [an airport]. The prime on that job said that we never turned the bid in. We have all of the documentation that we faxed to them. We did everything that we could to submit a bid for that job. He said he did due diligence and tried to get participation, but he couldn’t find anybody qualified. That is under investigation. I’m sure it won’t go anywhere other than where it is because it’s already in the process.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, said that there is false reporting of MBE/WBE participation or falsifying good faith efforts. She said, "Sometimes I felt like some entities were simply playing games, not upfront, some misrepresentation at best."

Interviewee WT #3, the owner of a South Bend-based rental home rehabilitation firm, wrote "There should be close attention paid to and strict enforcement of those businesses that historically have excluded women and minorities from submitting bids where the law states there is a goal set for the project or service by the nature of the funding source — state, federal, federal stimulus money. If there are goals, they should be checked for inclusion and authenticity. There have been many instances where minority and women businesses have been placed on a bid proposal without the minority business owner's knowledge." He said, "A process should be implemented that would protect certified Indiana businesses whose names have been used as a minority subcontractor or supplier on a particular project or service when in fact the minority business has never even been contacted."

Other interviewees reported no awareness of or experience with false reporting of MBE/WBE or DBE participation or falsifying good faith efforts. [Interviewees #: 100, 108, 110, 111, 112, 113, 115, 116, 117, 118, 119, 120, 121, 122, 123, 125, 201, 208, 209, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 223, 224, 225, 227, 228, 229, 230, 231, 302, 303, 306, 310, 311, 312, 313, 315, TA #1, TA #4]. Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, is not aware of any discrimination based on race, ethnicity, or gender regarding false reporting of MBE/WBE participation or falsifying of good faith efforts. He said that INDOT and IDOA keep close track of that and that if a firm did get caught doing this, that there would be extremely negative repercussions.

N. Any Other Related Forms of Discrimination Against Minorities or Women.

Some interviewees reported knowledge of or experience with other forms of discrimination in the local marketplace. [Interviewees #: 205, 207, 231, 305]. Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he is aware of other related forms of discrimination against minorities or women. He said, "We've recently seen something new come in the marketplace and it's called prequalification. And that's where a majority firm requires that the MBEs to bid portions of their projects be prequalified. Their muscle behind it is that the Department of Education does the same thing. However, you were performing their work beforehand, now you're no longer prequalified to bid their work." He mentioned that the owner of an MBE-certified firm told him of a situation in which a prime for which he had subcontracted in the past, required him to submit financials and then, based on those financials, decreased the dollar amount of the jobs that subcontractor can bid to that prime in the future.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said, "The ability to fit in and establish relationships ... those are probably the main stumbling blocks and the main barrier to entry."

Interviewee #231, a Caucasian male owner of a plumbing company, said that he has heard derogatory comments made about homosexuals on job sites.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, added another form of discrimination saying, “I have not seen an aggressive ... proactive effort to hire minorities and women in the sales field.”

Other interviewees reported no knowledge of or experience with other forms of discrimination in the local marketplace. [Interviewees #: 102, 103, 106, 108, 109, 113, 115, 118, 119, 120, 121, 122, 123, 125, 201, 204, 206, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 302, 303, 305, 306, 309, 310, 311, 312, 313, TA #1, TA #2, TA #4, TA #5, TA #8]. Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, stated that he “had no indications that I’ve suffered from direct discrimination. Sometimes I suspect my minority status might be a factor for not receiving a bid, but I would have no way of proving that. It’s just as likely that a particular contractor simply wanted his good friend to get the job. In the four years I’ve been in business I can’t really say I’ve experienced discrimination because of my ethnicity.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “My business has not experienced any discrimination based on race, gender or ethnicity, nor do I know anyone that has. I am aware of non-profit or public ‘referred providers’ that the agencies and colleges may use. Because of this it is hard to get in the door.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, said of the possible categories of discrimination, “I’m not sure if I would notice. I try to think the best of everyone. I wouldn’t know if any of those areas listed are a problem — they aren’t for me — but I don’t know about other firms.”

Interviewee #312, a Caucasian female and corporate officer of a construction firm, indicated that she has neither experienced nor knew of others who experienced any of the listed barriers, nor did she believe that there was discrimination in the industry based on race, ethnicity or gender. “Our biggest barrier is the economy — we were doing very well until things crashed.”

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, said he was unaware of their members experiencing discrimination. He also noted that he is not aware of any such discrimination directly or indirectly relating to opportunities with Indiana state agencies and public colleges.

VIII. Neutral Measures.

Interviewees were asked whether they had any experience with or were otherwise generally aware of any race-, ethnicity- or gender-neutral programs or measures to assist small businesses, including minority-owned and female-owned businesses. Interviewees were then asked to provide their impressions with respect to a number of specific race-, ethnicity- or gender-neutral programs or measures listed in detail below.

Some interviewees indicated that they had no knowledge of any race-, ethnicity-, or gender-neutral programs or measures to assist small businesses, including minority-owned and female-owned businesses. [Interviewees #: 100, 102, 103, 104, 105, 106, 117, 118, 200, 204, 209, 210, 211, 213, 216, 217, 221, 223, 225, 226, 227, 229, 302, 303, 305, 313, TA #2]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said that he was not aware of any

programs or measures that seem particularly helpful to small businesses. He did say, “The [Indiana Economic Development Center] has made 21st Century Minority Funds (SBIR — Small Business Innovation Research) available to us, and we received four of them, and they were very helpful.”

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated, “I really cannot name the measures or programs the state provides, not to say they are not making them available, just that I have not followed the state activities closely enough to know what is going on.”

Interviewee #106, an African American male owner of a recently-started firm, reported that he was not aware of any neutral programs to assist small businesses but stated, “I do wish the State would expand the scope of who could qualify for State grants so I could get some money to develop my product.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said that they were not aware of any particular programs that would be helpful to small businesses, noting that not even the “meet-and-greet” sessions are worth much. He commented, “I think public entities already have their minds made up and it is a perfect example of reverse discrimination, because you know that a black business is going to win the contract whether they are qualified or not.” He notes that it is not enough to be MBE-certified.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, stated that he is unaware of any programs designed to help his type of small business. He stated that there are no programs, like the Farmer Subsidy Program, that can assist him in buying a backhoe or other equipment.

Interviewee #303, the Caucasian female owner of an electrical contracting business, stated that she is unaware of any programs designed to help her type of small business. However, she said that she believes that any program that assists companies in identifying opportunities and helps them to become certified is a good idea. She said that she is going to investigate the various programs and workshops and become involved and certified.

Interviewee #306, a Caucasian male owner of a carpet and upholstery cleaning firm, indicated that he felt that he was not well-informed of programs or measures that are particularly helpful to small businesses, but he said, “I found the networking opportunities offered by the local Chamber of Commerce to be helpful in increasing business and connecting with other contractors in the region.”

Other interviewees reported general awareness of certain race, ethnic, or gender-neutral programs or measures to assist small businesses, including minority-owned and female-owned businesses. [Interviewees #: 107, 112, 205, 206, 207, 208, 212, 214, 215, 218, 219, 220, 222, 224, 228, 230, 231, 301, 304, 315, TA #1, TA #3, TA #4, TA #5, TA #7, TA #8]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, reported awareness of IDOA’s annual networking event, but noted that he personally has not found value in them for his firm. He stated that he thinks that these networking events are, in theory, excellent. However, he reported questioning the purpose of those who set up booths and indicated that he wonders if they are required to be there as a State entity, if it is a political maneuver, or if they really have diversity objectives about which they are serious. He said that, with 200 employees and nine offices, he feels that his company has probably outgrown these events. He noted that his company would be

interested to know what business has resulted for firms who have attended these networking events. He said that he feels that a post-event follow-up effort by IDOA should be mandatory because of the expense of these events.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, offered that she thinks that the current administration has done a great job of putting information on the state website. However, she thinks it would be ideal to have bids forwarded to them based on industries and regions. She stated that most of the bids on the site seem to be for other services and for Indianapolis opportunities, so it is very hard to keep monitoring this. She expressed that the State needs to get more involved in the way the cities, especially certain ones, handle the bidding process. "I don't think they are fair at all. It needs to be tackled." She would like the State to "jump in" to break down some of the barriers so that they have "a fair opportunity when it comes to work and contributing towards good economic development and creating job opportunities out here." She noted that she feels that the cities do not put near as much information about opportunities on their sites as the State seems to. She said that she thinks that this is probably because their minds are already made up. She said that she knows that many of the other certified businesses in the area share this view because they have local conferences and this issue always comes up.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, reported that he is aware of many of the measures and programs that seem particularly helpful to small businesses, including minority-owned and women-owned firms. He said that he is especially knowledgeable and positive about the services provided by Indiana's Minority Business Enterprise Center (MBEC) through IDOA.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he is aware that the state conducts workshops for MBEs and schedules events for MBEs to meet with prime contractors. He remarked that both of these services are beneficial to MBEs.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, reported that he is aware that the INDOT DBE office offers training and orientation sessions throughout the year. He said that he recalled that when he talked to people from that INDOT office, they said they were struggling with what technical assistance to offer in the future. He said that he encouraged them to continuing offering the programs because he believed the training was helpful.

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that he is aware of programs offered by the Small Business Administration and other organizations, but that his firm has not taken advantage of any of the services offered by these organizations.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, while generally aware of certain state programs said that there are no services that are "worthwhile" that any government agency offers that are particularly helpful to small businesses, including minority-owned and women-owned firms. She added that in general, government is "too cumbersome ... too slow ... not specific."

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that she has attended workshops, is aware of Small Business Administration loans, and aware of MBE/WBE workshops sponsored by IU that focus on financing and marketing to State agencies.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, is aware of mentorships and programs offered by SEED Corp., a Bloomington-based non-profit organization committed to the growth of small business and economic self-sufficiency in south-central Indiana.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that he is aware that Access Indiana is a good website for people to use who are interested in doing business with the State of Indiana.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she is aware of special programs for small businesses that Purdue University offers. She said she is also aware of Purdue University's Technical Assistance Program as a resource for small businesses. She added that the local Association of Women Business Owners offers monthly workshops featuring topics related to WBEs.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that the WBE certification process and the pre-RFP sessions that IDOA provides are particularly helpful to small businesses.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that she is familiar with networking events offered through IDOA and various state universities

Interviewee #224, a Caucasian male owner of a square dance calling and specialty archery supply firm, said that he is aware that the Small Business Administration offers programs to help small businesses.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that she is aware of programs offered by the Small Business Administration. She added that she receives The Conduit, distributed via e-mail from the IDOA Office of Minority and Women's Business Enterprises Division, which "is nice."

Interviewee #230, an Asian-American male owner of a dry cleaning company, said that he is aware of services to help small businesses through the Service Corps of Retired Executives (SCORE).

Interviewee #231, a Caucasian male owner of a plumbing company, said that he is aware of the mentoring services that are provided by the Indiana Small Business Development Centers.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, mentioned two programs that were helpful saying, "The EDI program is very helpful. The Entrepreneur Development Inc. is through INDOT's Supportive Services Group. They provide education and training, bidding, estimating, banking relationships, various types of intensive training. It's an 11-day training. They

should start developing at another level, and it's free. Another source of training was a series of workshops set up for MBE/WBEs and non-MBE/WBEs that wanted to work on the stadium project. Those were very helpful to the businesses." She also stated that she was aware of many of the specific programs and initiatives discussed below, had utilized many of them, and believed all would be helpful to MBEs, WBEs and small businesses in general.

Interviewee #315, an office manager of a Hispanic-owned environmental and construction staffing firm, said "I'm working on the [MBE] certification paperwork now. I don't know any programs to help small businesses except the one at Ivy Tech."

Interviewee TA #1, a Caucasian male president/CEO of a regional chamber of commerce, said that many programs offered through the Small Business Development Center that his organization runs help small businesses, including women- and minority-owned businesses.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that she is aware of the "minority business enterprise program" offered through the City of Indianapolis that sponsors monthly meetings. She remarked that the organization has not been very helpful of late.

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, said that the SBDC (Small Business Development Center) and PTAC (Procurement Technical Assistance Center) were helpful in developing small businesses. He stated these two organizations were helpful because they were customer-oriented and they offer effective tools for those wanting to set up and run a business. However, he went on to say "they are also understaffed."

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, said the following programs are helpful to small businesses: "What I see the SBA doing with regards to helping with business plans; SCORE; provides a good service; the [Business Ownership Initiative]; the state's efforts at training people; our organization; INSDC sets high standards for our members and stresses the responsibilities we have in the marketplace."

Interviewee TA #7, the African American male representative of a civil rights agency, indicated there are helpful programs such as the MBEC, Mentor Protégé, MBOC, etc.

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said, "We can speak from data that the program we run has been helpful throughout the country. We've seen companies go from barely surviving to being major players in the marketplace.... I think the [INDOT] supportive services function is helpful because it's a clearinghouse for troubleshooting and training."

Interviewees were asked to provide their impressions with respect to the following specific race-, ethnic- and gender-neutral programs or measures: whether they had any experience with these programs, whether they were aware of these programs, and whether they thought that these programs would be helpful.

A. Technical Assistance and Support Services.

Some interviewees reported awareness of technical assistance and support services.

[Interviewees #: 110, 111, 123, 125, 127, 201, 205, 206, 215, 217, 218, 220, 231, 309, PF #29, TA #1]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she was aware of technical assistance and support services but that she has not utilized these services because of her own background and knowledge.

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, indicated she did not know if the state offered technical assistance and support services, but thought the SBA did.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she receives e-mails from the “small business department” of the State of Indiana regarding technical assistance programs. She added that she receives a monthly electronic newsletter published by the Indiana Minority and Women’s Business Enterprises Division and that she plans to attend an upcoming vendor fair sponsored by that division.

Interviewee #217, an African American female owner of a commercial cleaning service, said that she is aware of technical assistance and support services available through the Small Business Development Center.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that she is aware of technical assistance and support services that are offered through the state’s Small Business Development Centers. She said that she had a “bad experience” with the SBDC, in that they never followed-up with her as promised.

Interviewee #309, a Caucasian male owner of a printing and distribution firm, reported, “In our industry we have industry-based training put on by individual manufacturing companies. [There is] specific training available to us for the printing industry. Training is available for anyone who wants it, usually at no cost.”

PF #29, the African American owner of a property preservation business, indicated that technical assistance such as assistance from SCORE is helpful to businesses. He also reported that some banks are not helpful to small businesses and are not ready to handle SBA loans.

Other interviewees reported that they were unaware of technical assistance and support services for small businesses. [Interviewees #: 112, 115, 116, 117, 118, 119, 120, 121, 122, 124, 126, 128, 202, 204, 207, 208, 209, 210, 211, 212, 213, 214, 216, 219, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 300, 301, 306, 313, TA #2, TA #3, TA #4, TA #5]. Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated she has not had any direct experience with using the technical assistance and support services provided, but she is sure it is provided by the State.

Some interviewees thought that the provision of technical assistance and support services could be beneficial to small businesses. [Interviewees #: 100, 101, 103, 104, 105, 106, 107, 109, 112, 115, 116, 119, 120, 123, 124, 125, 126, 127, 128, 204, 205, 206, 207, 208, 209, 210, 213, 215, 216, 217, 218, 223, 224, 225, 228, 229, 230, 231, 300, 304, 305, 306, 313, 314, 315,

TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #103, a male Caucasian owner of an excavating firm, stated that “back in 1998, when I started my business, I could have benefited from some technical assistance and support services along with some financial assistance. Now, with 11 years of running my business, I would not need those services.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, is aware that several programs that exist that would be beneficial for smaller businesses, but he usually passes up the opportunities. He stated that he is not aware of programs on emerging technology, such as electronic bidding, but he would be interested in this kind of program.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, indicated that he thinks that technical assistance and support services would be helpful if the State would teach people how keep their books, especially how to pay withholding taxes.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, indicated that he is not aware of technical assistance and support services, that he had no experience with such initiatives, and while he did not think such initiatives would be helpful to him, he did state that they might be helpful to some small businesses.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said, “It would definitely be helpful.” He added, “I’m really not 100 percent sure of how the bidding process goes, as far as the forms that you need. I think we just sort of stumble our way through it and, hopefully, latch onto someone that can help us out, but of course, that’s not happening. So, then you really don’t know if it’s your race that’s keeping you down or you’re not getting your correct paperwork in. There’s just no assistance in that area.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that technical assistance and support services are good, but they have to be programs that are done with qualified people.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that technical assistance and support services are “definitely helpful” to small businesses.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, reported that he believes that technical assistance and support services would be particularly helpful in understanding federal accounting regulations.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, is not aware of technical assistance and support services available to help small businesses. He said that these services would be helpful for any small business. He added that he believes a business would receive more assistance from the state if they were a “minority” firm because the state “works hard at trying to get minority businesses established, and they need to because there aren’t enough of them. That’s why it’s so hard to get your percentages.” He said that he thinks it is terrible that once a DBE-certified firm accumulates wealth over a certain threshold, that the firm loses its DBE status.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she would like to use technical assistance and support

services once she has the chance to investigate this more. She stated that it would be helpful to have that assistance to help her get through all of the details and do things properly, and it would be especially helpful because she does not have a large staff.

Other interviewees indicated that the provision of technical assistance or support services would not be beneficial to small businesses. [Interviewees #: 108, 113, 117, 118, 121, 122, 201, 203, 211, 212, 214, 219, 221, 222, 226, 227]. Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that technical assistance would not be particularly helpful for his firm. He added that technical assistance programs are more beneficial for firms that have employees with limited education, as opposed to firms that employ people who are highly-educated.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, is not aware of technical assistance and support services available to help small businesses, and said that such services would not be helpful for her firm. She added that technical assistance on how to bid on how to apply for Small Business Innovation Research grants would be helpful for her firm.

B. On-The-Job Training Programs.

Some interviewees reported awareness of on-the-job training programs available to small businesses. [Interviewees #: 110, 111, 116, 117, 121, 126, 204, 205, 209, 217, 218, 220, 226, 228, 310, 311, TA #1]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that she was aware of on-the-job training programs, but she said that she is not really able to utilize these programs because her company is so small.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that the only on-the-job training programs he is aware of are those provided by the unions.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, stated that they have been aware of on-the-job training programs but they were not something they were interested in.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he is aware of classes available “through the union,” but not of any other on-the-job programs offered.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that on-the-job training programs exist and cited Major Moves as an example of a good on-the-job training program offered by the State.

Interviewee #310, a Caucasian male owner of a moving company, said, “The Chamber of Commerce has business exchange meetings that are helpful, and the State Employment Security has seminars and has programs that have been useful, including On-the-Job Training Programs. The opportunity is there; we just don’t take advantage of them.”

Other interviewees reported that they were not aware of any on-the-job training programs available to small businesses. [Interviewees #: 112, 115, 118, 119, 120, 122, 123, 124, 125,

127, 128, 201, 206, 207, 208, 210, 211, 212, 213, 214, 215, 216, 219, 221, 222, 223, 224, 225, 227, 229, 230, 231, 300, 301, 306, 313, TA #2, TA #3, TA #4, TA #5]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that she was not aware of State-provided opportunities currently in place. She noted that they were contacted last year by Computer Tech Learning Center regarding a grant that they received to offer computer training for some of the sales representatives and that they were really excited about participating. However, she said that they recently received a call stating that the funding had been pulled.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that she has no direct experience with on-the-job training. She reported that for what she does she is not aware of any State agencies or public universities that provide this option.

Some interviewees thought that on-the-job training programs could be beneficial to small businesses. [Interviewees #: 100, 101, 104, 112, 113, 115, 116, 119, 123, 125, 126, 127, 201, 205, 206, 209, 210, 213, 215, 216, 217, 218, 220, 221, 224, 225, 226, 228, 229, 231, 300, 304, 305, 310, 311, 313, 314, 315, TA #1, TA #3, TA #4]. Interviewee #100, an Asian Pacific American male president of a water testing firm, commented that on-the-job training programs “would be very helpful. Maybe Ivy Tech could provide this. That would be a great service.”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she would be interested in such programs, especially if they involved learning how to use Microsoft Excel software.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that on-the-job training programs would be helpful, but he did not know how they could be implemented.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, commented that she thinks that on-the-job training could be helpful to small businesses depending on the nature of their business. She reported that she was not sure whether it would be helpful for her business.

Interviewee #311, a Caucasian male owner of a computer firm, said that on-the-job-training would be helpful to small business but not to him. He added, “The State had an on-the-job training program and programs where they reimbursed people for taking training classes. Those were useful.”

Other interviewees did not think that on-the-job training programs would be beneficial to small businesses. [Interviewees #: 108, 109, 111, 118, 120, 121, 122, 124, 202, 203, 204, 207, 208, 211, 212, 214, 219, 222, 223, 227, 230, TA #2, TA #5]. Interviewee #111, a Hispanic owner of an engineering services firm, said that he does not think too highly of these programs. He said, “They are made to try to make the minority public feel good about trying to get some training, but it’s all controlled by the unions. The unions are going to try to hire from within, their relatives or whatever first.” He reported that, even though there are good resources that come out of these training programs, he does not feel that those trained get jobs as a result.

Interviewee #124, an African American male president of an MBE-certified promotional products company, stated he had no knowledge of on-the-job training programs, that “This was really something an employee might need, but not something he, an owner, needed.” He doubted it would be helpful to other business owners.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that she does not feel that on-the-job experience would be helpful, and if one is in business one should already have the experience.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said, “I feel that what we do is on-the-job training.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he would have a hard time seeing how on-the-job training programs would be applicable to the type of work that his firm performs.

C. Mentor/Protégé Relationships.

Some interviewees reported that they were aware of mentor/protégé programs available to small businesses. [Interviewees #: 115, 117, 118, 119, 121, 123, 125, 126, 202, 205, 206, 207, 209, 214, 215, 219, 226, 228, 229, 230, 231, 300, 301, 314, TA #1, TA #5]. Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, said he was “possibly” aware of assistance with mentoring relationships.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he has heard about mentor-protégé relationship programs, but he is not familiar with how they work.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she has not had any direct experience with mentor/protégé relationship because she is not pursued this yet. However, she said that she knows that this type of opportunity exists, and she plans on looking for contacts.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, reported that he is aware of limited mentor-protégé programs. He said, “This happens more to the benefit of engineering and construction firms than for designers. Is there something on the architectural side where the larger firms will mentor smaller architectural firms? They may exist but I don’t know anything about them.”

Other interviewees reported that they were unaware of state level mentor/protégé programs available to small businesses. [Interviewees #: 110, 111, 116, 120, 122, 124, 127, 128, 201, 208, 210, 211, 212, 213, 216, 217, 218, 220, 221, 222, 223, 224, 225, 227, 306, 313, TA #2, TA #3, TA #4]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she was not aware of mentoring relationships on the state level but that she tries very hard to reach out to others and to help mentor them.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that she was not aware of assistance with mentoring relationships on the state level. However, she said that she serves as a mentor herself, and her firm works with Indiana Youth Institute to help mentor students.

Some interviewees thought that mentor/protégé programs could be beneficial to small businesses. [Interviewees #: 100, 101, 102, 104, 106, 108, 113, 115, 119, 123, 124, 125, 126, 127, 128, 200, 201, 202, 204, 206, 207, 208, 210, 213, 215, 216, 217, 218, 219, 220, 224, 225, 226, 228, 229, 230, 231, 300, 304, 305, 310, 311, 313, 314, 315, TA #1, TA #2, TA #3, TA #4]. Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, indicated an interest in a mentor-protégé program. He noted that he used to talk with SCORE people, and he found that helpful.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that mentor-protégé relationships would be helpful programs to have because “you have to train the young people ... the quality of work goes down if you don’t.”

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that mentor-protégé programs may be helpful. She said that she would like to know more about mentor-protégé relationships, and she believes that they could be included in contract requirements. She stated that she believes that a mentor-protégé relationship could help her get over the hurdle that she experiences in hiring her next employee.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said he believes that mentor-protégé relationships are a good idea. However, he said, “They’re hard because you’re really going to have to build a relationship with someone. If you’re starting out a new business and they’re already established, it’s going to be hard to actually make that connection, I think.” He said that right after he had started his business, he was approached by a large general contractor regarding the establishment of a mentor/protégé relationship with his firm. He said that a representative from the general contractor said to him, “What can you do for me?” Interviewee #204 said he told the man that he could not provide anything other than good quality work. He added that nothing further happened with that offer after that comment was made. Interviewee #204 reflected, “Here I am just starting my business and what exactly could I do for [him]? [He is a] a multi-million dollar company.... I just took it like [the man meant] ‘Why should I help you? How’s it going to benefit me if I help you?’ They can get all the union labor they need....”

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he is aware of mentor-protégé relationship programs, and he believes that they are a good idea.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that although he believes mentoring programs are a good idea, he has heard that “INDOT is kind of cool to that idea because of [the] potential for fraud.”

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that he is not aware of any mentor-protégé relationship programs, but said, “It never hurts to have someone with experience helping you.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said, “I think the mentoring opportunity can be very helpful for small firms like mine.” She commented that she believes that mentor/protégé relationships and programs can be helpful to small businesses because they usually don’t have individuals to tap into with certain strengths. She said that it would be helpful to go to larger firms to provide that expertise.

Interviewee #311, a Caucasian male owner of a computer firm, said that mentor/protégé relationships would be good for new small businesses “but not for me.”

Other interviewees did not think that mentor-protégé programs would be beneficial to small businesses. [Interviewees #: 109, 111, 122, 203, 205, 211, 214, 221, 222, 223, 227]. Interviewee #109, a Hispanic male president of an industrial cleaning firm, said that mentor/protégé programs “never work as well as people think it might.”

Interviewee #111, a Hispanic owner of an engineering services firm, stated that he thinks that mentoring programs would be difficult to implement. He reported that he does not want to give away any of his firm’s intellectual property to a new minority engineering firm. He indicated, though, that he does speak at schools when asked.

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, said she was not aware of assistance with mentoring relationships, but that it would not have helped her.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he does not believe that mentor-protégé relationship programs are a good idea. He said that the reason mentor-protégé programs are not beneficial is because “they flag you as a company in the pocket of another company, which then limits your ability to do business with other companies that automatically distrust you ... there are proprietary things that you as a partner will be discussing with majority firms ... they want to make sure that what you’re talking about isn’t making its way over to your friends.” He cited an example of an owner of an MBE-certified firm that engaged in a mentor-protégé relationship with a large electrical contractor. He said that the MBE-certified firm has not been able to obtain any business from any other firms because of the perception that he is too closely associated with the mentor firm.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that he is aware of mentor-protégé relationship programs, because they have participated in one for the paving of State Road 38. He said that they are not necessarily a good idea and that a protégé could learn just as much by subbing on a job and watching what is going on with the entire construction job. He added that he believes that mentor-protégé relationships cost the state more than if the state simply awarded a contract to a prime working with a sub.

Some interviewees were unsure of how helpful mentor-protégé programs could be to small businesses. [Interviewees #: 116, 117, 118, 120, 121, 212, TA #5]. Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, said mentoring programs would not have been beneficial to him, and it would depend on the business as to whether mentoring might be helpful to other small businesses.

D. Joint Venture Relationships.

Some interviewees reported that they were aware of joint venture relationships available to small businesses. [Interviewees #: 117, 121, 122, 123, 201, 204, 205, 206, 207, 209, 218, 219, 226, 231, 301, 314, TA #3, TA #5]. Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, said he knew Purdue offered some training on joint venture relationships.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said he has “heard about a few [joint venture relationships] ... but nothing’s ever panned out on it ... you usually start to talk when the economy gets bad.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that, in his opinion, the situation of MBEs subcontracting to primes qualifies as a joint venture and happens all the time.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that he felt that joint ventures usually happen on more government work because “they do not like to use new firms.”

Other interviewees reported that they were unaware of joint venture relationships available to small businesses. [Interviewees #: 107, 110, 111, 112, 115, 116, 118, 119, 120, 125, 126, 127, 128, 208, 210, 211, 212, 213, 214, 215, 216, 217, 220, 221, 222, 223, 224, 225, 227, 228, 229, 230, 300, 306, 313, TA #1, TA #2, TA #4]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, expressed that she was not aware of state assistance encouraging joint venture relationships, but she said that her firm has formed informal partnerships with other firms to go after business and assist each other in finding opportunities to work together. She noted that they also leverage resources with these partnerships.

Some interviewees thought that joint venture programs could be beneficial to small businesses. [Interviewees #: 100, 101, 104, 105, 107, 113, 115, 116, 120, 122, 123, 124, 125, 128, 200, 203, 205, 207, 208, 210, 211, 212, 213, 215, 216, 217, 218, 219, 222, 224, 225, 226, 231, 300, 304, 305, 311, 312, 313, 314, 315, TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #100, an Asian Pacific American male president of a water testing firm, indicated that joint venture programs could be helpful, “but I do not know where to go; some networking state-wide would be useful.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that he is not aware of joint venture relationship programs, but he would be interested in seeing something along these lines.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, said that joint venture relationship programs would not have been helpful for his company, but he said that they might be helpful to other businesses.

Interviewee #124, an African American male president of an MBE-certified promotional products company, said that joint venture relationships might be helpful to those in the construction business, but not so much for him.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that joint venture relationships would be helpful in obtaining work.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that joint venture relationships “are great.” However, he cited a problem with joint ventures, stating, “From our standpoint, they can [negatively] impact your ability to get your certification, especially your DBE certification.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that it would be helpful if INDOT promoted joint ventures between large primes that are prequalified to work on specific projects and DBE firms that are not prequalified. He stated that this type of joint venture relationship would enable primes to train DBEs to become prequalified.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she is aware of joint venture relationships and that they are a “really good idea” for small businesses. She added that joint ventures occurring at Purdue University’s Research Park are adding high-tech jobs to the state of Indiana.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she thinks that joint ventures could be helpful in mentoring small businesses. She stated, “It would give small firms access to other abilities versus having to do everything by themselves.”

Interviewee #311, a Caucasian male owner of a computer firm, said that joint venture relationships would be good for new small businesses, “but not for me.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said she had knowledge of joint venture relationships, and thought they could be helpful if well structured and documented.

Other interviewees reported that joint venture relationships would not be beneficial to small businesses. [Interviewees #: 108, 117, 209, 220, 221, 223, 227, 230]. Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, expressed that they were aware of state assistance encouraging joint venture relationships, but did not think that would have been helpful to them.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, is aware that joint venture relationship programs exist because they participate in them. He said that there is no real advantage in having a small business as a joint venture partner because they have “to bring something strong to the table,” and he believes that small businesses cannot offer much to the relationship.

Some interviewees were unsure of whether joint venture programs could benefit small businesses. [Interviewees #: 109, 111, 118, 119, 121, 126, 127, 202, 206, 214, 229]. Interviewee #111, a Hispanic owner of an engineering services firm, stated that he feels that such ventures can be tricky.

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated that Joint Venture programs would not be helpful for his company, but thought they possibly could be helpful to other companies.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, indicated that she explored joint ventures early on in the development of her business, but she concluded that she could not determine how that could actually help her.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that since he has never been involved in a joint venture relationship, he does not know how well it would work.

E. Financing Assistance.

Some interviewees reported that they were aware of financial assistance offered by the state. [Interviewees #: 112, 115, 116, 118, 122, 205, 208, 212, 223, 231, 300, 301, 308, TA #1, TA #3, TA #5]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that she knows that the State probably offers information on obtaining financing, but she has not found that information herself and is not quite sure where to look for it.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “I know that Fort Wayne’s Small Business Development Center makes financing available, and this is a very positive resource.”

Interviewee #118, a Caucasian male president of a plumbing and heating company, said he was aware of programs for obtaining financing (such as small business loans from the state), but he expressed reluctance to take any money from the State, which he described as “the taxes of neighbors and family members.” He said, “It’s like taking business welfare and I don’t like that.”

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, noted she was aware of programs for obtaining financing (such as small business loans from the state).

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he is aware of financing assistance available to help small businesses through the MBEC program, Small Business Administration, and some banks.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that she has no direct experience receiving financing assistance from State agencies and/or public universities. However, she reported that she is aware that there are different programs that provide such assistance. She referred to the Recovery Act as an example of a program meant to help grow companies. She said that she has not had to personally deal with them, though, because she was able to run her business off of what she brought in and her sales.

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, stated that she was aware of and attended a financing assistance program. She said, “Congressman Brad Ellsworth had a talk last year about how small businesses and not-for-

profits could get help to make it through the tough times, but there wasn't much help for small businesses.”

Other interviewees reported that they were unaware of the availability of financing assistance. [Interviewees #: 110, 111, 117, 119, 120, 121, 123, 124, 126, 127, 128, 201, 204, 207, 209, 210, 211, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 224, 225, 226, 227, 228, 229, 230, 306, 313, TA #2, TA #4]. Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, said he was not aware of programs for obtaining financing (such as small business loans from the state), but he expressed a desire to take advantage of small business loans if they were available and he qualified.

Some interviewees thought that the provision of financing assistance could be beneficial to small businesses. [Interviewees #: 101, 102, 103, 104, 106, 109, 112, 113, 115, 116, 120, 121, 122, 123, 125, 126, 127, 128, 200, 201, 202, 203, 204, 205, 206, 207, 208, 210, 211, 212, 213, 214, 215, 216, 217, 218, 222, 224, 226, 228, 229, 230, 231, 300, 301, 304, 305, 309, 311, 313, 314, 315, TA #1, TA #2, TA #3, TA #4]. Interviewee #103, a male Caucasian owner of an excavating firm, stated that “back in 1998 when I started my business I could have benefited from ... some financial assistance. Now, with 11 years of running my business, I would not need [that] service.”

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, said that she thinks it would be very helpful to get more information in this area. She noted that even though her firm has experienced growth this year, they have needed financial assistance to be able to maintain their growth in overhead, salaries, etc.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said financing assistance would be of interest to her, adding that she unsuccessfully attempted to obtain U.S. Small Business Administration financing.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that financing assistance might be helpful for his firm in the future.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he thinks it would be helpful. He said, “Small businesses sort of rob Peter to pay Paul ... that's how that goes.”

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he has heard of financing assistance for small businesses and believes that it could be a good idea.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that financing assistance for small businesses could be a good idea. He said that loan guarantees targeted toward MBE/DBEs would be a good idea. He said that if the State already offers financing assistance, it should be better publicized.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that she is aware of financing assistance for small businesses. She said that her firm received an Enterprise Zone grant when she started her business to purchase equipment, and remarked, “It

was fabulous.” She said that although she had to complete detailed paperwork to obtain the grant, “The end result was worth it.” However, she said she applied for and obtained Investment Credits, which were not very helpful. Regarding the Investment Credits, she said, “The amount of credit we get versus what we have to do to get that credit ... I spend more time than the value of the tax credit.”

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that financing assistance would be helpful. She stated that she has been trying to find funding to help her firm grow more quickly. She said that there is a way for small companies to obtain private financing by completing a Small Company Offering Registration (SCOR) Form U-7 and that Indiana is not helping to promote this program among small companies. She said that states including South Carolina, Iowa, and Connecticut are proactive with the SCOR program and that Indiana should also be.

Interviewee #300, a Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated, “I think having a good source to seek financing from is as important for small businesses as for large firms and not just for inventory but even for payroll and other cash flow needs. This would be especially good for small firms.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that she was sure that it is valuable when firms participate in training. She said, “It has been useful for me when I’ve participated in workshops on this topic.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, said that he would like financing assistance if it were available. He suggested that training on “dealing with banks” would be helpful. He said, “At one time I was paying 18 percent, and that is when I looked into SBA loans, but for one reason or another, I didn’t qualify. They would advertise that ‘this is so good,’ but I never qualified for it. Back in ‘82, when I did this, the bank loaned me money based on my personal integrity. Today it is much more difficult to get the money that I got, but I [got] it. And I still owe. It is hard to get out of debt.”

Interviewee #311, a Caucasian male owner of a computer firm, said that financing assistance would be good for new small businesses, but added, “but not for me.”

Other interviewees reported that the provision of financing assistance would not be beneficial to small businesses. [Interviewees #: 100, 108, 117, 209, 219, 220, 221, 223, 225, 227].

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that financing assistance for small business is not a good idea, and commented, “I don’t think the State should be a bank. It’s our tax dollars. It’s a risk. That’s why there are banks.”

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that he is aware that the federal government provides financing assistance, requiring business owners to “jump through hoops.” He said that he does not believe that these financing programs are helpful and that “the government needs to stay out of that.”

Some interviewees were unsure as to whether the provision of financing assistance would be beneficial to small businesses. [Interviewees #: 119, 124, TA #5]

F. Bonding Assistance

Some interviewees reported awareness of the availability of bonding assistance. [Interviewees #: 111, 205, 227, TA #5]. Interviewee #111, a Hispanic owner of an engineering services firm, said that he believed that the Small Business Administration (SBA) offered some assistance in obtaining bonding through the state.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that bonding assistance to help small business is available. He added that he was familiar with bonding-related outreach programs offered by the State MBE/WBE office in the past. He mentioned that he thought that the people conducting the outreach were competent.

Other interviewees reported that they were unaware of the availability of bonding assistance. [Interviewees #: 112, 115, 117, 122, 123, 124, 125, 126, 127, 128, 201, 204, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 228, 229, 230, 231, 300, 306, 313, TA #1, TA #2, TA #3, TA #4].

Some interviewees thought that the provision of bonding assistance could be beneficial to small businesses. [Interviewees #: 101, 102, 104, 105, 109, 112, 113, 116, 122, 123, 125, 126, 127, 128, 203, 204, 205, 206, 208, 210, 211, 212, 213, 215, 216, 217, 218, 221, 224, 225, 226, 227, 228, 229, 231, 300, 304, 305, 311, 313, 314, 315, TA #1, TA #2, TA #3, TA #4, TA #5].

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said that “this would make a huge difference.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that he would like to learn more about bonding requirements, and that would be very helpful.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that bonding assistance would be helpful for some firms but that he did not need it.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said, regarding bonding assistance to help small business, “[I] haven’t heard of anything, but it would most definitely be helpful.” He added, “I believe we actually don’t understand the difference between insured and bonding. Just because you have all the insurance you need doesn’t mean that you’re bonded.”

Interviewee #311, a Caucasian male owner of a computer firm, said that bonding assistance would be good programs for new small businesses, but added, “Not for me.”

Other interviewees did not think that the provision of bonding assistance would be beneficial to small businesses. [Interviewees #: 100, 108, 117, 209, 214, 222, 230].

Some interviewees were unsure whether the provision of bonding assistance would be beneficial to small businesses. [Interviewees #: 124, 200, 219, 220, 223].

G. Assistance in Obtaining Business Insurance.

Some interviewees reported awareness of assistance offered to obtain business insurance. [Interviewees #: 111, 123, 125, 205, 227, 300, TA #1]. Interviewee #111, a Hispanic owner of an engineering services firm, indicated that he was aware that the SBA offered some assistance in obtaining insurance.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he is aware that the State conducted a symposium on obtaining business assistance.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she has had direct experience with assistance in obtaining business insurance. She said that she has business insurance, but she obtained it outside of any type of State agency. She said, “I don’t have a whole lot of feel for what the State agencies and universities have done in this arena, and I really don’t have any information about this — which has it or what they do.”

Other interviewees reported that they were unaware of the availability of assistance to obtain business insurance. [Interviewees #: 112, 115, 116, 117, 119, 120, 121, 122, 124, 126, 127, 128, 201, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 228, 229, 230, 231, 306, 313, TA #2, TA #3, TA #4, TA #5].

Some interviewees thought that the provision of assistance to obtain business insurance could be beneficial to small businesses. [Interviewees #: 100, 101, 104, 105, 108, 109, 113, 115, 119, 121, 123, 125, 200, 201, 202, 203, 205, 206, 207, 208, 210, 213, 214, 215, 216, 217, 218, 220, 224, 225, 228, 229, 230, 231, 300, 304, 305, 311, 313, 314, 315, TA #1, TA #2, TA #3, TA #5]. Interviewee #100, an Asian Pacific American male president of a water testing firm, stated that being provided assistance in obtaining business insurance would “definitely” be beneficial. He stated that “it is so hard to get good medical coverage for our employees at any kind of reasonable price. We really need help there.”

Interviewee #109, a Hispanic male president of an industrial cleaning firm, noted, “Lowering insurance requirements to private sector standards would be very helpful. Needing \$5 million of insurance for public projects is just too much when most private projects require no more than \$2 million.”

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, indicated he was not aware of programs for obtaining insurance assistance, but thought they would be helpful because “the rates just continue to rise. What seems wrong to me is that neither I nor my wife takes any income from this company. In fact, we occasionally inject funds into it. But, at the same time, the company is forced to pay worker’s compensation on each of us as if each of us was being paid \$17,000 annually. That does not seem fair. For small businesses, every dime makes a difference, and for our company [to be] required to pay that compensation for two people who are not taking any income from the company is very unfair.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that a program to subcontract business insurance would be helpful.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he is aware that the State conducted a symposium on obtaining business assistance, which he believes is a good idea.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that it would be a good idea for new firms to know what insurance certain State agencies require.

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, said that he is not aware of any available assistance in obtaining business insurance, but said that it would be helpful, as he may have a need for that in the future.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that assistance with obtaining business insurance might be helpful if business owners could get insurance at a better price than what they get it for now.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that assistance in obtaining business insurance would be helpful if it were offered. She said that it would be nice if the State could have a program in which small businesses could all band together to get assistance with group health insurance. She added that getting health insurance for a company with fewer than 50 employees “is painful.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated she thinks the service would be useful for small businesses, including MBE/WBEs.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, “It would be nice to have a network of insurance providers [so] you could do some comparative shopping. You don’t want to get ripped off by somebody, especially if you are a new business.”

Interviewee #311, a Caucasian male owner of a computer firm, said that assistance obtaining business insurance would be good for new small businesses, but added, “Not for me.”

Other interviewees thought that the provision of assistance to obtain business insurance would not be beneficial to small businesses. [Interviewees #: 117, 122, 204, 209, 211, 212, 219, 221, 222, 223, 226, 227]. Interviewee #122, an Asian Pacific American female President and CEO of a WBE-certified consulting firm, responded she was not aware of programs for obtaining insurance assistance and said it was not something she needed.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he does not think assistance in obtaining business insurance is necessary. He added, “If you talk to an agent they’ll pretty much talk you into what you need, and a little more.”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that a business which is financially stable can obtain insurance. She added, “Honestly, you don’t want the State to help somebody that’s not financially stable because then you’re feeding the lions.”

H. Assistance in Using Emerging Technology.

Some interviewees were aware of the provision of assistance in using emerging technology. [Interviewees #: 123, 124, 200, 215, 218, 219, 222, 223, 226, 228, TA #1, TA #2, TA #8].

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that he was aware that the State already provides assistance with using its procurement website. He added that he can call the State with questions, and the people at the State are very helpful.

Other interviewees reported that they were unaware of the provision of assistance in using emerging technology. [Interviewees #: 112, 115, 117, 118, 119, 120, 121, 122, 125, 126, 127, 128, 201, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 216, 217, 220, 221, 224, 225, 227, 229, 230, 231, 306, 313, TA #3, TA #4, TA #5].

Some interviewees thought that the provision of assistance in using emerging technology could be beneficial to small businesses. [Interviewees #: 101, 104, 105, 108, 109, 112, 115, 123, 125, 126, 128, 200, 201, 202, 203, 205, 206, 207, 208, 209, 210, 211, 213, 215, 216, 217, 218, 219, 220, 222, 223, 224, 225, 226, 228, 229, 230, 231, 300, 304, 305, 311, 313, 314, 315, TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #108, an African American male who ran his own cleaning business, said, “The State of Michigan has PTACs [Procurement Technology Assistance Centers], which are staffed in various locations around the state [that provide technology assistance]. I would like to see Indiana do the same.”

Interviewee #109, a Hispanic male president of an industrial cleaning firm, said of the possibility of providing assistance in using emerging technology, “It can’t hurt.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that assistance in using electronic bidding and information on public agency contracting procedures and bidding opportunities would be helpful.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that assistance in using emerging technology would be a good. He added, “It would save a lot of time and a lot of paperwork.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that assistance in using emerging technology would be helpful. He added, “INDOT, for the most part, has been doing a good job of orienting the market in general, and MBEs and DBEs have been included in that ... it would be good, especially for firms that are starting out.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she has done some electronic bidding through the federal government but not through the state government. She said, “I’m beginning to do more electronic

bidding, searching for these types of opportunities, and learning how it's all being used. I think this type of bidding is very helpful. It tells everybody in general what the agencies are purchasing, instead of having to know who the right person is to tap. It makes the information a lot more available.”

Interviewee #311, a Caucasian male owner of a computer firm, said that assistance using emerging technology would be good for new small businesses, but added, “Not for me.”

Other interviewees did not think that the provision of assistance in using emerging technology would be necessary or beneficial. [Interviewees #: 100, 111, 113, 116, 117, 118, 119, 122, 212, 214, 221, 227]. Interviewee #111, a Hispanic owner of an engineering services firm, stated that he did not feel as though small businesses should get assistance in emerging technologies because that is a part of doing business. He reported that he pays maintenance fees for software that his firm purchases.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that he would not like to see the State help other firms get better at competing against him.

Some interviewees were unsure about whether the provision of assistance in using emerging technology would be necessary or beneficial. [Interviewees #: 120, 121, 124, 127, 204, TA #8]. Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that assistance in using emerging technology “might be helpful ... might be harmful.”

I. Other Small Business Start-Up Assistance.

Some interviewees reported that they were aware of start-up assistance for small businesses. [Interviewees #: 115, 118, 122, 123, 124, 125, 127, 128, 206, 210, 211, 217, 220, 222, 224, 226, 228, 229, 231, 300, 314, TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “Yes, I am aware of the City’s resources, and yes, it has been helpful.”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, stated she was aware the SBA provided small business start-up assistance.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he is aware of Small Business Administration (SBA) financing that is available for small businesses. He added that he has successfully received an SBA loan. He stated, “All of these questions lead back to the individual starting the business ... there has to be a certain level of competency.”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that she is aware of other small business start-up assistance through the Service Corps of Retired Executives (SCORE), which helped her start her business.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm said that he is aware of other small business start-up assistance, including tax abatements to entice businesses to locate in Indiana.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she has limited knowledge about small business start-up assistance. She stated that the IRS did a workshop, and the state has done different networking-type opportunities. She said, “I have used these resources. I am aware of this type of technical assistance and have participated in some of the assistance, especially workshops and seminars.”

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, said he had some knowledge of other small business start-up assistance, and cited the work of the Small Business Development Center.

Other interviewees reported that they were unaware of start-up assistance for small businesses. [Interviewees #: 110, 112, 116, 117, 119, 120, 121, 126, 201, 204, 205, 207, 208, 209, 212, 213, 214, 215, 216, 218, 219, 221, 223, 225, 227, 230, 306, 313]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she had not accessed or utilized any assistance in small business start-ups and that she did not know the assistance was available. She also reported that she started her business 20 years ago.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he is not aware of any additional small business start-up assistance that has been provided since some time ago when the MBE/WBE Division for IDOA provided small business start-up assistance.

Some interviewees thought that the provision of other business start-up assistance could be beneficial to small businesses. [Interviewees #: 100, 101, 102, 104, 106, 108, 111, 115, 116, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 202, 207, 213, 215, 216, 217, 218, 220, 224, 225, 226, 228, 229, 231, 300, 304, 305, 309, 313, 314, 315, TA #1, TA #2, TA #3, TA #5, TA #8]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said that small business start-up assistance would not be helpful for his firm now, “but in the beginning it would have been, and I’m sure it could be helpful for new start-ups.”

Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, said that although his firm is proficient in the trade, he could have used more “business tutoring” when he was getting his firm up and running.

Interviewee #106, an African American male owner of a recently started firm, indicated that start-up assistance in the form of capital would be beneficial to small businesses, including his own.

Interviewee #111, a Hispanic owner of an engineering services firm, indicated that the biggest assistance that can be provided for small business start-ups is to help them get the opportunities to bid on work. He said that he feels strongly that a business should not rely on getting set-asides as its first work project and that the business should prove that it can operate as a business first.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, when asked about small business start-up assistance said, “Yes, I am aware of the City’s resources, and yes, it has been helpful.”

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, stated she was aware of small business start-up assistance, and commented it could be helpful for others, “but a little late for me.”

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that financing assistance would be of interest to her, adding that assistance in completing certification paperwork would be especially helpful.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that it would be helpful for the State to offer assistance with financing, contracting procedures, the importance of relationships, marketing, and where to find work with state agencies.

Interviewee #217, an African American female owner of a commercial cleaning service, said, “I don’t think that the Small Business Development Center (SBDC) really gets into the meat of running a small business.... I don’t think that they explain ... how to handle specific situations in a given area — like Kokomo may be different than Carmel.” She added that she believes that the SBDC should provide more in-depth services than it currently provides.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said she is aware of small business start-up assistance offered by the SBDC and that it could be great if it were executed well.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated she has limited knowledge about small business start-up assistance. She said, “I have used these resources. I am aware of this type of technical assistance, and have participated in some of the assistance especially workshops and seminars. I do think this is helpful for small businesses.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said she had some knowledge of other small business start-up assistance that have had some successes, access to capital, sharing bonding, etc. She mentioned that help developing a small business plan would be helpful.

Other interviewees thought that the provision of other business start-up assistance would not be beneficial to small businesses. [Interviewees #: 109, 117, 212, 219, 221, 222, 223, 227, 230].

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, is not aware of other small business start-up assistance provided by the State and said that it would not be helpful. She added, “I don’t know that the State should try to make things happen.”

J. Information on Public Agency Contract Procedures and Bidding Opportunities.

Some interviewees reported that they were aware of information on public agency contract procedures and bidding opportunities. [Interviewees #: 110, 111, 112, 116, 123, 125, 126, 201, 205, 206, 207, 209, 210, 211, 214, 215, 217, 218, 219, 220, 222, 223, 224, 225, 226, 227, 229, 300, 308, 313, TA #2, TA #5]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, said that she utilized Northwestern Indiana Regional

Planning Commission (NIRPC) for workshops on how to be able to do business with the state government. She said, “They were very good workshops.” She added that she jumped from agency to agency because there were not many startups in her industry. However, she said that they did not know what to do with her or how to advise her.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that the only real assistance of which she is aware for getting information on contracting procedures and bidding opportunities is through the procurement websites. She said that she would love additional assistance in this area.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that information on public agency contracting procedures and bidding opportunities is available and is helpful. He specifically mentioned a symposium that was offered in the past by the MBE/WBE Division for IDOA.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that information on public agency contracting procedures and bidding opportunities is available and is helpful. He said that although it has been easy to learn about INDOT projects, it has not been that easy to find out about work that is available through IDOA or Purdue University.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that he knows information on public agency contracting procedures and bidding opportunities is available through the City of Indianapolis, but does not know if it is available through the State.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that some of the agencies will post bidding opportunities, and potential bidders receive these in an e-mail along with directions on where and how to submit proposals. She said, “I have used this service and find it helpful. It’s kind of like the electronic bidding service — it’s a lot easier than having to go around to all of the different agencies. I think it’s very useful for all types of businesses. It cuts down on manpower to have to visit each of the different agencies, and having to make numerous phone calls.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said that she connects to information on public agency contracting procedures and bidding opportunities. She said, “I get them through the Internet, and they sometimes will send a postcard.”

Other interviewees reported that they were unaware of any information on public agency contract procedures and bidding opportunities. [Interviewees #: 115, 117, 118, 119, 120, 121, 122, 124, 128, 204, 208, 212, 213, 216, 221, 228, 230, 231, 306, 309, TA #1, TA #3, TA #4].

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said “I’m not aware that this might be provided, but yes, it could be helpful for others, but I don’t think I would use it.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, said, “I don’t know about opportunities with the State of Indiana printing, what to bid on.”

Interviewee TA #1, a Caucasian male president/CEO of a regional chamber of commerce, said that he is not aware of any information on public agency contracting procedures and bidding opportunities being provided locally. He added that in Michigan, there are Local Procurement Organizations that help businesses obtain public sector contracts, and that there should be similar organizations in Indiana. He said, “It’s a gap in Indiana and we need to put an infrastructure in place to help companies with procurement or contracting opportunities.”

Some interviewees thought that the provision of information on public agency contract procedures and bidding opportunities would be beneficial to small businesses. [Interviewees #: 100, 101, 103, 104, 105, 106, 108, 109, 111, 112, 113, 115, 116, 117, 119, 120, 121, 122, 123, 124, 125, 126, 128, 201, 202, 204, 205, 206, 207, 208, 209, 210, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 231, 300, 301, 304, 305, 306, 309, 310, 312, 313, 314, 315, TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #100, an Asian Pacific American male president of a water testing firm, noted that “the State has been very good at e-mailing us with RFP and bidding opportunities.”

Interviewee #103, a male Caucasian owner of an excavating firm, indicated that presently with the poor economy he might consider taking advantage of services that provide information on public agency contracting.

Interviewee #111, a Hispanic owner of an engineering services firm, expressed that he learned a great deal about working with public agencies, contracting procedures, and bidding procedures at a minority seminar that he attended once at Purdue.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that the only real assistance of which she is aware for getting information on contracting procedures and bidding opportunities is through the procurement websites. She said that she would love additional assistance in this area.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said that information on public agency contract procedures and bidding opportunities would be helpful. He said, “Currently, the bidding procedure is so convoluted; it’s a nightmare. The stacks of paper are just too much.”

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said “I’m not aware that this might be provided, but yes, it could be helpful for others, but I don’t think I would use it.”

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, shared that she was not aware of information on contracting procedures and bidding opportunities because that was not germane to her business, but thought it could be helpful for others, like construction firms.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that information on public agency contracting procedures and bidding opportunities is available and is helpful. He said, “Once you’ve gone through it, you know what to do. The front-end documents on practically every job you bid are the same.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that some of the agencies will post bidding opportunities, and potential bidders receive these in an e-mail along with directions on where and how to submit proposals. She said, “I have used this service and find it helpful. It’s kind of like the electronic bidding service — it’s a lot easier than having to go around to all of the different agencies. I think it’s very useful for all types of businesses. It cuts down on manpower to have to visit each of the different agencies, and having to make numerous phone calls.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that he wants to see agencies do more to connect designers with decision-makers when they are looking for designers.

Interviewee #309, a Caucasian male owner of a printing and distribution firm, commented that information on public agencies contracting procedures and bidding opportunities would be helpful.

One interviewee thought that the provision of information on public agency contract procedures and bidding opportunities would not be beneficial to small businesses. [Interviewee #: 230].

K. On-Line Registration with a Public Agency as a Potential Bidder.

Some interviewees reported that they were aware of opportunities to become registered to receive information as a potential bidder. [Interviewees #: 107, 110, 112, 116, 122, 123, 125, 126, 201, 207, 209, 211, 212, 214, 215, 218, 219, 223, 224, 225, 226, 227, 228, 301, TA #5]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she still receives online information about work for the State, but she does not pursue those opportunities any more.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that they are registered as a bidder and that she feels as though they can contact the agencies directly if they have any questions.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that his firm is registered as a bidder.

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, stated she was aware of on-line registration, but added “it would not serve our needs, that’s not our business.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he was aware of on-line registration being available with INDOT but not for other State agencies and universities.

Other interviewees reported that they were unaware of opportunities to become registered with an agency as a potential bidder. [Interviewees #: 115, 117, 118, 119, 120, 121, 124, 128, 204, 205, 208, 210, 213, 216, 217, 220, 221, 222, 229, 230, 231, 306, 309, 313, TA #1, TA #2, TA #3, TA #4]. Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that the State of Indiana does not have this service available.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that on-line registration with a public agency as a potential bidder is not currently allowed.

Some interviewees thought that allowing a business to complete on-line registration with a public agency as a potential bidder could be beneficial to small businesses. [Interviewees #: 101, 103, 104, 106, 107, 108, 109, 113, 115, 116, 117, 118, 120, 123, 124, 125, 128, 201, 204, 207, 208, 209, 210, 211, 213, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 228, 229, 230, 231, 300, 304, 305, 309, 310, 312, 313, 314, 315, TA #1, TA #2, TA #3, TA #4, TA #5, TA #8]. Interviewee #103, a male Caucasian owner of an excavating firm, indicated that presently with the poor economy he might consider taking advantage of services that educate potential bidders about online bidding procedures for public sector work.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, reported that he has found some challenges with regard to on-line registration with IDOA as a potential bidder. He said, “We have found that the information for professional services for design services through [IDOA] seems to be a pretty closed door.” He indicated that IDOA is leaving some of the decisions for these types of projects to the architects and prime engineering firms, and he does not know where the access to the professional services projects might be. He noted, “It’s almost like a closed notification to some of the architects and engineering firms for State projects.” He reported that his firm would like more access or information flow for professional services. He mentioned, “It’s almost like an invite only.” He said that the firm often finds out that a project was awarded, and they did not even know it was out there.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, “Small businesses should be able to register in one place, which would suffice for all State and college institutions. The federal government has the CCR (Central Contracting Registry), which fulfills that purpose. A similar clearinghouse would be very helpful.”

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated he was not aware of on-line registration, but thinks it would be helpful, especially for local projects.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he was aware of on-line registration being available with INDOT but not for other State agencies and universities. He said that having on-line registration with additional public agencies as a potential bidder would be a good idea.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that the ability to participate in on-line registration with a public agency as a potential bidder is helpful, and there should be more information about front end work, such as the design work that she is in the business to perform.

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that it would be helpful, especially if the registration were available in languages including Spanish, Chinese, Japanese, Burmese, and Vietnamese.

Other interviewees did not believe that on-line registration as a potential bidder was necessary or beneficial. [Interviewees #: 100, 214, 227].

L. Hard Copy or Electronic Directory of Potential Subcontractors.

Some interviewees reported that they were aware of hard copy or electronic directories of potential subcontractors. [Interviewees #: 110, 116, 117, 123, 124, 125, 202, 204, 205, 206, 209, 210, 211, 212, 214, 215, 217, 220, 222, 223, 226, 227, 228]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she was listed on the online registry of MBE/WBE businesses, but she stated that this never seemed to influence her ability to get work with the State.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, expressed that he is aware of electronic directories of potential subcontractors and has no problem with them.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that a directory of potential subcontractors already exists, so there is no need for additional directory information.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that an electronic copy is helpful and already available.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that a hard copy or electronic directory of potential subcontractors is helpful and already available.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that having both a hard copy and an electronic directory of potential subcontractors is helpful and already available.

Other interviewees reported that they were unaware of hard copy or electronic directories of potential subcontractors. [Interviewees #: 112, 115, 118, 119, 120, 121, 122, 128, 201, 207, 208, 213, 216, 218, 219, 221, 224, 225, 229, 230, 231, 300, 306, 313, TA #1, TA #2, TA #3].

Interviewee #118, a Caucasian male president of a plumbing and heating company, expressed that he was not aware of electronic directories of potential subcontractors and added, “We would like to on a list of available subs.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that having both a hard copy and an electronic directory of potential subcontractors is not currently available for all State agencies.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she is not aware of the existence of a hard copy or electronic directory of potential subcontractors. She stated that she is not familiar with whether the State/public universities have used this service. She said, “If there is something like this I would like to become familiar with it.”

Some interviewees thought that the provision of hard copy or electronic directories of potential subcontractors could be beneficial to small businesses. [Interviewees #: 100, 101, 104, 106, 109, 112, 113, 121, 122, 123, 124, 125, 128, 201, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 300, 304, 305, 311, 313, 314, 315, TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that this would be extremely helpful but that she would not have any idea how to get this.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that having both a hard copy and an electronic directory of potential subcontractors for all State agencies would be helpful.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that a hard copy or electronic directory of potential subcontractors is not helpful to her because “it’s not relevant,” but she is sure that it is helpful to the people looking for that information.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said of hard copy or electronic directories of potential subcontractors, “I do think it would be helpful. Again, it’s kind of like another resource giving you contact with other firms — smaller firms to team up with to increase your capacity or to get on a team with larger firms. In my field that’s something (teaming) that happens a lot.”

Interviewee #311, a Caucasian male owner of a computer firm, said that electronic or hard copy lists of potential subcontractors would be good for new small businesses, but added, “Not for me.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said that the directories should be web-based so that they are not out of date soon after they are printed.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said she thought an electronic directory of potential subcontractors would be useful. However, she suggested that there be allowances for smaller businesses that may not be able to afford the technology for electronic versions.

Other interviewees thought that the provision of a hard copy or electronic directory of potential subcontractors would not be beneficial to small businesses. [Interviewees #: 108, 219].

M. Pre-Bid Conferences Where Subcontractors Can Meet Prime Contractors.

Some interviewees reported that they were aware of pre-bid conferences that allow subcontractors to meet prime contractors. [Interviewees #: 110, 111, 112, 116, 117, 124, 125, 126, 204, 205, 206, 209, 210, 211, 212, 213, 215, 220, 221, 222, 223, 225, 300, 301, 305, 313, 314, TA #4, TA #5]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she has attended pre-bid conferences in Lake County, IN, but she stated that she did not feel that the networking helped her become part of project teams. She said that while she did make some connections that were beneficial, she could not afford to do the work and not get paid for 90 days because of her financing situation.

Interviewee #111, a Hispanic owner of an engineering services firm, said that he holds pre-bid conferences for every job that his firm designs. He also indicated that he does not attend INDOT pre-bid conferences because the type of work that his firm does is mainly through the LPA and not directly with INDOT.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that she has attended two or three pre-bid conferences, but she said that she finds the travel and financial burden to be too much for the outcomes that seem to come. She noted that she feels that the primes and subcontractors remained the same, and she never really had a chance.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that he has attended pre-bid conferences where subcontractors meet primes.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said he has attended pre-bid conferences where subs meet primes and thinks they are good, especially if you are in construction projects.

Interviewee #124, an African American male president of an MBE-certified promotional products company, said he knew of such things as pre-bid conferences, but considered them strictly for construction business, not for his type of operation. He added “The State does all kinds of things for the large construction firms, but not so much for us smaller businesses.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that pre-bid conferences, where subcontractors and primes meet, already exist. In regard to pre-bid meetings, he said, “Everyone’s there trying to see what the scope of work is. The GCs, they’ll take your card, but it just seems like there’s no communication in between the pre-bid meeting and the time of the bid.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that pre-bid conferences where subcontractors and primes meet already exist and are a good idea. But he added, “Does anybody attend them?” He explained, “I attend them ... but the majority of people who are crying ‘foul’ about them not getting opportunities ... they’re not attending them.” He said that there have been times when he was the only person in attendance at some pre-bid conferences.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said, “I recently became aware of pre-bid conferences, but I have not participated in any yet.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, commented that he has participated in a few pre-bid conferences.

Other interviewees reported that they were unaware of any pre-bid conferences. [Interviewees #: 115, 118, 119, 120, 121, 122, 123, 128, 201, 207, 208, 214, 216, 217, 218, 219, 224, 226, 227, 228, 229, 230, 231, 306, TA #1, TA #2, TA #3]. Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that pre-bid

conferences where subcontractors and primes meet do not exist. He added that right now, primes and subcontractors meet informally.

Some interviewees thought that pre-bid conferences to allow subcontractors to meet prime contractors could be beneficial to small businesses. [Interviewees #: 100, 101, 102, 103, 104, 109, 115, 116, 117, 118, 120, 121, 123, 125, 126, 128, 201, 202, 203, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 300, 304, 305, 306, 310, 311, 312, 313, 314, 315, TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #103, a male Caucasian owner of an excavating firm, indicated that because of the poor economy he might consider taking advantage of pre-bid conferences.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, noted “It’s always good to have networking opportunities.”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, said she thought pre-bid conferences would be especially beneficial to construction firms.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he believes that pre-bid conferences where subcontractors meet prime contractors should be done routinely “with the attitude to hook up people with a mandatory requirement [of including MBE/WBEs] ... that doing it is not just a goal, but required.”

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that pre-bid conferences where subcontractors and primes meet already exist and are a good idea.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that pre-bid conferences where subcontractors and primes meet does not exist and are a good idea. He added that right now, primes and subcontractors meet informally, but it would be especially beneficial for new firms to have formal pre-bid conferences where subcontractors and primes could meet.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said “I do think pre-bid conferences are valuable, especially in my field.”

Interviewee #311, a Caucasian male owner of a computer firm, said that pre-bid conferences would be good for new small businesses, but added, “Not for me.”

Other interviewees did not think that pre-bid conferences to allow subcontractors to meet prime contractors would be beneficial to small businesses. [Interviewees #: 108, 112, 204]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that she has attended two or three pre-bid conferences, but she said that she finds the travel and financial burden to be too much for the outcomes that seem to come. She noted that she feels that the primes and subcontractors remained the same, and she never really had a chance.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that pre-bid conferences where subcontractors and primes meet already exist. In regard to pre-bid meetings, he said, “Everyone’s there trying to see what the scope of work is. The GCs, they’ll take your card, but it just seems like there’s no communication in between the pre-bid meeting and the time of the bid.”

Some interviewees reported that they were unsure of whether pre-bid conferences to allow subcontractors to meet prime contractors were beneficial to small businesses. [Interviewees #: 113, 119, 122]. Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, “I’m not sure. I suspect the primes would be hostile to it.”

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, said he was unaware of pre-bid conferences, and could not say whether they might be a good idea.

N. Distribution of Plan-holders’ Lists or Other Lists of Potential Prime Bidders to Subcontractors.

Some interviewees reported that they were aware of distribution lists to subcontractors of plan-holders concerning potential prime bidders. [Interviewees #: 107, 111, 116, 123, 125, 200, 202, 204, 206, 207, 209, 210, 211, 212, 213, 218, 220, 222, 226, 301, TA #5]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that the distribution of lists of possible prime bidders to potential subcontractors is lacking in the IDOA, but seems to be fine for INDOT.

Interviewee #111, a Hispanic owner of an engineering services firm, stated that has not utilized distribution lists of potential prime contractors, but he reported that he was aware that they exist.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated lists of plan-holders or potential prime bidders or subcontractors are something with which he is familiar and which he feels are very beneficial.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that Indiana-based Reprographics, Inc. offers a great website with plan-holder information.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that the distribution of lists of plan-holders or other lists of possible prime bidders do exist through Reprographics and other bid tools.

Other interviewees reported that they were not aware of any distribution to subcontractors of plan-holders’ lists or lists of other potential prime bidders. [Interviewees #: 110, 112, 115, 117, 118, 119, 120, 121, 122, 124, 126, 128, 201, 205, 208, 214, 215, 216, 217, 219, 221, 223, 224, 225, 227, 228, 229, 230, 231, 300, 306, 313, TA #1, TA #2, TA #3, TA #4]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she has not utilized any distribution lists of potential prime contractors and was not aware that these sometimes existed.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that the State does not currently distribute lists of plan-holders or other lists of possible prime bidders.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said, “I am not really aware of the plan-holder lists, where to find them, or if they even exist or are produced by the State or public universities.”

Some interviewees thought that the distribution to subcontractors of plan-holders’ lists or lists of potential prime bidders could be beneficial to small businesses. [Interviewees #: 100, 101, 102, 104, 106, 108, 109, 112, 113, 115, 116, 118, 123, 124, 125, 126, 200, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 300, 304, 305, 311, 312, 313, 314, 315, TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #109, a Hispanic male president of an industrial cleaning firm, said that the distribution of plan-holders’ lists or lists of other potential bidders to subcontractors “is always helpful.”

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said that “something like what the private sector already does” would be beneficial.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “It would only be helpful if such lists were available electronically.”

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated lists of plan-holders or potential prime bidders are not something he is familiar with, but indicated that if such lists were for local projects they might be beneficial for his business.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, reported that he finds the State’s distribution of plan-holders lists to be very helpful.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he believes the distribution of lists of plan-holders and other possible prime bidders would definitely be helpful.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that the distribution of lists of plan-holders or other lists of possible prime bidders would be helpful.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that the State should offer the type of service currently provided by Reprographics. He said there should be a common, centralized place for all plans and drawings, like the City of Indianapolis has.

Interviewee #206, an African American male owner of an MBE/WBE/DBE-certified general electrical contracting firm, said that the distribution of lists of plan-holders or other lists of possible prime bidders to potential subcontractors currently happens and is a good idea.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that the distribution of lists of plan-holders or other lists of possible prime bidders to potential subcontractors currently happens and is a good idea.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said, “Anything that helps put firms together would be helpful.”

Interviewee #311, a Caucasian male owner of a computer firm, said that lists of plan-holders or other lists of possible prime bidders given to potential subcontractors would be good for new small businesses, but added, “Not for me.”

Some interviewees thought that the distribution to subcontractors of plan-holders’ lists or lists of other potential prime bidders would not be beneficial to small businesses. [Interviewees #: 117, 216].

O. Other Agency Outreach.

Some interviewees reported that they were aware of agency outreach. [Interviewees #: 107, 110, 111, 116, 117, 118, 123, 124, 125, 201, 202, 203, 204, 205, 207, 209, 210, 212, 214, 215, 220, 222, 224, 226, 300, 301, 305, 308, 309, 310, 313, 314, TA #1, TA #2, TA #4, TA #5].

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, confirmed that information on other agency outreach programs is advertised, and the events can be very positive.

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that he was aware of agency outreach but that he was concerned about the cost involved. He reported that she has attended many vendor fairs in Indianapolis, IN or in Lake County, IN but that she did not feel that the investment paid off enough to justify it.

Interviewee #111, a Hispanic owner of an engineering services firm, indicated that he was aware of local vendor fairs but has not utilized them much. He said that he attended one in Indianapolis that he felt was worthwhile, and a couple in Chicago, but he mentioned that there are usually fees associated with these events.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that he is aware of other agency outreach programs, but he has never had to use them.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that she believes that IDOA’s outreach events are helpful, and she attends them when time permits. Interviewee #202 said that she recently participated in a webinar offered by the U.S. Small Business Administration regarding how to contract with the federal government. She added that IDOA offered a useful evening seminar regarding bid opportunities, which was helpful. She added that NAWBO has been slightly helpful. She also mentioned that the American Society of Civil Engineers offered a helpful all day program enabling primes to meet subcontractors, but she had to pay to attend, and she prefers to participate in free programs. She said that she was aware of an available Purdue University procurement workshop, but she has not yet attended, stating, “I haven’t been convinced it will help.” She mentioned that she receives many e-mails from anonymous sources

offering to help her get federal contracts, but she ignores all of them because she has heard that many of them are frauds.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said that he is aware of State agency outreach events, but commented that they have never produced positive results for him.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that vendor fairs exist to learn about products, but they do not exist to meet buyers.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has not seen any vendor fairs except what is currently being provided at Purdue University.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that some State agencies already have outreach but not all. He said that outreach also exists in which primes meet with State agencies. He added that it is a good idea to have agency outreach.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that the job fairs held by the State and the universities set-up exclusively for MBE/WBEs are very helpful. She said that having the representatives there along with the State representatives is valuable along with the information they present. She reported that the benefits are that you have access to a lot of agency representatives at one time, good information is presented (i.e., what's on their websites, presentations on how to get business with these agencies, etc.), and it is a good place to get your name out to agency representatives. She stated, "The seminars and networking events are a good marketing tool." She said, "I am aware agency outreach occurs. I receive the State and City of Indianapolis newsletters. I personally don't have a lot of experience with them because I haven't found anything that really pertains to what I do. I've gone to a couple of networking events."

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, stated that the City of Indianapolis has hosted seminars, but they help construction related contractors more than professional design firms. He mentioned, "The City of Indianapolis has hosted several seminars, and it's been helpful for contractors and vendors, but the work has typically already been designed. So, it's really not helpful for architects. It's helpful to meet the people in charge of the organizations and to learn about the potential work coming up, but the information shared is usually about projects that have already been designed... The City and State should do more to connect designers with services that fulfill our needs or ask us what we need and customize meetings for MBE/WBE/DBEs in the architectural field. I think all of the services mentioned are needed and can benefit all firms but especially those who have been around less than five years."

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, "I know there are job fairs going on. I just wonder how well that is communicated and who the target audience is."

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said, “I am aware of State seminars on bidding projects, but haven’t taken advantage of them as yet.” She added that she has taken advantage of vendor fairs, events and opportunities to meet buyers. She said, “I go when I am able to fit them into my schedule.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, stated that he had attended outreach events, such as vendor fairs and events that were conducted by the Crane Naval Base, but none by state agencies or universities. He said, “We have attended those a couple of times years ago.”

Interviewee #310, a Caucasian male owner of a moving company, said, “The Chamber of Commerce has business exchange meetings that are helpful, and the State Employment Security has seminars and has programs that have been useful, including On-the-Job Training Programs. The opportunity is there, we just don’t take advantage of them.”

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company said, “The State needs to do more statewide meetings, not just in Indianapolis.”

Interviewee TA #1, a Caucasian male President/CEO of a regional chamber of commerce, said that his organization sponsors an annual Regional Business Trade Show and that local universities provide job fairs throughout the year that are very helpful for businesses.

Other interviewees reported that they were unaware of agency outreach. [Interviewees #: 112, 115, 119, 120, 121, 122, 126, 128, 208, 211, 213, 216, 217, 218, 219, 221, 223, 225, 227, 228, 229, 230, 231, 306, TA #3]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that she has not received information on other agency outreach programs. She said that they attended some networking events but that she heard about them through other friends, not from the State.

Some interviewees thought that other agency outreach, including, for example, vendor fairs and events, could be beneficial to small businesses. [Interviewees #: 100, 104, 107, 108, 115, 118, 123, 124, 125, 128, 201, 202, 205, 206, 207, 208, 209, 210, 212, 213, 215, 217, 219, 220, 221, 222, 223, 224, 225, 226, 227, 229, 230, 231, 300, 301, 304, 305, 310, 311, 312, 313, 314, 315, PF #28, TA #2, TA #3, TA #4, TA #5, WT #5]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, confirmed that information on other agency outreach programs is advertised, and the events can be very positive.

Interviewee #108, an African American male who ran his own cleaning business, said, “This would be great if such vendor fairs ... were held in other parts of the State and not limited to Indianapolis.”

Interviewee #124, an African American male president of an MBE-certified promotional products company, shared that he was aware of agency outreach programs, and thought they were helpful. He said “the Match Makers program was very positive.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he thinks that vendor fairs are a good idea.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that it is a good idea to have agency outreach.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that she is aware of other agency outreach, and that it is helpful. She added that they learned about the company's largest job to date through a 'Vendor Roundtable' sponsored by the State of Indiana.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that she is aware of other agency outreach. She added that agency outreach could be helpful, but when she attended a vendor fair at Purdue University, there were very few buyers there to meet and that the buyers who were there congregated in the hallway and talked amongst themselves.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that the job fairs set up exclusively for MBE/WBEs by the State and universities are very helpful. She said that having the representatives there along with the State representatives is valuable, as is the information they present. She stated, "The seminars and networking events are a good marketing tool." Interviewee #300 reported, "I personally don't have a lot of experience with them because I haven't found anything that really pertains to what I do. I've gone to a couple of networking events. These are really useful to the MBE/WBEs because the people who are there are looking for MBE/WBEs."

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that the City of Indianapolis has hosted seminars, but they help construction related contractors more than professional design firms. He also reported that the networking events help firms get to know the decision makers, learn about upcoming projects, and meet primes and other subcontractors. He mentioned, "The City of Indianapolis has hosted several seminars, and it's been helpful for contractors and vendors, but the work has typically already been designed. So, it's really not helpful for architects. It's helpful to meet the people in charge of the organizations, and to learn about the potential work coming up, but the information shared is usually about projects that have already been designed. IPS and Housing have held social networking events. These are helpful. The City and State should do more to connect designers with services that fulfill our needs or ask us what we need and customize meetings for MBE/WBE/DBEs in the architectural field. I think all of the services mentioned are needed and can benefit all firms but especially those who have been around less than five years." Interviewee #301 said that he values agency outreach such as vendor fairs and events because it "puts me in touch with decision makers, but the ones the City and State have held for the most part are for projects that have already been designed. I want to see them do more to connect designers with decision-makers when they are looking for designers."

Interviewee #311, a Caucasian male owner of a computer firm, cited "Referral Networking Groups" as a particularly helpful program to small businesses. He commented, "This is useful when people refer opportunities to each other. They can be a source of new business." Interviewee #311 also said that other agency outreach would be good for new small businesses, but added, "Not for me."

PF #28, a representative of an MBE/WBE/DBE construction firm, reported that there is not enough emphasis at the State surrounding matchmaking between prime contractors and subcontractors. "We don't know who some of the primes are ... or the primes don't take a more assertive action to get

ahold of other contractors, unless sometimes somebody brings them to the water.” “Why isn’t there more matchmaking or outreach programs or networking done where we ... meet the primes.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said she knew about agency outreach and thought it was a very good idea. She said the age-old problem is to get the primes to participate.

Interviewee WT #5, the president of a WBE-certified commercial interior design firm, wrote “As a small WBE, I appreciate the networking events and seminars hosted by your diversity offices — I’ve had the opportunity to connect with countless professionals in my industry. I hope you will continue to offer these services to other small businesses.

Other interviewee reported that they did not think that agency outreach was beneficial to small business. [Interviewees #: 110, 203, 211, 214, 216, 218, 228].

P. Streamlining or Other Simplification of Bidding Procedures.

Some interviewees reported that they were aware of efforts to streamline or simplify the bidding procedures. [Interviewees #: 123, 125, 218, 228].

Other interviewees reported that they were unaware of any steps taken to streamline the bidding process. [Interviewees #: 110, 111, 112, 115, 116, 117, 118, 120, 121, 122, 124, 128, 201, 205, 208, 212, 213, 214, 215, 216, 217, 219, 220, 221, 222, 224, 225, 226, 227, 229, 230, 231, 300, 306, 313, TA #1, TA #2, TA #3, TA #4, TA #5]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that she has not gotten formal information from the State on streamlining the bidding process. She mentioned that they have had to learn as they went.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “I don’t know if this is the State’s goal.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said that they were not aware of State efforts to streamline the bidding process, but does believe they would be helpful.

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she is not aware of any streamlining/simplification of bidding procedures, but that the bidding procedures are “pretty easy now.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said, “I haven’t had direct experience with streamlining/simplification of bidding procedures. I’m really just getting into this.” She stated that she is not really aware of what the State and public universities are doing in this regard, so she is unaware of what’s currently in place. She said, “So, I’m not familiar with how they are changing what is in place.”

Some interviewees thought that the streamlining or other simplification of bidding procedures could be beneficial to small businesses. [Interviewees #: 100, 103, 104, 105, 106, 108, 109, 112, 113, 115, 123, 124, 125, 126, 128, 203, 205, 207, 208, 212, 213, 215, 216, 217, 218, 220,

221, 224, 225, 226, 227, 228, 229, 230, 231, 300, 302, 304, 305, 312, 313, 314, 315, PF #14, TA #1, TA #2, TA #3, TA #4]. Interviewee #103, a male Caucasian owner of an excavating firm, indicated that presently, with the poor economy, simplification of and tutoring on bidding procedures might be helpful.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, reported that she believes that it would be great to have a conference on how to bid. She hears about conferences that encourage becoming certified, but she has never seen anything that addresses what happens after certification. She said that this would be very helpful.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated he was aware the State was trying to streamline bidding procedures and was sure it would benefit his business and other small businesses.

Interviewee #124, an African American male president of an MBE-certified promotional products company, stated “I wish they could get the bidding process down to one page that we could e-mail in PDF format.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, recommended that State agencies and universities simplify their bidding process. He said that he would like for state agencies and universities to e-mail Requests for Proposals to firms that have capabilities that actually match the project requirements, instead of what he said now happens, in that he receives e-mails regarding projects that are not at all close to his firm’s expertise.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that INDOT’s bidding procedures are already “pretty efficient.” He added, though, that anything that the State could do to “speed up the decision-making” regarding the contract award would be helpful.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said, “Anything that streamlines processes is good — to make it simpler makes the whole process easier.” She stated that anything that simplifies anything makes it better for small businesses.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, recommended that the IDEM reduce the paperwork in the proposal process. Interviewee #302 said, “The paperwork should stick to the actual job. There is a ten-page questionnaire, like a pro forma, that is used for every job; I believe the paperwork can be streamlined down to stick to the specific proposal.”

Interviewee PF #14, the senior accounts supervisor for an MBE-certified advertising firm suggested, “I think one thing that would be helpful is to have some type of standardization in the paperwork. A recent bid that we submitted for an RFQ wasn’t necessarily like anything we had seen in the past.”

Interviewee TA #4, the President and CEO of a private-public economic development partnership consisting of mostly Caucasian male business owners and investors, said he had no direct knowledge of streamlining or simplification of bidding procedures, but said “simpler should be better.”

Other interviewees thought that streamlining or otherwise simplify bidding procedures would not be beneficial to small businesses. [Interviewees #: 101, 116, 200, 204, 206, 209, 210, 211, 219, 222, 223, 311]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, indicated that it is not necessary to streamline or otherwise simplify bidding procedures because they are presently not so difficult.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, indicated that he has had no problems in the bidding arena.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that he didn't believe the State's bidding procedures needed to be simplified and reported that they are "pretty simple" already.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that streamlining or simplifying the bidding procedures is not necessary because he believes they are not difficult in their current form.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that he does not know how streamlining or simplifying of the bidding procedures would work. He said, "It's pretty straightforward as it is."

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that the bidding procedures are already streamlined and simplified and that no further streamlining or simplification is necessary.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that bidding procedures are "pretty easy now," and that there is no need to further streamline or simplify them.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said she did not think streamlining would be necessary or beneficial because bidding procedures are not complicated.

Interviewee #223, a Caucasian male owner of a dump truck haulage firm, said that there is no need to streamline or simplify bidding procedures because they are already "pretty easy now."

Interviewee #311, a Caucasian male owner of a computer firm, commented on streamlining and simplification of bidding procedures by stating, "They are probably okay as they are for most bidders."

Q. Segmenting Larger Contracts into Smaller Pieces.

Some interviewees were aware of efforts to segment larger contracts into smaller pieces. [Interviewees #: 123, 205, 206, 207, 209, 212, 219, 220, 221, 223, 224, 225, 227, 300, 301, TA #5]. Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that she is aware of the practice of breaking up larger contracts into smaller pieces. She said that is what happened on the Indianapolis Airport project, which proved to be very beneficial to her firm and several other small contractors.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she has not had a lot of experience with projects where the large contracts have been broken into smaller pieces. She said, “I know it’s what a lot of the agencies are doing.” She indicated that she is aware that State and public universities do this in the architectural field.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said, “Some of the larger projects, like the Indianapolis Airport Authority for instance, broke up the project into smaller jobs and created the parking garage so the consortium of minority architects could perform that work. The Airport did that in response to the Board, who had been approached by the minority architects to consider this option as a means to ensure minority businesses obtain meaningful work on the midfield terminal project.”

Other interviewees were unaware of any efforts to segment larger contracts into smaller pieces. [Interviewees #: 110, 111, 115, 117, 118, 119, 120, 121, 124, 125, 126, 128, 201, 204, 208, 210, 211, 213, 214, 215, 216, 217, 218, 222, 226, 228, 229, 230, 231, 306, 313, TA #1, TA #2, TA #3]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, reported that she was unaware of any contracts being split into small enough pieces to assist companies of her size.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, stated they were not aware of breaking up contracts. He noted that the County does not break up its bids, and it is very difficult to pick out what might pertain to them. He added, “And for that reason we have quit bidding on County bids. We can’t bid on contracts that are not broken up into segments.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he would like to see large contracts broken into smaller pieces, but he said that is not currently happening. He said, “You really have to team up with someone in order to do that. Most GCs want the whole technology package, not just one portion of it.”

Some interviewees thought that an agency or public college segmenting larger contracts into smaller pieces could be beneficial to small businesses. [Interviewees #: 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 111, 112, 122, 123, 124, 125, 128, 201, 203, 204, 206, 212, 213, 215, 216, 217, 218, 220, 221, 222, 223, 225, 226, 230, 231, 300, 304, 305, 309, 310, 311, 312, 313, 314, 315, TA #3]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said that it would be “very helpful” to have an agency or public college break up the larger contracts into smaller pieces.

Interviewee #103, a male Caucasian owner of an excavating firm, indicated that presently, with the poor economy, breaking up large contracts into smaller pieces might be helpful to small businesses.

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, expressed that breaking up large contracts into smaller pieces is always a concern. He reported that he knows that the State has looked into doing that and that the City where he lives has looked into doing at that, but he said that they really need to make sure that some of the smaller companies are

able to bid on the pieces. He stated that if the projects are too large, the smaller companies just cannot do the work.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, said of segmenting larger contracts into smaller pieces, “This is the most important of all the things you’ve mentioned. This would be the most helpful.”

Interviewee #111, a Hispanic owner of an engineering services firm, stated that splitting contracts into smaller pieces is difficult to do, but feels that it would help provide smaller businesses the opportunity to bid on more projects.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that it would be very helpful if more contracts were broken up into smaller pieces. She cited Ivy Tech as a perfect example of an opportunity to break contracts up and choose local vendors to do the work, especially in her industry. She said, “I don’t see how universities can deal with that one prime if they are 500 miles away.” She said that they have been in contact with their Ivy Tech campus but were told that they are waiting to see if the State wants to go with one vendor, or choose regional vendors.

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, stated that breaking up contracts would be a helpful step “if they would do it correctly. I’m just afraid our State would mess it all up and matters would be worse for us.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, recommended that contracts should be broken into smaller pieces, such as engineering, non-engineering, construction, and clean-up, and then firms can check the website by specific service categories.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he would like to see large contracts broken into smaller pieces, but he said that is not currently happening. He said, “You really have to team up with someone in order to do that. Most GCs want the whole technology package, not just one portion of it.”

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that she is not aware of the practice of breaking up larger contracts into smaller pieces, but said that it would be a great idea. She said that such an option would enable her firm to have access to more work.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, said that the practice of breaking contracts into smaller pieces is a good idea. He said that such a practice would increase accountability and open more opportunities for entrepreneurs.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said, “I think it helps the agencies who might be looking for different size firms to get a piece of the pie instead of large firms controlling all of it.” She stated that she thinks it’s helpful for small businesses because it gives small firms a greater chance of getting some of the project when it’s broken up into smaller pieces.

Interviewee #309, a Caucasian male owner of a printing and distribution firm, commented, “I would be interested in opportunities where they broke up larger contracts into smaller pieces.”

Interviewee #310, a Caucasian male owner of a moving company, said, that breaking up large contracts into smaller pieces “[w]ould probably be helpful.”

Interviewee #311, a Caucasian male owner of a computer firm, speaking of breaking up large contracts into smaller pieces, said, “It would be good, but it won’t happen.”

Some telephone interviewees indicated that contract size is a barrier to small businesses pursuing opportunities with the State of Indiana. For example, a representative from a white male-owned firm commented that “larger contracts [are] out of my capacity due to the size of my company. [There is] not enough manpower.” A representative from a white women-owned firm said, “It would be good if they gave projects to smaller firms. We could still do the work on a \$5 to \$10 million new building.” Other firms suggested that the State of Indiana should make more efforts to advertise smaller contracts: “Listing job opportunities that are under the \$75,000 amount [would be helpful].”

Other interviewees stated that segmenting projects would not be beneficial. [Interviewees #: 115, 120, 126, 202, 205, 208, 210, 211, 219, 227, 228]. Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, stated he was not sure that breaking up contracts would be a good idea for his business or other smaller companies.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, indicated that she believes that breaking up large contracts into smaller pieces would prove to be too inefficient.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that the problem with breaking contracts into smaller pieces is that it would make MBE/WBE firms less competitive because there would have to be a manager overseeing each portion of the project, and most MBE/WBE firms are small with few managers.

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that she is not aware of the practice of breaking up larger contracts into smaller pieces, and if that practice were to happen, it “would probably cost the State more money in the long run.”

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that he not aware of the practice of breaking up larger contracts into smaller pieces, and that it would be a bad idea because it “would probably cost more money.”

Some interviewees thought that segmenting projects could be beneficial in some instances but not in others. [Interviewees #: 113, 116, 118, 121, 200, 207, 209, 224, TA #2, TA #4].

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, “This would be a two-edged sword. It has possibilities, but much would depend on how the judgments regarding those smaller pieces were made.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, stated that he had mixed feelings about breaking up contracts, adding, “It all depends on a company’s finances.”

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated that he was not sure that breaking up contracts would be a good idea unless it could give small businesses some opportunities they might not ordinarily have.

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, stated he did not know much about breaking up contracts and was not sure that would be a good idea for his business, but thought they might be good for other companies.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that he thought that breaking up larger projects into smaller pieces would be a good idea if a job is “20 miles long,” but not if it is two to three miles long.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that he believes that there “are plusses and minuses” associated with segmenting larger projects. He added that if contracts were broken into projects that are too small, that it can become inefficient. He said that with the way technology is today, very small firms can take on larger projects than they could in the past. He said that he believes there is a perception that small firms cannot handle large projects

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that he is aware of the practice of breaking up larger contracts into smaller pieces, and that there are “plusses and minuses” associated with that. He said that it costs the taxpayers more to have large contracts broken into smaller ones, but that by having smaller contracts, more firms are qualified to bid.

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that she is not aware of the practice of breaking up large contracts into smaller pieces and that she has mixed feelings about the practice. She said that breaking up contracts might actually be more costly. She said that if one contractor can do the entire job, then that contractor should do so.

R. Price or Evaluation Preferences for Small Businesses.

Some interviewees reported that they were aware of price or evaluation preferences for small businesses. [Interviewees #: 123, 211, 212, 224, 229, TA #5].

Other interviewees reported that they were unaware of any price or evaluation preferences for small businesses. [Interviewees #: 110, 115, 116, 117, 118, 119, 120, 121, 122, 124, 125, 126, 128, 201, 205, 206, 207, 208, 209, 210, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 225, 226, 227, 228, 230, 231, 306, 313, TA #1, TA #2, TA #3, TA #4].

Some interviewees thought that price or evaluation preferences could be beneficial to small businesses. [Interviewees #: 100, 102, 104, 106, 109, 112, 113, 117, 118, 120, 123, 124, 125, 126, 128, 201, 203, 205, 210, 211, 213, 214, 215, 216, 217, 222, 223, 224, 226, 227, 228, 229, 231, 304, 305, 310, 314, 315]. Interviewee #112, representing an MBE-certified Hispanic

American-owned professional cleaning services firm, shared that she thinks it is very helpful when bids contain price or evaluation preferences for small businesses.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said, “This would be very smart, especially in a slow economy. The State needs to help small businesses buy market share.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said of price or evaluation preferences for small businesses that he would “love to see it here.” He said he has been told that it is illegal in Indiana. He said, “... the way people get you to leave things alone [is] by telling you it’s illegal when you know it’s legal.”

Other interviewees did not think that price or evaluation preferences would be beneficial to small businesses. [Interviewees No. 101, 108, 111, 115, 116, 200, 202, 204, 206, 207, 209, 212, 218, 219, 220, 221, 225, 230, 311, TA #1, TA #2, TA #3, TA #5, TA #8]. Interviewee #111, a Hispanic owner of an engineering services firm, expressed that evaluation preferences should not be afforded to small businesses.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that he is not in favor of “the point system” regarding evaluation preferences for small businesses. He stated, “It’s still a person making a decision about what they know about your company.”

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, mentioned that she does not support price or evaluation preferences for small businesses, commenting, “I’m also a taxpayer, and I don’t think you should have to pay more just because it’s a small business.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that providing price or evaluation preferences for small businesses “seems kind of unfair.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that price or evaluation preferences for small businesses would not be a good idea. He added that firms should be awarded work based on their expertise. He said, “Small businesses should compete on the same footing as anybody else.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that while price or evaluation preferences would be a good idea, that it probably would not help small business. He said he believes that in some instances, contracts are merely awarded to people with political connections.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that she is not aware of any price or evaluation preferences for small businesses and that it would not be a good idea. She stated, “I’m so much about quality. I just think you give it to the people that are going to provide the service. If that’s big, if that’s small ... who’s got the best service.”

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that he is not aware of any price or evaluation preferences for small businesses and that they would not be helpful. He stated that small companies already have their advantages over larger companies and do not need such preferences.

Interviewee #311, a Caucasian male owner of a computer firm, reported that he is against price or evaluation preferences, saying, “I am opposed — it has got to be the best offer.”

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that she believes that contracts should be awarded to the most capable businesses, regardless of whether or not they are small.

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said “I don’t think this [price or evaluation preferences for small businesses] would fly — not in this environment. Given where we are, I don’t think this would be a good idea because some of the woman-owned DBEs throughout the country are making fortunes and there are some non-DBE firms barely surviving.”

S. Small Business Set-Asides.

Some interviewees reported that they were generally aware of small business set-asides.

[Interviewees #: 110, 123, 125, 126, 206, 211, 219, 226, 300, TA #1, TA #2]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, said that she did not feel that small business set-asides had helped enough to give companies of her size any advantages in getting State work.

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, said he was aware the federal government used small business set-asides but did not know if the State did. He thought this could be helpful for him, and for other small businesses.

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, said she was aware the federal government used small business set-asides but did not know if the State did.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that providing small business set-asides already happens through the 8-A Program.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, reported that she had some experience with small business set-asides and that she was aware that it has been done, especially with the federal government. She said, “I’m familiar with the federal government using this tool. But, I’m not as familiar with whether the universities do this type of initiative. I do believe the State utilizes set-asides for small businesses and/or MBE/WBES.”

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that she has heard about small business set-asides and does not believe that they are a good idea. She said, “Let’s keep it competitive.” She said that she

prefers setting MBE/WBE goals, as opposed to having set-asides. She added that she believes the goals for MBE/WBE participation should be close to 30 percent or 40 percent, as opposed to what they currently are.

Other interviewees reported that they were not aware of any small business set-asides.

[Interviewees #: 107, 112, 115, 117, 118, 119, 120, 121, 124, 128, 201, 204, 205, 207, 208, 209, 210, 212, 213, 214, 215, 216, 217, 218, 220, 221, 222, 223, 224, 225, 227, 228, 229, 230, 231, 306, 313, TA #3]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, stated that she would like to learn more about small business set-asides, as they would clearly help with her business. She indicated that she did not know much about this topic.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “I’m not aware if these exist, but I’m not interested. I’d rather succeed because of my talents and quality work, not because I was given an advantage as a minority business.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has never seen small business set-asides on a State level.

Some interviewees thought that small business set-asides could be beneficial to small businesses. [Interviewees #: 100, 102, 104, 105, 109, 113, 117, 118, 122, 123, 124, 126, 128, 202, 203, 204, 205, 207, 210, 211, 213, 214, 215, 216, 217, 218, 222, 225, 226, 227, 228, 229, 231, 300, 301, 304, 305, 310, 312, 314, 315, TA #1, TA #4, TA #5]. Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said “The number of set-asides needs to go up. That is a sure way to create more jobs for our State.”

Interviewee #118, a Caucasian male president of a plumbing and heating company, stated that small business set-asides “ might be helpful if the State let us know how to get certified so we would qualify.”

Interviewee #122, an Asian Pacific American female President and CEO of a WBE-certified consulting firm, said “I’d love small business set-asides.” However, she expressed concern that the IDOA may not implement small business set-asides successfully.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that she believes that small business set-asides are helpful if limited to certified small businesses.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated, “When you ask for a set-aside, they think you are asking for a handout ... we’re not asking for a handout ... professionally, we are much more competent than many other people.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he believes that providing small business set-asides is a good idea for small jobs.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that small business set-asides “would probably help as far as developing small business in Indiana.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said that he thinks small business set-asides are helpful. He said “I think it’s beneficial for the small businesses, MBE/WBEs, veteran-owned firms. I think it’s important to take some of these smaller projects and make sure it’s distributed more broadly.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that “it is helpful to have small business set-asides, especially when targeted for minority businesses.” He reported that the federal government does a lot of this but his firm has not gone after it.

Other interviewees did not think that implementing small business set-asides would be beneficial to small businesses. [Interviewees #: 101, 108, 110, 111, 115, 116, 200, 201, 209, 212, 219, 220, 221, 223, 224, 230, 308, 311, 313, TA #3]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, said that she did not feel that small business set-asides had helped enough to give companies of her size any advantages in obtaining State work.

Interviewee #111, a Hispanic owner of an engineering services firm, said that he feels goals are good, but he thinks that small business set-asides might be too much. He commented that a firm should get work because it is capable of doing the work well. He said that if a prime can do all the work itself, he does not believe it should be required to farm out work just because of set-asides.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “I’m not aware if these exist, but I’m not interested. I’d rather succeed because of my talents and quality work, not because I was given an advantage as a minority business.”

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, asked why the government needs to help people get into businesses. He said that he believes that that takes away the spirit of free enterprise. He said that he does not think that it is necessary or helpful, but on the other hand, he does understand that small businesses create jobs, and he does think that that is a good thing.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, said that he believes that small business set-asides are “almost discriminatory against the others.... You almost start crossing the line, in my eyes.... Your price and your work should stand on its own without any other factors.”

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she is not aware of any small business set-asides. She said that if they did exist, that they would be discriminatory.

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said, “I don’t think there should be set-asides. I think it should all be based on if

you're the company that has the resources and the people, and if you put in the good bid, you should get the job."

Interviewee #311, a Caucasian male owner of a computer firm, reported that he is against small business set-asides, saying, "I think it is wrong, even if I thought I would benefit from it."

Interviewee TA #3, an Asian American female executive director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that she is not aware of small business set-asides and that it would not be a good idea to have them. She said that "everyone should have a fair chance. Frankly speaking, the minorities shouldn't have a chip on their shoulder either."

T. Mandatory Subcontracting Minimums.

Some interviewees reported that they were aware of mandatory subcontracting minimums.

[Interviewees #: 123, 124, 126, 201, 209, 210, 212, 213, 215, 216, 220, 226, 227, 300, 308, TA #2, TA #5]. Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said, "I'm aware of how mandatory subcontracting minimums work because I've been brought in as a WBE on some projects. I think it helps the MBE/WBEs because it keeps one large firm from getting all of the projects. It gives everyone a chance to get some of the work." She stated all State agencies and public universities use this. She said, "I think this helps the MBE/WBEs and the small business in general to know the State money/public funds are being spread around to all firms."

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, said, "I've heard about that [mandatory subcontracting minimums] in the private sector — Honda here in Indiana, I think, did that, but I haven't heard of any public agency requiring that."

Other interviewees reported that they were not aware of mandatory subcontracting minimums.

[Interviewees #: 112, 115, 118, 119, 120, 121, 125, 128, 205, 206, 207, 208, 211, 214, 217, 218, 219, 221, 222, 223, 224, 225, 228, 229, 230, 231, 306, 313, TA #1, TA #3, TA #4].

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that she has not come across mandatory subcontracting minimums (only goals or preferences), but she would love to see minimums put into place.

Some interviewees thought that mandatory subcontracting minimums could be beneficial to small businesses. [Interviewees #: 100, 101, 102, 103, 104, 105, 106, 108, 109, 112, 116, 118, 122, 123, 124, 126, 128, 203, 204, 205, 206, 207, 210, 211, 213, 215, 216, 217, 226, 231, 300, 301, 304, 305, 310, 315, TA #2, TA #3, TA #5]. Interviewee #103, a male Caucasian owner of an excavating firm, indicated that because of the current bad economy presently, with the poor economy, he might consider taking advantage of mandatory subcontracting goals "if they give me work."

Interviewee #109, a Hispanic male president of an industrial cleaning firm, reported that mandatory subcontracting minimums could be beneficial to small businesses "if all subcontractors had to be prequalified."

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, said that mandatory subcontracting minimums are okay as long as they are run fairly, “on the up and up.”

Interviewee #122, an Asian Pacific American female President and CEO of a WBE-certified consulting firm, responded that mandatory subcontracting minimums would be good, “but then again, that never happened for me.”

Interviewee #124, an African American male president of an MBE-certified promotional products company, responded he was under the impression that mandatory subcontracting minimums were only available to construction firms, but “yes, this could be helpful to my company, and for other small businesses.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he believes that there should be mandatory subcontracting minimums. He said that he believes that the general contractors “probably should be required to show more information than a fax sheet saying that I sent this out and didn’t get anything back. They should have them get a signed [document] saying we’re not participating and why. I’m sure some of those companies that sent me those faxes probably got a job. If they were required to have a signature saying why I didn’t get his participation, that would be a different story. I think they would work a little harder. It’s just easy to say ‘no reply.’ It’s the easy way out.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he believes there should be mandatory subcontracting minimums. He said that there is a specification built into State projects that says, “Any prime must self-perform at least two-thirds of the value of the work.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, remarked that mandatory subcontracting minimums are necessary in the public arena, especially because primes typically “only contract with MBE/WBE/DBEs when they have to satisfy a goal. Some of the same firms usually don’t use us on private work. This is one of the reasons we concentrated in the black church niche for so long because we didn’t have to be a sub to meet goals; we were the prime.”

Interviewee #310, a Caucasian male owner of a moving company, said of mandatory subcontract minimums, “That would be nice, but I don’t know if our contracts are big enough. I just can’t imagine that happening in the moving industry.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said she saw the need for mandatory subcontracting minimums, but that should be re-evaluated on a scheduled basis. She said the word mandatory is a real turnoff. However, she thought some of her members would like it to be a requirement.

Other interviewees reported that mandatory subcontracting minimums would not be beneficial to small businesses. [Interviewees #: 110, 111, 113, 115, 117, 125, 202, 209, 212, 214, 218, 219, 220, 221, 223, 224, 225, 227, 229, 230, 311, 312, 313, TA #8]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, stated that she did not feel that subcontracting minimums did much to assist with her ability to get State work.

Interviewee #111, a Hispanic owner of an engineering services firm, said that he did not feel that subcontracting minimums should be required. He said that he feels that if a smaller firm brings knowledge to a project that a prime does not have, then subcontracting makes perfect sense. He indicated that subcontracting should not be required otherwise.

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said “I’m not aware of such minimums, but I don’t think they would help me.”

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said that mandatory subcontracting minimums are not right. He stated that there should be open and fair bidding.

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, responded she did not consider mandatory subcontracting minimums helpful, and would not be helpful for other small businesses unless there was a lot more instruction about them. “It would certainly increase paperwork though,” she said.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that mandatory subcontracting minimums may be difficult because the expertise needed is not always available through small businesses.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that he is aware of mandatory subcontracting minimums; in fact, he characterizes MBE/WBE/DBE goals as being mandatory subcontracting minimums. He said that having such minimums is a bad idea. He said, “They (State agencies) pay premium on some jobs by having that (MBE/WBE/DBE) requirement.”

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that she did not think mandatory subcontracting minimums were a good idea. She added that the most competitive firms should win the bids.

Interviewee #227, a Caucasian male owner of a truck haulage company, said that the State probably has mandatory subcontracting minimums, but that it is not a good idea to have them. He said that the State should use its own people to do work. He said one of the big problems with the State is that they sub out their work to people “who [do not have] got the equipment [to do the job].”

U. Small Business Subcontracting Goals.

Some interviewees reported that they were aware of small business subcontracting goals. [Interviewees #: 112, 116, 117, 118, 119, 123, 124, 125, 126, 210, 212, 219, 220, 224, 229, 300, TA #2, TA #5]. Interviewee #116, representing a Caucasian male majority-owned masonry services firm, expressed that small business subcontracting goals are already operative because that is what the minority and women requirements stipulate.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that she has direct experience as a WBE where small business contracting goals were established. She said, “I believe most of the public agencies use this tool.”

Other interviewees reported that they were not aware of any small business subcontracting goals. [Interviewees #: 110, 115, 120, 121, 128, 201, 205, 206, 207, 208, 209, 211, 213, 214, 215, 216, 217, 218, 221, 222, 223, 225, 226, 227, 228, 230, 231, 306, 313, TA #1, TA #3, TA #4]. Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, indicated that that the State agencies try to assist small businesses, but it does not go deep enough. She stated that she was unaware of small business subcontracting goals with regard to professional services.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that he is not aware of any small business subcontracting goals. He said that what the State should put in the contracts is “Small business/disadvantaged business” with only one percentage goal. He added that the prime contractor should then have the choice of either using a small or disadvantaged business to meet the State diversity goals.

Some interviewees thought that small business subcontracting goals could be beneficial to small businesses. [Interviewees #: 100, 101, 102, 104, 105, 106, 108, 109, 111, 112, 113, 118, 122, 123, 124, 126, 128, 201, 202, 203, 204, 205, 206, 207, 208, 210, 213, 214, 215, 216, 217, 218, 220, 222, 223, 225, 226, 227, 228, 230, 231, 300, 301, 304, 305, 310, 312, 314, 315, TA #3, TA #5]. Interviewee #109, a Hispanic male president of an industrial cleaning firm, stated that small business subcontracting goals “can’t hurt.”

Interviewee #111, a Hispanic owner of an engineering services firm, indicated that small business subcontracting goals are effective and are needed to try to prevent discrimination.

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, expressed that small business subcontracting goals are very helpful but have not helped them get business thus far. She said, “We thought it [having goals] would, but it didn’t.”

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, said “This would be smart.”

Interviewee #122, an Asian Pacific American female President and CEO of a WBE-certified consulting firm, expressed that she would be interested in small business subcontracting goals “as long as it was more than just empty talk, and there has been plenty of that from the State.”

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that she believes that small business subcontracting goals are good because they force the primes to look for small firms with which to partner.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that having small business subcontracting goals “sounds good, I mean I guess they have to determine what they consider a small business. It seems like as soon as you make a new rule or restriction, somebody’s already working on how to get around it.”

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that small business subcontracting goals are a good idea. She said that there a current trend away from using small businesses, which eliminates competition and the regional availability of small businesses, and is ultimately harmful for small businesses.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said of small business contracting goals, “I believe this is helpful. It forces all of the firms to share the piece of the pie a little more evenly.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said that small business subcontracting goals are necessary in the public arena, especially because primes typically “only contract with MBE/WBE/DBEs when they have to satisfy a goal. Some of the same firms usually don’t use us on private work.

Interviewee #310, a Caucasian male owner of a moving company, said that small business subcontracting goals would be helpful if they were large enough. He added, “It probably should be 25 percent — something like that. Everyone knows that small business is what makes this county, but nobody pays attention to it.”

Other interviewees said that small business subcontracting goals would not be beneficial to small businesses. [Interviewees #: 115, 117, 202, 209, 219, 221, 311, 313]. Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said, “I’m not aware of such goals, but I don’t want them.”

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that she believes that small business subcontracting goals exist, but that they are not a good idea. She stated that the size of the contract and the nature of the business should come into play in determining how much of a contract should be subbed out.

V. Formal Complaint / Grievance Procedures at the Public Agency.

Some interviewees reported that they were aware of formal complaint and grievance procedures. [Interviewees #: 116, 117, 123, 125, 200, 210, 212, 219, 224, 225, 227, 228, 229, 231, 300, 311, TA #1, TA #2]. Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, stated that he believes that formal complaint and grievance procedures are already in place.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, said, “I’ve never used any formal complain/grievance procedures. I know they are available, and I’ve found sites telling you the instructions, but I don’t have any personal experience using this remedy.”

Other interviewees reported that they were not aware of current complaint and grievance procedures at State agencies. [Interviewees #: 112, 115, 118, 119, 120, 121, 126, 128, 201, 204, 205, 206, 207, 208, 209, 211, 213, 214, 215, 216, 217, 218, 220, 221, 222, 223, 226, 230, 306, 312, 313, TA #3]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that there needs to be more education on complaint and grievance procedures, since this is an area that they know little about.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has never seen any formal

complaint and grievance procedures at State agencies. He added, “I only know of one company that’s ever filed a complaint ... but I don’t know whatever became of it.”

Some interviewees thought that the availability of formal complaint and grievance procedures at the agencies and public colleges could be beneficial to small businesses. [Interviewees #: 100, 102, 104, 105, 106, 108, 109, 111, 115, 123, 125, 128, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 300, 301, 304, 305, 310, 314, 315, TA #1, TA #2, TA #3, TA #4, TA #5, TA #8]. Interviewee #111, a Hispanic owner of an engineering services firm, indicated that several years ago the State held sessions for general contractors and subcontractors to come and share issues and concerns. He said that he was not aware if these sessions still exist, but he indicated that the sessions appeared to be helpful.

Interviewee #201, the president of an MBE/DBE-certified transportation engineering firm, said that she is not aware of any formal complaint and grievance procedures at State agencies, but said that they would be a good idea because “it seems like if they are public agencies, they always have to listen to the public.”

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, stated that formal complaint and grievance procedures are important, and she assumes they exist, but that she has never had to use them.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, stated that having formal complaint and grievance procedures at State agencies would be helpful, but remarked, “I don’t know what good it does.”

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm stated having these procedures in place is beneficial for small businesses, including MBE/WBEs, because it gives you a place to go to file your complaint.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, indicated that having complaint and grievance procedures in place is useful as a means of recourse when assistance is needed.

Interviewee #310, a Caucasian male owner of a moving company, said of formal complaint and grievance procedures, “I’ve had no need for them, but I guess it would be good if I ever needed them.”

Other interviewees indicated that the implementation of formal complaint or grievance procedures would not be beneficial to small businesses. [Interviewees #: 101, 113, 117, 122, 124, 311, 313]. Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, on complaint and grievance procedures, said “Nobody listens and it’s not worth the hassle so why waste my time.”

Interviewee #122, an Asian Pacific American female President and CEO of a WBE-certified consulting firm, on complaint and grievance procedures, said “That would be a waste of time.”

Interviewee #124, an African American male president of an MBE-certified promotional products company, said “That [formal complaint and grievance procedures do] not help. It’s a joke. The minute you complain you’re blackballed and you get nothing from that point on.”

Interviewee #311, a Caucasian male owner of a computer firm, said of formal complaint and grievance procedures, “We went through that one time [with FSSA], and it didn’t do any good. They just said, ‘That’s the way it is.’”

IX. Race, Ethnicity, or Gender-Based Measures.

Some interviewees identified race-, ethnicity-, and gender-based measures that they believe to be helpful to small business development. [Interviewees #: 101, 205, 218, 304, TA #6].

Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, stated, “Other than INDOT’s policy of placing DBE goals, I am not aware of any other programs or measures for small business development.” Interviewee #101 indicated such goals are quite helpful because “once certified as a DBE, then primes come looking for you rather than the other way around.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said he has had great opportunities with DBE certification.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that there should “absolutely” be an MBE/WBE certification program in the State of Indiana. He said, “We all have our prejudices ... because of our prejudices, we have to have things out there that break those down ... and help us to get those people ... the ability to find work and pursue their goals.”

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “There is the MEMBEC program through IDOA with funding from the U.S. Department of Commerce to help minority businesses. It is a very effective program. You can work with consultants on a reduced fee based upon your company revenues. They work to provide that extra help you may need. When I work as a consultant on projects, I have been able to recommend the MEMBEC program for those minority businesses that need to grow. I have taken advantage of the program myself.”

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female President/CEO, said that organizations like hers are helpful. She stated that supplier diversity managers are helpful sometimes and sometimes not, especially when they are put there by corporations to be gatekeepers and not allow MBEs to get past the front door. She commented that she finds the State’s Resource Fair and her firm’s Business Opportunity Fair to be helpful.

Some interviewees reported a positive experience in connection with the State MBE/WBE and Federal DBE Programs. [Interviewees #: 201, 205, 206, 210, 212, 220, 228, 231, 304, 308, PF #11, PF #16, PF #26, TA #5]. Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that she had a positive experience with the State WBE program. She said that the certification process “went pretty smoothly.” She added, however, that requiring less paperwork would be an improvement.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he has had “great experiences with the people [at the State MBE/WBE Program] — everything from the INDOT group to the IDOA group...” He commented that when the State took over the construction of the Lucas Oil Stadium from the City of Indianapolis, in order for MBE/WBE firms to qualify toward the stated diversity goals, they had to be certified with the State of Indiana, not just with the City of Indianapolis.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said, “In general, my experience [with the State MBE program] has been good. The jobs that I have done have gone well. They’ve been good jobs. I have not had a problem getting paid. The bidding process has been straight-forward. The award was straight-forward. I don’t think that working with the State is any harder or easier than working with the private sector.”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that the Federal DBE certification “was pretty easy on my part.”

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that her experience with the Federal DBE certification process was that it was easier than the State of Indiana’s WBE certification process.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that she had a good experience with the State MBE/WBE Program. She said that the State MBE/WBE Program would be better if certified business owners had the ability to contact someone in the program to provide them with assistance on how to contract with the State. She added that it was probably her own fault, not the State’s fault, that she has never asked for help in learning how to contract with the State.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said, “I don’t really remember the [WBE certification] process being difficult. I do get e-mailed newsletters but I don’t get much urging to participate in a group.... I kind of wish there was maybe more benefit, like a rehashing of the benefits or roundtables or something. Maybe they do it and I’m just not participating.”

Interviewee #231, a Caucasian male owner of a plumbing company, said that it is a good idea for the State to certify women and minority business enterprises.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “I appreciate the staff at INDOT, who will help you on short notice with a question or problem. They are very accessible.” Interviewee #304 said, “It’s the same for IDOA. For small business, the problem is access to information and so much paperwork. When you call and know you can get answers and direction, that is very helpful.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, commented, “I don’t have any issues there.” She said, “The current program does a good job of listing bids. I get daily listing of jobs to bid on but most don’t pertain to our

business.” She added, “As far as getting information out there, they put out good information on jobs.”

Interviewee PF #11, the president of an Indianapolis-based MBE/WBE/DBE-certified construction and transportation management business, said “I want to commend the State for everything that they’ve done since we’ve been certified over the 15 years, just the kinds of things that they’ve done to increase opportunities for minority and women businesses. And I have been a benefactor of that, and so I just want to commend to say thank you for what you’ve done.”

Interviewee PF #16, the owner/vice president of an MBE-certified Louisville management consulting services firm, said “Indiana is ahead of the game, because, first of all, they have good managers and good systems in place already.”

Interviewee PF #26, the African American owner of a supply company, commended State staff on the effectiveness of their support for MBE/WBEs. “As a new MBE, I appreciate the outstanding support that you guys have provided me.” “They are actually out there trying to help folks.”

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said that generally the State MBE/WBE Program is doing a pretty good job. She said agencies must be committed to the program, and if primes are not in compliance there needs to be accountability or consequences, otherwise the program cannot be effective. She recalled that one agency put such compliance in the buyer performance review, and she considered this a daring but potentially effective tool.

Some interviewees reported challenges or concerns regarding the State MBE/WBE and Federal DBE Programs. [Interviewees #: 100, 102, 104, 107, 109, 111, 113, 116, 117, 123, 125, 202, 203, 204, 205, 209, 210, 211, 212, 222, 302, 305, 306, 311, PF #4, TA #6, TA #8, TA #10].

Interviewee #100, an Asian Pacific American male president of a water testing firm, said “I would like to see the State simplify the application process. I would also like the State to tell me why we cannot be certified WBE since the majority ownership of our firm is women, and I don’t think the absence of one tax return from [one of] the women who is just a 15 percent owner should hold us back from WBE certification.”

Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, expressed his wish that City officials would enforce the provisions in place for fairer bidding practices. He said that he has been told by City officials that there is “no legal obligation” for them or private contractors to follow the local regulations about minority hiring. Interviewee #102 noted that between January and June of 2009, he submitted between 12 and 14 bids for public sector projects and received just one small bid, despite being on the City’s list of certified MBEs. He indicated that he would like to see better enforcement of the local regulations, stating, “That would go a long way in strengthening my business success.”

Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stated, “I’ve never been successful in obtaining a State contract, even when early on I was certified as an MBE. There is just much red tape, and the process needs to be streamlined.” Interviewee #104 stated that he had no experience with INDOT’s DBE program. He said, “Both local and State officials must place people who care in positions of responsibility for MBE and WBE programs. It is only people

who care who will take the time to explain the red tape, and to show patience with potential applicants trying to get certified.”

Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, commented that he knows of no notification or distribution for IDOA for certified or registered firms for professional services. Interviewee #107 shared that he is aware of the Federal DBE Program. He reported that he does not know if purely State-funded INDOT projects have a DBE goal. He commented that he was confused about whether the State has these goals or if they are only present on federally-funded or supplemented projects.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, reported that the program needed “more project evaluation.” He stated, “We need a more thorough investigation or oversight of certified companies to ensure they are what they are supposed to be, not just certified on paper.” He stated that such measures are also needed regarding the Federal DBE Programs. He also noted, “Small businesses still need to sell themselves. We still must prove we’re qualified to do the work and then perform.”

Interviewee #111, a Hispanic owner of an engineering services firm, indicated that he felt that the process for certification took too long, and then his firm was denied. He said, “I could see their point of view, but they were wrong. Now it’s taken a few years for me to prove that they were wrong.” He shared that he would appreciate it if he did not have start the whole certification process over, especially since his two partners are no longer in the business, and he is the last one standing. Interviewee #111 indicated that he had no experience with the Federal DBE Program.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, stated that his experience with certified MBE/WBE businesses has been limited, but what he has had has been negative.

Interviewee #116, representing a Caucasian male majority-owned masonry services firm, shared that he thought that if there were more work, MBE/WBE programs would work, but now it tends to tilt the playing field in favor of those minorities.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said that the MBE/WBE programs are discriminatory against Caucasian-owned businesses and favor African Americans. He added that “Not even the Hispanics get a chance.”

Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, recommended the State make certification for DBE programs available just as the federal government was doing.

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, said “It seemed like during the early years the State tried to improve its communications with us, but it’s not been as good the last few years. Communication from the State has been sporadic at best. The State’s e-newsletters with helpful hints were useful. From my perspective, getting solid information from the State is the key to success. That’s what the State needs to concentrate on.” She said she thinks the tag “disadvantaged” carries a negative connotation and would not consider trying to get certified as a DBE.

Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, said that she is concerned about neglecting to submit her annual WBE Statement of No Change. She added that she believes the IDOA website should include something that informs WBEs of when the Change Statements are due. She added that she has had to change her address several times, and she wishes it could be done online, which it cannot. Interviewee #202 mentioned that it is difficult to work with INDOT if one has never worked with them before. She added that the “Buy Indiana” program confuses her, commenting, “I think I understand what it is, but I don’t know ... I don’t understand the benefits.”

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, said in regard to his experience with the State MBE/WBE program, “I have not been able to figure out what they actually do ... what do they do to help MBEs? ... I have not been able to figure it out.” He said there should be some program established so that when the State needs assistance in his area of expertise, he is automatically notified of the available work. He added that the intentional barriers that the State imposes, like requiring experience in managing millions of dollars in contracts, makes it impossible for MBEs to qualify for projects. He further commented, “Don’t [allow the State to] have the attitude that MBEs will be subcontractors all their lives ... that attitude is there ... on State-funded projects, the State has not done anything to prevent that situation.” He then told a story about his brother who works part-time for an MBE construction firm in which the owner of the firm decided to stop looking for MBE work. He said that the firm wasted time looking for MBE work so they gave up and they are now on their own contracting for a very large retailer.

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that he doesn’t get any information from the State MBE/WBE Program. He added, “I don’t know where to go to find jobs that they have coming about.” He said that he has no experience with the Federal DBE Program implemented by INDOT.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said he has had great opportunities with the DBE certification. However, he said that there is trouble in having the certification count across State lines. He described an experience he had in bidding on a project in Kentucky, which was funded under the federal stimulus money. He said that the State of Kentucky would not accept his DBE certification, and he was required to submit his DBE paperwork to the State of Kentucky.

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, said that there are not many MBE/WBE/DBE firms with whom they can partner. He said that while there are MBE/WBE/DBE trucking firms they can use, there really are not many actual contractors for services available. He said that in Indianapolis there are many MBE/WBE/DBE trucking companies, and they can easily meet their MBE/WBE/DBE goals in the Indianapolis area. However, he said, it is difficult to meet their MBE/WBE/DBE goals in Peru, IN, because there just are not many MBE/WBE/DBE-certified firms which they can use there. He said “I really struggle with being forced to have [MBE/WBE/DBEs]. I’m not against anybody that can do the work, but for [State agencies] to tell me I have to go out and give something to somebody ... it rubs me the wrong way. I don’t know that we would do any less of what we do if it wasn’t required.... Sometimes we have to add money to the bid [to meet the MBE/WBE/DBE goals].”

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that the State MBE/WBE goals should be a little higher. She said that currently, the percentage goals are around five to 10 percent. She said, "If you could get somewhere up around the 25 percent range, I think that would be definitely helpful to us." She recommended for the DBE goals to be raised to 25 percent.

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, said that the State should eliminate all MBE/WBE goals in State contracts because they are not doing the State any good. He added that the State should give preferences for small businesses in their contracts. He commented, "We're the disadvantaged business, they're (MBE/WBE/DBEs) not, we are." He recommends for the DBE certification to be eliminated. He said, "Any time you don't have a chance to bid work, it's not fair ... that's against the Constitution, in my mind." He said, "Being a white Caucasian ... I guess I'm the wrong color or the wrong whatever ... it's just not a fair process." He said that because State work comprises 70 percent of his work, he has lost thousands of dollars of work to MBE/WBE/DBEs.

Interviewee #212, a Caucasian female owner of a WBE/DBE-certified fabricated structural metal firm, said that she understands "why they (State MBE/WBE staff) have to do what they have to do and how they have to do it. I feel some of their guidelines are misinterpreted." She added that she feels the IDOA WBE program discriminates against Caucasian females. She said that there is a clause in the MBE/WBE program guidelines referring to family-owned business that needs to be reviewed. She said that both Indiana and Florida officials referred to this clause in making their initial determination to deny her WBE certification. She reiterated that she feels the State of Indiana discriminated against her because she is Caucasian. She said, "I thought it was about being a woman [and not also having to be of a certain race or ethnicity]."

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that there needs to be better follow-through by the State after contracts are awarded to insure that MBE/WBEs that were included in bids are actually being used. She said that she cannot get any jobs through her Federal DBE because she needs to be prequalified and that to get prequalified, she has to perform large jobs, but she cannot perform big jobs without being prequalified.

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, said that his company is not certified with any of the certifying agencies and that the owners never thought about securing certification and do not believe in goals based on race or gender. Further, Interviewee #302 stated that it is the owner's belief that the "white male is now the minority." Interviewee #302 reported that his company does not automatically inform clients the company is a majority woman-owned business. He said that they will advise the client that they are a primarily female-owned business if they are asked or if they feel that it will help in securing the job. Interviewee #302 also indicated that being a majority woman-owned business has never hurt the company.

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, said, "My experience with the State program is limited, and it just looks daunting. I think I don't have time to do all the paperwork." He has no experience with the federal program.

Interviewee #306, a Caucasian male owner of a carpet and upholstery cleaning firm, reports that he has had no experience with either the State MBE/WBE program or with the Federal DBE program implemented by INDOT. He stated “I feel discriminated against as a white male” and that contracting agencies and others that these agencies should “start using white males like me again.” He said “I think that there are “better opportunities for minority and women business enterprises than for white males.”

Interviewee #311, a Caucasian male owner of a computer firm, suggested that “It would be ok to give points on contracts for WBE/MBE bidders, but they should win contracts based on their ability.” Interviewee #311 commented, “I know that the State puts out lists, and the City government sets goals of hiring or using a certain percentage of minorities or Women Business Enterprises. I think it is wrong. They should take the best bid. Otherwise the quality goes down.”

Interviewee PF #4, the minority owner of a certified WBE financial services firm in northwest Indiana, said that it was interesting filling out the RFP as a WBE because there are no points given for prime contractors with WBE status. He said that the only way a firm gets any extra points based on MBE or WBE status is if the firm brought in a subcontractor who was an MBE or a WBE. He said that he finds this unusual because it removes any benefit from their WBE status as a prime contractor and makes them more valuable as a subcontractor.

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female President/CEO, stated goals sometimes are an issue because “they lock MBEs into just that percentage of work. If you find a good MBE why not go beyond the goal. I’m not saying goals are bad because sometimes they drive people to use an MBE but sometimes they drive people to a finite box. They can almost do the reverse of what they are put in place for.”

Interviewee TA #8, an African American male President and female COO of an organization that provides assistance in the highway construction industry, said, “I think each DBE has different experiences, and it depends on the regions they are in. I would recommend something be done to balance out the DBEs who are used across the State so the same DBEs don’t always get the work.”

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, said, “Counting all of the certified firms as one each as opposed to looking at the individual capacity of each firm is a big flaw in the diversity study. All of construction is lumped together but you won’t have many plumbers find work in the highway industry. There should be some consideration given to the type of work those firms do and their capabilities.” He went on to say “One thing that troubles us with INDOT in assessing whether something is race neutral or race conscious — they set a goal and until you reach the goal using DBE firms, they don’t view any of those decisions as race neutral. But, yet, many of them are. We don’t believe INDOT understands what race neutral is. We have a computer firm we’ve used for 15 years, and it has nothing to do with the fact that the firm is a minority. They do a good job!”

Other interviewees indicated a lack of knowledge or experience regarding the State MBE/WBE or Federal DBE Programs. [Interviewees #: 105, 106, 108, 111, 112, 115, 116, 117, 118, 119, 120, 121, 122, 126, 201, 208, 213, 215, 216, 217, 218, 219, 220, 221, 223, 224, 225, 226, 227, 228, 229, 230, 231, 303, 305, 309, 312, 314, TA #4, TA #5]. Interviewee #105, a male Caucasian owner of a small concrete contracting firm, said, “I really don’t know much about MBEs or WBEs. I’ve had no experience with them that I know of. There aren’t many women who do this kind of

work. I don't know of any Hispanic firms in this business, although I do hire Mexican laborers when I need the extra help.”

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, indicated that she is aware of the DBE Program but has not received much information on this. She said that she is interested to know what the advantages of this certification are.

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, has no experience with the State MBE/WBE program, but said that becoming certified as a State MBE or Federal DBE “is our growth model at this point ... our first couple of years in existence was all motor sports-driven ... it [certification] wasn't a burning issue.” He added that since they are now beginning to move into more public sector work, that they will consider applying for certification in the future.

Interviewee #216, an African American male owner of a business consulting firm, said that he has no experience with the State MBE/WBE program. He said that he shied away from applying for MBE certification because he heard it was difficult. He said his uninformed opinion is that if it were simpler, it would be better.

Interviewee #217, an African American female owner of a commercial cleaning service, said regarding her experience with the State MBE/WBE Program, “I have just dealt with them briefly, so I really can't say a whole lot.... I haven't had a lot of contact ... I would like to have more (contact) and to tap into the knowledge and direction that they can give me ... I don't know who to contact.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, stated that he had no experience with the State MBE/WBE program or the INDOT DBE program implemented by INDOT, but he said, “I think everything is pretty fair. I don't know of any circumstance where I was looked over because I was a white male. It may be different if I did more government stuff. They may look at things entirely differently. But, no, I don't have any problems.”

X. Recommendations.

Race-, ethnic-, and gender-neutral recommendations

Some interviewees recommended that the State make public work more accessible to small businesses. [Interviewees #: 105, 124, 125, 211, 224, PF #28]. Interviewee #105, a male Caucasian owner of a small concrete contracting firm, said, “I wish the State could open it up so the small businesses like me could bid on jobs. I'd really like to get curbing and sidewalk jobs. It's hard to break into the right circles to be connected to the right people. I wish they could give us small guys the same leads the big guys get. I wish we could get the same ‘inside information’ the big guys get. Superintendents know what a job will pay and they pass that information on to their favorite contractors, who end up getting the job. Then, I suspect some money goes back to the superintendent from the contractors who got the job. Money just goes in the same big circle among the big guys, and we never see any of it.”

Interviewee #124, an African American male president of an MBE-certified promotional products company, suggested the State revise its criteria on what qualifies as “small business.” He recommended that “any business that earns a profit of more than \$500,000 no longer qualifies as a

small business. That way those of us who fall below that threshold would have a sporting chance of getting more contracts specifically set aside for small businesses.”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, stated “We’d love to do more State work but we just can’t seem to break through. I realize many State agencies go with the people they’re familiar with and don’t want to give ‘outsiders’ a chance. I know many of them are happy using the same old vendors, but that hardly leaves the rest of us an opportunity to get into the system. I also know that distance can be an obstacle, since we are in the northern part of the State and the [Indiana] area businesses are preferred. But, the State needs to be more progressive. With a ‘Good Old boy’ network in place, small businesses don’t have much chance of breaking through.”

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, suggested that the State should give small businesses, not women-or minority-owned firms, an opportunity to do work on INDOT contracts. He said that his company is one of the stronger trucking firms in Indiana, but “INDOT is beating us down.”

Interviewee #224, a Caucasian male owner of a square dance calling and specialty archery supply firm, said in conclusion, “I think they (State entities) need to keep an open mind that they potentially can get more for their money going that way (hiring small businesses). Typically, your first thought is ‘it’s a bigger company, they’re going to be able to get us better cost savings.’ Sometimes you have to consider the cost savings versus the quality.... A lot of times your small businesses are even more concerned about it (quality).”

PF #28, a representative of an MBE/WBE construction firm, recommended that the colleges and universities examine procedures for procuring construction other than the traditional low bid process. He suggested that using construction management contracts for construction services could be a way to consider the qualifications of firms and increase the opportunities for minority-owned prime contractors. He reported that this would help small businesses including MBE/WBEs. He indicated that it might require changes in state statute governing contracting requirements.

Some interviewees recommended that the State implement State-wide training programs to educate small businesses and their employees. [Interviewees #: 120, 124, 205, 215, 216, 217, 220, 225, 231, 304, PF #11]. Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, stated that State colleges need more support to develop internships with small businesses. He said that the universities need a better understanding of what the workforce requires from future graduates. He noted that presently, students are not trained on how to demonstrate their work skills. He said that they may have the skills, but they don’t know how to demonstrate or sell their abilities.

Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, indicated that guidance on how to handle illegal immigrants would be helpful to his businesses.

Interviewee #124, an African American male president of an MBE-certified promotional products company, stated “I’d like to see the State set up training according to interests. Right now, most of the training seems to focus on the construction business. Why not offer training for those in promotional products, those in the print business, those in staffing, etc.”

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that he would like to see a State-wide training program established through the State of Indiana universities to help small businesses run their businesses effectively. He said, “How in the world can you run a company when you don’t know how to structure your payroll? How in the world can you complain about opportunities when you can’t even do the necessary paperwork to be certified?” He said that he likes a program in the State of Ohio in which businesses are required to take basic classes before being certified. He said that if the State is serious about MBE/WBE firms surviving for longer than the first couple of years, then the businesses need to understand the business side of their operations. He concluded by stating that companies think that once they become MBE/WBE-certified, that the money will come pouring in because the companies believe that the primes “have to use you,” which is a commonly held misconception.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, recommended that the State should provide diversity training for companies that wish to conduct business with the State of Indiana. He said that training should focus on the cultural differences among Caucasians, African Americans, Hispanics, and Subcontinents.

Interviewee #216, an African American male owner of a business consulting firm, said that State agencies need to change their organizational culture to impact change and increase their cultural competence.

Interviewee #217, an African American female owner of a commercial cleaning service, said that the Small Business Development Center should make more services available to small businesses and should have educated, informed people who teach and mentor small business owners. Regarding the SBDC, she said, “I don’t think they’re as informed as they should be.” She recommended for the State to offer seminars on how to obtain business and to provide information that may benefit women and minority businesses. She said she attended a seminar sponsored by the Indiana Minority and Women’s Business Enterprises Division last summer that was very beneficial and suggested for the State to sponsor more of those types of events.

Interviewee #220, a Caucasian female owner of a formerly WBE-certified computer software consulting firm, said that helping businesses understand “how to work it (the State procurement process)” would be extremely helpful in increasing the availability and participation of small businesses. She commented that in helping small businesses contract with State of Indiana entities, “The State of Indiana has done a fabulous job ... I think Purdue University is working at it.”

Interviewee #225, a Caucasian male regional business development manager of a Caucasian male-owned commercial cleaning company, said that if technical assistance or mentoring were more readily available to small businesses, including MBE/WBEs, that it would help those small firms thrive. He added that when some small firms get a few contracts, they get bogged down, and “they can’t get a handle on how to go to the next level.”

Interviewee #231, a Caucasian male owner of a plumbing company, said that there are many small business owners who do not have the skills to manage their businesses, and it would be helpful for the State to offer programs to help business owners gain these business management skills.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “Training is essential. We have a lot of applicants come by interested in driving dump trucks, but don’t have experience. We are interested in giving some of these applicants an opportunity, but because of the expense and risk of training, we cannot maximize their opportunity. I don’t know if there is some opportunity for the agencies to provide financial assistance or to pay for the training for a certain amount of time. We’ve brought some people in, paid them the minimum wage rate, and they ride with our drivers. It’s a lot of cost involved.”

Interviewee PF #11, the president of an Indianapolis-based MBE/WBE/DBE-certified construction and transportation management business, said “We participated with my company as a DBE on INDOT’s training. It was called BBI. That is an area of training that is so needed for minority and women businesses.”

Some interviewees suggested the implementation of financing, bonding, insurance, and/or prequalification assistance to small businesses. [Interviewees #: 100, 113, 119, 204, 207, 214, 314]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said “If the State could provide assistance with employment insurance, that would be a big help. If the State increases the unemployment tax rate, that would be a big burden for small businesses.”

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, suggested that the State change bonding requirements for small businesses.

Interviewee #119, a Hispanic male owner of a CD duplication, graphic design, and sign printing company, reiterated that his number one concern was a desire to obtain a small business loan so he could purchase the equipment he needs to grow his company at the level he thinks he can really succeed. He stated “I have tried twice to secure a loan for a U-V coder and to move into a larger space, but no one will give me the money. That was five or six years ago, and I just gave up ever being able to find the money after that.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that it would be helpful if the State were to provide more information regarding bonding. He said, “There’s also a bunch of confusion about grants. I hear people talking about government grants all the time. There’s just no information on that. I hear the thing about a grant is [that] you need to know how to word it. So, there probably should be a program on writing grants or how to submit a grant.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that it would be helpful if INDOT offered training for DBE firms to become pre-qualified, “to allow them to qualify for more work.”

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, she said that the State should provide access to information about available financing. She also stated that Indiana should be more aggressive in helping small businesses obtain private financing through the Small Company Offering Registration (SCOR) program.

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said programs to assist with bonding, obtaining business insurance, and using emerging technologies would be helpful.

Some interviewees recommended that the State improve several aspects of the bidding process. [Interviewees #: 107, 108, 109, 112, 113, 117, 124, 125, 127, 201, 204, 207, 208, 214, 216, 217, 218, 226, 227, 300, 309, 311, 312, 314, TA #1, TA #2, TA #5, WT #4]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, stated that more information flow and distribution of opportunities to the firms that are certified and qualified would be very helpful. He reported that he would also like to see the State develop some type of pre-project interest list or some type of electronic notice of interest process when a project comes out. He stated that this would save a great deal of time for the companies bidding on the work.

Interviewee #108, an African American male and previous owner of a commercial cleaning company, stated that the State should provide MBEs and WBEs with information about business opportunities in his region.

Interviewee #109, a Hispanic male president of an industrial cleaning firm, said that “The State needs to notify us of bidding opportunities....” He said dissemination of information is still the most helpful thing that the State can do. He said, “The State needs to notify us ... about special programs for small businesses.”

Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that she wishes that the State would be tougher on some of the companies that are out there. “I would like to see the State back some of the firms out there that have never had an opportunity, that truly do have the talent and really have something to bring to the table.” She suggested that the State provide more feedback after a loss to explain what the reasoning is behind the loss. More transparency would be very beneficial. He added that the State could offer more help with the bidding process.

Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, commented on the bidding process, “Why not have an entity like Purdue set up a procedure whereby companies like ours could make an appointment with a secretary of the department wanting our product [or] services, meet with us, get our prices, listen to how we can save them money and then make the selection process transparent and fair, citing reasons why one bid was chosen over another. Right now, it’s all just a bid show and they are not serious about really giving us small businesses opportunities. They have their favorite vendors and won’t even speak with the rest of us.” He also said, “Save the tax payers’ money, take the lowest bid, open up the bidding process, get rid of the crooks and politicians, take the best bid, let the best man win, try new businesses, hold those businesses accountable, don’t put us through the process if we don’t have a chance of winning a bid.”

Interviewee #124, an African American male president of an MBE-certified promotional products company, commented “I’d like to see the State put on a class on how to use the system to learn who bids on proposals, and who gets the contracts. I’d like the State to clearly specify, when ordering specific products, whether they are ordering by the national part number, or by the agency’s or department’s part number. If by the latter, then for all practical purposes we are locked out of the bidding and pricing system because we have no objective criteria. We cannot really know how an

agency numbers its product parts and the agency can change them at will. There's just no way we can compete in such an arrangement."

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, said she would suggest the State continue keeping small businesses in its radar and make it easier to make bids and receive contracts.

Interviewee #127, a Caucasian male and president of a marketing and communications agency, said "I would like to see the State exhibit more creative thinking in finding ways for smaller businesses get up and running in their respective market areas. I don't think the bid process is working. The cost of entry into the bidding process is just too costly — both in time, energy, and fiscally. Rather than bid, smaller companies ought to have a forum at which they could make their presentations, sell their expertise, and then be evaluated by public personnel who know what they are doing and can speak for the public agency. Otherwise, it's just not worth it for us to get involved in the public process."

Interviewee #201, a Caucasian female owner of a WBE-certified electrical contracting firm, said that there should be additional ways to advertise bid opportunities than just through the State's website. She recommended that there be a "more open [bid] process." She concluded by stating, "There has to be more work."

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that it would be helpful if the State were to provide more information regarding the process for bidding on contracts.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said, "Tools or seminars to get familiar with the process of how to do business with a particular State agency" would be helpful. He added that he is very familiar with how to do business with INDOT, but he is not familiar with how to work with other State agencies or universities. He added that it would be helpful to have one point of contact to inform businesses of how to work with all State agencies and universities.

Interviewee #208, the chief financial officer of a Hispanic American male-owned auto racing engineering firm, acknowledged that he has limited experience in working with public agencies, but added that it would be extremely helpful for his firm if there were websites he could visit or persons he could contact to see what contracts were available. He said that the ability to search for bid opportunities would be useful. He said that it seems to him that the firm with the lowest bid price wins the job, although "that may not always be the best route to go." He said that he believes that the profit margin is so small on public sector jobs, and that it takes so many resources to obtain those jobs, that it isn't worth going after them.

Interviewee #214, a Caucasian female owner of a WBE-certified custom computer programming firm, said that access to information about available contracts would be helpful.

Interviewee #216, an African American male owner of a business consulting firm, said that there needs to be a better State government information network so that more small businesses know about contract opportunities. He said, "Small businesses routinely don't get that type of information or are only privy to it if somebody happens to know you and they'll give it to you."

Interviewee #217, an African American female owner of a commercial cleaning service, said that she does not know what bid opportunities are available through State agencies and higher education institutions.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, said that Indiana State agencies and public colleges should “cut the red tape ... make it easier for you to be able to communicate with the agencies and get through the paperwork.”

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that there should be more information available regarding the type of State of Indiana bid opportunities that exist and how to bid on them. He added that the State should remove its restrictions that specify that only MBEs or WBEs can qualify to bid on certain jobs.

Interviewee #227, a Caucasian male owner of a truck haulage company, said, “It takes [a lot of] money to bid on State jobs” because of the bid bond of 1 percent that he said is required.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, recommended that Indiana State agencies and public colleges improve their websites to simplify the process of finding out what these agencies and public colleges are purchasing or bidding. She said that sometimes it is a lot easier to find the products that State agencies and public colleges are purchasing than to learn about the services they need.

Interviewee #309, a Caucasian male owner of a printing and distribution firm, said “Locally I wish they (Indiana State agencies and public colleges) would talk to you more, allow you into the competition, [and] have an open bidding process.”

Interviewee #311, a Caucasian male owner of a computer firm, suggested, “[IDOA] has their own list of RFP’s for contractors, and IDOT has theirs, and other government agencies have their own lists — it would probably be easier for small businesses if they unified their listings.” He also suggested, “If the State wants to work with small business in a way not open to larger businesses, they should have a separate web-site; they could list all the agencies that help small businesses by county, by City — all in one place that is easy to use. There are too many places listed apart from each other without effective cross-references. We need consistency — more content and less flash.” He suggested, “It would be nice if we could view other proposals, especially the ones that were selected, so we can craft more effective proposals. We could learn from our competition. They could put them on the web as a PDF file.” He said, “What I want from a public bidding process is transparency in the bid process and a level playing field for everyone.”

Interviewee #312, a Caucasian female and corporate officer of a construction firm, said “[The State] could possibly be more proactive in their outreach to small businesses, better promote the opportunities that are out there and simplify their bid processes — it’s too complicated, especially for small businesses.”

Interviewee #314, the female marketing coordinator of the MBE-certified Asian Pacific-owned telecommunications firm, said “Core competencies of all businesses working in Indiana should be identified by the State so they can be better matched for the bid process.”

Interviewee TA #1, a Caucasian male president/CEO of a regional chamber of commerce, said that there should be local organizations in place to help MBE/WBEs better understand what government bid opportunities are available to help them grow their companies. He suggested that the State should provide regional “centralized warehousing of bid opportunities and human beings to hand-hold them thought the bid process ... encourage them and support them.” He concluded, “They (MBE/WBEs) don’t know who to turn to and how to get it done.”

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that the State should make sure that bid opportunities are posted further in advance, so that people can start to build relationships with prospective business partners, enabling them to submit stronger bids.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women’s organization, said she thought getting procurement opportunities out and explaining how the processes work is a good idea, and making those processes as streamlined as possible.

Interviewee WT #4, the senior accounts supervisor for an MBE-certified advertising firm, wrote “I would be interested in hearing suggestions for growing the depth of available contracts for professional services. As someone from an advertising firm, there are limited opportunities to bid on contracts as a primary vendor.... I would be open to sharing ideas on how to improve the system, improve the bid opportunity and improve outreach to MBE/WBEs.”

Some interviewees recommended that the State streamline the process to better connect prime and subcontractors. [Interviewees #: 107, 108, 124, 200, 229, 301, TA #2]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, also stated that he feels that the State could potentially look at a better way to filter and organize the MBE/WBEs in the State. He said that he feels that the platform for linking up subcontractors and primes could be a little more streamlined. He noted that having a more defined description of services for each company and allowing that to be accessed by the primes would be positive.

Interviewee #108, an African American male and previous owner of a commercial cleaning company, said, “I thought the State could have been more helpful in facilitating networking between small businesses and potential contractors and buyers, in our region.”

Interviewee #124, an African American male president of an MBE-certified promotional products company, responded: “I’d like to be able to go to the State and say ‘Here’s what I do. Who are the primes? Can I contact those primes and say the State has referred me to you for business with the State?’”

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, stated that he believes that any program which enables small businesses to make contact with larger firms is a good idea because “it’s who you know.”

Interviewee #229, a Caucasian male owner of a safety training firm, said, in conclusion, said that the State should have a database of potential contractors and a listing of the types of services they perform. Then, he said, the State could “put the word out” to these contractors whenever a bid opportunity arises.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said, “On the architectural side it would be helpful to have events where a lot of the prime architects and engineers get to meet each other. Right now I have to call on them one at a time.”

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, recommended that the State should provide good databases of the types of businesses that are out there with which businesses can partner.

Some interviewees commented on difficulties with the Indiana agencies and other public personnel. [Interviewees #: 104, 122, 209, 228, 308]. Interviewee #104, a male Hispanic American owner of a small civil engineering firm, stressed the importance of having people in public positions who are well informed, who care for the public, who understand and can explain the certification procedures. He said, “It is so frustrating to call an [Indiana] governmental office, explain to someone what you need, and then hear ‘I can’t answer that, you’ll have to call back tomorrow and speak with someone who might be able to help you.’”

Interviewee #122, an Asian Pacific American female president and CEO of a WBE-certified consulting firm, said “I will give the State some credit, they say they are willing to help and they do help a lot of people. The State used to make good things happen, however, recently they have been of little help to me. The State needs to hire people who are knowledgeable, ethical, can produce results, and who have an understanding of what business people need ... I feel the State has really let me down and I’m sorry about that, so I’ve just put the State aside and do what I need to do to thrive in my business.”

Interviewee #209, the male president of a Caucasian male-founded and employee stockholder-owned highway and street paving contracting firm, concluded by saying that they’re struggling with INDOT’s workforce cut-backs.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, recommended that INDOT should improve the way it communicates and it should simplify its processes. She said, “They (INDOT) need to be clear and they’re not clear.”

Interviewee #308, a Native American female and sole owner of an MBE/WBE-certified engineering and consulting firm, stated, “I’d like to see them improve their technical assistance and hire people who can work with you ... people who are available, no screening calls and stuff like that. That’s my biggest gripe.”

Some interviewees suggested that the State provide more tax assistance. [Interviewees #: 118, 120, 121, 125, 204, 302]. Interviewee #118, a Caucasian male president of a plumbing and heating company, added “I’d like to see the State give the same tax breaks to small businesses as the State gives to larger businesses. For example, the larger companies, those purchasing and using large volumes of materials and supplies get a sales tax break or reduction based on that volume, whereas those of us with small businesses do not get such a sales tax reduction because our volume does not reach the criteria. That does not seem fair. In addition, the inventory tax is not fair. I’ve already paid a sales tax on the materials and supplies I buy, and if I do not use them up in one year I end up paying another tax (inventory) on them. Why? That’s not fair.”

Interviewee #121, a Caucasian male and president, owner, and CEO of a precision metal casting company, responded “I already mentioned I had to lay off over 80 workers last year. It was a terrible year and I hated to do it. I was afraid the State was going to insist on increased unemployment taxes and that would have put us on the brink. I was so glad when the State cancelled that tax increase. I hope they don’t propose the same thing for this year. What I need is business. That’s what will keep us going. My margins are very thin and we’re making a little profit, but it is awfully thin. I don’t know how much longer we can survive on such a thin margin. Any increase in health care could knock us right out of the ring too. That issue is very scary. I pay \$12,000 a year on each of my 200 employees for medical insurance, and that’s a real hunk of change. If that goes up even more, it’s going to make it really tough.”

Interviewee #125, a Caucasian woman and director of operations of a WBE-certified advertising agency, went on to say “As a small business, financially we get no enterprise zone tax breaks because we do not have inventory or equipment. That does not help the small businesses like ours very much at all. On the other hand, we employ seven people in our State and that should count for something. I’d like to see small companies like ours get a break here and there.”

Interviewee #204, an African American male owner of an MBE-certified structured data cabling installation firm, said that it would be helpful if the State provided information about taxes. He stated, “Most people just starting a business don’t really understand taxes. There’s a lot to go with that ... it could really hurt a small business in the first couple years.”

Interviewee #302, the male president of a primarily female-owned excavating and environmental clean-up company, recommended that the State provide tax breaks for small businesses on income and equipment purchases.

Other interviewees recommended that projects utilize local contractors or encourage local skilled workers to stay in-State. [Interviewees #: 100, 109, 110, 115, 207, 222, 310, PF #7, TA #5]. Interviewee #100, an Asian Pacific American male president of a water testing firm, said that he wished there could be more communication and collaboration between industry and college administrations. He said, “We, the industry and businesses, do not know what the various technical schools and colleges are offering future employees, and the academic world does not know what we need for our industries. I wish the State had a program to encourage college graduates to stay in the State when they leave school. We need some incentive for them, even before college, like tuition assistance if the student promises to remain in the State for five years after graduation.”

Interviewee #109, a Hispanic male president of an industrial cleaning firm, stated, “Using in-State contractors is a must. Even the WBEs and MBEs must be in the State.”

Interviewee #110, a Hispanic American female owner of an MBE/WBE-certified computer consulting firm, indicated that the State needs to do business with local businesses whenever possible. She said, “You save mileage, you save on expenses, and you support the local economy.”

Interviewee #115, a Subcontinent Asian male owner and president of a technology consulting, deployment and management firm, said that the State needs to make business opportunities more accessible and make as much effort at saving small businesses as it does to keep the big corporations in State.

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said it might be helpful if the State were to award additional points for being an Indiana firm.

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, said that she still doesn't understand the "Buy Indiana" program. She added that she believes bidding by primes from other States should not be allowed on some projects.

Interviewee #310, a Caucasian male owner of a moving company, suggests, "The State should approach us small businesses. They can look in the phone book just as good as anybody. If they have a job in Mishawaka, for instance, why should they send somebody from Indianapolis. They used to have a guy in Indianapolis — that was his business — working for the State of Indiana. They need to minimize the influence of insiders and start soliciting work from locals." He concluded, "They need to make opportunities to local businesses to respond or participate."

Interviewee PF #7, the vice president of a WBE/DBE-certified Indianapolis trucking company, said "We see large companies coming from another State and take what — you know, maybe they'll underbid something by \$2 million — say there's an \$18 million project. They'll underbid it by \$2 million and they'll take \$16 million back to their State. And I would like to see the State exercise a little bit more, maybe weigh it just weigh it a little bit more. Is it worth saving \$2 million on a State project to send millions back to another State, when we could utilize that here in Indiana?"

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, said she did not know how to compare Indiana with other States, but thought it was important for the State to do business with Indiana businesses, much like what "Buy Indiana" is trying to do.

Some interviewees recommend that the State implement more programs to enable more networking by small businesses and alert small businesses to job opportunities. [Interviewees #: 120, 210, 218, 219, 228, 230, TA #10]. Interviewee #120, a Caucasian male and president of a small commercial custodial cleaning firm, stated "It would be nice if we had a list of local opportunities for cleaning jobs. That's one way the State might help out small businesses like ours, just to know of opportunities for jobs."

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said that there also needs to be more opportunities for roundtables with the State.

Interviewee #218, a Caucasian male owner of a veteran-certified computer-related business consulting firm, suggested that the State can better advertise "those things that are available to small business." He suggested that the State could offer seminars in communities throughout the State and could advertise them via print and television.

Interviewee #219, a Caucasian female who owns 50 percent of a carpet cleaning and janitorial services firm, said that it would be helpful if large corporations and public agencies, including Purdue University, provided a list of services that they contract out, so that small businesses would know if their services are needed. She said that based on her discussions with her friends, it is difficult to discover what services Purdue University contracts out and what services it performs in-house. She said that her friends have told her, "It's hard to get in there (Purdue University)" to provide services.

She said that her firm will probably be switching ownership to be at least 51 percent women-owned, and she wonders how Purdue University will then know that her business is a WBE and available for contracts.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that to enhance the availability and participation of small businesses, including MBE/WBEs, “communication is the biggest thing. Small businesses have less resources, which means they have less contracts, which means they travel less, which means they don’t know the top dogs ... they should know ... they start out with a handicap ... that can be solved through excellent communication from the State down ... whether it’s electronic or print or hosting roundtables in counties.”

Interviewee #230, an Asian-American male owner of a dry cleaning company, said that the State should have a website of “jobs wanted” so that companies like his could know what dry cleaning needs the State has.

Interviewee TA #10, an association of general contractors represented by its Caucasian male president, said that any type of social networking is a positive. He said “In today’s technological environment people don’t get to be face to face before technology brought about today. Social networking is valuable. We had an event the other day, and it was interesting to observe people who have worked with each other but have never met.

Some interviewees recommended that the State payment procedures be evaluated and restructured. [Interviewees #: 200, 304]. Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, recommended that the way INDOT pays all subcontractors should be reviewed, enabling subcontractors to be paid a better percentage of the entire project as their work is completed. Interviewee #200 stated that the way primes pay subcontractors on INDOT jobs needs to change. He said that when his firm wins a job as a subcontractor, he has to front the job for so long, requiring his firm to draw upon its line of credit, thus reducing his profit on the job because of having to pay interest.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “A recommendation for INDOT is to accelerate the payment process. Typically MBE/WBE companies can’t survive with a slow payment process.”

Some interviewees recommended that the State assist small businesses to access growth opportunities in general. [Interviewees #: 112, 113, 301, 304, PF #15, TA #3]. Interviewee #112, representing an MBE-certified Hispanic American-owned professional cleaning services firm, shared that they need to put more focus on what business opportunities are out there, and they need to be more aggressive in their business development process. She also reiterated the fact that the State needs to be more involved in making sure the process is fair and encourages small minority and women businesses as much as possible.

Interviewee #113, a Caucasian male president and CEO of a federally-certified disabled veteran small business, recommended that the State invest in small business.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, recommended that the City and State continue their outreach programs but add a focus on opportunities for design firms.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “Present greater opportunities to access growth. For example, we are a full staffed company. With more and better opportunities we could grow our people and grow the economy. We have to keep people working.”

Interviewee PF #15, the vice president of an MBE-certified Louisville-based management consulting firm, said “It’s important that we continue to develop these [MBE/WBE/DBE] firms and give them the opportunity to compete, because they are most likely to hire people like themselves.”

Interviewee TA #3, an Asian American female Executive Director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that the State should invest more resources in advertising the existence of programs to help small businesses, especially minority-owned businesses. She said that the information that the State provides to small businesses should be in multiple languages and published in the small communities’ newspapers in their native language. She said that the State should also have programs available to help business owners improve their English language skills.

Some interviewees recommended that the State break down contracts into smaller pieces.

[Interviewees #: 113, TA #8]. Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said “I think the only one I can think of is breaking projects up into smaller sizes so more businesses can become primes. This is what the smaller contractors are always asking for.”

Some interviewees recommended that the State require companies to provide certain benefits or services to employees to level the playing field among competitors. [Interviewees #: 210, 309].

Interviewee #210, a Caucasian female owner of a WBE/DBE-certified dump truck haulage firm, said there needs to be “better oversight of the prevailing wages ... that’s my number one complaint and concern ... it’s not fair to the companies that follow the rules and pay their employees what they’re supposed to be paid to be constantly getting beat out on work by companies that don’t follow the rules.”

Interviewee #309, a Caucasian male owner of a printing and distribution firm, when asked what else should be done to enhance the availability and participation of small businesses, including MBE/WBEs suggested “I would like to have everyone being on the same playing level — for instance I cover all of my employees health insurance, my competitors don’t — others should too. There is probably a time coming where I will have to make some changes.”

Race-, ethnic-, and gender-based recommendations

Some interviewees recommended that the State simplify certification programs. [Interviewees

#: 202, 203, 300]. Interviewee #202, a Caucasian female owner and president of a WBE/DBE-certified environmental consulting firm, suggested that the State of Indiana and City of Indianapolis WBE certification program be combined so that there is one program. She added that other cities throughout the State should also be a part of this one WBE Statewide certification process.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, suggested that there should be one simplified process enabling MBE/WBEs to apply for certification with all cities and towns in the State, as opposed to having a separate process for each City or town. He added that there should be one website in the State used by all State agencies, State universities, cities, and towns that shows all certified MBE/WBEs in the entire State. He stated that a directory of potential subcontractors categorized by expertise would be valuable. Interviewee #203 stated that there should be one MBE/WBE certification program for all State and local government agencies and public schools throughout the State of Indiana. He reiterated that the Federal DBE Program should be simplified. He added that the Federal DBE Program should not require unnecessary paperwork, such as car titles, car insurance, bank Statements, loan agreements, and proof of whether or not his car has a magnetic sticker on it stating the name of his firm. He said that the DBE documentation should be based on the firm's qualifications instead.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, stated that the certification process should be streamlined. She said that there is a lot of paperwork required for the certification process, and while she understands why the State needs what it requests, the steps could be simpler.

Some interviewees recommended that the State improve communication and publicity concerning DBEs, the certification process, and the opportunities involved. [Interviewees #: 207, 215, 301, 303, 304, 305, PF #24, TA #6]. Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm said that it would be helpful to have a guidance document regarding the rules and regulations related to the interpretation of the Federal DBE program guidelines. He also recommended that the State should do more to publicize what it takes to do business with the State, thus increasing the number of qualified vendors from which State agencies could select to perform projects.

Interviewee #215, an African American male owner of a firm specializing in the design, print, and distribution of promotional materials, recommended that whenever a business is registered in the State of Indiana, that the owner should be required to take an online class regarding the availability of MBE/WBEs in the State and diversity training.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, stated that agencies should be more proactive informing MBE/DBEs procurement forecasts so that firms can be better prepared when the RFP/RFQ is distributed. He said, "They need to continue the outreach, be a little more proactive in informing the MBE/WBEs that projects are coming out before the fact ... whatever they can to be ahead of the curve ... as soon as someone starts talking about a project in their near term plan, in their Board meetings, etc. All we need to know is the basics so we can start talking to primes." He also noted that it would be helpful if there were workshops to assist with certification.

Interviewee #303, the Caucasian female owner of an electrical contracting business, stated that this was the first time that anyone has ever contacted her or talk to her about opportunities or workshops and advised her of what was available. Interviewee #303 said that the process and the workshops are not publicized enough. She said, "Of course, I knew the City put out a lot of bids that say they want x percent of minority/women participation on the job site, but they never said here is where you go

or that you had to be certified.” She also said that the architectural construction firm with which she has been teaming to go after larger bids had asked her if she was certified, and she did not know what he was talking about, and he did not explain.

Interviewee #304, an operations manager of an MBE/WBE/DBE-certified African American female-owned trucking and hauling and construction management company, said, “One remedy that would be helpful is always having an outreach monitoring liaison empowered to assist in areas where issues arise. I know they are short staffed right now, but making sure they have enough people to run these programs would be helpful.”

Interviewee #305, an audiovisual firm that is co-owned by a Native American male, recommended that the State provide, “Outreach ... to business schools to create small business and MBE/WBE curriculum.”

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female President/CEO, commented that there should be more education about supplier diversity and more training about the business case for it. She said that where there is ignorance regarding what the programs are designed to do, then there is going to be misconception.

PF #24, the Subcontinent Asian American owner of an IT consulting, recommended that IDOA put a listing of all its contracts and prime contractors on its website. He also recommended that IDOA design a database system where prime contractors and subcontractors could match up.

Some interviewees recommended that the State expand the use of goals for small businesses.

[Interviewees #: 101, 102, 113, 200, 228, 301, PF #1, PF #3, PF #25, TA #3, TA #7, WT #2, WT #5]. Interviewee #101, the male vice president of a Subcontinent Asian American female-owned engineering consulting firm, opined that “goal projects are good because they allow the small businesses to get their foot in the door and ought to be continued.”

Interviewee #102, a Subcontinent Asian American male owner of an MBE-certified light commercial electrical contracting firm, said that as a minority business all he wants is to be included in bidding opportunities and be given a fair shake in securing work.

Interviewee #200, the vice president of an Asian Pacific American male-owned MBE/DBE-certified engineering and land surveying firm, recommended that, instead of the State setting a DBE percentage goal on the entire job, there be DBE percentage goals on the subcategories of each job. He added that there could possibly be ten subcategories of specific expertise. He mentioned that he believes that having separate DBE goals for each section of the work would eliminate the ‘Good Old Boy Network’. He said that his firm’s DBE status does not help him most of the time because the prime meets its DBE requirement by using a trucking firm or a firm that installs guard rails.

Interviewee #228, a Caucasian female owner of WBE-certified cultural resource management investigation services firm, said that she likes that there are (MBE/WBE) targets or goals and requirements, especially for government money. She commented that she does not know what those targets and goals should be, but they need to be there.

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, said, “Since agencies are not necessarily using us [MBEs/DBEs] as a prime, they should at least require the primes to use us as subs.”

Interviewee PF #1, a northwest Indiana WBE/DBE-certified trucking company, said “Recently we’ve had jobs that haven’t had any goals on them, and when I contact the prime contractors about the jobs, they tell me, ‘No, we don’t need any help on this job, that — we’ll use our own trucks.’ You know, they kind of don’t want to meet any needs. So, I think we need to have higher goals on the jobs, and the ones that don’t have any goals at all, we need to put something on there.”

Interviewee PF #3, the president/owner of an MBE/DBE-certified construction company in northwest Indiana, said “Minority contractors are not getting their share, so I’m requesting that these goals remain separate for us to get our share ... The playing field is not being leveled, so I would like for the goals to be separate from the women. This program is set up for the black contractor, but everybody surpasses us, the women, the Hispanic, the gays and lesbians, and other groups, from getting what’s come to them, but we’re not.”

PF #25, an African American female owner of a construction and consulting firm, gave an example of program with a State agency that successes due to the commitment of the owner, the extensive outreach to MBE/WBEs, one-on-one assistance for MBE/WBEs, and monitoring and accountability. She reported that MBE/WBEs develop long-term relationships with primes. She cautioned that program monitoring should ensure that MBE/WBE subcontractors do not farm out their work to the prime.

Interviewee TA #3, an Asian American female Executive Director of a nonprofit organization that promotes cultural awareness and civic participation among Asians, said that the State should have MBE/WBE certification, but “that everyone across the board should be given a fair chance.” She stated that there should not be mandatory set-asides for MBE/WBEs, but that “a certain percentage (of State contracts) should be given to minority” groups as goals.

Interviewee TA #7, the African American male representative of a civil rights agency, said that “I think you would need to give all businesses opportunity to participate in government and State contracts. And, we need to be conscious of race, gender and origin/culture with sensitivity. Ideally each contract from the State needs to be inclusive in writing RFPs, RFIs, and RFQs with MBE/WBE participation goals. I’ll be honest; this is the one program I’ve had very little involvement with. What few comments I’ve had has been positive. At the end of the day, we need to make sure that all of our State agencies have MBE/WBE goals and they are put in all bid opportunities (i.e., RFQs, RFPs, and RFIs) and enforced. These goals and programs should be made mandatory.” He said “Maybe we can have an Executive Order stating that all State government contracts will have some form of MBE/WBE participation based on goals set by the MBE/WBE Commission, which will include: Professional Services, Supplies and Construction. They will adhere to the same mechanisms that will fall under the Executive Order.”

Interviewee WT #2, the managing director of an environmental management firm, wrote “25 percent of all work, service, supplies and contracts should be reserved and set for MBEs. ‘Goal’ does not mean anything.”

Interviewee WT #5, the president of a WBE-certified commercial interior design firm, wrote “I’d like to make a suggestion as it relates to the design industry. The diversity groups have been very helpful with getting me in contact with decision makers; I have yet to receive a contract. There are no set percentage requirements for MBE/WBE and VBE participation for the selection of a project design team (i.e., [a]rchitects, [i]nterior [d]esigners, [e]ngineers, etc.). And if they do exist, I don’t believe they are enforced. I hope this disparity study will take some time to evaluate this side of a project and assess how a project team is established, who makes the final decision and set participation requirements, then hold the decision makers accountable.”

Some interviewees recommended that the State use set-asides and increase the awareness of such set-asides. [Interviewees #: 123, 207, 213, 229, 311]. Interviewee #123, an African American male CEO and president of an MBE-certified staffing firm, stated “I’d like to see the State agencies and colleges share some small business set-asides with us.”

Interviewee #207, a Hispanic male president and minority owner of an MBE/DBE-certified transportation engineering firm, said that small business set-asides would be a benefit for small businesses in Indiana. He said that he believes that ever since INDOT reorganized, INDOT’s contract scoring system favors large businesses.

Interviewee #213, a Caucasian female owner of a dump truck haulage firm, said that when a large firm is awarded a large contract, that there should be a mandate for 25 percent of the contract award to go to a small business. She added that she does not want anybody to give her something for nothing, but that she needs a chance to be able to get more work.

Interviewee #229, a Caucasian male owner of a safety training firm, said that there should be set-asides for small businesses.

Interviewee #311, a Caucasian male owner of a computer firm, suggested that “if there is to be a ‘set-aside’ specifically for small business opportunities, that should be a separate list.”

Some interviewees recommended the State eliminate “goals,” set-asides and/or mandatory sourcing in State contracts. [Interviewees #: 111, 211, 221, PF #14]. Interviewee #111, a Hispanic owner of an engineering services firm, said that the State should set some goals for what kinds of businesses it wants to certify, and then target those businesses for assistance. He said that he believes that majority and minority firms should all prove that they can do the work, and the State should not penalize firms that can do the whole project by implementing set-asides. He reported an experience where he was working on a project in which his firm was hired to do some surveying work, but the numbers provided for the project were not adding up. He stated that he found that the original survey that was done by a minority firm was wrong. He indicated that the original surveyor was a big surveyor, but they were getting too much work and quality was slipping. He said, “He would just walk up and say, ‘there’s a 10 percent set aside, 5 percent set aside.... I want it.’ And he had resources ... but he built it around the minority thing. And I don’t think that’s a good thing to do.”

Interviewee #211, a Caucasian male owner of a dump truck haulage firm, recommended that the State should remove all MBE/WBE participation goals from all State contracts. He said if “a prime contractor wants to use a minority, that’s fine, but give everybody an equal opportunity ... it’s not equal right now ... it’s not equal at all.”

Interviewee #221, a Caucasian male owner of an excavation firm, said that regarding MBE/WBE goals in State contracting opportunities, “I don’t think they’re necessary in this day and age.”

Interviewee PF #14, the senior accounts supervisor for an MBE-certified advertising firm, said “As the prime contractor, when you’re saying what your bid will be on the project, but then you also have to say that you’ll meet the nine percent for the WBEs and the nine percent for the MBEs, and if you’ve already trimmed your profit margin as much as you can, and then having to then source out to your partners ... it’s less enticing to want to bid on that project, because you know you won’t make any profit on it.”

Some interviewees recommended that the State cease MBE/WBE certification or commented that it is ineffective. [Interviewees #: 117, 226, 313]. Interviewee #117, a Caucasian male vice president and co-owner of an MBE/WBE-certified firm that provides printing, mailing, and promotion services, said “I don’t think MBE/WBE programs really help at all.”

Interviewee #226, a Hispanic male owner of a commercial cleaning company, said that he does not think that the State should certify MBE/WBEs. He stated that he does not like to be categorized as a “minority.” He said that he would prefer for the State to offer a Small Business Certification, as opposed to an MBE or WBE certification.

Interviewee #313, the Caucasian owner and treasurer of a trucking and construction hauling company said, “I don’t have experience with the [State MBE/WBE or Federal DBE] programs. I think they should do away with it. I’m not sure that’s useful. Like I said early, I think these programs help some businesses to hurt others. My company right now is on the side that is getting hurt. They should at least relax the restrictions in some areas that are economically depressed like it is here.”

Some interviewees recommended that the State provide greater oversight of the MBE/WBE and DBE Programs. [Interviewees #: 107, 203, 205, 206, 222, 300, 301, 307, PF #5, PF #9, PF #10, PF #14, TA #2, TA #5, TA #6, TA #8, WT #2, WT #4, WT #8]. Interviewee #107, representing an MBE-certified Asian Pacific American-owned engineering firm, reported that he believes that politics affect the certification process. He said, “I know of certain situations where, from a political standpoint, there was clearly an impact on access and selection of work.” He reported feeling that politics definitely play in.

Interviewee #203, a Subcontinent Asian American male owner of an MBE/DBE-certified environmental engineering consulting firm, recommended that IDOA oversee MBE/WBE goals in all State procurement programs, especially those administered by IDEM and those funded through the Indiana State Revolving Loan Fund Program.

Interviewee #205, an African American male minority owner and vice president of an MBE/WBE/DBE-certified general electrical contracting firm, said that in addition to having MBE/WBEs send their quotes to primes, he would like the State to require MBE/WBEs to send their quotes to a third party monitor to ensure that primes could not say that the MBE/WBEs that they approached for a quote were unresponsive. He stated, “This would be a perfect opportunity to spank a hand and reject a quote from that prime for lying. We would fix that problem really quick.” He said, “I think the thing that really angers me the most about anything that’s going on is the State universities’ exemption policy.” He explained that IUPUI spent two billion dollars this year on

construction and that less than 1 percent of it was spent on MBE/WBE contractors. He suggested that the State universities have MBE/WBE participation goals.

Interviewee #206, an African American male owner of an MBE-certified general electrical contracting firm, said that there should be something done to insure that MBE goals are achieved, short of making them mandatory. He added, “The goals that are in good faith are not being strived for. Something could be done there.”

Interviewee #222, a Caucasian female owner of WBE/DBE-certified commercial and industrial painting company, stated that the construction field is “a whole other animal,” that should have its own MBE/WBE compliance division.

Interviewee #300, the Caucasian female owner of a WBE-certified computer-aided design drafting and architectural design firm, recommended that the agencies ensure that when companies hire MBE/WBEs as subcontractors they are required to give them the work they were committed to perform. She reported that sometimes a prime might refuse to give them the work and at the end of the project the prime owes you a piece of the pie but the prime didn’t live up to his end of the bargain to utilize the MBE/WBE. She also said, “If the prime is getting the job because they hired the MBE/WBEs, the agencies should hold them accountable to meet the goal and enforce the requirements.”

Interviewee #301, the vice president and director of operations for an MBE/DBE-certified African American male-owned architectural and engineering firm, suggested that agencies enforce their MBE/WBE programs, especially those with goals, and audit what the primes are doing.

Interviewee #307, a Subcontinent Asian American president and owner of an MBE-certified engineering and consulting firm, said that companies like Toyota and Vectren educate their people about contracting with minorities, so there is no disconnect between the goals and actual implementation. However, he said that others have no idea what they are talking about in terms of knowing or achieving goals for minority contracting. He said that these companies never put a goal for minority contracting in their contracts. He reported that he gets invitations to bid from them because they know who he is. However, he said that a recent proposal has no mention of minority goals, and it should mention such goals because this company and this project gets money from the State of Indiana. He recommended that there needs to be better communication between those who manage the contract and those who execute the contract. Interviewee #307 stated that majority companies should be forced to make a true effort. He said, “They should make an effort to contact minorities and contract with them for 10 percent or whatever the goal is.... Getting our foot in the door is the toughest job we have.”

Interviewee PF #5, the owner of an MBE-certified psychiatric services firm, said “One of the things I worry about is the State allows the prime to bid for a contract, and then the sub wins with that contract, but later, the prime receives no reinforcement for having to use the sub for that contract. I think there has to be some more monitoring of contracts so that the primes feel that they really have to own up to what they bid for.”

Interviewee PF #9, a minority businessperson, commented “When you bid on contracts, it just seems that with public funds, public universities, they should be held to compliance more so, I think, than what they are. If they’re just going to be required to report the numbers, what kind of incentive is

there to actually seek out and have a transparency to MBE's? Because a lot of times, you know, we're not at the table, and this is after the fact."

Interviewee PF #10, the owner of a small WBE-certified tire services company, said, "If we know that these bigger companies under contract that they're supposed to utilize people like me, the smaller minority business. Is that happening? Is anybody looking at that to see if that's happening? That way I may not get the contract, but I can still have an opportunity to grow my business by getting a little business here and there, you know, and I don't think that is happening. I know it's not."

Interviewee PF #14, the senior accounts supervisor for an MBE-certified advertising firm, said "The other point that some other people had mentioned today is the lack of, really, repercussions. I know it is a suggestion by the State that those quotas be met and that it is monitored from a participation standpoint, but I don't feel that even those that do self-report their numbers are accurate to any level."

Interviewee PF#23, the African American owner of a construction firm urged enforcement of existing laws concerning minority business programs. He also indicated that the MBE and WBE goals should continue to be separated. He expressed concerns that white men are taking advantage of MBE/WBE programs by setting up wives or girlfriends in business and getting the firm certified as a WBE. "It's real effective when those goals are separated."

Interviewee TA #2, an African American female senior vice president of public and strategic affairs for a large metropolitan chamber of commerce, said that every legislative session, she hears that the State is not doing enough for MBE/WBEs and the participation goals should be larger. She said that she hears that the "hammer ought to be more consistent ... really hold people to these goals." She said that she hears that the goals are easy to get around and that there is no penalty when a prime gets around the goals.

Interviewee TA #5, the Executive Director of the Indianapolis Chapter of a national business women's organization, stated that WBEs and MBEs need to be accountable for the services they provide. She said "Whenever there are goals and the WBE/MBE does not meet expectations, the program is discredited. It's a big responsibility on our part to hold the WBEs and MBEs accountable." She stated that she thinks primes need to participate in the State processes to a fuller degree. She suggested automating compliance so it could be tracked more accurately and that education over time would help that.

Interviewee TA #6, a supplier diversity organization represented by its Caucasian female president/CEO, stated that there should be consequences for not complying with MBE/WBE goals.

Interviewee TA #8, an African American male president and female COO of an organization that provides assistance in the highway construction industry, said "I think the colleges/universities should be brought in more line at least complying in a fashion that INDOT does."

Interviewee WT #8, the owner of an MBE-certified psychiatric services firm, wrote "I won two separate subcontract bids with a majority firm for [a State hospital] and [other State hospitals] for 2008 contracts. The prime has not contracted with me and feels no obligation to fulfill the MBE portion. So far no one has helped. I feel the State of Indiana is not reinforcing MBE goals."

Other interviewees reported not wanting preferential treatment based upon their race or gender, but rather to be treated equally. [Interviewees Nos. 106, 111, 115, 126, 128, 309].

Interviewee #106, an African American male owner of a recently started firm, said, “I do not want any preferential treatment, but I do want opportunities for work based on my capabilities.”

Interviewee #106 concluded by saying, “I need a sponsor who believes in me and my product and will invest in getting that product from the prototype stage to the production stage. I don’t think race was an issue in my not obtaining the grant I applied for. Race is not an issue for me in running my business. It’s all about what you’re worth and figuring out how to show that worth in the product you can make.”

Interviewee #111, a Hispanic owner of an engineering services firm, shared that he does not like when people ask what his race or ethnicity is. He simply wants to be a good, hard-working businessman, which is why he is reluctant to go through the certification process again.

Interviewee #126, a Filipino Caucasian American male owner of a full-service marketing and advertising firm, said “I don’t want to obtain new business based just on my minority status. But I would like to have an opportunity to make quotes, sell myself and my services, and get a fair hearing. If I and another company are equal in all other factors, then, to break a tie and make one more segment of society more diverse, choose me for my minority status. Unfortunately, that’s not what is currently happening. I don’t think the playing field is level. I don’t think we minorities are getting an equal chance of succeeding.”

Interviewee #128, an African American male president and CEO of a women and minorities recruiting firm, suggested the State seek out minority and women businesses and evaluate what they can do. “I would like to have an opportunity to compete on a level playing field. I wish the State would recognize or partner with the Minority and Women Supplier Council. That might facilitate our applications for State MBE or WBE certification.”

A number of telephone interviewees indicated that it is difficult to obtain work with the State of Indiana for firms that are not certified as MBE/WBEs. One interviewee, representing a white male-owned firm, said, “You have to be a minority- or women-owned business to get any work. We don’t get any State business. We get passed up for State work due to minority requirements ... We have trouble receiving government contracts because of the minority aspects of the contracts. Another interviewee, also representing a white male-owned business commented, “A lot of State jobs require that [a firm] be 51 percent minority-owned, or else you can’t get the job. A lot of the companies want that. We have struggled with getting jobs. That’s an issue.”

Some telephone interviewees reported experiencing no problems working for the State of Indiana and had no recommendations for improvement. For example, a white male-owned firm commented that his firm has done quite well working for the State: “I think Indiana is generally an open state toward generating competition and we have been very successful in this state since opening four years ago.” Another interviewee, representing a white male-owned firm, said, “We have had excellent experiences with the City [of Indianapolis] and the State.” A representative from a minority-owned firm stated, “Because we are Asian American, we compete with the Caucasians and other minorities. We have survived and we can’t complain.”

APPENDIX K.
Combined State and SEI Disparity Tables

Figure K-1.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 85,326 | \$10,063,369 | \$10,063,369 | | | | |
| (2) MBE/WBE | 16,101 | \$1,138,137 | \$1,138,137 | 11.3 | 16.2 | -4.9 | 69.9 |
| (3) WBE | 11,285 | \$685,059 | \$685,059 | 6.8 | 11.0 | -4.1 | 62.1 |
| (4) MBE | 4,816 | \$453,078 | \$453,078 | 4.5 | 5.2 | -0.7 | 86.0 |
| (5) African American-owned | 1,654 | \$169,070 | \$174,598 | 1.7 | 1.8 | -0.1 | 96.7 |
| (6) Total Asian American-owned | 1,607 | \$135,675 | \$140,111 | 1.4 | 2.2 | -0.8 | 64.3 |
| (7) Asian-Pacific American-owned | 835 | \$61,669 | \$63,685 | 0.6 | 0.9 | -0.3 | 67.2 |
| (8) Subcontinent Asian American-owned | 763 | \$73,870 | \$76,285 | 0.8 | 1.2 | -0.5 | 61.9 |
| (9) Hispanic American-owned | 989 | \$78,691 | \$81,264 | 0.8 | 0.6 | 0.2 | 124.7 |
| (10) Native American-owned | 349 | \$55,298 | \$57,106 | 0.6 | 0.6 | 0.0 | 95.3 |
| (11) Unknown MBE | 217 | \$14,343 | | | | | |
| (12) Certified | 6,156 | \$424,726 | \$424,726 | 4.2 | | | |
| (13) Certified woman-owned | 3,902 | \$211,635 | \$211,843 | 2.1 | | | |
| (14) Certified minority-owned | 2,236 | \$212,672 | \$212,882 | 2.1 | | | |
| (15) Certified African American-owned | 1,005 | \$108,927 | \$109,034 | 1.1 | | | |
| (16) Certified Asian-Pacific American-owned | 313 | \$29,963 | \$29,992 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 207 | \$26,420 | \$26,446 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 638 | \$37,754 | \$37,791 | 0.4 | | | |
| (19) Certified Native American-owned | 73 | \$9,610 | \$9,619 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 18 | \$419 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-2.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 24,021 | \$6,283,243 | \$6,283,243 | | | | |
| (2) MBE/WBE | 4,343 | \$639,131 | \$639,131 | 10.2 | 11.8 | -1.6 | 86.4 |
| (3) WBE | 3,294 | \$432,468 | \$432,468 | 6.9 | 8.4 | -1.5 | 81.9 |
| (4) MBE | 1,049 | \$206,662 | \$206,662 | 3.3 | 3.4 | -0.1 | 97.6 |
| (5) African American-owned | 465 | \$82,651 | \$87,610 | 1.4 | 1.5 | -0.1 | 95.5 |
| (6) Total Asian American-owned | 158 | \$31,921 | \$33,837 | 0.5 | 0.9 | -0.4 | 59.8 |
| (7) Asian-Pacific American-owned | 130 | \$21,985 | \$23,305 | 0.4 | 0.2 | 0.1 | 155.0 |
| (8) Subcontinent Asian American-owned | 28 | \$9,936 | \$10,532 | 0.2 | 0.7 | -0.5 | 25.4 |
| (9) Hispanic American-owned | 187 | \$31,699 | \$33,601 | 0.5 | 0.2 | 0.3 | 200+ |
| (10) Native American-owned | 130 | \$48,692 | \$51,614 | 0.8 | 0.7 | 0.1 | 111.1 |
| (11) Unknown MBE | 109 | \$11,699 | | | | | |
| (12) Certified | 1,584 | \$212,774 | \$212,774 | 3.4 | | | |
| (13) Certified woman-owned | 1,107 | \$121,887 | \$121,887 | 1.9 | | | |
| (14) Certified minority-owned | 477 | \$90,887 | \$90,887 | 1.4 | | | |
| (15) Certified African American-owned | 255 | \$46,378 | \$46,378 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 52 | \$17,184 | \$17,184 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 24 | \$9,859 | \$9,859 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 119 | \$9,342 | \$9,342 | 0.1 | | | |
| (19) Certified Native American-owned | 27 | \$8,124 | \$8,124 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-3.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 30,769 | \$2,712,998 | \$2,712,998 | | | | |
| (2) MBE/WBE | 6,452 | \$319,319 | \$319,319 | 11.8 | 25.4 | -13.6 | 46.3 |
| (3) WBE | 4,173 | \$160,175 | \$160,175 | 5.9 | 16.5 | -10.6 | 35.9 |
| (4) MBE | 2,279 | \$159,144 | \$159,144 | 5.9 | 9.0 | -3.1 | 65.5 |
| (5) African American-owned | 742 | \$35,618 | \$36,031 | 1.3 | 2.4 | -1.0 | 56.0 |
| (6) Total Asian American-owned | 1,065 | \$85,020 | \$86,006 | 3.2 | 5.2 | -2.0 | 60.9 |
| (7) Asian-Pacific American-owned | 471 | \$27,396 | \$27,713 | 1.0 | 2.2 | -1.2 | 46.2 |
| (8) Subcontinent Asian American-owned | 589 | \$57,531 | \$58,198 | 2.1 | 3.0 | -0.8 | 71.7 |
| (9) Hispanic American-owned | 222 | \$30,765 | \$31,122 | 1.1 | 0.9 | 0.2 | 121.6 |
| (10) Native American-owned | 198 | \$5,917 | \$5,985 | 0.2 | 0.4 | -0.2 | 52.6 |
| (11) Unknown MBE | 52 | \$1,825 | | | | | |
| (12) Certified | 2,218 | \$120,002 | \$120,002 | 4.4 | | | |
| (13) Certified woman-owned | 1,432 | \$61,485 | \$61,485 | 2.3 | | | |
| (14) Certified minority-owned | 786 | \$58,517 | \$58,517 | 2.2 | | | |
| (15) Certified African American-owned | 424 | \$23,660 | \$23,660 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 135 | \$4,495 | \$4,495 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 96 | \$13,922 | \$13,922 | 0.5 | | | |
| (18) Certified Hispanic American-owned | 92 | \$15,311 | \$15,311 | 0.6 | | | |
| (19) Certified Native American-owned | 39 | \$1,129 | \$1,129 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-4.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 25,783 | \$907,127 | \$907,127 | | | | |
| (2) MBE/WBE | 4,259 | \$153,584 | \$153,584 | 16.9 | 16.0 | 1.0 | 106.0 |
| (3) WBE | 3,005 | \$77,954 | \$77,954 | 8.6 | 10.2 | -1.6 | 84.0 |
| (4) MBE | 1,254 | \$75,630 | \$75,630 | 8.3 | 5.7 | 2.6 | 145.2 |
| (5) African American-owned | 352 | \$48,041 | \$48,384 | 5.3 | 1.5 | 3.8 | 200+ |
| (6) Total Asian American-owned | 343 | \$10,916 | \$10,994 | 1.2 | 2.1 | -0.9 | 57.4 |
| (7) Asian-Pacific American-owned | 193 | \$4,470 | \$4,502 | 0.5 | 2.0 | -1.6 | 24.2 |
| (8) Subcontinent Asian American-owned | 146 | \$6,403 | \$6,449 | 0.7 | 0.1 | 0.6 | 200+ |
| (9) Hispanic American-owned | 513 | \$15,553 | \$15,664 | 1.7 | 2.0 | -0.3 | 84.6 |
| (10) Native American-owned | 13 | \$583 | \$587 | 0.1 | 0.1 | 0.0 | 127.5 |
| (11) Unknown MBE | 33 | \$536 | | | | | |
| (12) Certified | 1,958 | \$78,172 | \$78,172 | 8.6 | | | |
| (13) Certified woman-owned | 1,067 | \$22,876 | \$22,999 | 2.5 | | | |
| (14) Certified minority-owned | 873 | \$54,878 | \$55,173 | 6.1 | | | |
| (15) Certified African American-owned | 284 | \$37,499 | \$37,701 | 4.2 | | | |
| (16) Certified Asian-Pacific American-owned | 93 | \$1,566 | \$1,574 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 87 | \$2,638 | \$2,652 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 402 | \$12,818 | \$12,887 | 1.4 | | | |
| (19) Certified Native American-owned | 7 | \$357 | \$359 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 18 | \$419 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-5.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,753 | \$160,001 | \$160,001 | | | | |
| (2) MBE/WBE | 1,047 | \$26,104 | \$26,104 | 16.3 | 34.4 | -18.1 | 47.5 |
| (3) WBE | 813 | \$14,462 | \$14,462 | 9.0 | 22.1 | -13.0 | 41.0 |
| (4) MBE | 234 | \$11,642 | \$11,642 | 7.3 | 12.3 | -5.0 | 59.1 |
| (5) African American-owned | 95 | \$2,761 | \$2,830 | 1.8 | 6.5 | -4.8 | 27.1 |
| (6) Total Asian American-owned | 41 | \$7,818 | \$8,013 | 5.0 | 0.7 | 4.3 | 200+ |
| (7) Asian-Pacific American-owned | 41 | \$7,818 | \$8,013 | 5.0 | 0.7 | 4.3 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 67 | \$674 | \$691 | 0.4 | 4.1 | -3.6 | 10.6 |
| (10) Native American-owned | 8 | \$106 | \$109 | 0.1 | 1.0 | -0.9 | 6.9 |
| (11) Unknown MBE | 23 | \$283 | | | | | |
| (12) Certified | 396 | \$13,777 | \$13,777 | 8.6 | | | |
| (13) Certified woman-owned | 296 | \$5,387 | \$5,387 | 3.4 | | | |
| (14) Certified minority-owned | 100 | \$8,390 | \$8,390 | 5.2 | | | |
| (15) Certified African American-owned | 42 | \$1,391 | \$1,391 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 33 | \$6,717 | \$6,717 | 4.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 25 | \$282 | \$282 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-6.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 77,868 | \$8,887,106 | \$8,887,106 | | | | |
| (2) MBE/WBE | 13,320 | \$791,335 | \$791,335 | 8.9 | 15.7 | -6.8 | 56.6 |
| (3) WBE | 9,220 | \$497,116 | \$497,116 | 5.6 | 10.6 | -5.0 | 52.7 |
| (4) MBE | 4,100 | \$294,219 | \$294,219 | 3.3 | 5.1 | -1.8 | 64.6 |
| (5) African American-owned | 1,330 | \$96,212 | \$100,192 | 1.1 | 1.7 | -0.6 | 64.9 |
| (6) Total Asian American-owned | 1,406 | \$97,183 | \$101,203 | 1.1 | 2.2 | -1.1 | 51.3 |
| (7) Asian-Pacific American-owned | 730 | \$36,167 | \$37,663 | 0.4 | 1.0 | -0.5 | 43.9 |
| (8) Subcontinent Asian American-owned | 667 | \$60,880 | \$63,398 | 0.7 | 1.3 | -0.5 | 56.8 |
| (9) Hispanic American-owned | 882 | \$66,221 | \$68,961 | 0.8 | 0.7 | 0.1 | 118.7 |
| (10) Native American-owned | 292 | \$22,914 | \$23,862 | 0.3 | 0.5 | -0.2 | 55.1 |
| (11) Unknown MBE | 190 | \$11,688 | | | | | |
| (12) Certified | 4,851 | \$251,544 | \$251,544 | 2.8 | | | |
| (13) Certified woman-owned | 3,022 | \$123,017 | \$123,222 | 1.4 | | | |
| (14) Certified minority-owned | 1,811 | \$128,108 | \$128,322 | 1.4 | | | |
| (15) Certified African American-owned | 783 | \$62,008 | \$62,111 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 275 | \$12,384 | \$12,404 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 141 | \$15,745 | \$15,771 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 550 | \$28,987 | \$29,035 | 0.3 | | | |
| (19) Certified Native American-owned | 62 | \$8,985 | \$9,000 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 18 | \$419 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-7.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 17,422 | \$5,264,620 | \$5,264,620 | | | | |
| (2) MBE/WBE | 2,034 | \$346,501 | \$346,501 | 6.6 | 10.4 | -3.8 | 63.2 |
| (3) WBE | 1,508 | \$271,276 | \$271,276 | 5.2 | 7.4 | -2.3 | 69.3 |
| (4) MBE | 526 | \$75,225 | \$75,225 | 1.4 | 3.0 | -1.6 | 47.9 |
| (5) African American-owned | 209 | \$20,079 | \$22,823 | 0.4 | 1.3 | -0.9 | 32.5 |
| (6) Total Asian American-owned | 63 | \$7,157 | \$8,135 | 0.2 | 0.9 | -0.7 | 18.0 |
| (7) Asian-Pacific American-owned | 58 | \$1,517 | \$1,724 | 0.0 | 0.2 | -0.1 | 19.2 |
| (8) Subcontinent Asian American-owned | 5 | \$5,640 | \$6,411 | 0.1 | 0.7 | -0.6 | 17.7 |
| (9) Hispanic American-owned | 99 | \$22,637 | \$25,730 | 0.5 | 0.2 | 0.3 | 200+ |
| (10) Native American-owned | 73 | \$16,309 | \$18,537 | 0.4 | 0.6 | -0.2 | 59.8 |
| (11) Unknown MBE | 82 | \$9,045 | | | | | |
| (12) Certified | 548 | \$75,378 | \$75,378 | 1.4 | | | |
| (13) Certified woman-owned | 373 | \$52,525 | \$52,525 | 1.0 | | | |
| (14) Certified minority-owned | 175 | \$22,853 | \$22,853 | 0.4 | | | |
| (15) Certified African American-owned | 85 | \$6,866 | \$6,866 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 28 | \$915 | \$915 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$5,626 | \$5,626 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 43 | \$1,947 | \$1,947 | 0.0 | | | |
| (19) Certified Native American-owned | 16 | \$7,499 | \$7,499 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-8.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 30,037 | \$2,572,176 | \$2,572,176 | | | | |
| (2) MBE/WBE | 6,033 | \$271,239 | \$271,239 | 10.5 | 25.4 | -14.9 | 41.4 |
| (3) WBE | 3,932 | \$137,407 | \$137,407 | 5.3 | 16.6 | -11.3 | 32.2 |
| (4) MBE | 2,101 | \$133,833 | \$133,833 | 5.2 | 8.8 | -3.6 | 58.9 |
| (5) African American-owned | 686 | \$26,458 | \$26,824 | 1.0 | 2.3 | -1.3 | 44.6 |
| (6) Total Asian American-owned | 961 | \$72,068 | \$73,064 | 2.8 | 5.1 | -2.3 | 55.3 |
| (7) Asian-Pacific American-owned | 439 | \$22,372 | \$22,682 | 0.9 | 2.2 | -1.3 | 39.6 |
| (8) Subcontinent Asian American-owned | 517 | \$49,602 | \$50,288 | 2.0 | 2.9 | -1.0 | 67.3 |
| (9) Hispanic American-owned | 204 | \$27,565 | \$27,946 | 1.1 | 0.9 | 0.1 | 115.4 |
| (10) Native American-owned | 198 | \$5,917 | \$5,999 | 0.2 | 0.4 | -0.2 | 57.7 |
| (11) Unknown MBE | 52 | \$1,825 | | | | | |
| (12) Certified | 1,972 | \$86,016 | \$86,016 | 3.3 | | | |
| (13) Certified woman-owned | 1,301 | \$43,527 | \$43,527 | 1.7 | | | |
| (14) Certified minority-owned | 671 | \$42,489 | \$42,489 | 1.7 | | | |
| (15) Certified African American-owned | 378 | \$16,535 | \$16,535 | 0.6 | | | |
| (16) Certified Asian-Pacific American-owned | 122 | \$3,196 | \$3,196 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 51 | \$7,481 | \$7,481 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 81 | \$14,148 | \$14,148 | 0.6 | | | |
| (19) Certified Native American-owned | 39 | \$1,129 | \$1,129 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-9.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 25,717 | \$896,173 | \$896,173 | | | | |
| (2) MBE/WBE | 4,235 | \$149,564 | \$149,564 | 16.7 | 15.9 | 0.8 | 104.9 |
| (3) WBE | 2,992 | \$75,944 | \$75,944 | 8.5 | 10.2 | -1.7 | 83.5 |
| (4) MBE | 1,243 | \$73,620 | \$73,620 | 8.2 | 5.8 | 2.5 | 142.7 |
| (5) African American-owned | 344 | \$47,015 | \$47,360 | 5.3 | 1.5 | 3.8 | 200+ |
| (6) Total Asian American-owned | 341 | \$10,140 | \$10,214 | 1.1 | 2.1 | -1.0 | 53.6 |
| (7) Asian-Pacific American-owned | 192 | \$4,459 | \$4,492 | 0.5 | 2.1 | -1.6 | 24.3 |
| (8) Subcontinent Asian American-owned | 145 | \$5,638 | \$5,679 | 0.6 | 0.1 | 0.6 | 200+ |
| (9) Hispanic American-owned | 512 | \$15,345 | \$15,458 | 1.7 | 2.1 | -0.3 | 83.8 |
| (10) Native American-owned | 13 | \$583 | \$587 | 0.1 | 0.0 | 0.0 | 156.7 |
| (11) Unknown MBE | 33 | \$536 | | | | | |
| (12) Certified | 1,946 | \$76,683 | \$76,683 | 8.6 | | | |
| (13) Certified woman-owned | 1,063 | \$21,889 | \$22,009 | 2.5 | | | |
| (14) Certified minority-owned | 865 | \$54,376 | \$54,674 | 6.1 | | | |
| (15) Certified African American-owned | 278 | \$37,215 | \$37,420 | 4.2 | | | |
| (16) Certified Asian-Pacific American-owned | 92 | \$1,555 | \$1,564 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 87 | \$2,638 | \$2,653 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 401 | \$12,610 | \$12,679 | 1.4 | | | |
| (19) Certified Native American-owned | 7 | \$357 | \$359 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 18 | \$419 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-10.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,692 | \$154,137 | \$154,137 | | | | |
| (2) MBE/WBE | 1,018 | \$24,031 | \$24,031 | 15.6 | 34.9 | -19.3 | 44.7 |
| (3) WBE | 788 | \$12,489 | \$12,489 | 8.1 | 22.3 | -14.2 | 36.4 |
| (4) MBE | 230 | \$11,541 | \$11,541 | 7.5 | 12.7 | -5.2 | 59.2 |
| (5) African American-owned | 91 | \$2,660 | \$2,727 | 1.8 | 6.7 | -4.9 | 26.5 |
| (6) Total Asian American-owned | 41 | \$7,818 | \$8,015 | 5.2 | 0.8 | 4.4 | 200+ |
| (7) Asian-Pacific American-owned | 41 | \$7,818 | \$8,015 | 5.2 | 0.7 | 4.5 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 67 | \$674 | \$691 | 0.4 | 4.2 | -3.8 | 10.7 |
| (10) Native American-owned | 8 | \$106 | \$109 | 0.1 | 1.0 | -0.9 | 7.0 |
| (11) Unknown MBE | 23 | \$283 | | | | | |
| (12) Certified | 385 | \$13,466 | \$13,466 | 8.7 | | | |
| (13) Certified woman-owned | 285 | \$5,076 | \$5,076 | 3.3 | | | |
| (14) Certified minority-owned | 100 | \$8,390 | \$8,390 | 5.4 | | | |
| (15) Certified African American-owned | 42 | \$1,391 | \$1,391 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 33 | \$6,717 | \$6,717 | 4.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 25 | \$282 | \$282 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-11.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 7,458 | \$1,176,263 | \$1,176,263 | | | | |
| (2) MBE/WBE | 2,781 | \$346,802 | \$346,802 | 29.5 | 19.5 | 9.9 | 150.8 |
| (3) WBE | 2,065 | \$187,943 | \$187,943 | 16.0 | 13.5 | 2.5 | 118.4 |
| (4) MBE | 716 | \$158,859 | \$158,859 | 13.5 | 6.1 | 7.4 | 200+ |
| (5) African American-owned | 324 | \$72,859 | \$74,097 | 6.3 | 2.2 | 4.1 | 200+ |
| (6) Total Asian American-owned | 201 | \$38,492 | \$39,146 | 3.3 | 1.8 | 1.6 | 189.9 |
| (7) Asian-Pacific American-owned | 105 | \$25,502 | \$25,936 | 2.2 | 0.8 | 1.5 | 200+ |
| (8) Subcontinent Asian American-owned | 96 | \$12,990 | \$13,211 | 1.1 | 1.0 | 0.1 | 112.5 |
| (9) Hispanic American-owned | 107 | \$12,470 | \$12,682 | 1.1 | 0.6 | 0.5 | 179.9 |
| (10) Native American-owned | 57 | \$32,384 | \$32,934 | 2.8 | 1.4 | 1.4 | 198.4 |
| (11) Unknown MBE | 27 | \$2,655 | | | | | |
| (12) Certified | 1,305 | \$173,182 | \$173,182 | 14.7 | | | |
| (13) Certified woman-owned | 880 | \$88,618 | \$88,618 | 7.5 | | | |
| (14) Certified minority-owned | 425 | \$84,564 | \$84,564 | 7.2 | | | |
| (15) Certified African American-owned | 222 | \$46,919 | \$46,919 | 4.0 | | | |
| (16) Certified Asian-Pacific American-owned | 38 | \$17,579 | \$17,579 | 1.5 | | | |
| (17) Certified Subcontinent Asian American-owned | 66 | \$10,675 | \$10,675 | 0.9 | | | |
| (18) Certified Hispanic American-owned | 88 | \$8,767 | \$8,767 | 0.7 | | | |
| (19) Certified Native American-owned | 11 | \$625 | \$625 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-12.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 6,599 | \$1,018,623 | \$1,018,623 | | | | |
| (2) MBE/WBE | 2,309 | \$292,630 | \$292,630 | 28.7 | 18.8 | 9.9 | 152.8 |
| (3) WBE | 1,786 | \$161,192 | \$161,192 | 15.8 | 13.4 | 2.4 | 117.9 |
| (4) MBE | 523 | \$131,437 | \$131,437 | 12.9 | 5.4 | 7.5 | 200+ |
| (5) African American-owned | 256 | \$62,572 | \$63,862 | 6.3 | 2.1 | 4.1 | 200+ |
| (6) Total Asian American-owned | 95 | \$24,764 | \$25,275 | 2.5 | 1.1 | 1.4 | 200+ |
| (7) Asian-Pacific American-owned | 72 | \$20,468 | \$20,890 | 2.1 | 0.6 | 1.5 | 200+ |
| (8) Subcontinent Asian American-owned | 23 | \$4,296 | \$4,384 | 0.4 | 0.5 | -0.1 | 82.5 |
| (9) Hispanic American-owned | 88 | \$9,063 | \$9,249 | 0.9 | 0.5 | 0.4 | 165.4 |
| (10) Native American-owned | 57 | \$32,384 | \$33,051 | 3.2 | 1.5 | 1.7 | 200+ |
| (11) Unknown MBE | 27 | \$2,655 | | | | | |
| (12) Certified | 1,036 | \$137,396 | \$137,396 | 13.5 | | | |
| (13) Certified woman-owned | 734 | \$69,362 | \$69,362 | 6.8 | | | |
| (14) Certified minority-owned | 302 | \$68,034 | \$68,034 | 6.7 | | | |
| (15) Certified African American-owned | 170 | \$39,511 | \$39,511 | 3.9 | | | |
| (16) Certified Asian-Pacific American-owned | 24 | \$16,269 | \$16,269 | 1.6 | | | |
| (17) Certified Subcontinent Asian American-owned | 21 | \$4,234 | \$4,234 | 0.4 | | | |
| (18) Certified Hispanic American-owned | 76 | \$7,396 | \$7,396 | 0.7 | | | |
| (19) Certified Native American-owned | 11 | \$625 | \$625 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-13.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 732 | \$140,822 | \$140,822 | | | | |
| (2) MBE/WBE | 419 | \$48,079 | \$48,079 | 34.1 | 24.8 | 9.3 | 137.5 |
| (3) WBE | 241 | \$22,768 | \$22,768 | 16.2 | 13.7 | 2.5 | 118.0 |
| (4) MBE | 178 | \$25,311 | \$25,311 | 18.0 | 11.1 | 6.8 | 161.4 |
| (5) African American-owned | 56 | \$9,160 | \$9,160 | 6.5 | 3.0 | 3.5 | 200+ |
| (6) Total Asian American-owned | 104 | \$12,952 | \$12,952 | 9.2 | 6.5 | 2.7 | 142.3 |
| (7) Asian-Pacific American-owned | 32 | \$5,023 | \$5,023 | 3.6 | 1.9 | 1.6 | 185.0 |
| (8) Subcontinent Asian American-owned | 72 | \$7,929 | \$7,929 | 5.6 | 4.5 | 1.1 | 124.2 |
| (9) Hispanic American-owned | 18 | \$3,200 | \$3,200 | 2.3 | 1.0 | 1.3 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 246 | \$33,986 | \$33,986 | 24.1 | | | |
| (13) Certified woman-owned | 131 | \$17,958 | \$17,958 | 12.8 | | | |
| (14) Certified minority-owned | 115 | \$16,028 | \$16,028 | 11.4 | | | |
| (15) Certified African American-owned | 46 | \$7,124 | \$7,124 | 5.1 | | | |
| (16) Certified Asian-Pacific American-owned | 13 | \$1,299 | \$1,299 | 0.9 | | | |
| (17) Certified Subcontinent Asian American-owned | 45 | \$6,441 | \$6,441 | 4.6 | | | |
| (18) Certified Hispanic American-owned | 11 | \$1,164 | \$1,164 | 0.8 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-16.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 71,325 | \$1,571,925 | \$1,571,925 | | | | |
| (2) MBE/WBE | 12,479 | \$268,245 | \$268,245 | 17.1 | 22.8 | -5.7 | 74.9 |
| (3) WBE | 8,742 | \$177,410 | \$177,410 | 11.3 | 15.4 | -4.1 | 73.3 |
| (4) MBE | 3,737 | \$90,836 | \$90,836 | 5.8 | 7.4 | -1.6 | 78.1 |
| (5) African American-owned | 1,226 | \$35,832 | \$37,410 | 2.4 | 3.2 | -0.8 | 74.5 |
| (6) Total Asian American-owned | 1,286 | \$30,697 | \$32,049 | 2.0 | 2.1 | 0.0 | 97.8 |
| (7) Asian-Pacific American-owned | 664 | \$13,636 | \$14,237 | 0.9 | 1.2 | -0.3 | 75.0 |
| (8) Subcontinent Asian American-owned | 613 | \$16,925 | \$17,670 | 1.1 | 0.9 | 0.2 | 128.2 |
| (9) Hispanic American-owned | 789 | \$15,918 | \$16,619 | 1.1 | 1.5 | -0.5 | 69.9 |
| (10) Native American-owned | 269 | \$4,556 | \$4,757 | 0.3 | 0.5 | -0.2 | 55.7 |
| (11) Unknown MBE | 167 | \$3,831 | | | | | |
| (12) Certified | 4,542 | \$98,268 | \$98,268 | 6.3 | | | |
| (13) Certified woman-owned | 2,883 | \$56,368 | \$56,609 | 3.6 | | | |
| (14) Certified minority-owned | 1,641 | \$41,482 | \$41,659 | 2.7 | | | |
| (15) Certified African American-owned | 716 | \$23,265 | \$23,365 | 1.5 | | | |
| (16) Certified Asian-Pacific American-owned | 241 | \$4,585 | \$4,604 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 131 | \$3,073 | \$3,086 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 498 | \$9,227 | \$9,267 | 0.6 | | | |
| (19) Certified Native American-owned | 55 | \$1,332 | \$1,338 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 18 | \$419 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-17.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 14,283 | \$350,712 | \$350,712 | | | | |
| (2) MBE/WBE | 1,680 | \$45,087 | \$45,087 | 12.9 | 17.3 | -4.4 | 74.5 |
| (3) WBE | 1,243 | \$34,392 | \$34,392 | 9.8 | 13.0 | -3.2 | 75.3 |
| (4) MBE | 437 | \$10,694 | \$10,694 | 3.0 | 4.2 | -1.2 | 72.1 |
| (5) African American-owned | 189 | \$4,618 | \$5,482 | 1.6 | 2.1 | -0.6 | 73.2 |
| (6) Total Asian American-owned | 58 | \$1,245 | \$1,478 | 0.4 | 0.4 | 0.0 | 99.1 |
| (7) Asian-Pacific American-owned | 55 | \$1,219 | \$1,446 | 0.4 | 0.2 | 0.2 | 170.1 |
| (8) Subcontinent Asian American-owned | 3 | \$27 | \$32 | 0.0 | 0.2 | -0.2 | 5.0 |
| (9) Hispanic American-owned | 74 | \$2,341 | \$2,778 | 0.8 | 0.4 | 0.4 | 197.5 |
| (10) Native American-owned | 54 | \$805 | \$956 | 0.3 | 1.1 | -0.9 | 23.9 |
| (11) Unknown MBE | 62 | \$1,684 | | | | | |
| (12) Certified | 450 | \$12,903 | \$12,903 | 3.7 | | | |
| (13) Certified woman-owned | 294 | \$9,369 | \$9,369 | 2.7 | | | |
| (14) Certified minority-owned | 156 | \$3,533 | \$3,533 | 1.0 | | | |
| (15) Certified African American-owned | 78 | \$1,683 | \$1,683 | 0.5 | | | |
| (16) Certified Asian-Pacific American-owned | 25 | \$617 | \$617 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$13 | \$13 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 42 | \$1,106 | \$1,106 | 0.3 | | | |
| (19) Certified Native American-owned | 10 | \$114 | \$114 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-18.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 27,534 | \$692,869 | \$692,869 | | | | |
| (2) MBE/WBE | 5,727 | \$131,697 | \$131,697 | 19.0 | 26.5 | -7.5 | 71.8 |
| (3) WBE | 3,782 | \$83,286 | \$83,286 | 12.0 | 16.5 | -4.5 | 73.0 |
| (4) MBE | 1,945 | \$48,411 | \$48,411 | 7.0 | 10.0 | -3.0 | 69.9 |
| (5) African American-owned | 664 | \$16,651 | \$17,121 | 2.5 | 3.8 | -1.3 | 65.2 |
| (6) Total Asian American-owned | 885 | \$22,576 | \$23,213 | 3.4 | 3.9 | -0.5 | 86.6 |
| (7) Asian-Pacific American-owned | 409 | \$8,851 | \$9,100 | 1.3 | 2.1 | -0.7 | 63.8 |
| (8) Subcontinent Asian American-owned | 471 | \$13,632 | \$14,016 | 2.0 | 1.8 | 0.2 | 111.6 |
| (9) Hispanic American-owned | 151 | \$4,371 | \$4,494 | 0.6 | 1.8 | -1.1 | 37.0 |
| (10) Native American-owned | 196 | \$3,485 | \$3,584 | 0.5 | 0.5 | 0.0 | 102.7 |
| (11) Unknown MBE | 49 | \$1,328 | | | | | |
| (12) Certified | 1,875 | \$41,315 | \$41,315 | 6.0 | | | |
| (13) Certified woman-owned | 1,262 | \$25,173 | \$25,173 | 3.6 | | | |
| (14) Certified minority-owned | 613 | \$16,142 | \$16,142 | 2.3 | | | |
| (15) Certified African American-owned | 366 | \$9,415 | \$9,415 | 1.4 | | | |
| (16) Certified Asian-Pacific American-owned | 119 | \$2,633 | \$2,633 | 0.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 46 | \$1,340 | \$1,340 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 43 | \$1,625 | \$1,625 | 0.2 | | | |
| (19) Certified Native American-owned | 39 | \$1,129 | \$1,129 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-19.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 25,014 | \$448,470 | \$448,470 | | | | |
| (2) MBE/WBE | 4,098 | \$78,344 | \$78,344 | 17.5 | 19.4 | -1.9 | 90.2 |
| (3) WBE | 2,941 | \$50,445 | \$50,445 | 11.2 | 14.0 | -2.7 | 80.5 |
| (4) MBE | 1,157 | \$27,899 | \$27,899 | 6.2 | 5.4 | 0.8 | 115.2 |
| (5) African American-owned | 286 | \$12,738 | \$12,988 | 2.9 | 2.4 | 0.5 | 120.4 |
| (6) Total Asian American-owned | 330 | \$5,932 | \$6,049 | 1.3 | 0.9 | 0.5 | 153.5 |
| (7) Asian-Pacific American-owned | 187 | \$2,623 | \$2,675 | 0.6 | 0.8 | -0.2 | 78.8 |
| (8) Subcontinent Asian American-owned | 139 | \$3,266 | \$3,330 | 0.7 | 0.1 | 0.6 | 200+ |
| (9) Hispanic American-owned | 497 | \$8,532 | \$8,700 | 1.9 | 2.0 | -0.1 | 95.5 |
| (10) Native American-owned | 11 | \$160 | \$163 | 0.0 | 0.1 | 0.0 | 43.4 |
| (11) Unknown MBE | 33 | \$536 | | | | | |
| (12) Certified | 1,869 | \$39,777 | \$39,777 | 8.9 | | | |
| (13) Certified woman-owned | 1,050 | \$18,901 | \$19,102 | 4.3 | | | |
| (14) Certified minority-owned | 801 | \$20,458 | \$20,675 | 4.6 | | | |
| (15) Certified African American-owned | 233 | \$11,443 | \$11,565 | 2.6 | | | |
| (16) Certified Asian-Pacific American-owned | 90 | \$992 | \$1,002 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 84 | \$1,721 | \$1,739 | 0.4 | | | |
| (18) Certified Hispanic American-owned | 388 | \$6,214 | \$6,280 | 1.4 | | | |
| (19) Certified Native American-owned | 6 | \$88 | \$89 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 18 | \$419 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-20.
Agency: IDOA, INDOT and SEIs
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,494 | \$79,874 | \$79,874 | | | | |
| (2) MBE/WBE | 974 | \$13,117 | \$13,117 | 16.4 | 34.4 | -18.0 | 47.7 |
| (3) WBE | 776 | \$9,286 | \$9,286 | 11.6 | 24.4 | -12.8 | 47.6 |
| (4) MBE | 198 | \$3,832 | \$3,832 | 4.8 | 10.0 | -5.2 | 47.9 |
| (5) African American-owned | 87 | \$1,825 | \$1,970 | 2.5 | 7.1 | -4.7 | 34.6 |
| (6) Total Asian American-owned | 13 | \$944 | \$1,019 | 1.3 | 0.6 | 0.6 | 199.2 |
| (7) Asian-Pacific American-owned | 13 | \$944 | \$1,019 | 1.3 | 0.6 | 0.7 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 67 | \$674 | \$728 | 0.9 | 1.4 | -0.5 | 65.5 |
| (10) Native American-owned | 8 | \$106 | \$114 | 0.1 | 0.9 | -0.7 | 16.8 |
| (11) Unknown MBE | 23 | \$283 | | | | | |
| (12) Certified | 348 | \$4,274 | \$4,274 | 5.4 | | | |
| (13) Certified woman-owned | 277 | \$2,925 | \$2,925 | 3.7 | | | |
| (14) Certified minority-owned | 71 | \$1,349 | \$1,349 | 1.7 | | | |
| (15) Certified African American-owned | 39 | \$723 | \$723 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 7 | \$343 | \$343 | 0.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 25 | \$282 | \$282 | 0.4 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-201.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 78,425 | \$6,118,073 | \$6,118,073 | | | | |
| (2) MBE/WBE | 13,814 | \$747,435 | \$747,435 | 12.2 | 18.9 | -6.6 | 64.8 |
| (3) WBE | 9,555 | \$440,354 | \$440,354 | 7.2 | 12.2 | -5.0 | 59.0 |
| (4) MBE | 4,259 | \$307,082 | \$307,082 | 5.0 | 6.7 | -1.6 | 75.4 |
| (5) African American-owned | 1,484 | \$130,122 | \$134,317 | 2.2 | 2.4 | -0.2 | 92.5 |
| (6) Total Asian American-owned | 1,375 | \$86,949 | \$89,752 | 1.5 | 2.8 | -1.3 | 52.3 |
| (7) Asian-Pacific American-owned | 750 | \$49,846 | \$51,452 | 0.8 | 1.2 | -0.4 | 68.3 |
| (8) Subcontinent Asian American-owned | 616 | \$36,967 | \$38,159 | 0.6 | 1.6 | -1.0 | 39.6 |
| (9) Hispanic American-owned | 903 | \$50,051 | \$51,665 | 0.8 | 0.9 | 0.0 | 95.7 |
| (10) Native American-owned | 303 | \$30,370 | \$31,349 | 0.5 | 0.5 | 0.0 | 94.0 |
| (11) Unknown MBE | 194 | \$9,590 | | | | | |
| (12) Certified | 5,275 | \$326,307 | \$326,307 | 5.3 | | | |
| (13) Certified woman-owned | 3,232 | \$147,263 | \$147,452 | 2.4 | | | |
| (14) Certified minority-owned | 2,025 | \$178,625 | \$178,855 | 2.9 | | | |
| (15) Certified African American-owned | 920 | \$95,518 | \$95,641 | 1.6 | | | |
| (16) Certified Asian-Pacific American-owned | 301 | \$28,365 | \$28,401 | 0.5 | | | |
| (17) Certified Subcontinent Asian American-owned | 150 | \$15,584 | \$15,604 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 587 | \$34,307 | \$34,351 | 0.6 | | | |
| (19) Certified Native American-owned | 67 | \$4,852 | \$4,858 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 18 | \$419 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-202.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 18,701 | \$2,908,152 | \$2,908,152 | | | | |
| (2) MBE/WBE | 2,635 | \$351,022 | \$351,022 | 12.1 | 13.1 | -1.0 | 92.2 |
| (3) WBE | 1,861 | \$221,747 | \$221,747 | 7.6 | 7.8 | -0.2 | 97.4 |
| (4) MBE | 774 | \$129,275 | \$129,275 | 4.4 | 5.3 | -0.8 | 84.4 |
| (5) African American-owned | 359 | \$52,963 | \$56,019 | 1.9 | 2.4 | -0.5 | 79.1 |
| (6) Total Asian American-owned | 114 | \$29,816 | \$31,536 | 1.1 | 1.6 | -0.5 | 68.6 |
| (7) Asian-Pacific American-owned | 98 | \$20,212 | \$21,378 | 0.7 | 0.4 | 0.4 | 200+ |
| (8) Subcontinent Asian American-owned | 16 | \$9,604 | \$10,158 | 0.3 | 1.2 | -0.9 | 28.7 |
| (9) Hispanic American-owned | 118 | \$13,525 | \$14,305 | 0.5 | 0.3 | 0.2 | 146.9 |
| (10) Native American-owned | 94 | \$25,920 | \$27,415 | 0.9 | 0.8 | 0.1 | 112.5 |
| (11) Unknown MBE | 89 | \$7,051 | | | | | |
| (12) Certified | 927 | \$150,580 | \$150,580 | 5.2 | | | |
| (13) Certified woman-owned | 565 | \$75,081 | \$75,081 | 2.6 | | | |
| (14) Certified minority-owned | 362 | \$75,499 | \$75,499 | 2.6 | | | |
| (15) Certified African American-owned | 206 | \$38,491 | \$38,491 | 1.3 | | | |
| (16) Certified Asian-Pacific American-owned | 50 | \$16,901 | \$16,901 | 0.6 | | | |
| (17) Certified Subcontinent Asian American-owned | 12 | \$9,528 | \$9,528 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 73 | \$7,214 | \$7,214 | 0.2 | | | |
| (19) Certified Native American-owned | 21 | \$3,366 | \$3,366 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-203.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 29,378 | \$2,181,531 | \$2,181,531 | | | | |
| (2) MBE/WBE | 5,912 | \$222,742 | \$222,742 | 10.2 | 26.8 | -16.6 | 38.0 |
| (3) WBE | 3,910 | \$132,087 | \$132,087 | 6.1 | 18.3 | -12.3 | 33.0 |
| (4) MBE | 2,002 | \$90,655 | \$90,655 | 4.2 | 8.5 | -4.3 | 48.9 |
| (5) African American-owned | 683 | \$26,477 | \$26,989 | 1.2 | 2.3 | -1.1 | 52.7 |
| (6) Total Asian American-owned | 877 | \$38,399 | \$39,141 | 1.8 | 4.8 | -3.0 | 37.1 |
| (7) Asian-Pacific American-owned | 418 | \$17,346 | \$17,681 | 0.8 | 2.1 | -1.3 | 39.3 |
| (8) Subcontinent Asian American-owned | 454 | \$20,960 | \$21,365 | 1.0 | 2.8 | -1.8 | 35.4 |
| (9) Hispanic American-owned | 205 | \$20,299 | \$20,692 | 0.9 | 1.0 | 0.0 | 97.3 |
| (10) Native American-owned | 188 | \$3,761 | \$3,833 | 0.2 | 0.3 | -0.1 | 55.0 |
| (11) Unknown MBE | 49 | \$1,720 | | | | | |
| (12) Certified | 2,003 | \$84,027 | \$84,027 | 3.9 | | | |
| (13) Certified woman-owned | 1,313 | \$44,169 | \$44,169 | 2.0 | | | |
| (14) Certified minority-owned | 690 | \$39,858 | \$39,858 | 1.8 | | | |
| (15) Certified African American-owned | 388 | \$18,138 | \$18,138 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 125 | \$3,181 | \$3,181 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 51 | \$3,418 | \$3,418 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 87 | \$13,992 | \$13,992 | 0.6 | | | |
| (19) Certified Native American-owned | 39 | \$1,129 | \$1,129 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-204.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 25,715 | \$899,152 | \$899,152 | | | | |
| (2) MBE/WBE | 4,247 | \$149,570 | \$149,570 | 16.6 | 15.8 | 0.9 | 105.4 |
| (3) WBE | 2,994 | \$73,960 | \$73,960 | 8.2 | 10.0 | -1.8 | 82.2 |
| (4) MBE | 1,253 | \$75,610 | \$75,610 | 8.4 | 5.8 | 2.6 | 145.7 |
| (5) African American-owned | 351 | \$48,022 | \$48,365 | 5.4 | 1.5 | 3.8 | 200+ |
| (6) Total Asian American-owned | 343 | \$10,916 | \$10,994 | 1.2 | 2.1 | -0.9 | 57.4 |
| (7) Asian-Pacific American-owned | 193 | \$4,470 | \$4,502 | 0.5 | 2.1 | -1.6 | 24.2 |
| (8) Subcontinent Asian American-owned | 146 | \$6,403 | \$6,449 | 0.7 | 0.1 | 0.7 | 200+ |
| (9) Hispanic American-owned | 513 | \$15,553 | \$15,664 | 1.7 | 2.0 | -0.3 | 85.2 |
| (10) Native American-owned | 13 | \$583 | \$587 | 0.1 | 0.1 | 0.0 | 129.5 |
| (11) Unknown MBE | 33 | \$536 | | | | | |
| (12) Certified | 1,958 | \$78,172 | \$78,172 | 8.7 | | | |
| (13) Certified woman-owned | 1,067 | \$22,876 | \$22,999 | 2.6 | | | |
| (14) Certified minority-owned | 873 | \$54,878 | \$55,173 | 6.1 | | | |
| (15) Certified African American-owned | 284 | \$37,499 | \$37,701 | 4.2 | | | |
| (16) Certified Asian-Pacific American-owned | 93 | \$1,566 | \$1,574 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 87 | \$2,638 | \$2,652 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 402 | \$12,818 | \$12,887 | 1.4 | | | |
| (19) Certified Native American-owned | 7 | \$357 | \$359 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 18 | \$419 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-205.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,631 | \$129,238 | \$129,238 | | | | |
| (2) MBE/WBE | 1,020 | \$24,101 | \$24,101 | 18.6 | 35.2 | -16.5 | 53.0 |
| (3) WBE | 790 | \$12,559 | \$12,559 | 9.7 | 22.4 | -12.7 | 43.4 |
| (4) MBE | 230 | \$11,541 | \$11,541 | 8.9 | 12.8 | -3.9 | 69.7 |
| (5) African American-owned | 91 | \$2,660 | \$2,727 | 2.1 | 7.2 | -5.0 | 29.5 |
| (6) Total Asian American-owned | 41 | \$7,818 | \$8,015 | 6.2 | 0.9 | 5.3 | 200+ |
| (7) Asian-Pacific American-owned | 41 | \$7,818 | \$8,015 | 6.2 | 0.9 | 5.3 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 67 | \$674 | \$691 | 0.5 | 3.6 | -3.0 | 15.0 |
| (10) Native American-owned | 8 | \$106 | \$109 | 0.1 | 1.2 | -1.1 | 7.0 |
| (11) Unknown MBE | 23 | \$283 | | | | | |
| (12) Certified | 387 | \$13,528 | \$13,528 | 10.5 | | | |
| (13) Certified woman-owned | 287 | \$5,137 | \$5,137 | 4.0 | | | |
| (14) Certified minority-owned | 100 | \$8,390 | \$8,390 | 6.5 | | | |
| (15) Certified African American-owned | 42 | \$1,391 | \$1,391 | 1.1 | | | |
| (16) Certified Asian-Pacific American-owned | 33 | \$6,717 | \$6,717 | 5.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 25 | \$282 | \$282 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-206.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 74,726 | \$5,426,447 | \$5,426,447 | | | | |
| (2) MBE/WBE | 12,891 | \$572,643 | \$572,643 | 10.6 | 18.9 | -8.4 | 55.7 |
| (3) WBE | 8,986 | \$366,008 | \$366,008 | 6.7 | 12.3 | -5.5 | 55.0 |
| (4) MBE | 3,905 | \$206,635 | \$206,635 | 3.8 | 6.7 | -2.9 | 57.0 |
| (5) African American-owned | 1,303 | \$84,119 | \$87,434 | 1.6 | 2.3 | -0.7 | 68.7 |
| (6) Total Asian American-owned | 1,311 | \$62,906 | \$65,385 | 1.2 | 3.0 | -1.8 | 40.3 |
| (7) Asian-Pacific American-owned | 703 | \$31,010 | \$32,232 | 0.6 | 1.3 | -0.7 | 46.0 |
| (8) Subcontinent Asian American-owned | 599 | \$31,760 | \$33,012 | 0.6 | 1.7 | -1.1 | 35.8 |
| (9) Hispanic American-owned | 852 | \$41,711 | \$43,355 | 0.8 | 0.9 | -0.1 | 88.0 |
| (10) Native American-owned | 268 | \$10,065 | \$10,461 | 0.2 | 0.4 | -0.2 | 48.7 |
| (11) Unknown MBE | 171 | \$7,834 | | | | | |
| (12) Certified | 4,803 | \$226,874 | \$226,874 | 4.2 | | | |
| (13) Certified woman-owned | 2,993 | \$113,783 | \$113,993 | 2.1 | | | |
| (14) Certified minority-owned | 1,792 | \$112,673 | \$112,881 | 2.1 | | | |
| (15) Certified African American-owned | 776 | \$57,237 | \$57,343 | 1.1 | | | |
| (16) Certified Asian-Pacific American-owned | 274 | \$12,254 | \$12,276 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 137 | \$11,216 | \$11,237 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 547 | \$27,686 | \$27,737 | 0.5 | | | |
| (19) Certified Native American-owned | 58 | \$4,280 | \$4,288 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 18 | \$419 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-207.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 15,233 | \$2,245,626 | \$2,245,626 | | | | |
| (2) MBE/WBE | 1,802 | \$186,275 | \$186,275 | 8.3 | 11.6 | -3.4 | 71.2 |
| (3) WBE | 1,337 | \$151,164 | \$151,164 | 6.7 | 6.7 | 0.0 | 100.1 |
| (4) MBE | 465 | \$35,111 | \$35,111 | 1.6 | 4.9 | -3.4 | 31.8 |
| (5) African American-owned | 199 | \$10,403 | \$12,250 | 0.5 | 2.4 | -1.8 | 22.8 |
| (6) Total Asian American-owned | 63 | \$7,157 | \$8,428 | 0.4 | 1.7 | -1.3 | 22.7 |
| (7) Asian-Pacific American-owned | 58 | \$1,517 | \$1,786 | 0.1 | 0.2 | -0.2 | 31.8 |
| (8) Subcontinent Asian American-owned | 5 | \$5,640 | \$6,641 | 0.3 | 1.4 | -1.1 | 21.0 |
| (9) Hispanic American-owned | 78 | \$6,642 | \$7,821 | 0.3 | 0.2 | 0.1 | 147.0 |
| (10) Native American-owned | 59 | \$5,615 | \$6,612 | 0.3 | 0.6 | -0.3 | 52.1 |
| (11) Unknown MBE | 66 | \$5,295 | | | | | |
| (12) Certified | 515 | \$58,214 | \$58,214 | 2.6 | | | |
| (13) Certified woman-owned | 349 | \$44,255 | \$44,255 | 2.0 | | | |
| (14) Certified minority-owned | 166 | \$13,959 | \$13,959 | 0.6 | | | |
| (15) Certified African American-owned | 80 | \$2,677 | \$2,677 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 28 | \$915 | \$915 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$5,626 | \$5,626 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 43 | \$1,947 | \$1,947 | 0.1 | | | |
| (19) Certified Native American-owned | 12 | \$2,794 | \$2,794 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-208.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 29,213 | \$2,162,504 | \$2,162,504 | | | | |
| (2) MBE/WBE | 5,845 | \$216,211 | \$216,211 | 10.0 | 26.9 | -16.9 | 37.2 |
| (3) WBE | 3,877 | \$129,828 | \$129,828 | 6.0 | 18.3 | -12.3 | 32.7 |
| (4) MBE | 1,968 | \$86,382 | \$86,382 | 4.0 | 8.5 | -4.5 | 47.0 |
| (5) African American-owned | 670 | \$24,061 | \$24,550 | 1.1 | 2.3 | -1.2 | 48.5 |
| (6) Total Asian American-owned | 866 | \$37,791 | \$38,559 | 1.8 | 4.8 | -3.1 | 36.8 |
| (7) Asian-Pacific American-owned | 412 | \$17,215 | \$17,565 | 0.8 | 2.1 | -1.3 | 39.2 |
| (8) Subcontinent Asian American-owned | 449 | \$20,482 | \$20,898 | 1.0 | 2.8 | -1.8 | 34.8 |
| (9) Hispanic American-owned | 195 | \$19,050 | \$19,437 | 0.9 | 1.0 | -0.1 | 92.5 |
| (10) Native American-owned | 188 | \$3,761 | \$3,837 | 0.2 | 0.3 | -0.1 | 55.9 |
| (11) Unknown MBE | 49 | \$1,720 | | | | | |
| (12) Certified | 1,957 | \$78,510 | \$78,510 | 3.6 | | | |
| (13) Certified woman-owned | 1,296 | \$42,562 | \$42,562 | 2.0 | | | |
| (14) Certified minority-owned | 661 | \$35,948 | \$35,948 | 1.7 | | | |
| (15) Certified African American-owned | 376 | \$15,954 | \$15,954 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 121 | \$3,066 | \$3,066 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 47 | \$2,952 | \$2,952 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 78 | \$12,847 | \$12,847 | 0.6 | | | |
| (19) Certified Native American-owned | 39 | \$1,129 | \$1,129 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-209.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 25,658 | \$889,392 | \$889,392 | | | | |
| (2) MBE/WBE | 4,227 | \$146,135 | \$146,135 | 16.4 | 15.7 | 0.7 | 104.4 |
| (3) WBE | 2,985 | \$72,535 | \$72,535 | 8.2 | 9.9 | -1.8 | 82.0 |
| (4) MBE | 1,242 | \$73,600 | \$73,600 | 8.3 | 5.8 | 2.5 | 143.1 |
| (5) African American-owned | 343 | \$46,995 | \$47,340 | 5.3 | 1.5 | 3.8 | 200+ |
| (6) Total Asian American-owned | 341 | \$10,140 | \$10,214 | 1.1 | 2.1 | -1.0 | 53.6 |
| (7) Asian-Pacific American-owned | 192 | \$4,459 | \$4,492 | 0.5 | 2.1 | -1.6 | 24.3 |
| (8) Subcontinent Asian American-owned | 145 | \$5,638 | \$5,679 | 0.6 | 0.1 | 0.6 | 200+ |
| (9) Hispanic American-owned | 512 | \$15,345 | \$15,458 | 1.7 | 2.1 | -0.3 | 84.3 |
| (10) Native American-owned | 13 | \$583 | \$587 | 0.1 | 0.0 | 0.0 | 158.7 |
| (11) Unknown MBE | 33 | \$536 | | | | | |
| (12) Certified | 1,946 | \$76,683 | \$76,683 | 8.6 | | | |
| (13) Certified woman-owned | 1,063 | \$21,889 | \$22,009 | 2.5 | | | |
| (14) Certified minority-owned | 865 | \$54,376 | \$54,674 | 6.1 | | | |
| (15) Certified African American-owned | 278 | \$37,215 | \$37,420 | 4.2 | | | |
| (16) Certified Asian-Pacific American-owned | 92 | \$1,555 | \$1,564 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 87 | \$2,638 | \$2,653 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 401 | \$12,610 | \$12,679 | 1.4 | | | |
| (19) Certified Native American-owned | 7 | \$357 | \$359 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 18 | \$419 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-210.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,622 | \$128,925 | \$128,925 | | | | |
| (2) MBE/WBE | 1,017 | \$24,022 | \$24,022 | 18.6 | 35.2 | -16.6 | 52.9 |
| (3) WBE | 787 | \$12,480 | \$12,480 | 9.7 | 22.4 | -12.7 | 43.2 |
| (4) MBE | 230 | \$11,541 | \$11,541 | 9.0 | 12.8 | -3.9 | 69.8 |
| (5) African American-owned | 91 | \$2,660 | \$2,727 | 2.1 | 7.2 | -5.0 | 29.5 |
| (6) Total Asian American-owned | 41 | \$7,818 | \$8,015 | 6.2 | 0.9 | 5.3 | 200+ |
| (7) Asian-Pacific American-owned | 41 | \$7,818 | \$8,015 | 6.2 | 0.9 | 5.3 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 67 | \$674 | \$691 | 0.5 | 3.6 | -3.0 | 15.0 |
| (10) Native American-owned | 8 | \$106 | \$109 | 0.1 | 1.2 | -1.1 | 7.0 |
| (11) Unknown MBE | 23 | \$283 | | | | | |
| (12) Certified | 385 | \$13,466 | \$13,466 | 10.4 | | | |
| (13) Certified woman-owned | 285 | \$5,076 | \$5,076 | 3.9 | | | |
| (14) Certified minority-owned | 100 | \$8,390 | \$8,390 | 6.5 | | | |
| (15) Certified African American-owned | 42 | \$1,391 | \$1,391 | 1.1 | | | |
| (16) Certified Asian-Pacific American-owned | 33 | \$6,717 | \$6,717 | 5.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 25 | \$282 | \$282 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-211.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,699 | \$691,627 | \$691,627 | | | | |
| (2) MBE/WBE | 923 | \$174,792 | \$174,792 | 25.3 | 18.2 | 7.1 | 138.7 |
| (3) WBE | 569 | \$74,346 | \$74,346 | 10.7 | 11.8 | -1.0 | 91.4 |
| (4) MBE | 354 | \$100,446 | \$100,446 | 14.5 | 6.5 | 8.1 | 200+ |
| (5) African American-owned | 181 | \$46,003 | \$46,821 | 6.8 | 2.6 | 4.2 | 200+ |
| (6) Total Asian American-owned | 64 | \$24,043 | \$24,471 | 3.5 | 1.4 | 2.2 | 200+ |
| (7) Asian-Pacific American-owned | 47 | \$18,836 | \$19,171 | 2.8 | 0.8 | 2.0 | 200+ |
| (8) Subcontinent Asian American-owned | 17 | \$5,207 | \$5,300 | 0.8 | 0.6 | 0.2 | 129.7 |
| (9) Hispanic American-owned | 51 | \$8,340 | \$8,488 | 1.2 | 0.7 | 0.5 | 179.5 |
| (10) Native American-owned | 35 | \$20,305 | \$20,666 | 3.0 | 1.7 | 1.3 | 174.0 |
| (11) Unknown MBE | 23 | \$1,756 | | | | | |
| (12) Certified | 472 | \$99,433 | \$99,433 | 14.4 | | | |
| (13) Certified woman-owned | 239 | \$33,480 | \$33,480 | 4.8 | | | |
| (14) Certified minority-owned | 233 | \$65,953 | \$65,953 | 9.5 | | | |
| (15) Certified African American-owned | 144 | \$38,281 | \$38,281 | 5.5 | | | |
| (16) Certified Asian-Pacific American-owned | 27 | \$16,111 | \$16,111 | 2.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 13 | \$4,368 | \$4,368 | 0.6 | | | |
| (18) Certified Hispanic American-owned | 40 | \$6,621 | \$6,621 | 1.0 | | | |
| (19) Certified Native American-owned | 9 | \$572 | \$572 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-212.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,468 | \$662,527 | \$662,527 | | | | |
| (2) MBE/WBE | 833 | \$164,747 | \$164,747 | 24.9 | 18.0 | 6.9 | 138.1 |
| (3) WBE | 524 | \$70,583 | \$70,583 | 10.7 | 11.6 | -0.9 | 92.2 |
| (4) MBE | 309 | \$94,164 | \$94,164 | 14.2 | 6.4 | 7.8 | 200+ |
| (5) African American-owned | 160 | \$42,561 | \$43,369 | 6.5 | 2.6 | 4.0 | 200+ |
| (6) Total Asian American-owned | 51 | \$22,659 | \$23,090 | 3.5 | 1.3 | 2.2 | 200+ |
| (7) Asian-Pacific American-owned | 40 | \$18,695 | \$19,050 | 2.9 | 0.8 | 2.1 | 200+ |
| (8) Subcontinent Asian American-owned | 11 | \$3,964 | \$4,039 | 0.6 | 0.6 | 0.0 | 107.5 |
| (9) Hispanic American-owned | 40 | \$6,883 | \$7,014 | 1.1 | 0.7 | 0.4 | 158.8 |
| (10) Native American-owned | 35 | \$20,305 | \$20,691 | 3.1 | 1.8 | 1.4 | 177.2 |
| (11) Unknown MBE | 23 | \$1,756 | | | | | |
| (12) Certified | 412 | \$92,367 | \$92,367 | 13.9 | | | |
| (13) Certified woman-owned | 216 | \$30,826 | \$30,826 | 4.7 | | | |
| (14) Certified minority-owned | 196 | \$61,541 | \$61,541 | 9.3 | | | |
| (15) Certified African American-owned | 126 | \$35,813 | \$35,813 | 5.4 | | | |
| (16) Certified Asian-Pacific American-owned | 22 | \$15,986 | \$15,986 | 2.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 9 | \$3,902 | \$3,902 | 0.6 | | | |
| (18) Certified Hispanic American-owned | 30 | \$5,268 | \$5,268 | 0.8 | | | |
| (19) Certified Native American-owned | 9 | \$572 | \$572 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure K-213.
Agency: IDOA, INDOT and SEIs
Funding: Contracts excluding FHWA-funded contracts
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|----------------------------------|--|---|---|---|--------------------------------------|
| (1) All firms | 165 | \$19,027 | \$19,027 | | | | |
| (2) MBE/WBE | 67 | \$6,532 | \$6,532 | 34.3 | 24.9 | 9.5 | 138.1 |
| (3) WBE | 33 | \$2,259 | \$2,259 | 11.9 | 16.9 | -5.0 | 70.3 |
| (4) MBE | 34 | \$4,273 | \$4,273 | 22.5 | 8.0 | 14.5 | 200+ |
| (5) African American-owned | 13 | \$2,416 | \$2,416 | 12.7 | 3.0 | 9.7 | 200+ |
| (6) Total Asian American-owned | 11 | \$608 | \$608 | 3.2 | 3.0 | 0.2 | 107.5 |
| (7) Asian-Pacific American-owned | 6 | \$130 | \$130 | 0.7 | 1.3 | -0.7 | 51.1 |
| (8) Subcontinent Asian American-owned | 5 | \$478 | \$478 | 2.5 | 1.6 | 0.9 | 153.8 |
| (9) Hispanic American-owned | 10 | \$1,249 | \$1,249 | 6.6 | 1.3 | 5.2 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 46 | \$5,517 | \$5,517 | 29.0 | | | |
| (13) Certified woman-owned | 17 | \$1,606 | \$1,606 | 8.4 | | | |
| (14) Certified minority-owned | 29 | \$3,910 | \$3,910 | 20.6 | | | |
| (15) Certified African American-owned | 12 | \$2,184 | \$2,184 | 11.5 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$115 | \$115 | 0.6 | | | |
| (17) Certified Subcontinent Asian American-owned | 4 | \$466 | \$466 | 2.4 | | | |
| (18) Certified Hispanic American-owned | 9 | \$1,146 | \$1,146 | 6.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX L.
Combined IDOA and INDOT Disparity Tables

Figure L-1.
Agency: IDOA and INDOT
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 54,066 | \$7,935,164 | \$7,935,164 | | | | |
| (2) MBE/WBE | 10,302 | \$869,968 | \$869,968 | 11.0 | 15.7 | -4.8 | 69.6 |
| (3) WBE | 6,834 | \$470,815 | \$470,815 | 5.9 | 11.2 | -5.3 | 52.8 |
| (4) MBE | 3,468 | \$399,153 | \$399,153 | 5.0 | 4.5 | 0.5 | 111.8 |
| (5) African American-owned | 1,231 | \$149,992 | \$152,798 | 1.9 | 1.3 | 0.6 | 143.8 |
| (6) Total Asian American-owned | 1,249 | \$121,982 | \$124,264 | 1.6 | 2.0 | -0.4 | 79.1 |
| (7) Asian-Pacific American-owned | 555 | \$54,073 | \$55,084 | 0.7 | 0.9 | -0.2 | 75.8 |
| (8) Subcontinent Asian American-owned | 692 | \$67,880 | \$69,149 | 0.9 | 1.1 | -0.2 | 81.8 |
| (9) Hispanic American-owned | 661 | \$67,539 | \$68,803 | 0.9 | 0.6 | 0.3 | 154.3 |
| (10) Native American-owned | 280 | \$52,311 | \$53,289 | 0.7 | 0.6 | 0.1 | 111.1 |
| (11) Unknown MBE | 47 | \$7,328 | | | | | |
| (12) Certified | 3,577 | \$307,553 | \$307,553 | 3.9 | | | |
| (13) Certified woman-owned | 1,951 | \$124,538 | \$124,555 | 1.6 | | | |
| (14) Certified minority-owned | 1,625 | \$182,973 | \$182,998 | 2.3 | | | |
| (15) Certified African American-owned | 787 | \$94,905 | \$94,918 | 1.2 | | | |
| (16) Certified Asian-Pacific American-owned | 148 | \$25,861 | \$25,865 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 179 | \$21,582 | \$21,585 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 448 | \$31,802 | \$31,807 | 0.4 | | | |
| (19) Certified Native American-owned | 63 | \$8,823 | \$8,824 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-2.
Agency: IDOA and INDOT
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 14,870 | \$4,942,975 | \$4,942,975 | | | | |
| (2) MBE/WBE | 3,087 | \$495,863 | \$495,863 | 10.0 | 10.9 | -0.8 | 92.3 |
| (3) WBE | 2,364 | \$308,143 | \$308,143 | 6.2 | 8.6 | -2.4 | 72.3 |
| (4) MBE | 723 | \$187,721 | \$187,721 | 3.8 | 2.2 | 1.6 | 169.3 |
| (5) African American-owned | 353 | \$77,915 | \$80,937 | 1.6 | 0.9 | 0.7 | 183.9 |
| (6) Total Asian American-owned | 118 | \$26,669 | \$27,704 | 0.6 | 0.4 | 0.1 | 133.4 |
| (7) Asian-Pacific American-owned | 98 | \$20,631 | \$21,432 | 0.4 | 0.2 | 0.3 | 200+ |
| (8) Subcontinent Asian American-owned | 20 | \$6,038 | \$6,272 | 0.1 | 0.2 | -0.1 | 51.8 |
| (9) Hispanic American-owned | 123 | \$28,699 | \$29,812 | 0.6 | 0.2 | 0.4 | 200+ |
| (10) Native American-owned | 97 | \$47,428 | \$49,268 | 1.0 | 0.7 | 0.3 | 134.1 |
| (11) Unknown MBE | 32 | \$7,010 | | | | | |
| (12) Certified | 1,230 | \$162,320 | \$162,320 | 3.3 | | | |
| (13) Certified woman-owned | 907 | \$81,593 | \$81,593 | 1.7 | | | |
| (14) Certified minority-owned | 323 | \$80,727 | \$80,727 | 1.6 | | | |
| (15) Certified African American-owned | 168 | \$42,408 | \$42,408 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 36 | \$16,332 | \$16,332 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 19 | \$6,031 | \$6,031 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 77 | \$8,275 | \$8,275 | 0.2 | | | |
| (19) Certified Native American-owned | 23 | \$7,681 | \$7,681 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-3.
Agency: IDOA and INDOT
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 22,040 | \$2,322,074 | \$2,322,074 | | | | |
| (2) MBE/WBE | 4,430 | \$250,749 | \$250,749 | 10.8 | 25.5 | -14.8 | 42.3 |
| (3) WBE | 2,667 | \$114,358 | \$114,358 | 4.9 | 16.7 | -11.8 | 29.5 |
| (4) MBE | 1,763 | \$136,391 | \$136,391 | 5.9 | 8.9 | -3.0 | 66.2 |
| (5) African American-owned | 562 | \$24,655 | \$24,697 | 1.1 | 2.1 | -1.1 | 50.0 |
| (6) Total Asian American-owned | 860 | \$79,318 | \$79,454 | 3.4 | 5.3 | -1.9 | 64.0 |
| (7) Asian-Pacific American-owned | 310 | \$23,503 | \$23,543 | 1.0 | 2.2 | -1.2 | 45.2 |
| (8) Subcontinent Asian American-owned | 550 | \$55,815 | \$55,911 | 2.4 | 3.1 | -0.7 | 77.6 |
| (9) Hispanic American-owned | 151 | \$27,347 | \$27,393 | 1.2 | 1.0 | 0.2 | 122.8 |
| (10) Native American-owned | 181 | \$4,838 | \$4,847 | 0.2 | 0.4 | -0.2 | 49.6 |
| (11) Unknown MBE | 9 | \$234 | | | | | |
| (12) Certified | 1,171 | \$81,319 | \$81,319 | 3.5 | | | |
| (13) Certified woman-owned | 589 | \$35,580 | \$35,580 | 1.5 | | | |
| (14) Certified minority-owned | 582 | \$45,739 | \$45,739 | 2.0 | | | |
| (15) Certified African American-owned | 361 | \$15,582 | \$15,582 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 35 | \$2,368 | \$2,368 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 80 | \$12,984 | \$12,984 | 0.6 | | | |
| (18) Certified Hispanic American-owned | 68 | \$13,707 | \$13,707 | 0.6 | | | |
| (19) Certified Native American-owned | 38 | \$1,098 | \$1,098 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-4.
Agency: IDOA and INDOT
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 14,674 | \$555,179 | \$555,179 | | | | |
| (2) MBE/WBE | 2,328 | \$107,448 | \$107,448 | 19.4 | 14.5 | 4.9 | 133.8 |
| (3) WBE | 1,414 | \$40,480 | \$40,480 | 7.3 | 9.7 | -2.4 | 75.2 |
| (4) MBE | 914 | \$66,968 | \$66,968 | 12.1 | 4.8 | 7.3 | 200+ |
| (5) African American-owned | 299 | \$46,969 | \$47,018 | 8.5 | 1.1 | 7.3 | 200+ |
| (6) Total Asian American-owned | 237 | \$8,591 | \$8,600 | 1.5 | 2.1 | -0.5 | 74.6 |
| (7) Asian-Pacific American-owned | 113 | \$2,534 | \$2,537 | 0.5 | 2.0 | -1.6 | 22.6 |
| (8) Subcontinent Asian American-owned | 122 | \$6,027 | \$6,033 | 1.1 | 0.0 | 1.0 | 200+ |
| (9) Hispanic American-owned | 371 | \$11,294 | \$11,306 | 2.0 | 1.5 | 0.5 | 135.9 |
| (10) Native American-owned | 2 | \$44 | \$44 | 0.0 | 0.1 | -0.1 | 11.3 |
| (11) Unknown MBE | 5 | \$70 | | | | | |
| (12) Certified | 965 | \$54,025 | \$54,025 | 9.7 | | | |
| (13) Certified woman-owned | 290 | \$4,346 | \$4,350 | 0.8 | | | |
| (14) Certified minority-owned | 674 | \$49,636 | \$49,675 | 8.9 | | | |
| (15) Certified African American-owned | 257 | \$36,909 | \$36,938 | 6.7 | | | |
| (16) Certified Asian-Pacific American-owned | 48 | \$495 | \$495 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 80 | \$2,568 | \$2,570 | 0.5 | | | |
| (18) Certified Hispanic American-owned | 287 | \$9,620 | \$9,628 | 1.7 | | | |
| (19) Certified Native American-owned | 2 | \$44 | \$44 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-5.
Agency: IDOA and INDOT
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,482 | \$114,937 | \$114,937 | | | | |
| (2) MBE/WBE | 457 | \$15,907 | \$15,907 | 13.8 | 33.5 | -19.6 | 41.3 |
| (3) WBE | 389 | \$7,835 | \$7,835 | 6.8 | 21.5 | -14.7 | 31.7 |
| (4) MBE | 68 | \$8,072 | \$8,072 | 7.0 | 12.0 | -4.9 | 58.7 |
| (5) African American-owned | 17 | \$454 | \$455 | 0.4 | 5.7 | -5.3 | 6.9 |
| (6) Total Asian American-owned | 34 | \$7,404 | \$7,417 | 6.5 | 0.7 | 5.8 | 200+ |
| (7) Asian-Pacific American-owned | 34 | \$7,404 | \$7,417 | 6.5 | 0.6 | 5.8 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 16 | \$200 | \$200 | 0.2 | 4.7 | -4.5 | 3.7 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (11) Unknown MBE | 1 | \$14 | | | | | |
| (12) Certified | 211 | \$9,888 | \$9,888 | 8.6 | | | |
| (13) Certified woman-owned | 165 | \$3,018 | \$3,018 | 2.6 | | | |
| (14) Certified minority-owned | 46 | \$6,871 | \$6,871 | 6.0 | | | |
| (15) Certified African American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 29 | \$6,666 | \$6,666 | 5.8 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 16 | \$200 | \$200 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-6.
Agency: IDOA and INDOT
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 49,036 | \$7,110,590 | \$7,110,590 | | | | |
| (2) MBE/WBE | 7,915 | \$563,871 | \$563,871 | 7.9 | 15.2 | -7.3 | 52.2 |
| (3) WBE | 5,032 | \$309,977 | \$309,977 | 4.4 | 10.9 | -6.5 | 40.2 |
| (4) MBE | 2,883 | \$253,893 | \$253,893 | 3.6 | 4.3 | -0.8 | 82.6 |
| (5) African American-owned | 967 | \$82,043 | \$84,044 | 1.2 | 1.3 | -0.1 | 93.7 |
| (6) Total Asian American-owned | 1,069 | \$88,319 | \$90,473 | 1.3 | 2.0 | -0.7 | 64.0 |
| (7) Asian-Pacific American-owned | 463 | \$29,454 | \$30,172 | 0.4 | 0.9 | -0.5 | 45.6 |
| (8) Subcontinent Asian American-owned | 604 | \$58,836 | \$60,270 | 0.8 | 1.1 | -0.2 | 80.1 |
| (9) Hispanic American-owned | 576 | \$56,477 | \$57,855 | 0.8 | 0.6 | 0.2 | 141.7 |
| (10) Native American-owned | 230 | \$21,009 | \$21,522 | 0.3 | 0.5 | -0.2 | 62.1 |
| (11) Unknown MBE | 41 | \$6,045 | | | | | |
| (12) Certified | 2,437 | \$156,193 | \$156,193 | 2.2 | | | |
| (13) Certified woman-owned | 1,151 | \$47,479 | \$47,492 | 0.7 | | | |
| (14) Certified minority-owned | 1,285 | \$108,671 | \$108,701 | 1.5 | | | |
| (15) Certified African American-owned | 614 | \$52,396 | \$52,411 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 118 | \$8,832 | \$8,834 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 119 | \$14,791 | \$14,795 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 378 | \$24,011 | \$24,017 | 0.3 | | | |
| (19) Certified Native American-owned | 56 | \$8,641 | \$8,643 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-7.
Agency: IDOA and INDOT
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 10,588 | \$4,259,745 | \$4,259,745 | | | | |
| (2) MBE/WBE | 1,131 | \$239,116 | \$239,116 | 5.6 | 9.4 | -3.8 | 59.4 |
| (3) WBE | 821 | \$172,020 | \$172,020 | 4.0 | 7.6 | -3.6 | 52.8 |
| (4) MBE | 310 | \$67,096 | \$67,096 | 1.6 | 1.8 | -0.2 | 87.7 |
| (5) African American-owned | 148 | \$18,583 | \$20,317 | 0.5 | 0.7 | -0.3 | 64.0 |
| (6) Total Asian American-owned | 39 | \$6,281 | \$6,867 | 0.2 | 0.3 | -0.2 | 50.3 |
| (7) Asian-Pacific American-owned | 37 | \$991 | \$1,084 | 0.0 | 0.1 | -0.1 | 23.3 |
| (8) Subcontinent Asian American-owned | 2 | \$5,290 | \$5,783 | 0.1 | 0.2 | -0.1 | 64.2 |
| (9) Hispanic American-owned | 50 | \$20,379 | \$22,281 | 0.5 | 0.1 | 0.4 | 200+ |
| (10) Native American-owned | 47 | \$16,127 | \$17,632 | 0.4 | 0.6 | -0.2 | 72.0 |
| (11) Unknown MBE | 26 | \$5,727 | | | | | |
| (12) Certified | 328 | \$42,444 | \$42,444 | 1.0 | | | |
| (13) Certified woman-owned | 241 | \$22,150 | \$22,150 | 0.5 | | | |
| (14) Certified minority-owned | 87 | \$20,294 | \$20,294 | 0.5 | | | |
| (15) Certified African American-owned | 39 | \$5,661 | \$5,661 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 18 | \$558 | \$558 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$5,282 | \$5,282 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 13 | \$1,294 | \$1,294 | 0.0 | | | |
| (19) Certified Native American-owned | 16 | \$7,499 | \$7,499 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-8.
Agency: IDOA and INDOT
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 21,389 | \$2,191,198 | \$2,191,198 | | | | |
| (2) MBE/WBE | 4,046 | \$206,841 | \$206,841 | 9.4 | 25.6 | -16.1 | 36.9 |
| (3) WBE | 2,442 | \$93,008 | \$93,008 | 4.2 | 16.9 | -12.6 | 25.2 |
| (4) MBE | 1,604 | \$113,833 | \$113,833 | 5.2 | 8.7 | -3.5 | 59.5 |
| (5) African American-owned | 513 | \$17,130 | \$17,165 | 0.8 | 2.1 | -1.3 | 37.8 |
| (6) Total Asian American-owned | 761 | \$66,819 | \$66,957 | 3.1 | 5.3 | -2.2 | 58.0 |
| (7) Asian-Pacific American-owned | 280 | \$18,535 | \$18,573 | 0.8 | 2.3 | -1.4 | 37.5 |
| (8) Subcontinent Asian American-owned | 481 | \$48,285 | \$48,384 | 2.2 | 3.0 | -0.8 | 73.3 |
| (9) Hispanic American-owned | 140 | \$24,812 | \$24,863 | 1.1 | 1.0 | 0.2 | 117.9 |
| (10) Native American-owned | 181 | \$4,838 | \$4,848 | 0.2 | 0.4 | -0.2 | 54.7 |
| (11) Unknown MBE | 9 | \$234 | | | | | |
| (12) Certified | 954 | \$51,183 | \$51,183 | 2.3 | | | |
| (13) Certified woman-owned | 469 | \$18,822 | \$18,822 | 0.9 | | | |
| (14) Certified minority-owned | 485 | \$32,361 | \$32,361 | 1.5 | | | |
| (15) Certified African American-owned | 322 | \$10,093 | \$10,093 | 0.5 | | | |
| (16) Certified Asian-Pacific American-owned | 24 | \$1,124 | \$1,124 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 38 | \$6,941 | \$6,941 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 63 | \$13,105 | \$13,105 | 0.6 | | | |
| (19) Certified Native American-owned | 38 | \$1,098 | \$1,098 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-9.
Agency: IDOA and INDOT
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 14,638 | \$550,575 | \$550,575 | | | | |
| (2) MBE/WBE | 2,310 | \$104,080 | \$104,080 | 18.9 | 14.4 | 4.5 | 131.3 |
| (3) WBE | 1,405 | \$39,087 | \$39,087 | 7.1 | 9.6 | -2.5 | 73.6 |
| (4) MBE | 905 | \$64,993 | \$64,993 | 11.8 | 4.8 | 7.0 | 200+ |
| (5) African American-owned | 293 | \$45,977 | \$46,027 | 8.4 | 1.1 | 7.2 | 200+ |
| (6) Total Asian American-owned | 235 | \$7,815 | \$7,823 | 1.4 | 2.1 | -0.7 | 68.3 |
| (7) Asian-Pacific American-owned | 112 | \$2,524 | \$2,527 | 0.5 | 2.0 | -1.6 | 22.5 |
| (8) Subcontinent Asian American-owned | 121 | \$5,261 | \$5,267 | 1.0 | 0.0 | 0.9 | 200+ |
| (9) Hispanic American-owned | 370 | \$11,087 | \$11,099 | 2.0 | 1.5 | 0.5 | 133.9 |
| (10) Native American-owned | 2 | \$44 | \$44 | 0.0 | 0.1 | -0.1 | 13.7 |
| (11) Unknown MBE | 5 | \$70 | | | | | |
| (12) Certified | 955 | \$52,989 | \$52,989 | 9.6 | | | |
| (13) Certified woman-owned | 287 | \$3,800 | \$3,803 | 0.7 | | | |
| (14) Certified minority-owned | 667 | \$49,146 | \$49,185 | 8.9 | | | |
| (15) Certified African American-owned | 252 | \$36,637 | \$36,666 | 6.7 | | | |
| (16) Certified Asian-Pacific American-owned | 47 | \$484 | \$485 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 80 | \$2,568 | \$2,570 | 0.5 | | | |
| (18) Certified Hispanic American-owned | 286 | \$9,413 | \$9,420 | 1.7 | | | |
| (19) Certified Native American-owned | 2 | \$44 | \$44 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-10.
Agency: IDOA and INDOT
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,421 | \$109,073 | \$109,073 | | | | |
| (2) MBE/WBE | 428 | \$13,834 | \$13,834 | 12.7 | 34.2 | -21.5 | 37.1 |
| (3) WBE | 364 | \$5,862 | \$5,862 | 5.4 | 21.8 | -16.4 | 24.7 |
| (4) MBE | 64 | \$7,972 | \$7,972 | 7.3 | 12.4 | -5.1 | 58.9 |
| (5) African American-owned | 13 | \$354 | \$354 | 0.3 | 5.9 | -5.6 | 5.5 |
| (6) Total Asian American-owned | 34 | \$7,404 | \$7,417 | 6.8 | 0.7 | 6.1 | 200+ |
| (7) Asian-Pacific American-owned | 34 | \$7,404 | \$7,417 | 6.8 | 0.7 | 6.1 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 16 | \$200 | \$200 | 0.2 | 4.9 | -4.7 | 3.7 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (11) Unknown MBE | 1 | \$14 | | | | | |
| (12) Certified | 200 | \$9,578 | \$9,578 | 8.8 | | | |
| (13) Certified woman-owned | 154 | \$2,707 | \$2,707 | 2.5 | | | |
| (14) Certified minority-owned | 46 | \$6,871 | \$6,871 | 6.3 | | | |
| (15) Certified African American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 29 | \$6,666 | \$6,666 | 6.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 16 | \$200 | \$200 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-11.
Agency: IDOA and INDOT
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 5,030 | \$824,574 | \$824,574 | | | | |
| (2) MBE/WBE | 2,387 | \$306,097 | \$306,097 | 37.1 | 20.6 | 16.5 | 180.1 |
| (3) WBE | 1,802 | \$160,838 | \$160,838 | 19.5 | 14.6 | 4.9 | 133.7 |
| (4) MBE | 585 | \$145,259 | \$145,259 | 17.6 | 6.0 | 11.6 | 200+ |
| (5) African American-owned | 264 | \$67,949 | \$68,555 | 8.3 | 2.0 | 6.3 | 200+ |
| (6) Total Asian American-owned | 180 | \$33,663 | \$33,963 | 4.1 | 1.9 | 2.2 | 200+ |
| (7) Asian-Pacific American-owned | 92 | \$24,619 | \$24,838 | 3.0 | 0.8 | 2.2 | 200+ |
| (8) Subcontinent Asian American-owned | 88 | \$9,044 | \$9,125 | 1.1 | 1.1 | 0.0 | 98.6 |
| (9) Hispanic American-owned | 85 | \$11,062 | \$11,161 | 1.4 | 0.5 | 0.9 | 200+ |
| (10) Native American-owned | 50 | \$31,301 | \$31,580 | 3.8 | 1.6 | 2.2 | 200+ |
| (11) Unknown MBE | 6 | \$1,284 | | | | | |
| (12) Certified | 1,140 | \$151,360 | \$151,360 | 18.4 | | | |
| (13) Certified woman-owned | 800 | \$77,058 | \$77,058 | 9.3 | | | |
| (14) Certified minority-owned | 340 | \$74,302 | \$74,302 | 9.0 | | | |
| (15) Certified African American-owned | 173 | \$42,508 | \$42,508 | 5.2 | | | |
| (16) Certified Asian-Pacific American-owned | 30 | \$17,029 | \$17,029 | 2.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 60 | \$6,791 | \$6,791 | 0.8 | | | |
| (18) Certified Hispanic American-owned | 70 | \$7,792 | \$7,792 | 0.9 | | | |
| (19) Certified Native American-owned | 7 | \$182 | \$182 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-12.
Agency: IDOA and INDOT
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,282 | \$683,230 | \$683,230 | | | | |
| (2) MBE/WBE | 1,956 | \$256,747 | \$256,747 | 37.6 | 19.8 | 17.8 | 190.2 |
| (3) WBE | 1,543 | \$136,123 | \$136,123 | 19.9 | 14.7 | 5.2 | 135.3 |
| (4) MBE | 413 | \$120,625 | \$120,625 | 17.7 | 5.0 | 12.6 | 200+ |
| (5) African American-owned | 205 | \$59,332 | \$59,970 | 8.8 | 1.8 | 7.0 | 200+ |
| (6) Total Asian American-owned | 79 | \$20,388 | \$20,608 | 3.0 | 1.0 | 2.0 | 200+ |
| (7) Asian-Pacific American-owned | 61 | \$19,640 | \$19,851 | 2.9 | 0.6 | 2.3 | 200+ |
| (8) Subcontinent Asian American-owned | 18 | \$748 | \$756 | 0.1 | 0.5 | -0.3 | 24.4 |
| (9) Hispanic American-owned | 73 | \$8,320 | \$8,409 | 1.2 | 0.4 | 0.9 | 200+ |
| (10) Native American-owned | 50 | \$31,301 | \$31,638 | 4.6 | 1.8 | 2.8 | 200+ |
| (11) Unknown MBE | 6 | \$1,284 | | | | | |
| (12) Certified | 902 | \$119,877 | \$119,877 | 17.5 | | | |
| (13) Certified woman-owned | 666 | \$59,444 | \$59,444 | 8.7 | | | |
| (14) Certified minority-owned | 236 | \$60,433 | \$60,433 | 8.8 | | | |
| (15) Certified African American-owned | 129 | \$36,747 | \$36,747 | 5.4 | | | |
| (16) Certified Asian-Pacific American-owned | 18 | \$15,775 | \$15,775 | 2.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 18 | \$748 | \$748 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 64 | \$6,981 | \$6,981 | 1.0 | | | |
| (19) Certified Native American-owned | 7 | \$182 | \$182 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-13.
Agency: IDOA and INDOT
Funding: All
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 651 | \$130,876 | \$130,876 | | | | |
| (2) MBE/WBE | 384 | \$43,908 | \$43,908 | 33.5 | 25.0 | 8.5 | 134.1 |
| (3) WBE | 225 | \$21,350 | \$21,350 | 16.3 | 13.8 | 2.5 | 118.5 |
| (4) MBE | 159 | \$22,558 | \$22,558 | 17.2 | 11.3 | 6.0 | 153.1 |
| (5) African American-owned | 49 | \$7,525 | \$7,525 | 5.7 | 3.0 | 2.7 | 190.0 |
| (6) Total Asian American-owned | 99 | \$12,499 | \$12,499 | 9.5 | 6.6 | 3.0 | 144.7 |
| (7) Asian-Pacific American-owned | 30 | \$4,968 | \$4,968 | 3.8 | 1.9 | 1.9 | 197.3 |
| (8) Subcontinent Asian American-owned | 69 | \$7,530 | \$7,530 | 5.8 | 4.7 | 1.1 | 123.0 |
| (9) Hispanic American-owned | 11 | \$2,535 | \$2,535 | 1.9 | 0.9 | 1.0 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 217 | \$30,137 | \$30,137 | 23.0 | | | |
| (13) Certified woman-owned | 120 | \$16,758 | \$16,758 | 12.8 | | | |
| (14) Certified minority-owned | 97 | \$13,379 | \$13,379 | 10.2 | | | |
| (15) Certified African American-owned | 39 | \$5,489 | \$5,489 | 4.2 | | | |
| (16) Certified Asian-Pacific American-owned | 11 | \$1,244 | \$1,244 | 1.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 42 | \$6,043 | \$6,043 | 4.6 | | | |
| (18) Certified Hispanic American-owned | 5 | \$602 | \$602 | 0.5 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-16.
Agency: IDOA and INDOT
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 43,989 | \$1,027,236 | \$1,027,236 | | | | |
| (2) MBE/WBE | 7,296 | \$169,873 | \$169,873 | 16.5 | 22.8 | -6.3 | 72.5 |
| (3) WBE | 4,723 | \$102,877 | \$102,877 | 10.0 | 15.6 | -5.6 | 64.1 |
| (4) MBE | 2,573 | \$66,996 | \$66,996 | 6.5 | 7.2 | -0.7 | 90.8 |
| (5) African American-owned | 879 | \$28,261 | \$28,645 | 2.8 | 3.0 | -0.2 | 93.4 |
| (6) Total Asian American-owned | 959 | \$24,530 | \$24,863 | 2.4 | 2.2 | 0.3 | 111.7 |
| (7) Asian-Pacific American-owned | 405 | \$9,079 | \$9,202 | 0.9 | 1.2 | -0.3 | 76.7 |
| (8) Subcontinent Asian American-owned | 552 | \$15,422 | \$15,631 | 1.5 | 1.0 | 0.5 | 152.2 |
| (9) Hispanic American-owned | 497 | \$9,772 | \$9,905 | 1.0 | 1.4 | -0.5 | 67.3 |
| (10) Native American-owned | 210 | \$3,535 | \$3,583 | 0.3 | 0.5 | -0.2 | 63.5 |
| (11) Unknown MBE | 28 | \$898 | | | | | |
| (12) Certified | 2,231 | \$54,027 | \$54,027 | 5.3 | | | |
| (13) Certified woman-owned | 1,090 | \$22,885 | \$22,904 | 2.2 | | | |
| (14) Certified minority-owned | 1,140 | \$31,099 | \$31,124 | 3.0 | | | |
| (15) Certified African American-owned | 559 | \$19,634 | \$19,650 | 1.9 | | | |
| (16) Certified Asian-Pacific American-owned | 88 | \$1,921 | \$1,923 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 110 | \$2,450 | \$2,452 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 333 | \$5,838 | \$5,842 | 0.6 | | | |
| (19) Certified Native American-owned | 50 | \$1,256 | \$1,257 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-17.
Agency: IDOA and INDOT
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 8,210 | \$221,235 | \$221,235 | | | | |
| (2) MBE/WBE | 879 | \$28,149 | \$28,149 | 12.7 | 16.3 | -3.6 | 78.1 |
| (3) WBE | 645 | \$21,196 | \$21,196 | 9.6 | 12.9 | -3.3 | 74.4 |
| (4) MBE | 234 | \$6,953 | \$6,953 | 3.1 | 3.4 | -0.3 | 92.0 |
| (5) African American-owned | 129 | \$3,539 | \$3,861 | 1.7 | 1.7 | 0.1 | 103.2 |
| (6) Total Asian American-owned | 36 | \$870 | \$949 | 0.4 | 0.3 | 0.1 | 135.9 |
| (7) Asian-Pacific American-owned | 35 | \$863 | \$941 | 0.4 | 0.2 | 0.2 | 200+ |
| (8) Subcontinent Asian American-owned | 1 | \$7 | \$8 | 0.0 | 0.1 | -0.1 | 2.9 |
| (9) Hispanic American-owned | 28 | \$1,340 | \$1,462 | 0.7 | 0.3 | 0.3 | 191.8 |
| (10) Native American-owned | 28 | \$624 | \$681 | 0.3 | 1.0 | -0.7 | 31.0 |
| (11) Unknown MBE | 13 | \$580 | | | | | |
| (12) Certified | 278 | \$8,874 | \$8,874 | 4.0 | | | |
| (13) Certified woman-owned | 207 | \$6,983 | \$6,983 | 3.2 | | | |
| (14) Certified minority-owned | 71 | \$1,892 | \$1,892 | 0.9 | | | |
| (15) Certified African American-owned | 33 | \$895 | \$895 | 0.4 | | | |
| (16) Certified Asian-Pacific American-owned | 16 | \$429 | \$429 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 12 | \$453 | \$453 | 0.2 | | | |
| (19) Certified Native American-owned | 10 | \$114 | \$114 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-18.
Agency: IDOA and INDOT
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 19,291 | \$506,551 | \$506,551 | | | | |
| (2) MBE/WBE | 3,810 | \$93,687 | \$93,687 | 18.5 | 27.1 | -8.6 | 68.2 |
| (3) WBE | 2,339 | \$56,929 | \$56,929 | 11.2 | 16.7 | -5.4 | 67.4 |
| (4) MBE | 1,471 | \$36,758 | \$36,758 | 7.3 | 10.5 | -3.2 | 69.3 |
| (5) African American-owned | 501 | \$12,631 | \$12,712 | 2.5 | 3.8 | -1.3 | 65.3 |
| (6) Total Asian American-owned | 689 | \$18,337 | \$18,455 | 3.6 | 4.0 | -0.4 | 90.6 |
| (7) Asian-Pacific American-owned | 253 | \$5,812 | \$5,850 | 1.2 | 2.1 | -0.9 | 55.0 |
| (8) Subcontinent Asian American-owned | 436 | \$12,525 | \$12,605 | 2.5 | 1.9 | 0.6 | 129.5 |
| (9) Hispanic American-owned | 92 | \$2,688 | \$2,706 | 0.5 | 2.0 | -1.4 | 27.1 |
| (10) Native American-owned | 180 | \$2,868 | \$2,886 | 0.6 | 0.6 | 0.0 | 101.3 |
| (11) Unknown MBE | 9 | \$234 | | | | | |
| (12) Certified | 888 | \$22,792 | \$22,792 | 4.5 | | | |
| (13) Certified woman-owned | 449 | \$10,994 | \$10,994 | 2.2 | | | |
| (14) Certified minority-owned | 439 | \$11,797 | \$11,797 | 2.3 | | | |
| (15) Certified African American-owned | 318 | \$7,869 | \$7,869 | 1.6 | | | |
| (16) Certified Asian-Pacific American-owned | 22 | \$716 | \$716 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 33 | \$800 | \$800 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 28 | \$1,315 | \$1,315 | 0.3 | | | |
| (19) Certified Native American-owned | 38 | \$1,098 | \$1,098 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-19.
Agency: IDOA and INDOT
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 14,227 | \$255,179 | \$255,179 | | | | |
| (2) MBE/WBE | 2,212 | \$42,328 | \$42,328 | 16.6 | 18.1 | -1.5 | 91.5 |
| (3) WBE | 1,381 | \$20,489 | \$20,489 | 8.0 | 14.4 | -6.4 | 55.6 |
| (4) MBE | 831 | \$21,839 | \$21,839 | 8.6 | 3.7 | 4.9 | 200+ |
| (5) African American-owned | 236 | \$11,738 | \$11,776 | 4.6 | 1.8 | 2.8 | 200+ |
| (6) Total Asian American-owned | 227 | \$4,443 | \$4,457 | 1.7 | 0.4 | 1.4 | 200+ |
| (7) Asian-Pacific American-owned | 110 | \$1,524 | \$1,529 | 0.6 | 0.3 | 0.3 | 200+ |
| (8) Subcontinent Asian American-owned | 115 | \$2,890 | \$2,899 | 1.1 | 0.1 | 1.0 | 200+ |
| (9) Hispanic American-owned | 361 | \$5,544 | \$5,562 | 2.2 | 1.4 | 0.8 | 157.3 |
| (10) Native American-owned | 2 | \$44 | \$44 | 0.0 | 0.1 | -0.1 | 13.8 |
| (11) Unknown MBE | 5 | \$70 | | | | | |
| (12) Certified | 896 | \$20,404 | \$20,404 | 8.0 | | | |
| (13) Certified woman-owned | 285 | \$3,448 | \$3,455 | 1.4 | | | |
| (14) Certified minority-owned | 610 | \$16,914 | \$16,949 | 6.6 | | | |
| (15) Certified African American-owned | 207 | \$10,865 | \$10,888 | 4.3 | | | |
| (16) Certified Asian-Pacific American-owned | 47 | \$484 | \$486 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 77 | \$1,650 | \$1,654 | 0.6 | | | |
| (18) Certified Hispanic American-owned | 277 | \$3,870 | \$3,878 | 1.5 | | | |
| (19) Certified Native American-owned | 2 | \$44 | \$44 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure L-20.
Agency: IDOA and INDOT
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,261 | \$44,271 | \$44,271 | | | | |
| (2) MBE/WBE | 395 | \$5,709 | \$5,709 | 12.9 | 32.8 | -19.9 | 39.3 |
| (3) WBE | 358 | \$4,262 | \$4,262 | 9.6 | 24.1 | -14.5 | 39.9 |
| (4) MBE | 37 | \$1,447 | \$1,447 | 3.3 | 8.7 | -5.4 | 37.5 |
| (5) African American-owned | 13 | \$354 | \$357 | 0.8 | 6.6 | -5.8 | 12.2 |
| (6) Total Asian American-owned | 7 | \$880 | \$888 | 2.0 | 0.5 | 1.5 | 200+ |
| (7) Asian-Pacific American-owned | 7 | \$880 | \$888 | 2.0 | 0.5 | 1.6 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 16 | \$200 | \$202 | 0.5 | 1.0 | -0.5 | 46.1 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (11) Unknown MBE | 1 | \$14 | | | | | |
| (12) Certified | 169 | \$1,957 | \$1,957 | 4.4 | | | |
| (13) Certified woman-owned | 149 | \$1,461 | \$1,461 | 3.3 | | | |
| (14) Certified minority-owned | 20 | \$496 | \$496 | 1.1 | | | |
| (15) Certified African American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 3 | \$291 | \$291 | 0.7 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 16 | \$200 | \$200 | 0.5 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX M.
Combined SEI Disparity Tables

Figure M-1.
Agency: SEIs
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 31,260 | \$2,128,205 | \$2,128,205 | | | | |
| (2) MBE/WBE | 5,799 | \$268,170 | \$268,170 | 12.6 | 17.8 | -5.2 | 70.6 |
| (3) WBE | 4,451 | \$214,244 | \$214,244 | 10.1 | 9.9 | 0.2 | 101.9 |
| (4) MBE | 1,348 | \$53,926 | \$53,926 | 2.5 | 8.0 | -5.4 | 31.8 |
| (5) African American-owned | 423 | \$19,078 | \$21,931 | 1.0 | 3.5 | -2.5 | 29.5 |
| (6) Total Asian American-owned | 358 | \$13,693 | \$15,741 | 0.7 | 2.9 | -2.1 | 25.9 |
| (7) Asian-Pacific American-owned | 280 | \$7,596 | \$8,732 | 0.4 | 1.0 | -0.6 | 39.6 |
| (8) Subcontinent Asian American-owned | 71 | \$5,990 | \$6,886 | 0.3 | 1.8 | -1.5 | 17.8 |
| (9) Hispanic American-owned | 328 | \$11,152 | \$12,819 | 0.6 | 1.0 | -0.4 | 62.3 |
| (10) Native American-owned | 69 | \$2,988 | \$3,434 | 0.2 | 0.6 | -0.4 | 28.7 |
| (11) Unknown MBE | 170 | \$7,015 | | | | | |
| (12) Certified | 2,579 | \$117,173 | \$117,173 | 5.5 | | | |
| (13) Certified woman-owned | 1,951 | \$87,097 | \$87,377 | 4.1 | | | |
| (14) Certified minority-owned | 611 | \$29,700 | \$29,795 | 1.4 | | | |
| (15) Certified African American-owned | 218 | \$14,022 | \$14,067 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 165 | \$4,101 | \$4,115 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 28 | \$4,837 | \$4,853 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 190 | \$5,952 | \$5,971 | 0.3 | | | |
| (19) Certified Native American-owned | 10 | \$787 | \$790 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 17 | \$376 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-2.
Agency: SEIs
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 9,151 | \$1,340,269 | \$1,340,269 | | | | |
| (2) MBE/WBE | 1,256 | \$143,268 | \$143,268 | 10.7 | 15.1 | -4.4 | 70.8 |
| (3) WBE | 930 | \$124,326 | \$124,326 | 9.3 | 7.6 | 1.7 | 122.5 |
| (4) MBE | 326 | \$18,942 | \$18,942 | 1.4 | 7.5 | -6.1 | 18.8 |
| (5) African American-owned | 112 | \$4,736 | \$6,294 | 0.5 | 3.6 | -3.1 | 13.2 |
| (6) Total Asian American-owned | 40 | \$5,252 | \$6,980 | 0.5 | 2.7 | -2.2 | 19.5 |
| (7) Asian-Pacific American-owned | 32 | \$1,354 | \$1,799 | 0.1 | 0.5 | -0.3 | 28.3 |
| (8) Subcontinent Asian American-owned | 8 | \$3,898 | \$5,180 | 0.4 | 2.2 | -1.8 | 17.6 |
| (9) Hispanic American-owned | 64 | \$3,000 | \$3,988 | 0.3 | 0.4 | -0.1 | 66.6 |
| (10) Native American-owned | 33 | \$1,264 | \$1,680 | 0.1 | 0.7 | -0.6 | 17.2 |
| (11) Unknown MBE | 77 | \$4,689 | | | | | |
| (12) Certified | 354 | \$50,454 | \$50,454 | 3.8 | | | |
| (13) Certified woman-owned | 200 | \$40,293 | \$40,293 | 3.0 | | | |
| (14) Certified minority-owned | 154 | \$10,160 | \$10,160 | 0.8 | | | |
| (15) Certified African American-owned | 87 | \$3,969 | \$3,969 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 16 | \$852 | \$852 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 5 | \$3,829 | \$3,829 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 42 | \$1,067 | \$1,067 | 0.1 | | | |
| (19) Certified Native American-owned | 4 | \$443 | \$443 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-3.
Agency: SEIs
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 8,729 | \$390,924 | \$390,924 | | | | |
| (2) MBE/WBE | 2,022 | \$68,569 | \$68,569 | 17.5 | 24.6 | -7.1 | 71.3 |
| (3) WBE | 1,506 | \$45,817 | \$45,817 | 11.7 | 15.1 | -3.4 | 77.5 |
| (4) MBE | 516 | \$22,753 | \$22,753 | 5.8 | 9.5 | -3.7 | 61.4 |
| (5) African American-owned | 180 | \$10,963 | \$11,787 | 3.0 | 3.8 | -0.8 | 78.7 |
| (6) Total Asian American-owned | 205 | \$5,702 | \$6,131 | 1.6 | 4.3 | -2.8 | 36.1 |
| (7) Asian-Pacific American-owned | 161 | \$3,893 | \$4,186 | 1.1 | 2.0 | -1.0 | 52.7 |
| (8) Subcontinent Asian American-owned | 39 | \$1,716 | \$1,845 | 0.5 | 2.3 | -1.8 | 20.4 |
| (9) Hispanic American-owned | 71 | \$3,418 | \$3,675 | 0.9 | 0.8 | 0.1 | 111.9 |
| (10) Native American-owned | 17 | \$1,078 | \$1,159 | 0.3 | 0.4 | -0.1 | 72.1 |
| (11) Unknown MBE | 43 | \$1,591 | | | | | |
| (12) Certified | 1,047 | \$38,683 | \$38,683 | 9.9 | | | |
| (13) Certified woman-owned | 843 | \$25,905 | \$25,905 | 6.6 | | | |
| (14) Certified minority-owned | 204 | \$12,778 | \$12,778 | 3.3 | | | |
| (15) Certified African American-owned | 63 | \$8,077 | \$8,077 | 2.1 | | | |
| (16) Certified Asian-Pacific American-owned | 100 | \$2,127 | \$2,127 | 0.5 | | | |
| (17) Certified Subcontinent Asian American-owned | 16 | \$938 | \$938 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 24 | \$1,604 | \$1,604 | 0.4 | | | |
| (19) Certified Native American-owned | 1 | \$31 | \$31 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-4.
Agency: SEIs
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 11,109 | \$351,948 | \$351,948 | | | | |
| (2) MBE/WBE | 1,931 | \$46,136 | \$46,136 | 13.1 | 18.3 | -5.2 | 71.5 |
| (3) WBE | 1,591 | \$37,475 | \$37,475 | 10.6 | 11.1 | -0.4 | 96.2 |
| (4) MBE | 340 | \$8,661 | \$8,661 | 2.5 | 7.3 | -4.8 | 33.8 |
| (5) African American-owned | 53 | \$1,073 | \$1,134 | 0.3 | 2.2 | -1.9 | 14.7 |
| (6) Total Asian American-owned | 106 | \$2,325 | \$2,457 | 0.7 | 2.2 | -1.5 | 32.2 |
| (7) Asian-Pacific American-owned | 80 | \$1,935 | \$2,045 | 0.6 | 2.1 | -1.5 | 27.9 |
| (8) Subcontinent Asian American-owned | 24 | \$377 | \$398 | 0.1 | 0.1 | 0.0 | 132.2 |
| (9) Hispanic American-owned | 142 | \$4,259 | \$4,501 | 1.3 | 2.9 | -1.6 | 44.1 |
| (10) Native American-owned | 11 | \$539 | \$570 | 0.2 | 0.0 | 0.1 | 200+ |
| (11) Unknown MBE | 28 | \$466 | | | | | |
| (12) Certified | 993 | \$24,147 | \$24,147 | 6.9 | | | |
| (13) Certified woman-owned | 777 | \$18,530 | \$18,823 | 5.3 | | | |
| (14) Certified minority-owned | 199 | \$5,242 | \$5,325 | 1.5 | | | |
| (15) Certified African American-owned | 27 | \$590 | \$599 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 45 | \$1,071 | \$1,087 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 7 | \$70 | \$71 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 115 | \$3,198 | \$3,248 | 0.9 | | | |
| (19) Certified Native American-owned | 5 | \$313 | \$318 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 17 | \$376 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-5.
Agency: SEIs
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,271 | \$45,065 | \$45,065 | | | | |
| (2) MBE/WBE | 590 | \$10,197 | \$10,197 | 22.6 | 36.7 | -14.1 | 61.7 |
| (3) WBE | 424 | \$6,627 | \$6,627 | 14.7 | 23.5 | -8.8 | 62.7 |
| (4) MBE | 166 | \$3,570 | \$3,570 | 7.9 | 13.2 | -5.3 | 59.9 |
| (5) African American-owned | 78 | \$2,306 | \$2,494 | 5.5 | 8.6 | -3.1 | 64.2 |
| (6) Total Asian American-owned | 7 | \$414 | \$448 | 1.0 | 1.0 | 0.0 | 104.2 |
| (7) Asian-Pacific American-owned | 7 | \$414 | \$448 | 1.0 | 0.9 | 0.1 | 110.1 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 51 | \$474 | \$513 | 1.1 | 2.5 | -1.3 | 46.2 |
| (10) Native American-owned | 8 | \$106 | \$115 | 0.3 | 1.2 | -0.9 | 21.7 |
| (11) Unknown MBE | 22 | \$269 | | | | | |
| (12) Certified | 185 | \$3,889 | \$3,889 | 8.6 | | | |
| (13) Certified woman-owned | 131 | \$2,369 | \$2,369 | 5.3 | | | |
| (14) Certified minority-owned | 54 | \$1,520 | \$1,520 | 3.4 | | | |
| (15) Certified African American-owned | 41 | \$1,385 | \$1,385 | 3.1 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$52 | \$52 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 9 | \$83 | \$83 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-6.
Agency: SEIs
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 28,832 | \$1,776,516 | \$1,776,516 | | | | |
| (2) MBE/WBE | 5,405 | \$227,464 | \$227,464 | 12.8 | 18.0 | -5.2 | 71.1 |
| (3) WBE | 4,188 | \$187,139 | \$187,139 | 10.5 | 9.7 | 0.9 | 108.9 |
| (4) MBE | 1,217 | \$40,325 | \$40,325 | 2.3 | 8.3 | -6.1 | 27.3 |
| (5) African American-owned | 363 | \$14,169 | \$16,475 | 0.9 | 3.6 | -2.7 | 25.5 |
| (6) Total Asian American-owned | 337 | \$8,864 | \$10,306 | 0.6 | 3.2 | -2.6 | 18.4 |
| (7) Asian-Pacific American-owned | 267 | \$6,713 | \$7,805 | 0.4 | 1.1 | -0.7 | 39.5 |
| (8) Subcontinent Asian American-owned | 63 | \$2,044 | \$2,377 | 0.1 | 2.0 | -1.9 | 6.5 |
| (9) Hispanic American-owned | 306 | \$9,744 | \$11,330 | 0.6 | 1.0 | -0.3 | 65.5 |
| (10) Native American-owned | 62 | \$1,905 | \$2,215 | 0.1 | 0.5 | -0.4 | 25.7 |
| (11) Unknown MBE | 149 | \$5,644 | | | | | |
| (12) Certified | 2,414 | \$95,351 | \$95,351 | 5.4 | | | |
| (13) Certified woman-owned | 1,871 | \$75,538 | \$75,837 | 4.3 | | | |
| (14) Certified minority-owned | 526 | \$19,437 | \$19,514 | 1.1 | | | |
| (15) Certified African American-owned | 169 | \$9,611 | \$9,649 | 0.5 | | | |
| (16) Certified Asian-Pacific American-owned | 157 | \$3,552 | \$3,566 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 22 | \$954 | \$957 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 172 | \$4,976 | \$4,996 | 0.3 | | | |
| (19) Certified Native American-owned | 6 | \$344 | \$346 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 17 | \$376 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-7.
Agency: SEIs
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 6,834 | \$1,004,875 | \$1,004,875 | | | | |
| (2) MBE/WBE | 903 | \$107,385 | \$107,385 | 10.7 | 14.5 | -3.8 | 73.6 |
| (3) WBE | 687 | \$99,256 | \$99,256 | 9.9 | 6.5 | 3.4 | 151.6 |
| (4) MBE | 216 | \$8,129 | \$8,129 | 0.8 | 8.0 | -7.2 | 10.1 |
| (5) African American-owned | 61 | \$1,496 | \$2,528 | 0.3 | 3.8 | -3.6 | 6.6 |
| (6) Total Asian American-owned | 24 | \$876 | \$1,480 | 0.1 | 3.1 | -3.0 | 4.7 |
| (7) Asian-Pacific American-owned | 21 | \$526 | \$888 | 0.1 | 0.4 | -0.3 | 20.6 |
| (8) Subcontinent Asian American-owned | 3 | \$350 | \$592 | 0.1 | 2.7 | -2.6 | 2.2 |
| (9) Hispanic American-owned | 49 | \$2,257 | \$3,814 | 0.4 | 0.3 | 0.1 | 131.3 |
| (10) Native American-owned | 26 | \$181 | \$307 | 0.0 | 0.6 | -0.6 | 4.7 |
| (11) Unknown MBE | 56 | \$3,318 | | | | | |
| (12) Certified | 220 | \$32,934 | \$32,934 | 3.3 | | | |
| (13) Certified woman-owned | 132 | \$30,375 | \$30,375 | 3.0 | | | |
| (14) Certified minority-owned | 88 | \$2,559 | \$2,559 | 0.3 | | | |
| (15) Certified African American-owned | 46 | \$1,205 | \$1,205 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 10 | \$358 | \$358 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$343 | \$343 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 30 | \$653 | \$653 | 0.1 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-8.
Agency: SEIs
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 8,648 | \$380,978 | \$380,978 | | | | |
| (2) MBE/WBE | 1,987 | \$64,398 | \$64,398 | 16.9 | 24.7 | -7.8 | 68.6 |
| (3) WBE | 1,490 | \$44,398 | \$44,398 | 11.7 | 15.2 | -3.5 | 76.8 |
| (4) MBE | 497 | \$20,000 | \$20,000 | 5.2 | 9.5 | -4.2 | 55.4 |
| (5) African American-owned | 173 | \$9,328 | \$10,134 | 2.7 | 3.9 | -1.2 | 68.7 |
| (6) Total Asian American-owned | 200 | \$5,249 | \$5,702 | 1.5 | 4.3 | -2.8 | 34.6 |
| (7) Asian-Pacific American-owned | 159 | \$3,838 | \$4,170 | 1.1 | 2.0 | -0.9 | 53.9 |
| (8) Subcontinent Asian American-owned | 36 | \$1,317 | \$1,431 | 0.4 | 2.3 | -1.9 | 16.3 |
| (9) Hispanic American-owned | 64 | \$2,754 | \$2,992 | 0.8 | 0.8 | 0.0 | 95.8 |
| (10) Native American-owned | 17 | \$1,078 | \$1,172 | 0.3 | 0.4 | -0.1 | 76.7 |
| (11) Unknown MBE | 43 | \$1,591 | | | | | |
| (12) Certified | 1,018 | \$34,833 | \$34,833 | 9.1 | | | |
| (13) Certified woman-owned | 832 | \$24,705 | \$24,705 | 6.5 | | | |
| (14) Certified minority-owned | 186 | \$10,128 | \$10,128 | 2.7 | | | |
| (15) Certified African American-owned | 56 | \$6,442 | \$6,442 | 1.7 | | | |
| (16) Certified Asian-Pacific American-owned | 98 | \$2,072 | \$2,072 | 0.5 | | | |
| (17) Certified Subcontinent Asian American-owned | 13 | \$540 | \$540 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 18 | \$1,043 | \$1,043 | 0.3 | | | |
| (19) Certified Native American-owned | 1 | \$31 | \$31 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-9.
Agency: SEIs
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 11,079 | \$345,599 | \$345,599 | | | | |
| (2) MBE/WBE | 1,925 | \$45,484 | \$45,484 | 13.2 | 18.3 | -5.2 | 71.8 |
| (3) WBE | 1,587 | \$36,857 | \$36,857 | 10.7 | 11.0 | -0.3 | 97.3 |
| (4) MBE | 338 | \$8,627 | \$8,627 | 2.5 | 7.4 | -4.9 | 34.0 |
| (5) African American-owned | 51 | \$1,038 | \$1,097 | 0.3 | 2.2 | -1.9 | 14.4 |
| (6) Total Asian American-owned | 106 | \$2,325 | \$2,458 | 0.7 | 2.2 | -1.5 | 32.4 |
| (7) Asian-Pacific American-owned | 80 | \$1,935 | \$2,046 | 0.6 | 2.1 | -1.5 | 28.1 |
| (8) Subcontinent Asian American-owned | 24 | \$377 | \$398 | 0.1 | 0.1 | 0.0 | 132.4 |
| (9) Hispanic American-owned | 142 | \$4,259 | \$4,502 | 1.3 | 2.9 | -1.6 | 44.3 |
| (10) Native American-owned | 11 | \$539 | \$570 | 0.2 | 0.0 | 0.1 | 200+ |
| (11) Unknown MBE | 28 | \$466 | | | | | |
| (12) Certified | 991 | \$23,695 | \$23,695 | 6.9 | | | |
| (13) Certified woman-owned | 776 | \$18,089 | \$18,380 | 5.3 | | | |
| (14) Certified minority-owned | 198 | \$5,230 | \$5,314 | 1.5 | | | |
| (15) Certified African American-owned | 26 | \$578 | \$588 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 45 | \$1,071 | \$1,088 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 7 | \$70 | \$71 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 115 | \$3,198 | \$3,249 | 0.9 | | | |
| (19) Certified Native American-owned | 5 | \$313 | \$318 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 17 | \$376 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-10.
Agency: SEIs
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,271 | \$45,065 | \$45,065 | | | | |
| (2) MBE/WBE | 590 | \$10,197 | \$10,197 | 22.6 | 36.7 | -14.1 | 61.7 |
| (3) WBE | 424 | \$6,627 | \$6,627 | 14.7 | 23.5 | -8.8 | 62.7 |
| (4) MBE | 166 | \$3,570 | \$3,570 | 7.9 | 13.2 | -5.3 | 59.9 |
| (5) African American-owned | 78 | \$2,306 | \$2,494 | 5.5 | 8.6 | -3.1 | 64.2 |
| (6) Total Asian American-owned | 7 | \$414 | \$448 | 1.0 | 1.0 | 0.0 | 104.2 |
| (7) Asian-Pacific American-owned | 7 | \$414 | \$448 | 1.0 | 0.9 | 0.1 | 110.1 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 51 | \$474 | \$513 | 1.1 | 2.5 | -1.3 | 46.2 |
| (10) Native American-owned | 8 | \$106 | \$115 | 0.3 | 1.2 | -0.9 | 21.7 |
| (11) Unknown MBE | 22 | \$269 | | | | | |
| (12) Certified | 185 | \$3,889 | \$3,889 | 8.6 | | | |
| (13) Certified woman-owned | 131 | \$2,369 | \$2,369 | 5.3 | | | |
| (14) Certified minority-owned | 54 | \$1,520 | \$1,520 | 3.4 | | | |
| (15) Certified African American-owned | 41 | \$1,385 | \$1,385 | 3.1 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$52 | \$52 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 9 | \$83 | \$83 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-11.
Agency: SEIs
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,428 | \$351,689 | \$351,689 | | | | |
| (2) MBE/WBE | 394 | \$40,705 | \$40,705 | 11.6 | 17.1 | -5.5 | 67.8 |
| (3) WBE | 263 | \$27,105 | \$27,105 | 7.7 | 10.9 | -3.2 | 70.7 |
| (4) MBE | 131 | \$13,600 | \$13,600 | 3.9 | 6.2 | -2.3 | 62.9 |
| (5) African American-owned | 60 | \$4,909 | \$5,460 | 1.6 | 2.8 | -1.2 | 56.3 |
| (6) Total Asian American-owned | 21 | \$4,829 | \$5,371 | 1.5 | 1.4 | 0.2 | 112.5 |
| (7) Asian-Pacific American-owned | 13 | \$883 | \$982 | 0.3 | 0.7 | -0.4 | 42.9 |
| (8) Subcontinent Asian American-owned | 8 | \$3,946 | \$4,389 | 1.2 | 0.7 | 0.5 | 176.7 |
| (9) Hispanic American-owned | 22 | \$1,408 | \$1,565 | 0.4 | 0.9 | -0.5 | 47.7 |
| (10) Native American-owned | 7 | \$1,083 | \$1,204 | 0.3 | 0.9 | -0.6 | 36.2 |
| (11) Unknown MBE | 21 | \$1,371 | | | | | |
| (12) Certified | 165 | \$21,822 | \$21,822 | 6.2 | | | |
| (13) Certified woman-owned | 80 | \$11,559 | \$11,559 | 3.3 | | | |
| (14) Certified minority-owned | 85 | \$10,262 | \$10,262 | 2.9 | | | |
| (15) Certified African American-owned | 49 | \$4,411 | \$4,411 | 1.3 | | | |
| (16) Certified Asian-Pacific American-owned | 8 | \$549 | \$549 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 6 | \$3,884 | \$3,884 | 1.1 | | | |
| (18) Certified Hispanic American-owned | 18 | \$975 | \$975 | 0.3 | | | |
| (19) Certified Native American-owned | 4 | \$443 | \$443 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-12.
Agency: SEIs
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,317 | \$335,393 | \$335,393 | | | | |
| (2) MBE/WBE | 353 | \$35,882 | \$35,882 | 10.7 | 16.9 | -6.2 | 63.5 |
| (3) WBE | 243 | \$25,069 | \$25,069 | 7.5 | 10.7 | -3.3 | 69.6 |
| (4) MBE | 110 | \$10,813 | \$10,813 | 3.2 | 6.1 | -2.9 | 52.8 |
| (5) African American-owned | 51 | \$3,240 | \$3,711 | 1.1 | 2.8 | -1.7 | 39.6 |
| (6) Total Asian American-owned | 16 | \$4,376 | \$5,011 | 1.5 | 1.3 | 0.2 | 117.3 |
| (7) Asian-Pacific American-owned | 11 | \$828 | \$948 | 0.3 | 0.6 | -0.3 | 46.2 |
| (8) Subcontinent Asian American-owned | 5 | \$3,548 | \$4,063 | 1.2 | 0.7 | 0.6 | 183.2 |
| (9) Hispanic American-owned | 15 | \$743 | \$851 | 0.3 | 0.9 | -0.7 | 27.6 |
| (10) Native American-owned | 7 | \$1,083 | \$1,240 | 0.4 | 1.0 | -0.6 | 38.4 |
| (11) Unknown MBE | 21 | \$1,371 | | | | | |
| (12) Certified | 134 | \$17,520 | \$17,520 | 5.2 | | | |
| (13) Certified woman-owned | 68 | \$9,918 | \$9,918 | 3.0 | | | |
| (14) Certified minority-owned | 66 | \$7,601 | \$7,601 | 2.3 | | | |
| (15) Certified African American-owned | 41 | \$2,764 | \$2,764 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 6 | \$494 | \$494 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$3,486 | \$3,486 | 1.0 | | | |
| (18) Certified Hispanic American-owned | 12 | \$414 | \$414 | 0.1 | | | |
| (19) Certified Native American-owned | 4 | \$443 | \$443 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-13.
Agency: SEIs
Funding: All
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 81 | \$9,946 | \$9,946 | | | | |
| (2) MBE/WBE | 35 | \$4,171 | \$4,171 | 41.9 | 22.3 | 19.6 | 187.9 |
| (3) WBE | 16 | \$1,418 | \$1,418 | 14.3 | 12.8 | 1.5 | 111.5 |
| (4) MBE | 19 | \$2,753 | \$2,753 | 27.7 | 9.5 | 18.1 | 200+ |
| (5) African American-owned | 7 | \$1,635 | \$1,635 | 16.4 | 2.4 | 14.0 | 200+ |
| (6) Total Asian American-owned | 5 | \$453 | \$453 | 4.6 | 4.7 | -0.1 | 97.9 |
| (7) Asian-Pacific American-owned | 2 | \$55 | \$55 | 0.6 | 2.0 | -1.4 | 27.9 |
| (8) Subcontinent Asian American-owned | 3 | \$398 | \$398 | 4.0 | 2.7 | 1.3 | 150.1 |
| (9) Hispanic American-owned | 7 | \$665 | \$665 | 6.7 | 1.6 | 5.1 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.8 | -0.8 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 29 | \$3,849 | \$3,849 | 38.7 | | | |
| (13) Certified woman-owned | 11 | \$1,200 | \$1,200 | 12.1 | | | |
| (14) Certified minority-owned | 18 | \$2,650 | \$2,650 | 26.6 | | | |
| (15) Certified African American-owned | 7 | \$1,635 | \$1,635 | 16.4 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$55 | \$55 | 0.6 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$398 | \$398 | 4.0 | | | |
| (18) Certified Hispanic American-owned | 6 | \$561 | \$561 | 5.6 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-16.
Agency: SEIs
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 27,336 | \$544,689 | \$544,689 | | | | |
| (2) MBE/WBE | 5,183 | \$98,372 | \$98,372 | 18.1 | 22.8 | -4.7 | 79.3 |
| (3) WBE | 4,019 | \$74,533 | \$74,533 | 13.7 | 15.0 | -1.3 | 91.4 |
| (4) MBE | 1,164 | \$23,839 | \$23,839 | 4.4 | 7.8 | -3.4 | 56.1 |
| (5) African American-owned | 347 | \$7,571 | \$8,633 | 1.6 | 3.6 | -2.0 | 44.2 |
| (6) Total Asian American-owned | 327 | \$6,167 | \$7,033 | 1.3 | 1.9 | -0.6 | 67.0 |
| (7) Asian-Pacific American-owned | 259 | \$4,558 | \$5,197 | 1.0 | 1.3 | -0.3 | 74.4 |
| (8) Subcontinent Asian American-owned | 61 | \$1,503 | \$1,714 | 0.3 | 0.6 | -0.3 | 48.8 |
| (9) Hispanic American-owned | 292 | \$6,146 | \$7,009 | 1.3 | 1.7 | -0.4 | 77.3 |
| (10) Native American-owned | 59 | \$1,021 | \$1,164 | 0.2 | 0.5 | -0.3 | 40.2 |
| (11) Unknown MBE | 139 | \$2,934 | | | | | |
| (12) Certified | 2,311 | \$44,241 | \$44,241 | 8.1 | | | |
| (13) Certified woman-owned | 1,793 | \$33,482 | \$33,769 | 6.2 | | | |
| (14) Certified minority-owned | 501 | \$10,383 | \$10,472 | 1.9 | | | |
| (15) Certified African American-owned | 157 | \$3,631 | \$3,662 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 153 | \$2,664 | \$2,687 | 0.5 | | | |
| (17) Certified Subcontinent Asian American-owned | 21 | \$623 | \$628 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 165 | \$3,390 | \$3,419 | 0.6 | | | |
| (19) Certified Native American-owned | 5 | \$76 | \$76 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 17 | \$376 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-17.
Agency: SEIs
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 6,073 | \$129,477 | \$129,477 | | | | |
| (2) MBE/WBE | 801 | \$16,938 | \$16,938 | 13.1 | 18.9 | -5.8 | 69.2 |
| (3) WBE | 598 | \$13,196 | \$13,196 | 10.2 | 13.3 | -3.1 | 76.7 |
| (4) MBE | 203 | \$3,742 | \$3,742 | 2.9 | 5.6 | -2.7 | 51.4 |
| (5) African American-owned | 60 | \$1,079 | \$1,531 | 1.2 | 2.9 | -1.7 | 40.9 |
| (6) Total Asian American-owned | 22 | \$376 | \$533 | 0.4 | 0.6 | -0.2 | 67.2 |
| (7) Asian-Pacific American-owned | 20 | \$356 | \$505 | 0.4 | 0.3 | 0.1 | 119.6 |
| (8) Subcontinent Asian American-owned | 2 | \$20 | \$28 | 0.0 | 0.3 | -0.3 | 7.5 |
| (9) Hispanic American-owned | 46 | \$1,001 | \$1,421 | 1.1 | 0.5 | 0.6 | 200+ |
| (10) Native American-owned | 26 | \$181 | \$257 | 0.2 | 1.4 | -1.2 | 14.3 |
| (11) Unknown MBE | 49 | \$1,104 | | | | | |
| (12) Certified | 172 | \$4,028 | \$4,028 | 3.1 | | | |
| (13) Certified woman-owned | 87 | \$2,387 | \$2,387 | 1.8 | | | |
| (14) Certified minority-owned | 85 | \$1,642 | \$1,642 | 1.3 | | | |
| (15) Certified African American-owned | 45 | \$788 | \$788 | 0.6 | | | |
| (16) Certified Asian-Pacific American-owned | 9 | \$188 | \$188 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$13 | \$13 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 30 | \$653 | \$653 | 0.5 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-18.
Agency: SEIs
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 8,243 | \$186,318 | \$186,318 | | | | |
| (2) MBE/WBE | 1,917 | \$38,010 | \$38,010 | 20.4 | 24.7 | -4.3 | 82.7 |
| (3) WBE | 1,443 | \$26,357 | \$26,357 | 14.1 | 15.9 | -1.8 | 88.8 |
| (4) MBE | 474 | \$11,653 | \$11,653 | 6.3 | 8.7 | -2.5 | 71.6 |
| (5) African American-owned | 163 | \$4,020 | \$4,437 | 2.4 | 3.7 | -1.3 | 65.2 |
| (6) Total Asian American-owned | 196 | \$4,239 | \$4,678 | 2.5 | 3.5 | -0.9 | 72.6 |
| (7) Asian-Pacific American-owned | 156 | \$3,038 | \$3,353 | 1.8 | 1.9 | -0.1 | 92.5 |
| (8) Subcontinent Asian American-owned | 35 | \$1,107 | \$1,222 | 0.7 | 1.5 | -0.9 | 43.3 |
| (9) Hispanic American-owned | 59 | \$1,682 | \$1,857 | 1.0 | 1.2 | -0.2 | 85.4 |
| (10) Native American-owned | 16 | \$618 | \$682 | 0.4 | 0.3 | 0.0 | 106.5 |
| (11) Unknown MBE | 40 | \$1,095 | | | | | |
| (12) Certified | 987 | \$18,523 | \$18,523 | 9.9 | | | |
| (13) Certified woman-owned | 813 | \$14,179 | \$14,179 | 7.6 | | | |
| (14) Certified minority-owned | 174 | \$4,345 | \$4,345 | 2.3 | | | |
| (15) Certified African American-owned | 48 | \$1,546 | \$1,546 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 97 | \$1,917 | \$1,917 | 1.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 13 | \$540 | \$540 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 15 | \$310 | \$310 | 0.2 | | | |
| (19) Certified Native American-owned | 1 | \$31 | \$31 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-19.
Agency: SEIs
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 10,787 | \$193,290 | \$193,290 | | | | |
| (2) MBE/WBE | 1,886 | \$36,016 | \$36,016 | 18.6 | 21.0 | -2.4 | 88.7 |
| (3) WBE | 1,560 | \$29,956 | \$29,956 | 15.5 | 13.4 | 2.1 | 116.0 |
| (4) MBE | 326 | \$6,060 | \$6,060 | 3.1 | 7.7 | -4.5 | 40.9 |
| (5) African American-owned | 50 | \$1,001 | \$1,084 | 0.6 | 3.2 | -2.7 | 17.4 |
| (6) Total Asian American-owned | 103 | \$1,489 | \$1,613 | 0.8 | 1.5 | -0.7 | 54.4 |
| (7) Asian-Pacific American-owned | 77 | \$1,099 | \$1,191 | 0.6 | 1.4 | -0.8 | 44.7 |
| (8) Subcontinent Asian American-owned | 24 | \$377 | \$408 | 0.2 | 0.2 | 0.1 | 135.6 |
| (9) Hispanic American-owned | 136 | \$2,988 | \$3,237 | 1.7 | 2.9 | -1.2 | 58.1 |
| (10) Native American-owned | 9 | \$116 | \$125 | 0.1 | 0.0 | 0.0 | 200+ |
| (11) Unknown MBE | 28 | \$466 | | | | | |
| (12) Certified | 973 | \$19,373 | \$19,373 | 10.0 | | | |
| (13) Certified woman-owned | 765 | \$15,453 | \$15,759 | 8.2 | | | |
| (14) Certified minority-owned | 191 | \$3,544 | \$3,614 | 1.9 | | | |
| (15) Certified African American-owned | 26 | \$578 | \$590 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 43 | \$507 | \$517 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 7 | \$70 | \$72 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 111 | \$2,344 | \$2,390 | 1.2 | | | |
| (19) Certified Native American-owned | 4 | \$44 | \$45 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 17 | \$376 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure M-20.
Agency: SEIs
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,233 | \$35,603 | \$35,603 | | | | |
| (2) MBE/WBE | 579 | \$7,408 | \$7,408 | 20.8 | 36.5 | -15.7 | 57.1 |
| (3) WBE | 418 | \$5,024 | \$5,024 | 14.1 | 24.8 | -10.7 | 56.8 |
| (4) MBE | 161 | \$2,385 | \$2,385 | 6.7 | 11.6 | -4.9 | 57.6 |
| (5) African American-owned | 74 | \$1,471 | \$1,658 | 4.7 | 7.8 | -3.1 | 59.9 |
| (6) Total Asian American-owned | 6 | \$64 | \$72 | 0.2 | 0.8 | -0.6 | 24.6 |
| (7) Asian-Pacific American-owned | 6 | \$64 | \$72 | 0.2 | 0.8 | -0.6 | 26.7 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 51 | \$474 | \$535 | 1.5 | 1.9 | -0.4 | 79.2 |
| (10) Native American-owned | 8 | \$106 | \$119 | 0.3 | 1.1 | -0.8 | 29.4 |
| (11) Unknown MBE | 22 | \$269 | | | | | |
| (12) Certified | 179 | \$2,317 | \$2,317 | 6.5 | | | |
| (13) Certified woman-owned | 128 | \$1,464 | \$1,464 | 4.1 | | | |
| (14) Certified minority-owned | 51 | \$852 | \$852 | 2.4 | | | |
| (15) Certified African American-owned | 38 | \$718 | \$718 | 2.0 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$52 | \$52 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 9 | \$83 | \$83 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX N.
ISCBA Disparity Tables

Figure N-1.
Agency: ISCBA
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 371 | \$324,140 | \$324,140 | | | | |
| (2) MBE/WBE | 166 | \$76,380 | \$76,380 | 23.6 | 15.3 | 8.2 | 153.7 |
| (3) WBE | 62 | \$21,161 | \$21,161 | 6.5 | 7.2 | -0.7 | 90.7 |
| (4) MBE | 104 | \$55,220 | \$55,220 | 17.0 | 8.1 | 8.9 | 200+ |
| (5) African American-owned | 69 | \$31,618 | \$31,618 | 9.8 | 2.4 | 7.3 | 200+ |
| (6) Total Asian American-owned | 18 | \$11,992 | \$11,992 | 3.7 | 4.0 | -0.3 | 91.6 |
| (7) Asian-Pacific American-owned | 13 | \$5,658 | \$5,658 | 1.7 | 3.2 | -1.5 | 54.0 |
| (8) Subcontinent Asian American-owned | 5 | \$6,334 | \$6,334 | 2.0 | 0.8 | 1.1 | 200+ |
| (9) Hispanic American-owned | 12 | \$9,752 | \$9,752 | 3.0 | 1.4 | 1.6 | 200+ |
| (10) Native American-owned | 5 | \$1,858 | \$1,858 | 0.6 | 0.2 | 0.4 | 200+ |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 123 | \$51,094 | \$51,094 | 15.8 | | | |
| (13) Certified woman-owned | 40 | \$7,611 | \$7,611 | 2.3 | | | |
| (14) Certified minority-owned | 83 | \$43,483 | \$43,483 | 13.4 | | | |
| (15) Certified African American-owned | 55 | \$25,524 | \$25,524 | 7.9 | | | |
| (16) Certified Asian-Pacific American-owned | 11 | \$4,125 | \$4,125 | 1.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 4 | \$5,568 | \$5,568 | 1.7 | | | |
| (18) Certified Hispanic American-owned | 10 | \$8,173 | \$8,173 | 2.5 | | | |
| (19) Certified Native American-owned | 3 | \$93 | \$93 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure N-2.
Agency: ISCBA
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 306 | \$240,572 | \$240,572 | | | | |
| (2) MBE/WBE | 138 | \$57,561 | \$57,561 | 23.9 | 13.0 | 11.0 | 184.6 |
| (3) WBE | 53 | \$10,286 | \$10,286 | 4.3 | 7.7 | -3.4 | 55.7 |
| (4) MBE | 85 | \$47,276 | \$47,276 | 19.7 | 5.3 | 14.4 | 200+ |
| (5) African American-owned | 62 | \$29,132 | \$29,132 | 12.1 | 3.0 | 9.2 | 200+ |
| (6) Total Asian American-owned | 12 | \$10,448 | \$10,448 | 4.3 | 1.7 | 2.7 | 200+ |
| (7) Asian-Pacific American-owned | 9 | \$4,947 | \$4,947 | 2.1 | 0.6 | 1.4 | 200+ |
| (8) Subcontinent Asian American-owned | 3 | \$5,501 | \$5,501 | 2.3 | 1.1 | 1.2 | 200+ |
| (9) Hispanic American-owned | 6 | \$5,839 | \$5,839 | 2.4 | 0.4 | 2.1 | 200+ |
| (10) Native American-owned | 5 | \$1,858 | \$1,858 | 0.8 | 0.2 | 0.5 | 200+ |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 100 | \$44,082 | \$44,082 | 18.3 | | | |
| (13) Certified woman-owned | 34 | \$7,057 | \$7,057 | 2.9 | | | |
| (14) Certified minority-owned | 66 | \$37,025 | \$37,025 | 15.4 | | | |
| (15) Certified African American-owned | 49 | \$23,757 | \$23,757 | 9.9 | | | |
| (16) Certified Asian-Pacific American-owned | 7 | \$3,413 | \$3,413 | 1.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$5,501 | \$5,501 | 2.3 | | | |
| (18) Certified Hispanic American-owned | 4 | \$4,260 | \$4,260 | 1.8 | | | |
| (19) Certified Native American-owned | 3 | \$93 | \$93 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX O.
IDOA Disparity Tables

Figure O-1.
Agency: IDOA (including ISCBA)
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 32,288 | \$2,390,327 | \$2,390,327 | | | | |
| (2) MBE/WBE | 5,502 | \$262,530 | \$262,530 | 11.0 | 23.4 | -12.4 | 46.9 |
| (3) WBE | 3,940 | \$132,984 | \$132,984 | 5.6 | 16.7 | -11.1 | 33.4 |
| (4) MBE | 1,562 | \$129,546 | \$129,546 | 5.4 | 6.8 | -1.3 | 80.3 |
| (5) African American-owned | 620 | \$47,075 | \$47,150 | 2.0 | 2.0 | 0.0 | 100.5 |
| (6) Total Asian American-owned | 454 | \$51,021 | \$51,103 | 2.1 | 3.5 | -1.4 | 60.4 |
| (7) Asian-Pacific American-owned | 269 | \$37,311 | \$37,370 | 1.6 | 1.8 | -0.2 | 87.9 |
| (8) Subcontinent Asian American-owned | 183 | \$13,681 | \$13,703 | 0.6 | 1.8 | -1.2 | 32.5 |
| (9) Hispanic American-owned | 411 | \$27,019 | \$27,062 | 1.1 | 1.0 | 0.1 | 114.5 |
| (10) Native American-owned | 65 | \$4,225 | \$4,231 | 0.2 | 0.2 | 0.0 | 79.4 |
| (11) Unknown MBE | 12 | \$207 | | | | | |
| (12) Certified | 2,084 | \$130,179 | \$130,179 | 5.4 | | | |
| (13) Certified woman-owned | 1,008 | \$36,350 | \$36,362 | 1.5 | | | |
| (14) Certified minority-owned | 1,075 | \$93,785 | \$93,816 | 3.9 | | | |
| (15) Certified African American-owned | 427 | \$36,176 | \$36,188 | 1.5 | | | |
| (16) Certified Asian-Pacific American-owned | 121 | \$23,491 | \$23,499 | 1.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 106 | \$8,901 | \$8,904 | 0.4 | | | |
| (18) Certified Hispanic American-owned | 367 | \$23,840 | \$23,848 | 1.0 | | | |
| (19) Certified Native American-owned | 54 | \$1,377 | \$1,377 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-2.
Agency: IDOA (including ISCBA)
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,132 | \$456,976 | \$456,976 | | | | |
| (2) MBE/WBE | 551 | \$86,026 | \$86,026 | 18.8 | 14.3 | 4.5 | 131.2 |
| (3) WBE | 316 | \$21,529 | \$21,529 | 4.7 | 9.1 | -4.4 | 51.8 |
| (4) MBE | 235 | \$64,498 | \$64,498 | 14.1 | 5.3 | 8.9 | 200+ |
| (5) African American-owned | 137 | \$32,007 | \$32,014 | 7.0 | 2.8 | 4.2 | 200+ |
| (6) Total Asian American-owned | 47 | \$22,782 | \$22,787 | 5.0 | 1.4 | 3.6 | 200+ |
| (7) Asian-Pacific American-owned | 41 | \$17,161 | \$17,165 | 3.8 | 0.7 | 3.1 | 200+ |
| (8) Subcontinent Asian American-owned | 6 | \$5,621 | \$5,622 | 1.2 | 0.7 | 0.5 | 171.3 |
| (9) Hispanic American-owned | 30 | \$6,751 | \$6,753 | 1.5 | 0.5 | 1.0 | 200+ |
| (10) Native American-owned | 19 | \$2,943 | \$2,944 | 0.6 | 0.5 | 0.1 | 129.6 |
| (11) Unknown MBE | 2 | \$14 | | | | | |
| (12) Certified | 273 | \$64,167 | \$64,167 | 14.0 | | | |
| (13) Certified woman-owned | 121 | \$12,058 | \$12,058 | 2.6 | | | |
| (14) Certified minority-owned | 152 | \$52,110 | \$52,110 | 11.4 | | | |
| (15) Certified African American-owned | 88 | \$25,770 | \$25,770 | 5.6 | | | |
| (16) Certified Asian-Pacific American-owned | 25 | \$15,465 | \$15,465 | 3.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 5 | \$5,614 | \$5,614 | 1.2 | | | |
| (18) Certified Hispanic American-owned | 20 | \$5,026 | \$5,026 | 1.1 | | | |
| (19) Certified Native American-owned | 14 | \$235 | \$235 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-3.
Agency: IDOA (including ISCBA)
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 13,663 | \$1,426,242 | \$1,426,242 | | | | |
| (2) MBE/WBE | 2,648 | \$109,070 | \$109,070 | 7.6 | 28.3 | -20.6 | 27.0 |
| (3) WBE | 1,958 | \$71,705 | \$71,705 | 5.0 | 20.9 | -15.9 | 24.0 |
| (4) MBE | 690 | \$37,364 | \$37,364 | 2.6 | 7.3 | -4.7 | 35.7 |
| (5) African American-owned | 430 | \$12,868 | \$12,913 | 0.9 | 1.7 | -0.8 | 52.3 |
| (6) Total Asian American-owned | 147 | \$12,905 | \$12,950 | 0.9 | 4.7 | -3.7 | 19.5 |
| (7) Asian-Pacific American-owned | 82 | \$10,216 | \$10,252 | 0.7 | 1.9 | -1.2 | 36.9 |
| (8) Subcontinent Asian American-owned | 65 | \$2,689 | \$2,698 | 0.2 | 2.7 | -2.5 | 7.0 |
| (9) Hispanic American-owned | 63 | \$10,224 | \$10,260 | 0.7 | 0.8 | -0.1 | 90.7 |
| (10) Native American-owned | 44 | \$1,238 | \$1,242 | 0.1 | 0.1 | 0.0 | 66.8 |
| (11) Unknown MBE | 6 | \$129 | | | | | |
| (12) Certified | 880 | \$38,652 | \$38,652 | 2.7 | | | |
| (13) Certified woman-owned | 443 | \$17,239 | \$17,239 | 1.2 | | | |
| (14) Certified minority-owned | 437 | \$21,412 | \$21,412 | 1.5 | | | |
| (15) Certified African American-owned | 314 | \$9,729 | \$9,729 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 20 | \$871 | \$871 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 21 | \$720 | \$720 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 44 | \$8,994 | \$8,994 | 0.6 | | | |
| (19) Certified Native American-owned | 38 | \$1,098 | \$1,098 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-4.
Agency: IDOA (including ISCBA)
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 12,466 | \$434,985 | \$434,985 | | | | |
| (2) MBE/WBE | 1,880 | \$53,670 | \$53,670 | 12.3 | 15.1 | -2.8 | 81.7 |
| (3) WBE | 1,305 | \$33,922 | \$33,922 | 7.8 | 9.9 | -2.1 | 78.8 |
| (4) MBE | 575 | \$19,747 | \$19,747 | 4.5 | 5.2 | -0.7 | 87.0 |
| (5) African American-owned | 42 | \$1,881 | \$1,886 | 0.4 | 1.0 | -0.6 | 42.5 |
| (6) Total Asian American-owned | 226 | \$7,930 | \$7,950 | 1.8 | 2.6 | -0.8 | 70.4 |
| (7) Asian-Pacific American-owned | 112 | \$2,529 | \$2,535 | 0.6 | 2.5 | -2.0 | 23.0 |
| (8) Subcontinent Asian American-owned | 112 | \$5,371 | \$5,385 | 1.2 | 0.1 | 1.2 | 200+ |
| (9) Hispanic American-owned | 302 | \$9,844 | \$9,868 | 2.3 | 1.5 | 0.7 | 147.0 |
| (10) Native American-owned | 2 | \$44 | \$44 | 0.0 | 0.1 | 0.0 | 18.5 |
| (11) Unknown MBE | 3 | \$50 | | | | | |
| (12) Certified | 731 | \$17,782 | \$17,782 | 4.1 | | | |
| (13) Certified woman-owned | 290 | \$4,346 | \$4,357 | 1.0 | | | |
| (14) Certified minority-owned | 440 | \$13,393 | \$13,425 | 3.1 | | | |
| (15) Certified African American-owned | 24 | \$672 | \$673 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 47 | \$490 | \$491 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 80 | \$2,568 | \$2,574 | 0.6 | | | |
| (18) Certified Hispanic American-owned | 287 | \$9,620 | \$9,643 | 2.2 | | | |
| (19) Certified Native American-owned | 2 | \$44 | \$44 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-5.
Agency: IDOA (including ISCBA)
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,027 | \$72,124 | \$72,124 | | | | |
| (2) MBE/WBE | 423 | \$13,765 | \$13,765 | 19.1 | 35.2 | -16.1 | 54.2 |
| (3) WBE | 361 | \$5,828 | \$5,828 | 8.1 | 21.2 | -13.1 | 38.1 |
| (4) MBE | 62 | \$7,937 | \$7,937 | 11.0 | 14.0 | -3.0 | 78.6 |
| (5) African American-owned | 11 | \$319 | \$319 | 0.4 | 7.0 | -6.5 | 6.4 |
| (6) Total Asian American-owned | 34 | \$7,404 | \$7,417 | 10.3 | 1.0 | 9.3 | 200+ |
| (7) Asian-Pacific American-owned | 34 | \$7,404 | \$7,417 | 10.3 | 1.0 | 9.3 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 16 | \$200 | \$200 | 0.3 | 4.7 | -4.4 | 5.9 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.3 | -1.3 | 0.0 |
| (11) Unknown MBE | 1 | \$14 | | | | | |
| (12) Certified | 200 | \$9,578 | \$9,578 | 13.3 | | | |
| (13) Certified woman-owned | 154 | \$2,707 | \$2,707 | 3.8 | | | |
| (14) Certified minority-owned | 46 | \$6,871 | \$6,871 | 9.5 | | | |
| (15) Certified African American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 29 | \$6,666 | \$6,666 | 9.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 16 | \$200 | \$200 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-6.
Agency: IDOA (including ISCBA)
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 31,601 | \$2,252,509 | \$2,252,509 | | | | |
| (2) MBE/WBE | 5,251 | \$195,775 | \$195,775 | 8.7 | 23.6 | -14.9 | 36.8 |
| (3) WBE | 3,831 | \$119,592 | \$119,592 | 5.3 | 16.9 | -11.6 | 31.4 |
| (4) MBE | 1,420 | \$76,183 | \$76,183 | 3.4 | 6.7 | -3.3 | 50.5 |
| (5) African American-owned | 529 | \$18,245 | \$18,293 | 0.8 | 1.8 | -1.0 | 44.1 |
| (6) Total Asian American-owned | 427 | \$33,045 | \$33,132 | 1.5 | 3.6 | -2.1 | 40.7 |
| (7) Asian-Pacific American-owned | 248 | \$20,498 | \$20,553 | 0.9 | 1.8 | -0.9 | 51.2 |
| (8) Subcontinent Asian American-owned | 177 | \$12,517 | \$12,550 | 0.6 | 1.8 | -1.3 | 30.4 |
| (9) Hispanic American-owned | 395 | \$22,361 | \$22,421 | 1.0 | 1.0 | 0.0 | 98.6 |
| (10) Native American-owned | 58 | \$2,331 | \$2,337 | 0.1 | 0.2 | -0.1 | 50.1 |
| (11) Unknown MBE | 11 | \$201 | | | | | |
| (12) Certified | 1,901 | \$75,200 | \$75,200 | 3.3 | | | |
| (13) Certified woman-owned | 940 | \$27,359 | \$27,375 | 1.2 | | | |
| (14) Certified minority-owned | 960 | \$47,798 | \$47,825 | 2.1 | | | |
| (15) Certified African American-owned | 350 | \$10,505 | \$10,511 | 0.5 | | | |
| (16) Certified Asian-Pacific American-owned | 104 | \$8,226 | \$8,231 | 0.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 101 | \$8,503 | \$8,508 | 0.4 | | | |
| (18) Certified Hispanic American-owned | 356 | \$19,316 | \$19,327 | 0.9 | | | |
| (19) Certified Native American-owned | 49 | \$1,248 | \$1,249 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-7.
Agency: IDOA (including ISCBA)
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,536 | \$330,214 | \$330,214 | | | | |
| (2) MBE/WBE | 335 | \$23,846 | \$23,846 | 7.2 | 12.2 | -5.0 | 59.2 |
| (3) WBE | 222 | \$9,518 | \$9,518 | 2.9 | 7.9 | -5.0 | 36.7 |
| (4) MBE | 113 | \$14,327 | \$14,327 | 4.3 | 4.3 | 0.0 | 100.0 |
| (5) African American-owned | 56 | \$4,668 | \$4,671 | 1.4 | 2.4 | -0.9 | 60.1 |
| (6) Total Asian American-owned | 26 | \$5,715 | \$5,719 | 1.7 | 0.9 | 0.8 | 184.5 |
| (7) Asian-Pacific American-owned | 24 | \$426 | \$426 | 0.1 | 0.2 | -0.1 | 62.7 |
| (8) Subcontinent Asian American-owned | 2 | \$5,290 | \$5,293 | 1.6 | 0.7 | 0.9 | 200+ |
| (9) Hispanic American-owned | 18 | \$2,886 | \$2,888 | 0.9 | 0.4 | 0.5 | 200+ |
| (10) Native American-owned | 12 | \$1,050 | \$1,050 | 0.3 | 0.5 | -0.2 | 62.0 |
| (11) Unknown MBE | 1 | \$9 | | | | | |
| (12) Certified | 113 | \$11,686 | \$11,686 | 3.5 | | | |
| (13) Certified woman-owned | 59 | \$3,863 | \$3,863 | 1.2 | | | |
| (14) Certified minority-owned | 54 | \$7,823 | \$7,823 | 2.4 | | | |
| (15) Certified African American-owned | 20 | \$870 | \$870 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 11 | \$271 | \$271 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$5,282 | \$5,282 | 1.6 | | | |
| (18) Certified Hispanic American-owned | 13 | \$1,294 | \$1,294 | 0.4 | | | |
| (19) Certified Native American-owned | 9 | \$106 | \$106 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-8.
Agency: IDOA (including ISCBA)
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 13,601 | \$1,418,677 | \$1,418,677 | | | | |
| (2) MBE/WBE | 2,627 | \$107,278 | \$107,278 | 7.6 | 28.3 | -20.7 | 26.7 |
| (3) WBE | 1,948 | \$71,131 | \$71,131 | 5.0 | 20.9 | -15.9 | 23.9 |
| (4) MBE | 679 | \$36,147 | \$36,147 | 2.5 | 7.3 | -4.8 | 34.7 |
| (5) African American-owned | 426 | \$12,369 | \$12,413 | 0.9 | 1.7 | -0.8 | 50.9 |
| (6) Total Asian American-owned | 143 | \$12,772 | \$12,817 | 0.9 | 4.7 | -3.8 | 19.3 |
| (7) Asian-Pacific American-owned | 79 | \$10,150 | \$10,186 | 0.7 | 2.0 | -1.2 | 36.7 |
| (8) Subcontinent Asian American-owned | 64 | \$2,622 | \$2,631 | 0.2 | 2.7 | -2.5 | 6.8 |
| (9) Hispanic American-owned | 60 | \$9,640 | \$9,674 | 0.7 | 0.8 | -0.1 | 86.0 |
| (10) Native American-owned | 44 | \$1,238 | \$1,242 | 0.1 | 0.1 | 0.0 | 67.3 |
| (11) Unknown MBE | 6 | \$129 | | | | | |
| (12) Certified | 867 | \$37,190 | \$37,190 | 2.6 | | | |
| (13) Certified woman-owned | 440 | \$16,989 | \$16,989 | 1.2 | | | |
| (14) Certified minority-owned | 427 | \$20,202 | \$20,202 | 1.4 | | | |
| (15) Certified African American-owned | 310 | \$9,230 | \$9,230 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 18 | \$811 | \$811 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 20 | \$653 | \$653 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 41 | \$8,410 | \$8,410 | 0.6 | | | |
| (19) Certified Native American-owned | 38 | \$1,098 | \$1,098 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-9.
Agency: IDOA (including ISCBA)
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 12,439 | \$431,575 | \$431,575 | | | | |
| (2) MBE/WBE | 1,866 | \$50,887 | \$50,887 | 11.8 | 15.1 | -3.3 | 78.2 |
| (3) WBE | 1,300 | \$33,115 | \$33,115 | 7.7 | 9.9 | -2.2 | 77.7 |
| (4) MBE | 566 | \$17,772 | \$17,772 | 4.1 | 5.2 | -1.1 | 79.2 |
| (5) African American-owned | 36 | \$889 | \$891 | 0.2 | 1.0 | -0.8 | 20.6 |
| (6) Total Asian American-owned | 224 | \$7,154 | \$7,174 | 1.7 | 2.6 | -0.9 | 63.8 |
| (7) Asian-Pacific American-owned | 111 | \$2,518 | \$2,525 | 0.6 | 2.5 | -2.0 | 23.0 |
| (8) Subcontinent Asian American-owned | 111 | \$4,606 | \$4,619 | 1.1 | 0.1 | 1.0 | 200+ |
| (9) Hispanic American-owned | 301 | \$9,636 | \$9,663 | 2.2 | 1.5 | 0.7 | 144.5 |
| (10) Native American-owned | 2 | \$44 | \$44 | 0.0 | 0.0 | 0.0 | 25.4 |
| (11) Unknown MBE | 3 | \$50 | | | | | |
| (12) Certified | 721 | \$16,746 | \$16,746 | 3.9 | | | |
| (13) Certified woman-owned | 287 | \$3,800 | \$3,810 | 0.9 | | | |
| (14) Certified minority-owned | 433 | \$12,903 | \$12,936 | 3.0 | | | |
| (15) Certified African American-owned | 19 | \$400 | \$401 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 46 | \$479 | \$480 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 80 | \$2,568 | \$2,574 | 0.6 | | | |
| (18) Certified Hispanic American-owned | 286 | \$9,413 | \$9,437 | 2.2 | | | |
| (19) Certified Native American-owned | 2 | \$44 | \$44 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-10.
Agency: IDOA (including ISCBA)
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,025 | \$72,044 | \$72,044 | | | | |
| (2) MBE/WBE | 423 | \$13,765 | \$13,765 | 19.1 | 35.2 | -16.1 | 54.3 |
| (3) WBE | 361 | \$5,828 | \$5,828 | 8.1 | 21.2 | -13.1 | 38.2 |
| (4) MBE | 62 | \$7,937 | \$7,937 | 11.0 | 14.0 | -3.0 | 78.6 |
| (5) African American-owned | 11 | \$319 | \$319 | 0.4 | 7.0 | -6.5 | 6.4 |
| (6) Total Asian American-owned | 34 | \$7,404 | \$7,417 | 10.3 | 1.0 | 9.3 | 200+ |
| (7) Asian-Pacific American-owned | 34 | \$7,404 | \$7,417 | 10.3 | 1.0 | 9.3 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 16 | \$200 | \$200 | 0.3 | 4.7 | -4.4 | 5.9 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.3 | -1.3 | 0.0 |
| (11) Unknown MBE | 1 | \$14 | | | | | |
| (12) Certified | 200 | \$9,578 | \$9,578 | 13.3 | | | |
| (13) Certified woman-owned | 154 | \$2,707 | \$2,707 | 3.8 | | | |
| (14) Certified minority-owned | 46 | \$6,871 | \$6,871 | 9.5 | | | |
| (15) Certified African American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 29 | \$6,666 | \$6,666 | 9.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 16 | \$200 | \$200 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-11.
Agency: IDOA (including ISCBA)
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 687 | \$137,817 | \$137,817 | | | | |
| (2) MBE/WBE | 251 | \$66,755 | \$66,755 | 48.4 | 20.4 | 28.0 | 200+ |
| (3) WBE | 109 | \$13,392 | \$13,392 | 9.7 | 12.9 | -3.2 | 75.5 |
| (4) MBE | 142 | \$53,363 | \$53,363 | 38.7 | 7.5 | 31.2 | 200+ |
| (5) African American-owned | 91 | \$28,830 | \$28,834 | 20.9 | 3.9 | 17.0 | 200+ |
| (6) Total Asian American-owned | 27 | \$17,976 | \$17,978 | 13.0 | 2.4 | 10.7 | 200+ |
| (7) Asian-Pacific American-owned | 21 | \$16,812 | \$16,814 | 12.2 | 1.7 | 10.5 | 200+ |
| (8) Subcontinent Asian American-owned | 6 | \$1,164 | \$1,164 | 0.8 | 0.7 | 0.2 | 129.4 |
| (9) Hispanic American-owned | 16 | \$4,657 | \$4,658 | 3.4 | 0.7 | 2.7 | 200+ |
| (10) Native American-owned | 7 | \$1,893 | \$1,894 | 1.4 | 0.5 | 0.9 | 200+ |
| (11) Unknown MBE | 1 | \$6 | | | | | |
| (12) Certified | 183 | \$54,979 | \$54,979 | 39.9 | | | |
| (13) Certified woman-owned | 68 | \$8,991 | \$8,991 | 6.5 | | | |
| (14) Certified minority-owned | 115 | \$45,988 | \$45,988 | 33.4 | | | |
| (15) Certified African American-owned | 77 | \$25,671 | \$25,671 | 18.6 | | | |
| (16) Certified Asian-Pacific American-owned | 17 | \$15,265 | \$15,265 | 11.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 5 | \$398 | \$398 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 11 | \$4,525 | \$4,525 | 3.3 | | | |
| (19) Certified Native American-owned | 5 | \$129 | \$129 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-12.
Agency: IDOA (including ISCBA)
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 596 | \$126,762 | \$126,762 | | | | |
| (2) MBE/WBE | 216 | \$62,181 | \$62,181 | 49.1 | 20.0 | 29.1 | 200+ |
| (3) WBE | 94 | \$12,010 | \$12,010 | 9.5 | 12.3 | -2.8 | 76.9 |
| (4) MBE | 122 | \$50,170 | \$50,170 | 39.6 | 7.7 | 31.9 | 200+ |
| (5) African American-owned | 81 | \$27,339 | \$27,342 | 21.6 | 3.9 | 17.6 | 200+ |
| (6) Total Asian American-owned | 21 | \$17,067 | \$17,069 | 13.5 | 2.5 | 11.0 | 200+ |
| (7) Asian-Pacific American-owned | 17 | \$16,736 | \$16,737 | 13.2 | 1.8 | 11.4 | 200+ |
| (8) Subcontinent Asian American-owned | 4 | \$331 | \$331 | 0.3 | 0.7 | -0.4 | 38.4 |
| (9) Hispanic American-owned | 12 | \$3,865 | \$3,866 | 3.0 | 0.6 | 2.4 | 200+ |
| (10) Native American-owned | 7 | \$1,893 | \$1,894 | 1.5 | 0.5 | 1.0 | 200+ |
| (11) Unknown MBE | 1 | \$6 | | | | | |
| (12) Certified | 160 | \$52,482 | \$52,482 | 41.4 | | | |
| (13) Certified woman-owned | 62 | \$8,195 | \$8,195 | 6.5 | | | |
| (14) Certified minority-owned | 98 | \$44,287 | \$44,287 | 34.9 | | | |
| (15) Certified African American-owned | 68 | \$24,900 | \$24,900 | 19.6 | | | |
| (16) Certified Asian-Pacific American-owned | 14 | \$15,194 | \$15,194 | 12.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 4 | \$331 | \$331 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 7 | \$3,732 | \$3,732 | 2.9 | | | |
| (19) Certified Native American-owned | 5 | \$129 | \$129 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-13.
Agency: IDOA (including ISCBA)
Funding: All
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 62 | \$7,565 | \$7,565 | | | | |
| (2) MBE/WBE | 21 | \$1,792 | \$1,792 | 23.7 | 28.1 | -4.5 | 84.1 |
| (3) WBE | 10 | \$574 | \$574 | 7.6 | 22.3 | -14.7 | 34.0 |
| (4) MBE | 11 | \$1,217 | \$1,217 | 16.1 | 5.8 | 10.3 | 200+ |
| (5) African American-owned | 4 | \$499 | \$499 | 6.6 | 3.9 | 2.7 | 171.4 |
| (6) Total Asian American-owned | 4 | \$134 | \$134 | 1.8 | 0.7 | 1.0 | 200+ |
| (7) Asian-Pacific American-owned | 3 | \$66 | \$66 | 0.9 | 0.5 | 0.4 | 191.8 |
| (8) Subcontinent Asian American-owned | 1 | \$67 | \$67 | 0.9 | 0.3 | 0.6 | 200+ |
| (9) Hispanic American-owned | 3 | \$584 | \$584 | 7.7 | 0.9 | 6.8 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 13 | \$1,461 | \$1,461 | 19.3 | | | |
| (13) Certified woman-owned | 3 | \$251 | \$251 | 3.3 | | | |
| (14) Certified minority-owned | 10 | \$1,211 | \$1,211 | 16.0 | | | |
| (15) Certified African American-owned | 4 | \$499 | \$499 | 6.6 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$60 | \$60 | 0.8 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$67 | \$67 | 0.9 | | | |
| (18) Certified Hispanic American-owned | 3 | \$584 | \$584 | 7.7 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-16.
Agency: IDOA (including ISCBA)
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 29,607 | \$621,946 | \$621,946 | | | | |
| (2) MBE/WBE | 5,035 | \$102,120 | \$102,120 | 16.4 | 24.3 | -7.8 | 67.7 |
| (3) WBE | 3,726 | \$73,472 | \$73,472 | 11.8 | 16.9 | -5.1 | 69.8 |
| (4) MBE | 1,309 | \$28,648 | \$28,648 | 4.6 | 7.3 | -2.7 | 62.7 |
| (5) African American-owned | 518 | \$12,065 | \$12,150 | 2.0 | 3.3 | -1.4 | 58.5 |
| (6) Total Asian American-owned | 372 | \$8,981 | \$9,044 | 1.5 | 2.0 | -0.6 | 71.4 |
| (7) Asian-Pacific American-owned | 202 | \$4,663 | \$4,696 | 0.8 | 1.2 | -0.4 | 63.2 |
| (8) Subcontinent Asian American-owned | 168 | \$4,288 | \$4,318 | 0.7 | 0.8 | -0.1 | 82.5 |
| (9) Hispanic American-owned | 351 | \$5,986 | \$6,028 | 1.0 | 1.6 | -0.6 | 62.0 |
| (10) Native American-owned | 57 | \$1,416 | \$1,426 | 0.2 | 0.3 | -0.1 | 67.9 |
| (11) Unknown MBE | 11 | \$201 | | | | | |
| (12) Certified | 1,798 | \$35,778 | \$35,778 | 5.8 | | | |
| (13) Certified woman-owned | 914 | \$17,586 | \$17,607 | 2.8 | | | |
| (14) Certified minority-owned | 883 | \$18,150 | \$18,171 | 2.9 | | | |
| (15) Certified African American-owned | 346 | \$8,217 | \$8,227 | 1.3 | | | |
| (16) Certified Asian-Pacific American-owned | 75 | \$1,446 | \$1,447 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 96 | \$2,113 | \$2,115 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 317 | \$5,126 | \$5,132 | 0.8 | | | |
| (19) Certified Native American-owned | 49 | \$1,248 | \$1,249 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-17.
Agency: IDOA (including ISCBA)
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,271 | \$74,696 | \$74,696 | | | | |
| (2) MBE/WBE | 316 | \$7,299 | \$7,299 | 9.8 | 16.6 | -6.8 | 59.0 |
| (3) WBE | 213 | \$5,296 | \$5,296 | 7.1 | 12.0 | -4.9 | 59.0 |
| (4) MBE | 103 | \$2,002 | \$2,002 | 2.7 | 4.5 | -1.8 | 59.2 |
| (5) African American-owned | 52 | \$1,060 | \$1,064 | 1.4 | 2.0 | -0.5 | 72.2 |
| (6) Total Asian American-owned | 23 | \$304 | \$306 | 0.4 | 0.5 | -0.1 | 80.4 |
| (7) Asian-Pacific American-owned | 22 | \$297 | \$298 | 0.4 | 0.3 | 0.1 | 117.6 |
| (8) Subcontinent Asian American-owned | 1 | \$7 | \$7 | 0.0 | 0.2 | -0.2 | 5.7 |
| (9) Hispanic American-owned | 16 | \$496 | \$498 | 0.7 | 0.6 | 0.0 | 104.5 |
| (10) Native American-owned | 11 | \$134 | \$135 | 0.2 | 1.3 | -1.1 | 14.3 |
| (11) Unknown MBE | 1 | \$9 | | | | | |
| (12) Certified | 105 | \$3,149 | \$3,149 | 4.2 | | | |
| (13) Certified woman-owned | 56 | \$2,155 | \$2,155 | 2.9 | | | |
| (14) Certified minority-owned | 49 | \$994 | \$994 | 1.3 | | | |
| (15) Certified African American-owned | 19 | \$293 | \$293 | 0.4 | | | |
| (16) Certified Asian-Pacific American-owned | 9 | \$142 | \$142 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 12 | \$453 | \$453 | 0.6 | | | |
| (19) Certified Native American-owned | 9 | \$106 | \$106 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-18.
Agency: IDOA (including ISCBA)
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 12,257 | \$313,770 | \$313,770 | | | | |
| (2) MBE/WBE | 2,496 | \$61,596 | \$61,596 | 19.6 | 28.3 | -8.6 | 69.4 |
| (3) WBE | 1,875 | \$45,648 | \$45,648 | 14.5 | 18.0 | -3.5 | 80.7 |
| (4) MBE | 621 | \$15,948 | \$15,948 | 5.1 | 10.2 | -5.2 | 49.6 |
| (5) African American-owned | 419 | \$9,797 | \$9,877 | 3.1 | 4.3 | -1.1 | 74.1 |
| (6) Total Asian American-owned | 125 | \$3,587 | \$3,616 | 1.2 | 3.6 | -2.4 | 32.0 |
| (7) Asian-Pacific American-owned | 64 | \$1,968 | \$1,984 | 0.6 | 2.1 | -1.4 | 30.8 |
| (8) Subcontinent Asian American-owned | 61 | \$1,619 | \$1,633 | 0.5 | 1.5 | -1.0 | 33.7 |
| (9) Hispanic American-owned | 27 | \$1,197 | \$1,207 | 0.4 | 2.1 | -1.7 | 18.7 |
| (10) Native American-owned | 44 | \$1,238 | \$1,248 | 0.4 | 0.2 | 0.2 | 166.0 |
| (11) Unknown MBE | 6 | \$129 | | | | | |
| (12) Certified | 817 | \$20,739 | \$20,739 | 6.6 | | | |
| (13) Certified woman-owned | 424 | \$10,522 | \$10,522 | 3.4 | | | |
| (14) Certified minority-owned | 393 | \$10,216 | \$10,216 | 3.3 | | | |
| (15) Certified African American-owned | 307 | \$7,520 | \$7,520 | 2.4 | | | |
| (16) Certified Asian-Pacific American-owned | 17 | \$533 | \$533 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 19 | \$462 | \$462 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 12 | \$603 | \$603 | 0.2 | | | |
| (19) Certified Native American-owned | 38 | \$1,098 | \$1,098 | 0.3 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-19.
Agency: IDOA (including ISCBA)
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 12,171 | \$198,145 | \$198,145 | | | | |
| (2) MBE/WBE | 1,833 | \$27,585 | \$27,585 | 13.9 | 19.1 | -5.2 | 72.7 |
| (3) WBE | 1,283 | \$18,300 | \$18,300 | 9.2 | 15.8 | -6.5 | 58.5 |
| (4) MBE | 550 | \$9,285 | \$9,285 | 4.7 | 3.4 | 1.3 | 139.6 |
| (5) African American-owned | 36 | \$889 | \$894 | 0.5 | 1.6 | -1.2 | 27.4 |
| (6) Total Asian American-owned | 217 | \$4,210 | \$4,232 | 2.1 | 0.4 | 1.7 | 200+ |
| (7) Asian-Pacific American-owned | 109 | \$1,518 | \$1,527 | 0.8 | 0.3 | 0.5 | 200+ |
| (8) Subcontinent Asian American-owned | 106 | \$2,662 | \$2,676 | 1.4 | 0.1 | 1.2 | 200+ |
| (9) Hispanic American-owned | 292 | \$4,093 | \$4,115 | 2.1 | 1.2 | 0.9 | 169.8 |
| (10) Native American-owned | 2 | \$44 | \$44 | 0.0 | 0.1 | -0.1 | 25.5 |
| (11) Unknown MBE | 3 | \$50 | | | | | |
| (12) Certified | 707 | \$9,933 | \$9,933 | 5.0 | | | |
| (13) Certified woman-owned | 285 | \$3,448 | \$3,463 | 1.7 | | | |
| (14) Certified minority-owned | 421 | \$6,443 | \$6,471 | 3.3 | | | |
| (15) Certified African American-owned | 19 | \$400 | \$401 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 46 | \$479 | \$481 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 77 | \$1,650 | \$1,658 | 0.8 | | | |
| (18) Certified Hispanic American-owned | 277 | \$3,870 | \$3,887 | 2.0 | | | |
| (19) Certified Native American-owned | 2 | \$44 | \$44 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$43 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure O-20.
Agency: IDOA (including ISCBA)
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,908 | \$35,335 | \$35,335 | | | | |
| (2) MBE/WBE | 390 | \$5,640 | \$5,640 | 16.0 | 33.7 | -17.8 | 47.3 |
| (3) WBE | 355 | \$4,228 | \$4,228 | 12.0 | 23.8 | -11.9 | 50.2 |
| (4) MBE | 35 | \$1,412 | \$1,412 | 4.0 | 9.9 | -5.9 | 40.5 |
| (5) African American-owned | 11 | \$319 | \$322 | 0.9 | 7.6 | -6.7 | 12.0 |
| (6) Total Asian American-owned | 7 | \$880 | \$889 | 2.5 | 0.6 | 2.0 | 200+ |
| (7) Asian-Pacific American-owned | 7 | \$880 | \$889 | 2.5 | 0.5 | 2.0 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 16 | \$200 | \$202 | 0.6 | 1.0 | -0.5 | 54.4 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (11) Unknown MBE | 1 | \$14 | | | | | |
| (12) Certified | 169 | \$1,957 | \$1,957 | 5.5 | | | |
| (13) Certified woman-owned | 149 | \$1,461 | \$1,461 | 4.1 | | | |
| (14) Certified minority-owned | 20 | \$496 | \$496 | 1.4 | | | |
| (15) Certified African American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 3 | \$291 | \$291 | 0.8 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 16 | \$200 | \$200 | 0.6 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX P.

IDOA Summary Report

The State of Indiana commissioned BBC Research & Consulting (BBC) to conduct a disparity study as part of a periodic evaluation of its Minority and Women's Business Enterprises (MBE/WBE) Program. BBC analyzed participation of minority- and women-owned firms — regardless of whether they were certified as such with the State of Indiana — in contracts and subcontracts that the Indiana Department of Administration (IDOA) awarded between July 1, 2006 and June 30, 2009 (fiscal years 2007 through 2009).^{1,2} The study team then compared MBE/WBE utilization to what those firms would be expected to receive based on their availability for specific types of IDOA work.

IDOA's summary report is organized in five parts:

- A. Availability of MBE/WBEs for IDOA contracts and subcontracts³;
- B. Utilization of MBE/WBEs on IDOA contracts and subcontracts;
- C. Disparity analyses and results;
- D. Marketplace conditions for MBE/WBEs; and
- E. Options for improving MBE/WBEs' access to IDOA contracting opportunities.

A. Availability of MBE/WBEs for IDOA Contracts and Subcontracts

In the disparity analysis, the study team compared the percentage of IDOA contract dollars going to each racial/ethnic/gender group (MBE/WBE utilization) to the percentage of dollars that each group would be expected to receive based on its availability for specific types, sizes and locations of IDOA prime contracts and subcontracts (MBE/WBE availability).

BBC collected information about potentially available firms by contacting Indiana businesses in the local construction, professional services, goods and support services industries. More than 9,000 firms completed telephone interviews, allowing the study team to build a database of firms available for specific types of IDOA work. BBC conducted a sophisticated analysis of the number of MBEs and WBEs available for each IDOA contract and subcontract and dollar-weighted the results when determining overall availability for IDOA work. Chapter 5 and Appendix D of the full report explain the availability analysis in detail.

¹ Data from a number of state agencies were included in IDOA's analysis. For a complete list of agencies, see Chapter 1 of the full disparity study report.

² BBC defines WBEs as white women-owned firms. The rationale for doing so is presented in Chapter 5 of the full disparity study report.

³ BBC uses the words "contract" and "procurement" interchangeably throughout the report.

Figure P-1 presents the availability of MBE/WBE firms for IDOA procurements that BBC analyzed as part of the study. Availability estimates are presented by racial/ethnic/gender group. As shown in Figure P-1, MBE/WBE firms might be expected to receive about 23 percent of IDOA contract dollars given their availability for specific types, sizes and locations of IDOA prime contracts and subcontracts during the study period. This “availability benchmark” reflects dollar-weighted availability — it is not based on a headcount of MBE/WBEs. White women-owned firms comprise a large share of total MBE/WBE availability for IDOA contracts and procurements.

Figure P-1.
Availability of firms for IDOA contracts, July 2006–June 2009, by race/ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) |
|-----------------------------------|--|
| African American-owned | 2.0 % |
| Asian-Pacific American-owned | 1.8 |
| Subcontinent Asian American-owned | 1.8 |
| Hispanic American-owned | 1.0 |
| Native American-owned | 0.2 |
| Total MBE | 6.8 % |
| WBE (white women-owned) | <u>16.7</u> |
| Total MBE/WBE | 23.4 % |
| Majority-owned | 76.6 |
| Total | 100.0 % |

Note: See Figure O-1 in Appendix O.
 Numbers may not sum perfectly due to rounding.
 Source: BBC Research & Consulting from 2009/2010 Availability Survey.

The study team found that MBE/WBE availability is highest for IDOA support services contracts (35%) and lowest for construction contracts (14%). The tables in Appendix O present MBE/WBE availability for different subsets of IDOA contracts and subcontracts.

B. Utilization of MBE/WBEs on IDOA Contracts and Subcontracts

To determine MBE/WBE utilization on IDOA contracts, BBC examined more than 32,000 contracts and subcontracts totaling \$2.4 billion for the three-year study period.⁴ Figure P-2 examines IDOA’s utilization of each MBE/WBE group (top half of the figure) and IDOA’s utilization of only those firms certified as MBE/WBEs (bottom half of the figure). MBE/WBE firms received 11.0 percent of IDOA contract and subcontract dollars during the study period. WBEs accounted for much of the overall MBE/WBE utilization.

⁴ BBC began by considering more than \$31 billion in IDOA contracts and procurements. However, most of those procurement dollars were not analyzed as part of the study because they went to organizations that were not businesses, such as government agencies, universities and non-profit organizations. For more detail about the dollars that the study team included in the disparity study, see Chapter 3 and Appendix C.

Figure P-2.
Utilization of MBE/WBEs and certified MBE/WBEs for IDOA contracts,
July 2006–June 2009

| Race, ethnicity and gender | Utilization % |
|-----------------------------------|----------------|
| MBE/WBEs | |
| African American-owned | 2.0 % |
| Asian-Pacific American-owned | 1.6 |
| Subcontinent Asian American-owned | 0.6 |
| Hispanic American-owned | 1.1 |
| Native American-owned | 0.2 |
| Total MBE | 5.4 % |
| WBE (white women-owned) | 5.6 |
| Total MBE/WBE | 11.0 % |
| Majority-owned | 89.0 |
| Total | 100.0 % |
| Certified MBE/WBEs | |
| African American-owned | 1.5 % |
| Asian-Pacific American-owned | 1.0 |
| Subcontinent Asian American-owned | 0.4 |
| Hispanic American-owned | 1.0 |
| Native American-owned | 0.1 |
| Total MBE certified | 3.9 % |
| WBE (white women-owned) | 1.5 |
| Total MBE/WBE certified | 5.4 % |
| Non-certified | 94.6 |
| Total | 100.0 % |

Note: See Figure O-1 in Appendix O.

Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from data on IDOA contracts.

When examining IDOA contract dollars by industry, MBE/WBE utilization was 19 percent for construction, 8 percent for professional services, 12 percent for goods and 19 percent for support services. For more detail about MBE/WBE utilization by study industry, see Chapter 7 and Figures O-2 through O-5 of Appendix O.

C. Disparity Analysis

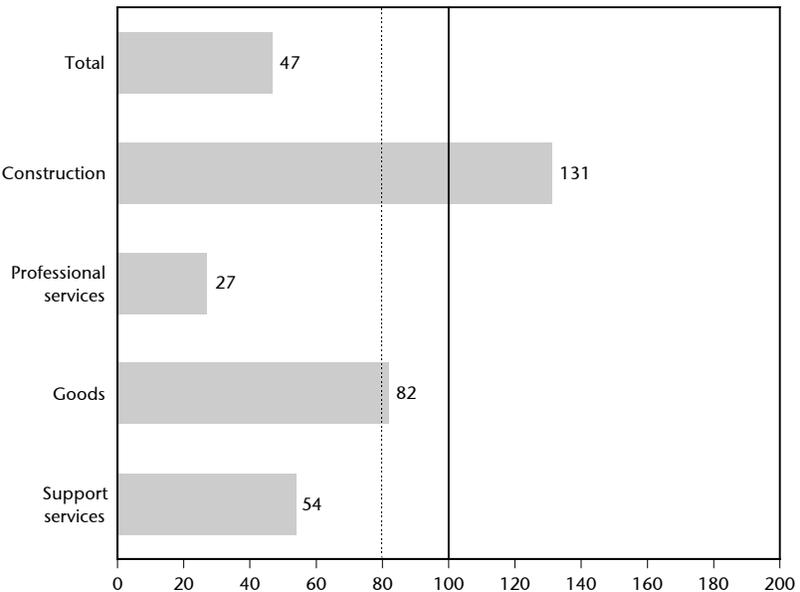
BBC compared actual utilization of MBE/WBEs on IDOA contracts (as a percentage of total dollars) to the percentage of dollars that those firms might be expected to receive based on the availability analysis. To help compare results between groups and across sets of contracts, BBC calculated disparity indices by dividing the utilization percentage by availability and then multiplying by 100.⁵ A disparity index of 100 indicates “parity” — that is, for a particular set of contracts, an MBE/WBE group received 100 percent of the dollars that it would be expected to receive based on availability.

Results by industry. Figure P-3 presents overall MBE/WBE disparity indices for IDOA contracts by study industry. The results in Figure P-3 include data from IDOA prime contracts and subcontracts. Overall, MBE/WBEs considered together were substantially underutilized on IDOA contracts — they received less than half of the procurement dollars that they would be expected to receive based on availability (disparity index of 47).⁶ MBE/WBEs showed substantial disparities in each study industry except for construction (disparity index of 131). However, as explained further in Chapter 7, the relatively high utilization of MBE/WBEs on IDOA construction contracts was driven primarily by a single agency — the Indiana Stadium and Convention Building Authority.

Figure P-3.
Disparity indices for
MBE/WBE utilization on
IDOA contracts, July 2006–
June 2009, by study
industry

Note:
See Figures O-1 through O-5 in Appendix O.

Source:
BBC Research & Consulting from data on
IDOA contracts.



⁵ For example, if utilization of WBEs for a set of IDOA contracts was 2 percent and availability was 10 percent, the disparity index would be 20 (i.e., 2% divided by 10%, then multiplied by 100).

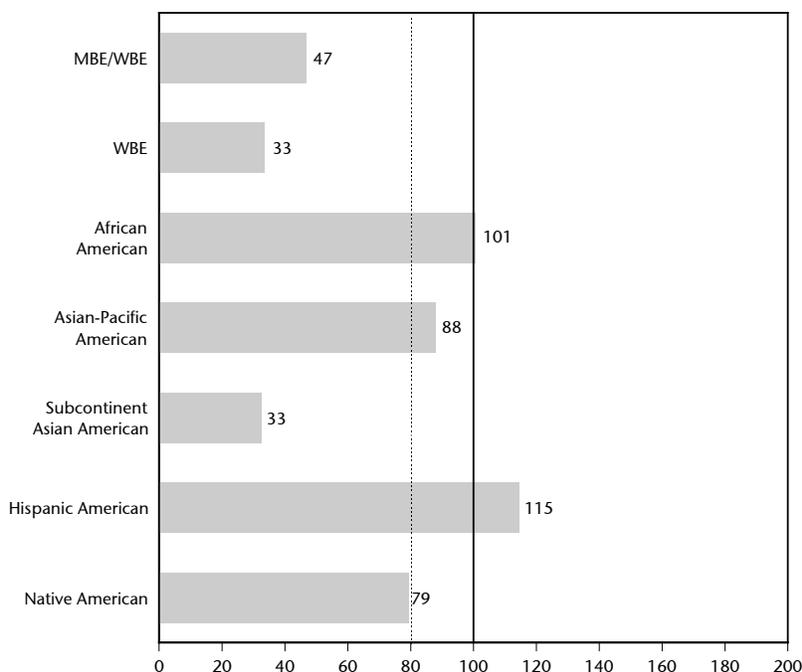
⁶ BBC’s use of the word “substantial” in describing certain disparity indices reflects the opinion of some courts that a disparity index of less than 80 reflects a substantial disparity.

Results by MBE/WBE. Figure P-4 presents disparity indices by MBE/WBE group. The results in Figure P-4 include data from IDOA prime contracts and subcontracts. Three MBE/WBE groups did not show substantial disparities — African American- (disparity index of 101), Asian-Pacific American- (disparity index of 88) and Hispanic American-owned firms (disparity index of 115).

Figure P-4.
Disparity indices for utilization on IDOA contracts, July 2006–June 2009, by MBE/WBE group

Note:
 See Figures O-1 in Appendix O.

Source:
 BBC Research & Consulting from data on IDOA contracts.



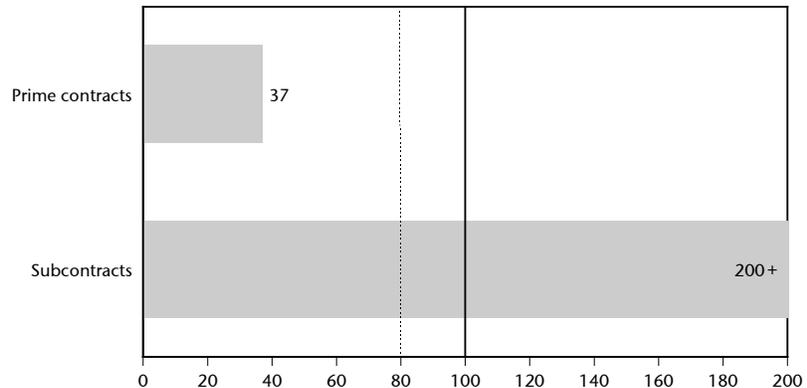
Prime contracts and subcontracts. As part of the State of Indiana’s MBE/WBE Program, IDOA applies MBE/WBE contract goals to its construction, professional services, goods and support services contracts. Prime contractors can meet those goals by either: (a) making subcontracting commitments to MBE/WBE-certified subcontractors at the time of bid; or (b) filling out an MBE/WBE program waiver showing that they made all reasonable good faith efforts to fulfill the contract goals but could not do so.

As one assessment of the effectiveness of IDOA’s implementation of the State of Indiana MBE/WBE Program, Figure P-5 shows overall MBE/WBE disparity results for prime contracts and subcontracts. MBE/WBEs were substantially underutilized on IDOA prime contracts (disparity index of 37). In contrast, MBE/WBEs showed a disparity index of greater than 200 for IDOA subcontracts. Those results may indicate the success of the MBE/WBE contract goals that IDOA applied to its contracts during the study period. It appears that the State of Indiana MBE/WBE Program may expand opportunities for minority- and women-owned firms through work as subcontractors.

Figure P-5.
Disparity indices for
MBE/WBE utilization on
IDOA prime contracts and
subcontracts, July 2006–
June 2009

Note:
 See Figure O-6 and O-11 in Appendix O.

Source:
 BBC Research & Consulting from data on
 IDOA contracts.



Comparison of disparity results between IDOA/INDOT and SEI contracts. The disparity study also examined MBE/WBE utilization and availability for the Indiana Department of Transportation (INDOT) and seven state colleges and universities (state educational institutions or “SEIs”).

- Similar to IDOA, INDOT applied MBE/WBE contract goals to certain state-funded contracts. For federally-funded construction and professional services contracts, which represent most of INDOT’s contracting, INDOT applied Disadvantaged Business Enterprise (DBE) goals.
- SEIs did not apply MBE/WBE contract goals to their contracts or there were no consequences if prime contractors did not meet the goals (or fulfill good faith efforts).

BBC analyzed MBE/WBE disparities for IDOA and INDOT combined (the “state”) and for all SEIs combined. Although disparity results for MBE/WBEs did not differ between state contracts (disparity index of 70) and SEI contracts (disparity index of 71) when considering prime contracts and subcontracts together, disparity results differed considerably when only considering subcontracts. There were no disparities for minority- and women-owned firms on state subcontracts (disparity index of 180), but MBE/WBEs were substantially underutilized on SEI subcontracts (disparity index of 68). These results indicate that the use of MBE/WBE/DBE goals may expand opportunities for minority- and women-owned firms through work as subcontractors. For more details about these combined analyses, see Chapter 6.⁷

⁷ State contracts included contracts awarded by the Indiana Stadium and Convention Building Authority (ISCBA). During the study period, ISCBA awarded contract dollars in connection with two large construction projects — building Lucas Oil Stadium and the Indiana Convention Center — using an MBE/WBE contracting program. In addition to the analyses presented here, the study team examined MBE/WBE disparity indices for state and SEI contracts after removing contract dollars awarded by ISCBA. Without ISCBA, the disparity index for MBE/WBEs was 66 for state prime contracts and subcontracts considered together and 171 for state subcontracts.

D. Marketplace Conditions for MBE/WBEs

BBC also examined whether certain barriers exist for minority- and women-owned firms in the Indiana marketplace as a whole. Barriers in the marketplace may help explain some of the disparities that BBC observed for certain MBE/WBE groups in IDOA's construction, professional services, goods and support services contracts. BBC examined potential barriers in the Indiana marketplace in four primary areas:

1. Entry and advancement;
2. Business ownership;
3. Access to capital, bonding and insurance; and
4. Success of businesses.

Chapter 4 and Appendices E – H and Appendix J of the full report provide detailed information about marketplace conditions in Indiana.

Entry and advancement. BBC's analyses indicated that certain minority groups and women are underrepresented in the construction, professional services, goods and support services industries in Indiana, compared to non-Hispanic whites and men, even after accounting for factors such as education. Results indicated that:

- African Americans and women exhibited relatively low representation in the Indiana construction industry compared to their representation in the entire Indiana workforce. In addition, there appeared to be barriers to advancement for minorities and women.
- There was relatively low representation of African Americans, Hispanic Americans and women in the Indiana professional services industry. Among all professional services workers, there was particularly low representation of African Americans and women in engineering- and architecture-related lines of work.
- African Americans and women exhibited relatively low representation in the Indiana goods industry compared to their representation in the entire Indiana workforce. Among goods workers, African Americans and women were also less likely than non-Hispanic whites and males to advance to supervisory and managerial positions.
- Two groups showed lower representation in the support services industry compared to their representation in all Indiana industries considered together — Asian Americans and women. Minorities and women were far less likely to advance to supervisory or managerial positions.

- During in-depth interviews and public forums that BBC held as part of the disparity study, some individuals reported stereotypical attitudes on the part of customers and buyers in Indiana as a contributor to unfavorable work environments for minorities and women. Other interviewees reported instances of racial slurs or sexist comments. Some interviewees indicated that they have not experienced difficulties associated with entry and advancement, or that certain factors — such as stereotypical attitudes — have worked to their advantage.

Business ownership. Quantitative analyses of the Indiana construction, professional services, goods and support services industries revealed statistically significant disparities in business ownership for some racial/ethnic/gender groups after accounting for various neutral factors such as age and education.

- Compared to similarly-situated non-Hispanic whites and men, there were disparities in business ownership rates for African Americans, Hispanic Americans and women working in the Indiana construction industry.
- Asian Americans and women exhibited substantial disparities in business ownership rates in the professional services industry.
- White women own goods businesses at less than two-thirds the rate of similarly-situated white men in Indiana.
- African Americans exhibited a substantial disparity in business ownership rates in the support services industry compared to similarly-situated non-Hispanic whites.

Access to capital, bonding and insurance. If race/ethnic or gender discrimination exists in capital, bonding and insurance markets, minorities and women may have difficulty starting or expanding a business. BBC examined whether MBE/WBEs' access to capital — both from their homes and businesses — is comparable to that of majority-owned firms. In addition, BBC examined information about whether minorities and women face barriers in obtaining bonding and insurance.

- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Indiana were more likely to have their applications denied. In addition, African Americans and Hispanic Americans were approved for business loans at rates that were much lower than that of similarly-situated non-Hispanic whites.
- Several interviewees reported that business credit is difficult to obtain and indicated that race and gender discrimination affected access to business credit. There was also some information that indicated difficulties for small businesses — particularly MBE/WBEs — in obtaining bonding and insurance in Indiana. Other interviewees indicated that they have not experienced difficulties associated with access to capital, bonding or insurance.

Success of businesses. BBC completed analyses that assessed whether the success of minority- and women-owned businesses differs from that of majority-owned businesses in the Indiana marketplace. The study team examined business success primarily in terms of business closures, contractions and expansions, and in terms of business receipts and earnings.

- Between 1997 and 2001, African American- and Hispanic American-owned firms in Indiana closed at higher rates than all firms considered together.⁸
- African-American-owned firms were less likely than other firms to expand. However, Hispanic American- and Native American-owned firms were more likely to expand than other firms.
- African American-, Hispanic American- and Native American-owned firms in Indiana were less likely than all firms considered together to experience contraction between 1997 and 2001. Asian American-owned firms were as likely as all Indiana firms considered together to experience contraction.
- African American-, Hispanic American-, Native American- and women-owned firms in Indiana earned substantially less in gross revenue than all firms considered together. The study team also developed regression models of business owner earnings in the East North Central region, which includes Indiana, based on 2000 U.S. Census data.⁹ The models examined the impact of race/ethnicity/gender on business owner earnings after statistically controlling for neutral factors. The study team identified statistically significant disparities in business earnings for female business owners in construction, professional services, goods and support services. There were also statistically significant disparities for African American construction business owners.
- Data from telephone interviews that BBC conducted as part of the availability analysis indicated that, across all subindustries except professional services, a larger share of majority-owned firms than of MBE/WBEs reported gross revenues of \$5 million or more.
- Several interviewees described difficulties that may affect business success for MBE/WBEs in the study industries. Interviewees discussed participation as prime- and subcontractors; unfair denial of bid opportunities and contract awards; and the existence of a “good ol’ boy” network.” Other interviewees indicated experiencing no difficulties in these areas.

⁸ These were the most recent business closure, contractions and expansion data available for Indiana at the time of the disparity study.

⁹ This was the most current Census data source available at the time of this study.

E. Options for Improving MBE/WBEs' Access to IDOA Contracting Opportunities

After reviewing contracting practices and business assistance programs that IDOA currently has in place, BBC suggests several steps that IDOA might consider to further encourage the future participation of small businesses — including MBE/WBEs — in its contracting and procurement. Some of those suggestions may require changes to existing state and administrative code. When implementing any program focusing on minority- and women-owned firms, the State of Indiana must also ensure that it is in compliance with U.S. Supreme Court, federal and state court decisions regarding such programs.¹⁰ For more detail, see Chapter 2 and Appendix B.

Expand use of small business set-asides and preferences. Indiana state code allows state agencies to solicit bids or quotes only from businesses that qualify as small businesses for certain goods and support services contracts. In addition, state code allows state agencies to use price preferences for small businesses bidding on certain goods and support services contracts. IDOA and other state agencies might consider expanding this program to include certain construction and professional services contracts.

Increase competitive opportunities for small contracts. The State of Indiana might consider increasing the number of small contracts that it awards by segmenting large contracts into multiple, smaller contract elements. Encouraging bid opportunities on small contracts might increase the likelihood of small businesses — including MBE/WBEs — to compete for them. BBC's analyses indicated that IDOA showed higher MBE/WBE utilization on small contracts than on all contracts (see Chapter 7).

Insurance and bonding requirements. The State of Indiana might consider reviewing its insurance and bonding requirements to ensure that they do not act as barriers to smaller and newer firms. BBC's analyses of the Indiana marketplace indicated that certain MBE/WBE groups may face barriers in obtaining insurance and bonding and that those barriers may lead to reduced participation in state contracting (see Chapter 4).

Finance, bonding and insurance assistance. BBC's analyses identified disparities in access to capital, bonding and insurance for certain MBE/WBE groups. IDOA offers some technical assistance related to obtaining finance, but it might also consider exploring ways to better connect its contractors and consultants with programs offered by local public and private organizations.

Technical assistance and mentoring. IDOA offers many technical assistance programs in various business areas, such as managing financial resources, developing a business plan and doing business with state agencies and SEIs. IDOA might consider partnering with local organizations to offer further technical assistance and training. For example, some agencies in other states host a construction management school that staff members from a local construction firm teach. IDOA might consider partnering with a large construction firm or other organizations to host similar construction management or general business management courses.

¹⁰ *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995). See Appendix B for more detail about related case law.

Outreach and advocacy, including notification of bid opportunities. IDOA hosts and participates in many outreach and advocacy events that include information about marketing, the MBE/WBE certification process, doing business with the State of Indiana and available bid opportunities. Many firms interviewed as part of the disparity study complimented IDOA on its outreach and advocacy efforts in the Indiana marketplace (see Appendix J for specific comments). IDOA might consider broadening its outreach and advocacy efforts to include more partnerships with local trade organizations and other public agencies.

Expand MBE/WBE outreach and assistance measures, and data collection, to include uncertified firms. IDOA might consider expanding the measures that it uses to encourage the participation of MBE/WBE-certified firms to include minority- and women-owned firms that are not currently certified. BBC's analyses indicate that a large portion of IDOA's MBE/WBE utilization occurred with firms that were not certified. Further cultivating relationships with those firms could help encourage MBE/WBE participation in IDOA contracting. In addition, IDOA might consider monitoring utilization of all minority- and women-owned firms as prime contractors and subcontractors, not just certified MBE/WBEs.

APPENDIX Q.
INDOT Disparity Tables

Figure Q-1.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 21,778 | \$5,544,837 | \$5,544,837 | | | | |
| (2) MBE/WBE | 4,800 | \$607,437 | \$607,437 | 11.0 | 12.4 | -1.5 | 88.1 |
| (3) WBE | 2,894 | \$337,831 | \$337,831 | 6.1 | 8.9 | -2.8 | 68.4 |
| (4) MBE | 1,906 | \$269,606 | \$269,606 | 4.9 | 3.5 | 1.3 | 137.8 |
| (5) African American-owned | 611 | \$102,917 | \$105,710 | 1.9 | 1.1 | 0.8 | 178.2 |
| (6) Total Asian American-owned | 795 | \$70,961 | \$72,886 | 1.3 | 1.3 | 0.0 | 100.5 |
| (7) Asian-Pacific American-owned | 286 | \$16,762 | \$17,217 | 0.3 | 0.5 | -0.2 | 57.1 |
| (8) Subcontinent Asian American-owned | 509 | \$54,199 | \$55,669 | 1.0 | 0.8 | 0.2 | 131.4 |
| (9) Hispanic American-owned | 250 | \$40,521 | \$41,620 | 0.8 | 0.4 | 0.4 | 198.7 |
| (10) Native American-owned | 215 | \$48,086 | \$49,391 | 0.9 | 0.8 | 0.1 | 115.9 |
| (11) Unknown MBE | 35 | \$7,121 | | | | | |
| (12) Certified | 1,493 | \$177,374 | \$177,374 | 3.2 | | | |
| (13) Certified woman-owned | 943 | \$88,187 | \$88,187 | 1.6 | | | |
| (14) Certified minority-owned | 550 | \$89,187 | \$89,187 | 1.6 | | | |
| (15) Certified African American-owned | 360 | \$58,729 | \$58,729 | 1.1 | | | |
| (16) Certified Asian-Pacific American-owned | 27 | \$2,370 | \$2,370 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 73 | \$12,681 | \$12,681 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 81 | \$7,962 | \$7,962 | 0.1 | | | |
| (19) Certified Native American-owned | 9 | \$7,446 | \$7,446 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-2.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 10,738 | \$4,485,999 | \$4,485,999 | | | | |
| (2) MBE/WBE | 2,536 | \$409,837 | \$409,837 | 9.1 | 10.5 | -1.4 | 86.9 |
| (3) WBE | 2,048 | \$286,614 | \$286,614 | 6.4 | 8.6 | -2.2 | 74.5 |
| (4) MBE | 488 | \$123,223 | \$123,223 | 2.7 | 1.9 | 0.8 | 141.8 |
| (5) African American-owned | 216 | \$45,907 | \$48,671 | 1.1 | 0.7 | 0.4 | 155.7 |
| (6) Total Asian American-owned | 71 | \$3,887 | \$4,121 | 0.1 | 0.3 | -0.2 | 28.4 |
| (7) Asian-Pacific American-owned | 57 | \$3,470 | \$3,679 | 0.1 | 0.1 | 0.0 | 64.9 |
| (8) Subcontinent Asian American-owned | 14 | \$417 | \$442 | 0.0 | 0.2 | -0.2 | 5.0 |
| (9) Hispanic American-owned | 93 | \$21,948 | \$23,269 | 0.5 | 0.1 | 0.4 | 200+ |
| (10) Native American-owned | 78 | \$44,485 | \$47,163 | 1.1 | 0.8 | 0.3 | 136.8 |
| (11) Unknown MBE | 30 | \$6,996 | | | | | |
| (12) Certified | 957 | \$98,153 | \$98,153 | 2.2 | | | |
| (13) Certified woman-owned | 786 | \$69,536 | \$69,536 | 1.6 | | | |
| (14) Certified minority-owned | 171 | \$28,617 | \$28,617 | 0.6 | | | |
| (15) Certified African American-owned | 80 | \$16,639 | \$16,639 | 0.4 | | | |
| (16) Certified Asian-Pacific American-owned | 11 | \$867 | \$867 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 14 | \$417 | \$417 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 57 | \$3,249 | \$3,249 | 0.1 | | | |
| (19) Certified Native American-owned | 9 | \$7,446 | \$7,446 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-3.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 8,377 | \$895,832 | \$895,832 | | | | |
| (2) MBE/WBE | 1,782 | \$141,680 | \$141,680 | 15.8 | 21.2 | -5.4 | 74.6 |
| (3) WBE | 709 | \$42,653 | \$42,653 | 4.8 | 9.9 | -5.1 | 48.2 |
| (4) MBE | 1,073 | \$99,027 | \$99,027 | 11.1 | 11.3 | -0.3 | 97.7 |
| (5) African American-owned | 132 | \$11,786 | \$11,799 | 1.3 | 2.8 | -1.4 | 47.7 |
| (6) Total Asian American-owned | 713 | \$66,413 | \$66,483 | 7.4 | 6.4 | 1.0 | 115.1 |
| (7) Asian-Pacific American-owned | 228 | \$13,287 | \$13,301 | 1.5 | 2.7 | -1.2 | 54.8 |
| (8) Subcontinent Asian American-owned | 485 | \$53,126 | \$53,182 | 5.9 | 3.7 | 2.2 | 158.8 |
| (9) Hispanic American-owned | 88 | \$17,122 | \$17,140 | 1.9 | 1.2 | 0.7 | 155.9 |
| (10) Native American-owned | 137 | \$3,601 | \$3,604 | 0.4 | 0.9 | -0.5 | 45.6 |
| (11) Unknown MBE | 3 | \$105 | | | | | |
| (12) Certified | 291 | \$42,668 | \$42,668 | 4.8 | | | |
| (13) Certified woman-owned | 146 | \$18,341 | \$18,341 | 2.0 | | | |
| (14) Certified minority-owned | 145 | \$24,327 | \$24,327 | 2.7 | | | |
| (15) Certified African American-owned | 47 | \$5,853 | \$5,853 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 15 | \$1,498 | \$1,498 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 59 | \$12,264 | \$12,264 | 1.4 | | | |
| (18) Certified Hispanic American-owned | 24 | \$4,713 | \$4,713 | 0.5 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-4.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,208 | \$120,193 | \$120,193 | | | | |
| (2) MBE/WBE | 448 | \$53,778 | \$53,778 | 44.7 | 12.1 | 32.6 | 200+ |
| (3) WBE | 109 | \$6,557 | \$6,557 | 5.5 | 8.9 | -3.5 | 61.0 |
| (4) MBE | 339 | \$47,221 | \$47,221 | 39.3 | 3.2 | 36.1 | 200+ |
| (5) African American-owned | 257 | \$45,088 | \$45,108 | 37.5 | 1.5 | 36.0 | 200+ |
| (6) Total Asian American-owned | 11 | \$661 | \$661 | 0.6 | 0.2 | 0.4 | 200+ |
| (7) Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | 0.2 | -0.2 | 2.5 |
| (8) Subcontinent Asian American-owned | 10 | \$656 | \$656 | 0.5 | 0.0 | 0.5 | 200+ |
| (9) Hispanic American-owned | 69 | \$1,451 | \$1,451 | 1.2 | 1.3 | -0.1 | 90.4 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 2 | \$21 | | | | | |
| (12) Certified | 234 | \$36,243 | \$36,243 | 30.2 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 234 | \$36,243 | \$36,243 | 30.2 | | | |
| (15) Certified African American-owned | 233 | \$36,237 | \$36,237 | 30.1 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-5.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 455 | \$42,813 | \$42,813 | | | | |
| (2) MBE/WBE | 34 | \$2,143 | \$2,143 | 5.0 | 30.6 | -25.6 | 16.4 |
| (3) WBE | 28 | \$2,007 | \$2,007 | 4.7 | 22.0 | -17.4 | 21.3 |
| (4) MBE | 6 | \$136 | \$136 | 0.3 | 8.5 | -8.2 | 3.7 |
| (5) African American-owned | 6 | \$136 | \$136 | 0.3 | 3.6 | -3.3 | 8.8 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 4.6 | -4.6 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 11 | \$311 | \$311 | 0.7 | | | |
| (13) Certified woman-owned | 11 | \$311 | \$311 | 0.7 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-6.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 17,435 | \$4,858,081 | \$4,858,081 | | | | |
| (2) MBE/WBE | 2,664 | \$368,096 | \$368,096 | 7.6 | 11.3 | -3.7 | 67.2 |
| (3) WBE | 1,201 | \$190,386 | \$190,386 | 3.9 | 8.1 | -4.1 | 48.7 |
| (4) MBE | 1,463 | \$177,710 | \$177,710 | 3.7 | 3.2 | 0.4 | 113.6 |
| (5) African American-owned | 438 | \$63,799 | \$65,968 | 1.4 | 1.0 | 0.4 | 136.8 |
| (6) Total Asian American-owned | 642 | \$55,274 | \$57,154 | 1.2 | 1.2 | -0.1 | 95.3 |
| (7) Asian-Pacific American-owned | 215 | \$8,956 | \$9,260 | 0.2 | 0.5 | -0.3 | 35.6 |
| (8) Subcontinent Asian American-owned | 427 | \$46,319 | \$47,893 | 1.0 | 0.7 | 0.3 | 140.9 |
| (9) Hispanic American-owned | 181 | \$34,116 | \$35,276 | 0.7 | 0.4 | 0.4 | 195.1 |
| (10) Native American-owned | 172 | \$18,678 | \$19,313 | 0.4 | 0.6 | -0.2 | 64.4 |
| (11) Unknown MBE | 30 | \$5,844 | | | | | |
| (12) Certified | 536 | \$80,993 | \$80,993 | 1.7 | | | |
| (13) Certified woman-owned | 211 | \$20,120 | \$20,120 | 0.4 | | | |
| (14) Certified minority-owned | 325 | \$60,873 | \$60,873 | 1.3 | | | |
| (15) Certified African American-owned | 264 | \$41,892 | \$41,892 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 14 | \$606 | \$606 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 18 | \$6,288 | \$6,288 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 22 | \$4,695 | \$4,695 | 0.1 | | | |
| (19) Certified Native American-owned | 7 | \$7,393 | \$7,393 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-7.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 7,052 | \$3,929,531 | \$3,929,531 | | | | |
| (2) MBE/WBE | 796 | \$215,270 | \$215,270 | 5.5 | 9.2 | -3.7 | 59.4 |
| (3) WBE | 599 | \$162,502 | \$162,502 | 4.1 | 7.6 | -3.5 | 54.2 |
| (4) MBE | 197 | \$52,769 | \$52,769 | 1.3 | 1.6 | -0.2 | 84.9 |
| (5) African American-owned | 92 | \$13,915 | \$15,606 | 0.4 | 0.6 | -0.2 | 65.0 |
| (6) Total Asian American-owned | 13 | \$566 | \$634 | 0.0 | 0.3 | -0.3 | 6.0 |
| (7) Asian-Pacific American-owned | 13 | \$566 | \$634 | 0.0 | 0.1 | -0.1 | 16.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (9) Hispanic American-owned | 32 | \$17,493 | \$19,619 | 0.5 | 0.1 | 0.4 | 200+ |
| (10) Native American-owned | 35 | \$15,077 | \$16,910 | 0.4 | 0.6 | -0.1 | 74.2 |
| (11) Unknown MBE | 25 | \$5,718 | | | | | |
| (12) Certified | 215 | \$30,758 | \$30,758 | 0.8 | | | |
| (13) Certified woman-owned | 182 | \$18,287 | \$18,287 | 0.5 | | | |
| (14) Certified minority-owned | 33 | \$12,472 | \$12,472 | 0.3 | | | |
| (15) Certified African American-owned | 19 | \$4,791 | \$4,791 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 7 | \$287 | \$287 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 7 | \$7,393 | \$7,393 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-8.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 7,788 | \$772,521 | \$772,521 | | | | |
| (2) MBE/WBE | 1,419 | \$99,563 | \$99,563 | 12.9 | 20.6 | -7.7 | 62.5 |
| (3) WBE | 494 | \$21,878 | \$21,878 | 2.8 | 9.3 | -6.5 | 30.3 |
| (4) MBE | 925 | \$77,686 | \$77,686 | 10.1 | 11.3 | -1.2 | 89.2 |
| (5) African American-owned | 87 | \$4,761 | \$4,767 | 0.6 | 2.7 | -2.1 | 22.7 |
| (6) Total Asian American-owned | 618 | \$54,047 | \$54,121 | 7.0 | 6.4 | 0.6 | 110.1 |
| (7) Asian-Pacific American-owned | 201 | \$8,385 | \$8,396 | 1.1 | 2.8 | -1.7 | 38.6 |
| (8) Subcontinent Asian American-owned | 417 | \$45,663 | \$45,725 | 5.9 | 3.5 | 2.4 | 166.9 |
| (9) Hispanic American-owned | 80 | \$15,172 | \$15,192 | 2.0 | 1.3 | 0.7 | 154.4 |
| (10) Native American-owned | 137 | \$3,601 | \$3,606 | 0.5 | 0.9 | -0.4 | 51.4 |
| (11) Unknown MBE | 3 | \$105 | | | | | |
| (12) Certified | 87 | \$13,993 | \$13,993 | 1.8 | | | |
| (13) Certified woman-owned | 29 | \$1,833 | \$1,833 | 0.2 | | | |
| (14) Certified minority-owned | 58 | \$12,159 | \$12,159 | 1.6 | | | |
| (15) Certified African American-owned | 12 | \$863 | \$863 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 6 | \$313 | \$313 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 18 | \$6,288 | \$6,288 | 0.8 | | | |
| (18) Certified Hispanic American-owned | 22 | \$4,695 | \$4,695 | 0.6 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-9.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,199 | \$119,000 | \$119,000 | | | | |
| (2) MBE/WBE | 444 | \$53,193 | \$53,193 | 44.7 | 12.0 | 32.7 | 200+ |
| (3) WBE | 105 | \$5,972 | \$5,972 | 5.0 | 8.8 | -3.8 | 57.0 |
| (4) MBE | 339 | \$47,221 | \$47,221 | 39.7 | 3.2 | 36.5 | 200+ |
| (5) African American-owned | 257 | \$45,088 | \$45,108 | 37.9 | 1.5 | 36.4 | 200+ |
| (6) Total Asian American-owned | 11 | \$661 | \$661 | 0.6 | 0.2 | 0.4 | 200+ |
| (7) Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | 0.2 | -0.2 | 2.6 |
| (8) Subcontinent Asian American-owned | 10 | \$656 | \$656 | 0.6 | 0.0 | 0.5 | 200+ |
| (9) Hispanic American-owned | 69 | \$1,451 | \$1,451 | 1.2 | 1.3 | -0.1 | 90.7 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 2 | \$21 | | | | | |
| (12) Certified | 234 | \$36,243 | \$36,243 | 30.5 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 234 | \$36,243 | \$36,243 | 30.5 | | | |
| (15) Certified African American-owned | 233 | \$36,237 | \$36,237 | 30.5 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-10.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 396 | \$37,029 | \$37,029 | | | | |
| (2) MBE/WBE | 5 | \$69 | \$69 | 0.2 | 32.2 | -32.0 | 0.6 |
| (3) WBE | 3 | \$35 | \$35 | 0.1 | 22.9 | -22.8 | 0.4 |
| (4) MBE | 2 | \$35 | \$35 | 0.1 | 9.3 | -9.2 | 1.0 |
| (5) African American-owned | 2 | \$35 | \$35 | 0.1 | 3.8 | -3.7 | 2.5 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 5.3 | -5.3 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-11.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,343 | \$686,756 | \$686,756 | | | | |
| (2) MBE/WBE | 2,136 | \$239,342 | \$239,342 | 34.9 | 20.6 | 14.2 | 168.8 |
| (3) WBE | 1,693 | \$147,445 | \$147,445 | 21.5 | 14.9 | 6.5 | 143.7 |
| (4) MBE | 443 | \$91,896 | \$91,896 | 13.4 | 5.7 | 7.7 | 200+ |
| (5) African American-owned | 173 | \$39,119 | \$39,670 | 5.8 | 1.6 | 4.2 | 200+ |
| (6) Total Asian American-owned | 153 | \$15,687 | \$15,908 | 2.3 | 1.8 | 0.5 | 126.8 |
| (7) Asian-Pacific American-owned | 71 | \$7,807 | \$7,917 | 1.2 | 0.6 | 0.5 | 188.8 |
| (8) Subcontinent Asian American-owned | 82 | \$7,880 | \$7,991 | 1.2 | 1.2 | -0.1 | 95.6 |
| (9) Hispanic American-owned | 69 | \$6,405 | \$6,495 | 0.9 | 0.4 | 0.5 | 200+ |
| (10) Native American-owned | 43 | \$29,408 | \$29,823 | 4.3 | 1.8 | 2.5 | 200+ |
| (11) Unknown MBE | 5 | \$1,278 | | | | | |
| (12) Certified | 957 | \$96,381 | \$96,381 | 14.0 | | | |
| (13) Certified woman-owned | 732 | \$68,067 | \$68,067 | 9.9 | | | |
| (14) Certified minority-owned | 225 | \$28,314 | \$28,314 | 4.1 | | | |
| (15) Certified African American-owned | 96 | \$16,837 | \$16,837 | 2.5 | | | |
| (16) Certified Asian-Pacific American-owned | 13 | \$1,765 | \$1,765 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 55 | \$6,393 | \$6,393 | 0.9 | | | |
| (18) Certified Hispanic American-owned | 59 | \$3,267 | \$3,267 | 0.5 | | | |
| (19) Certified Native American-owned | 2 | \$53 | \$53 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-12.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,686 | \$556,468 | \$556,468 | | | | |
| (2) MBE/WBE | 1,740 | \$194,567 | \$194,567 | 35.0 | 19.7 | 15.3 | 177.4 |
| (3) WBE | 1,449 | \$124,112 | \$124,112 | 22.3 | 15.3 | 7.0 | 146.0 |
| (4) MBE | 291 | \$70,454 | \$70,454 | 12.7 | 4.4 | 8.2 | 200+ |
| (5) African American-owned | 124 | \$31,993 | \$32,583 | 5.9 | 1.3 | 4.6 | 200+ |
| (6) Total Asian American-owned | 58 | \$3,322 | \$3,383 | 0.6 | 0.7 | -0.1 | 85.9 |
| (7) Asian-Pacific American-owned | 44 | \$2,905 | \$2,958 | 0.5 | 0.3 | 0.2 | 173.7 |
| (8) Subcontinent Asian American-owned | 14 | \$417 | \$425 | 0.1 | 0.4 | -0.3 | 19.0 |
| (9) Hispanic American-owned | 61 | \$4,454 | \$4,537 | 0.8 | 0.3 | 0.5 | 200+ |
| (10) Native American-owned | 43 | \$29,408 | \$29,951 | 5.4 | 2.1 | 3.3 | 200+ |
| (11) Unknown MBE | 5 | \$1,278 | | | | | |
| (12) Certified | 742 | \$67,395 | \$67,395 | 12.1 | | | |
| (13) Certified woman-owned | 604 | \$51,249 | \$51,249 | 9.2 | | | |
| (14) Certified minority-owned | 138 | \$16,146 | \$16,146 | 2.9 | | | |
| (15) Certified African American-owned | 61 | \$11,847 | \$11,847 | 2.1 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$580 | \$580 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 14 | \$417 | \$417 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 57 | \$3,249 | \$3,249 | 0.6 | | | |
| (19) Certified Native American-owned | 2 | \$53 | \$53 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-13.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 589 | \$123,311 | \$123,311 | | | | |
| (2) MBE/WBE | 363 | \$42,116 | \$42,116 | 34.2 | 24.8 | 9.3 | 137.5 |
| (3) WBE | 215 | \$20,775 | \$20,775 | 16.8 | 13.2 | 3.6 | 127.2 |
| (4) MBE | 148 | \$21,341 | \$21,341 | 17.3 | 11.6 | 5.7 | 149.3 |
| (5) African American-owned | 45 | \$7,025 | \$7,025 | 5.7 | 3.0 | 2.7 | 191.4 |
| (6) Total Asian American-owned | 95 | \$12,365 | \$12,365 | 10.0 | 7.0 | 3.1 | 144.1 |
| (7) Asian-Pacific American-owned | 27 | \$4,902 | \$4,902 | 4.0 | 2.0 | 2.0 | 197.4 |
| (8) Subcontinent Asian American-owned | 68 | \$7,463 | \$7,463 | 6.1 | 4.9 | 1.1 | 122.4 |
| (9) Hispanic American-owned | 8 | \$1,950 | \$1,950 | 1.6 | 0.9 | 0.6 | 168.8 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 204 | \$28,675 | \$28,675 | 23.3 | | | |
| (13) Certified woman-owned | 117 | \$16,507 | \$16,507 | 13.4 | | | |
| (14) Certified minority-owned | 87 | \$12,168 | \$12,168 | 9.9 | | | |
| (15) Certified African American-owned | 35 | \$4,990 | \$4,990 | 4.0 | | | |
| (16) Certified Asian-Pacific American-owned | 9 | \$1,185 | \$1,185 | 1.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 41 | \$5,976 | \$5,976 | 4.8 | | | |
| (18) Certified Hispanic American-owned | 2 | \$18 | \$18 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-16.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 14,382 | \$405,289 | \$405,289 | | | | |
| (2) MBE/WBE | 2,261 | \$67,753 | \$67,753 | 16.7 | 20.6 | -3.9 | 81.3 |
| (3) WBE | 997 | \$29,405 | \$29,405 | 7.3 | 13.6 | -6.4 | 53.2 |
| (4) MBE | 1,264 | \$38,349 | \$38,349 | 9.5 | 6.9 | 2.5 | 136.3 |
| (5) African American-owned | 361 | \$16,197 | \$16,497 | 4.1 | 2.4 | 1.6 | 166.3 |
| (6) Total Asian American-owned | 587 | \$15,550 | \$15,837 | 3.9 | 2.4 | 1.5 | 165.0 |
| (7) Asian-Pacific American-owned | 203 | \$4,416 | \$4,498 | 1.1 | 1.1 | 0.0 | 98.6 |
| (8) Subcontinent Asian American-owned | 384 | \$11,134 | \$11,340 | 2.8 | 1.2 | 1.6 | 200+ |
| (9) Hispanic American-owned | 146 | \$3,786 | \$3,856 | 1.0 | 1.2 | -0.3 | 77.1 |
| (10) Native American-owned | 153 | \$2,119 | \$2,159 | 0.5 | 0.9 | -0.3 | 61.0 |
| (11) Unknown MBE | 17 | \$697 | | | | | |
| (12) Certified | 433 | \$18,249 | \$18,249 | 4.5 | | | |
| (13) Certified woman-owned | 176 | \$5,300 | \$5,300 | 1.3 | | | |
| (14) Certified minority-owned | 257 | \$12,949 | \$12,949 | 3.2 | | | |
| (15) Certified African American-owned | 213 | \$11,417 | \$11,417 | 2.8 | | | |
| (16) Certified Asian-Pacific American-owned | 13 | \$475 | \$475 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 14 | \$338 | \$338 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 16 | \$711 | \$711 | 0.2 | | | |
| (19) Certified Native American-owned | 1 | \$8 | \$8 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-17.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,939 | \$146,539 | \$146,539 | | | | |
| (2) MBE/WBE | 563 | \$20,850 | \$20,850 | 14.2 | 16.2 | -1.9 | 88.1 |
| (3) WBE | 432 | \$15,900 | \$15,900 | 10.9 | 13.3 | -2.5 | 81.5 |
| (4) MBE | 131 | \$4,950 | \$4,950 | 3.4 | 2.8 | 0.5 | 118.6 |
| (5) African American-owned | 77 | \$2,480 | \$2,803 | 1.9 | 1.5 | 0.4 | 123.6 |
| (6) Total Asian American-owned | 13 | \$566 | \$639 | 0.4 | 0.2 | 0.2 | 200+ |
| (7) Asian-Pacific American-owned | 13 | \$566 | \$639 | 0.4 | 0.1 | 0.3 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 12 | \$844 | \$954 | 0.7 | 0.2 | 0.5 | 200+ |
| (10) Native American-owned | 17 | \$490 | \$553 | 0.4 | 0.9 | -0.5 | 44.3 |
| (11) Unknown MBE | 12 | \$571 | | | | | |
| (12) Certified | 173 | \$5,725 | \$5,725 | 3.9 | | | |
| (13) Certified woman-owned | 151 | \$4,827 | \$4,827 | 3.3 | | | |
| (14) Certified minority-owned | 22 | \$898 | \$898 | 0.6 | | | |
| (15) Certified African American-owned | 14 | \$602 | \$602 | 0.4 | | | |
| (16) Certified Asian-Pacific American-owned | 7 | \$287 | \$287 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 1 | \$8 | \$8 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-18.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 7,034 | \$192,781 | \$192,781 | | | | |
| (2) MBE/WBE | 1,314 | \$32,091 | \$32,091 | 16.6 | 25.3 | -8.6 | 65.9 |
| (3) WBE | 464 | \$11,281 | \$11,281 | 5.9 | 14.5 | -8.6 | 40.5 |
| (4) MBE | 850 | \$20,810 | \$20,810 | 10.8 | 10.8 | 0.0 | 99.8 |
| (5) African American-owned | 82 | \$2,834 | \$2,848 | 1.5 | 3.2 | -1.7 | 46.6 |
| (6) Total Asian American-owned | 564 | \$14,751 | \$14,825 | 7.7 | 4.7 | 3.0 | 163.4 |
| (7) Asian-Pacific American-owned | 189 | \$3,845 | \$3,864 | 2.0 | 2.2 | -0.2 | 92.3 |
| (8) Subcontinent Asian American-owned | 375 | \$10,906 | \$10,961 | 5.7 | 2.5 | 3.1 | 200+ |
| (9) Hispanic American-owned | 65 | \$1,491 | \$1,499 | 0.8 | 1.8 | -1.1 | 42.4 |
| (10) Native American-owned | 136 | \$1,630 | \$1,638 | 0.8 | 1.1 | -0.2 | 78.1 |
| (11) Unknown MBE | 3 | \$105 | | | | | |
| (12) Certified | 71 | \$2,053 | \$2,053 | 1.1 | | | |
| (13) Certified woman-owned | 25 | \$472 | \$472 | 0.2 | | | |
| (14) Certified minority-owned | 46 | \$1,581 | \$1,581 | 0.8 | | | |
| (15) Certified African American-owned | 11 | \$349 | \$349 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 5 | \$183 | \$183 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 14 | \$338 | \$338 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 16 | \$711 | \$711 | 0.4 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-19.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,056 | \$57,034 | \$57,034 | | | | |
| (2) MBE/WBE | 379 | \$14,743 | \$14,743 | 25.8 | 14.6 | 11.2 | 176.6 |
| (3) WBE | 98 | \$2,189 | \$2,189 | 3.8 | 9.8 | -6.0 | 39.1 |
| (4) MBE | 281 | \$12,554 | \$12,554 | 22.0 | 4.8 | 17.2 | 200+ |
| (5) African American-owned | 200 | \$10,849 | \$10,867 | 19.1 | 2.3 | 16.8 | 200+ |
| (6) Total Asian American-owned | 10 | \$233 | \$234 | 0.4 | 0.3 | 0.1 | 126.6 |
| (7) Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | 0.3 | -0.3 | 3.0 |
| (8) Subcontinent Asian American-owned | 9 | \$228 | \$228 | 0.4 | 0.0 | 0.4 | 200+ |
| (9) Hispanic American-owned | 69 | \$1,451 | \$1,453 | 2.5 | 2.0 | 0.6 | 130.6 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (11) Unknown MBE | 2 | \$21 | | | | | |
| (12) Certified | 189 | \$10,471 | \$10,471 | 18.4 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 189 | \$10,471 | \$10,471 | 18.4 | | | |
| (15) Certified African American-owned | 188 | \$10,465 | \$10,465 | 18.3 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-20.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 353 | \$8,936 | \$8,936 | | | | |
| (2) MBE/WBE | 5 | \$69 | \$69 | 0.8 | 29.2 | -28.4 | 2.7 |
| (3) WBE | 3 | \$35 | \$35 | 0.4 | 25.1 | -24.8 | 1.5 |
| (4) MBE | 2 | \$35 | \$35 | 0.4 | 4.1 | -3.7 | 9.5 |
| (5) African American-owned | 2 | \$35 | \$35 | 0.4 | 2.6 | -2.2 | 15.1 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-21.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: All
Region: North Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,935 | \$1,332,587 | \$1,332,587 | | | | |
| (2) MBE/WBE | 825 | \$181,855 | \$181,855 | 13.6 | 11.7 | 1.9 | 116.2 |
| (3) WBE | 645 | \$99,771 | \$99,771 | 7.5 | 9.5 | -2.0 | 79.2 |
| (4) MBE | 180 | \$82,085 | \$82,085 | 6.2 | 2.3 | 3.9 | 200+ |
| (5) African American-owned | 68 | \$24,651 | \$24,651 | 1.8 | 0.7 | 1.2 | 200+ |
| (6) Total Asian American-owned | 37 | \$13,618 | \$13,618 | 1.0 | 0.6 | 0.5 | 180.4 |
| (7) Asian-Pacific American-owned | 12 | \$608 | \$608 | 0.0 | 0.2 | -0.2 | 21.2 |
| (8) Subcontinent Asian American-owned | 25 | \$13,010 | \$13,010 | 1.0 | 0.4 | 0.6 | 200+ |
| (9) Hispanic American-owned | 38 | \$14,695 | \$14,695 | 1.1 | 0.3 | 0.8 | 200+ |
| (10) Native American-owned | 37 | \$29,121 | \$29,121 | 2.2 | 0.7 | 1.5 | 200+ |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 278 | \$39,164 | \$39,164 | 2.9 | | | |
| (13) Certified woman-owned | 211 | \$20,171 | \$20,171 | 1.5 | | | |
| (14) Certified minority-owned | 67 | \$18,993 | \$18,993 | 1.4 | | | |
| (15) Certified African American-owned | 40 | \$12,749 | \$12,749 | 1.0 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$363 | \$363 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 8 | \$903 | \$903 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 11 | \$273 | \$273 | 0.0 | | | |
| (19) Certified Native American-owned | 4 | \$4,705 | \$4,705 | 0.4 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-22.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Construction
Region: North Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,431 | \$1,219,951 | \$1,219,951 | | | | |
| (2) MBE/WBE | 693 | \$150,607 | \$150,607 | 12.3 | 11.2 | 1.1 | 110.0 |
| (3) WBE | 579 | \$94,800 | \$94,800 | 7.8 | 9.6 | -1.8 | 81.3 |
| (4) MBE | 114 | \$55,807 | \$55,807 | 4.6 | 1.7 | 2.9 | 200+ |
| (5) African American-owned | 36 | \$12,230 | \$12,230 | 1.0 | 0.6 | 0.5 | 181.5 |
| (6) Total Asian American-owned | 7 | \$339 | \$339 | 0.0 | 0.3 | -0.2 | 11.0 |
| (7) Asian-Pacific American-owned | 5 | \$320 | \$320 | 0.0 | 0.1 | -0.1 | 33.9 |
| (8) Subcontinent Asian American-owned | 2 | \$19 | \$19 | 0.0 | 0.2 | -0.2 | 0.9 |
| (9) Hispanic American-owned | 35 | \$14,122 | \$14,122 | 1.2 | 0.1 | 1.0 | 200+ |
| (10) Native American-owned | 36 | \$29,116 | \$29,116 | 2.4 | 0.7 | 1.7 | 200+ |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 214 | \$26,164 | \$26,164 | 2.1 | | | |
| (13) Certified woman-owned | 181 | \$17,107 | \$17,107 | 1.4 | | | |
| (14) Certified minority-owned | 33 | \$9,056 | \$9,056 | 0.7 | | | |
| (15) Certified African American-owned | 14 | \$3,786 | \$3,786 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$274 | \$274 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$19 | \$19 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 11 | \$273 | \$273 | 0.0 | | | |
| (19) Certified Native American-owned | 4 | \$4,705 | \$4,705 | 0.4 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-23.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Professional services
Region: North Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 228 | \$86,724 | \$86,724 | | | | |
| (2) MBE/WBE | 88 | \$18,947 | \$18,947 | 21.8 | 18.0 | 3.8 | 121.3 |
| (3) WBE | 51 | \$3,845 | \$3,845 | 4.4 | 9.1 | -4.7 | 48.5 |
| (4) MBE | 37 | \$15,102 | \$15,102 | 17.4 | 8.9 | 8.5 | 196.1 |
| (5) African American-owned | 6 | \$1,268 | \$1,268 | 1.5 | 2.2 | -0.7 | 67.0 |
| (6) Total Asian American-owned | 29 | \$13,273 | \$13,273 | 15.3 | 5.1 | 10.2 | 200+ |
| (7) Asian-Pacific American-owned | 6 | \$282 | \$282 | 0.3 | 2.2 | -1.9 | 14.7 |
| (8) Subcontinent Asian American-owned | 23 | \$12,991 | \$12,991 | 15.0 | 2.9 | 12.1 | 200+ |
| (9) Hispanic American-owned | 1 | \$555 | \$555 | 0.6 | 1.0 | -0.3 | 65.8 |
| (10) Native American-owned | 1 | \$5 | \$5 | 0.0 | 0.6 | -0.6 | 0.9 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 39 | \$5,175 | \$5,175 | 6.0 | | | |
| (13) Certified woman-owned | 27 | \$2,974 | \$2,974 | 3.4 | | | |
| (14) Certified minority-owned | 12 | \$2,201 | \$2,201 | 2.5 | | | |
| (15) Certified African American-owned | 5 | \$1,233 | \$1,233 | 1.4 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$84 | \$84 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 6 | \$884 | \$884 | 1.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-24.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Goods
Region: North Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 215 | \$18,507 | \$18,507 | | | | |
| (2) MBE/WBE | 36 | \$11,678 | \$11,678 | 63.1 | 6.6 | 56.5 | 200+ |
| (3) WBE | 8 | \$511 | \$511 | 2.8 | 4.5 | -1.7 | 62.0 |
| (4) MBE | 28 | \$11,167 | \$11,167 | 60.3 | 2.2 | 58.2 | 200+ |
| (5) African American-owned | 25 | \$11,144 | \$11,144 | 60.2 | 1.0 | 59.2 | 200+ |
| (6) Total Asian American-owned | 1 | \$5 | \$5 | 0.0 | 0.0 | 0.0 | 74.7 |
| (7) Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | 0.0 | 0.0 | 77.4 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 2 | \$18 | \$18 | 0.1 | 1.1 | -1.0 | 8.9 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 22 | \$7,736 | \$7,736 | 41.8 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 22 | \$7,736 | \$7,736 | 41.8 | | | |
| (15) Certified African American-owned | 21 | \$7,731 | \$7,731 | 41.8 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-25.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Support services
Region: North Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 61 | \$7,405 | \$7,405 | | | | |
| (2) MBE/WBE | 8 | \$624 | \$624 | 8.4 | 35.8 | -27.4 | 23.5 |
| (3) WBE | 7 | \$615 | \$615 | 8.3 | 8.7 | -0.4 | 95.9 |
| (4) MBE | 1 | \$9 | \$9 | 0.1 | 27.2 | -27.0 | 0.5 |
| (5) African American-owned | 1 | \$9 | \$9 | 0.1 | 1.0 | -0.8 | 13.2 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 25.6 | -25.6 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.4 | -0.4 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 3 | \$90 | \$90 | 1.2 | | | |
| (13) Certified woman-owned | 3 | \$90 | \$90 | 1.2 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-26.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: All
Region: Central Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 16,056 | \$3,092,679 | \$3,092,679 | | | | |
| (2) MBE/WBE | 3,087 | \$306,707 | \$306,707 | 9.9 | 12.5 | -2.6 | 79.3 |
| (3) WBE | 1,594 | \$175,248 | \$175,248 | 5.7 | 8.7 | -3.0 | 65.4 |
| (4) MBE | 1,493 | \$131,459 | \$131,459 | 4.3 | 3.8 | 0.4 | 110.8 |
| (5) African American-owned | 458 | \$59,540 | \$60,310 | 2.0 | 1.3 | 0.7 | 155.2 |
| (6) Total Asian American-owned | 671 | \$37,541 | \$38,026 | 1.2 | 1.5 | -0.3 | 80.9 |
| (7) Asian-Pacific American-owned | 229 | \$10,099 | \$10,230 | 0.3 | 0.6 | -0.2 | 59.6 |
| (8) Subcontinent Asian American-owned | 442 | \$27,442 | \$27,797 | 0.9 | 1.0 | -0.1 | 93.1 |
| (9) Hispanic American-owned | 188 | \$18,375 | \$18,612 | 0.6 | 0.5 | 0.2 | 133.5 |
| (10) Native American-owned | 161 | \$14,325 | \$14,510 | 0.5 | 0.6 | -0.1 | 78.2 |
| (11) Unknown MBE | 15 | \$1,679 | | | | | |
| (12) Certified | 841 | \$93,188 | \$93,188 | 3.0 | | | |
| (13) Certified woman-owned | 450 | \$43,539 | \$43,539 | 1.4 | | | |
| (14) Certified minority-owned | 391 | \$49,649 | \$49,649 | 1.6 | | | |
| (15) Certified African American-owned | 280 | \$34,439 | \$34,439 | 1.1 | | | |
| (16) Certified Asian-Pacific American-owned | 16 | \$1,526 | \$1,526 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 40 | \$5,155 | \$5,155 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 50 | \$5,788 | \$5,788 | 0.2 | | | |
| (19) Certified Native American-owned | 5 | \$2,740 | \$2,740 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-27.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Construction
Region: Central Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 6,250 | \$2,369,269 | \$2,369,269 | | | | |
| (2) MBE/WBE | 1,207 | \$189,805 | \$189,805 | 8.0 | 10.0 | -1.9 | 80.5 |
| (3) WBE | 946 | \$143,101 | \$143,101 | 6.0 | 8.1 | -2.1 | 74.1 |
| (4) MBE | 261 | \$46,703 | \$46,703 | 2.0 | 1.8 | 0.2 | 109.2 |
| (5) African American-owned | 137 | \$24,328 | \$25,165 | 1.1 | 0.8 | 0.3 | 134.3 |
| (6) Total Asian American-owned | 46 | \$2,056 | \$2,127 | 0.1 | 0.3 | -0.2 | 29.4 |
| (7) Asian-Pacific American-owned | 40 | \$1,869 | \$1,934 | 0.1 | 0.1 | 0.0 | 90.5 |
| (8) Subcontinent Asian American-owned | 6 | \$187 | \$193 | 0.0 | 0.2 | -0.2 | 3.8 |
| (9) Hispanic American-owned | 41 | \$6,058 | \$6,266 | 0.3 | 0.2 | 0.1 | 158.2 |
| (10) Native American-owned | 27 | \$12,708 | \$13,145 | 0.6 | 0.5 | 0.0 | 104.2 |
| (11) Unknown MBE | 10 | \$1,553 | | | | | |
| (12) Certified | 471 | \$43,461 | \$43,461 | 1.8 | | | |
| (13) Certified woman-owned | 372 | \$31,402 | \$31,402 | 1.3 | | | |
| (14) Certified minority-owned | 99 | \$12,059 | \$12,059 | 0.5 | | | |
| (15) Certified African American-owned | 51 | \$7,508 | \$7,508 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 8 | \$415 | \$415 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 6 | \$187 | \$187 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 29 | \$1,209 | \$1,209 | 0.1 | | | |
| (19) Certified Native American-owned | 5 | \$2,740 | \$2,740 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-28.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Professional services
Region: Central Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 7,682 | \$617,743 | \$617,743 | | | | |
| (2) MBE/WBE | 1,495 | \$85,845 | \$85,845 | 13.9 | 21.8 | -7.9 | 63.8 |
| (3) WBE | 558 | \$29,525 | \$29,525 | 4.8 | 10.2 | -5.4 | 47.0 |
| (4) MBE | 937 | \$56,320 | \$56,320 | 9.1 | 11.6 | -2.5 | 78.4 |
| (5) African American-owned | 105 | \$8,886 | \$8,902 | 1.4 | 2.9 | -1.4 | 50.2 |
| (6) Total Asian American-owned | 615 | \$34,829 | \$34,894 | 5.6 | 6.4 | -0.8 | 88.2 |
| (7) Asian-Pacific American-owned | 189 | \$8,230 | \$8,245 | 1.3 | 2.4 | -1.1 | 55.7 |
| (8) Subcontinent Asian American-owned | 426 | \$26,599 | \$26,649 | 4.3 | 4.0 | 0.3 | 107.7 |
| (9) Hispanic American-owned | 80 | \$10,884 | \$10,904 | 1.8 | 1.4 | 0.4 | 125.3 |
| (10) Native American-owned | 134 | \$1,617 | \$1,620 | 0.3 | 0.9 | -0.7 | 28.1 |
| (11) Unknown MBE | 3 | \$105 | | | | | |
| (12) Certified | 166 | \$26,638 | \$26,638 | 4.3 | | | |
| (13) Certified woman-owned | 74 | \$12,050 | \$12,050 | 2.0 | | | |
| (14) Certified minority-owned | 92 | \$14,588 | \$14,588 | 2.4 | | | |
| (15) Certified African American-owned | 29 | \$3,929 | \$3,929 | 0.6 | | | |
| (16) Certified Asian-Pacific American-owned | 8 | \$1,111 | \$1,111 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 34 | \$4,969 | \$4,969 | 0.8 | | | |
| (18) Certified Hispanic American-owned | 21 | \$4,580 | \$4,580 | 0.7 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-29.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Goods
Region: Central Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,774 | \$83,431 | \$83,431 | | | | |
| (2) MBE/WBE | 373 | \$30,753 | \$30,753 | 36.9 | 12.0 | 24.8 | 200+ |
| (3) WBE | 80 | \$2,350 | \$2,350 | 2.8 | 8.5 | -5.7 | 33.1 |
| (4) MBE | 293 | \$28,403 | \$28,403 | 34.0 | 3.5 | 30.5 | 200+ |
| (5) African American-owned | 214 | \$26,293 | \$26,313 | 31.5 | 1.7 | 29.8 | 200+ |
| (6) Total Asian American-owned | 10 | \$656 | \$656 | 0.8 | 0.2 | 0.5 | 200+ |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 10 | \$656 | \$656 | 0.8 | 0.0 | 0.8 | 200+ |
| (9) Hispanic American-owned | 67 | \$1,433 | \$1,434 | 1.7 | 1.4 | 0.3 | 119.3 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 2 | \$21 | | | | | |
| (12) Certified | 200 | \$23,002 | \$23,002 | 27.6 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 200 | \$23,002 | \$23,002 | 27.6 | | | |
| (15) Certified African American-owned | 200 | \$23,002 | \$23,002 | 27.6 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-30.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Support services
Region: Central Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 350 | \$22,236 | \$22,236 | | | | |
| (2) MBE/WBE | 12 | \$304 | \$304 | 1.4 | 28.0 | -26.7 | 4.9 |
| (3) WBE | 10 | \$272 | \$272 | 1.2 | 23.0 | -21.7 | 5.3 |
| (4) MBE | 2 | \$33 | \$33 | 0.1 | 5.1 | -4.9 | 2.9 |
| (5) African American-owned | 2 | \$33 | \$33 | 0.1 | 4.3 | -4.2 | 3.4 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.4 | -0.4 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 4 | \$87 | \$87 | 0.4 | | | |
| (13) Certified woman-owned | 4 | \$87 | \$87 | 0.4 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-31.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: All
Region: South Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,594 | \$1,048,509 | \$1,048,509 | | | | |
| (2) MBE/WBE | 806 | \$96,210 | \$96,210 | 9.2 | 12.4 | -3.2 | 74.0 |
| (3) WBE | 622 | \$56,845 | \$56,845 | 5.4 | 8.7 | -3.3 | 62.1 |
| (4) MBE | 184 | \$39,365 | \$39,365 | 3.8 | 3.7 | 0.1 | 102.4 |
| (5) African American-owned | 72 | \$17,920 | \$20,795 | 2.0 | 0.9 | 1.1 | 200+ |
| (6) Total Asian American-owned | 58 | \$11,450 | \$13,287 | 1.3 | 1.3 | 0.0 | 98.8 |
| (7) Asian-Pacific American-owned | 25 | \$3,247 | \$3,768 | 0.4 | 0.8 | -0.4 | 45.2 |
| (8) Subcontinent Asian American-owned | 33 | \$8,203 | \$9,519 | 0.9 | 0.5 | 0.4 | 185.9 |
| (9) Hispanic American-owned | 18 | \$1,883 | \$2,185 | 0.2 | 0.2 | 0.0 | 130.0 |
| (10) Native American-owned | 16 | \$2,669 | \$3,098 | 0.3 | 1.3 | -1.0 | 22.1 |
| (11) Unknown MBE | 20 | \$5,442 | | | | | |
| (12) Certified | 346 | \$42,378 | \$42,378 | 4.0 | | | |
| (13) Certified woman-owned | 273 | \$23,199 | \$23,199 | 2.2 | | | |
| (14) Certified minority-owned | 73 | \$19,178 | \$19,178 | 1.8 | | | |
| (15) Certified African American-owned | 30 | \$10,919 | \$10,919 | 1.0 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$406 | \$406 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 21 | \$5,971 | \$5,971 | 0.6 | | | |
| (18) Certified Hispanic American-owned | 18 | \$1,883 | \$1,883 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-32.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Construction
Region: South Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,057 | \$896,779 | \$896,779 | | | | |
| (2) MBE/WBE | 636 | \$69,426 | \$69,426 | 7.7 | 11.0 | -3.3 | 70.1 |
| (3) WBE | 523 | \$48,713 | \$48,713 | 5.4 | 8.4 | -3.0 | 64.7 |
| (4) MBE | 113 | \$20,713 | \$20,713 | 2.3 | 2.7 | -0.3 | 87.1 |
| (5) African American-owned | 43 | \$9,350 | \$12,682 | 1.4 | 0.6 | 0.8 | 200+ |
| (6) Total Asian American-owned | 18 | \$1,492 | \$2,024 | 0.2 | 0.5 | -0.2 | 48.6 |
| (7) Asian-Pacific American-owned | 12 | \$1,281 | \$1,737 | 0.2 | 0.3 | -0.1 | 67.1 |
| (8) Subcontinent Asian American-owned | 6 | \$211 | \$287 | 0.0 | 0.2 | -0.1 | 18.2 |
| (9) Hispanic American-owned | 17 | \$1,767 | \$2,397 | 0.3 | 0.1 | 0.2 | 200+ |
| (10) Native American-owned | 15 | \$2,662 | \$3,610 | 0.4 | 1.4 | -1.0 | 27.8 |
| (11) Unknown MBE | 20 | \$5,442 | | | | | |
| (12) Certified | 272 | \$28,528 | \$28,528 | 3.2 | | | |
| (13) Certified woman-owned | 233 | \$21,026 | \$21,026 | 2.3 | | | |
| (14) Certified minority-owned | 39 | \$7,502 | \$7,502 | 0.8 | | | |
| (15) Certified African American-owned | 15 | \$5,344 | \$5,344 | 0.6 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$179 | \$179 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 6 | \$211 | \$211 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 17 | \$1,767 | \$1,767 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-33.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Professional services
Region: South Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 274 | \$120,304 | \$120,304 | | | | |
| (2) MBE/WBE | 117 | \$14,223 | \$14,223 | 11.8 | 19.5 | -7.7 | 60.7 |
| (3) WBE | 67 | \$3,315 | \$3,315 | 2.8 | 8.1 | -5.4 | 33.9 |
| (4) MBE | 50 | \$10,907 | \$10,907 | 9.1 | 11.4 | -2.3 | 79.8 |
| (5) African American-owned | 8 | \$826 | \$826 | 0.7 | 2.3 | -1.6 | 30.2 |
| (6) Total Asian American-owned | 40 | \$9,958 | \$9,958 | 8.3 | 7.7 | 0.6 | 107.5 |
| (7) Asian-Pacific American-owned | 13 | \$1,967 | \$1,967 | 1.6 | 4.8 | -3.1 | 34.3 |
| (8) Subcontinent Asian American-owned | 27 | \$7,992 | \$7,992 | 6.6 | 2.9 | 3.7 | 200+ |
| (9) Hispanic American-owned | 1 | \$115 | \$115 | 0.1 | 0.6 | -0.5 | 16.5 |
| (10) Native American-owned | 1 | \$8 | \$8 | 0.0 | 0.8 | -0.8 | 0.8 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 58 | \$8,211 | \$8,211 | 6.8 | | | |
| (13) Certified woman-owned | 36 | \$2,039 | \$2,039 | 1.7 | | | |
| (14) Certified minority-owned | 22 | \$6,172 | \$6,172 | 5.1 | | | |
| (15) Certified African American-owned | 3 | \$70 | \$70 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 3 | \$227 | \$227 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 15 | \$5,760 | \$5,760 | 4.8 | | | |
| (18) Certified Hispanic American-owned | 1 | \$115 | \$115 | 0.1 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-34.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Goods
Region: South Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 219 | \$18,255 | \$18,255 | | | | |
| (2) MBE/WBE | 39 | \$11,347 | \$11,347 | 62.2 | 18.0 | 44.1 | 200+ |
| (3) WBE | 21 | \$3,696 | \$3,696 | 20.2 | 15.5 | 4.8 | 130.9 |
| (4) MBE | 18 | \$7,651 | \$7,651 | 41.9 | 2.6 | 39.3 | 200+ |
| (5) African American-owned | 18 | \$7,651 | \$7,651 | 41.9 | 1.2 | 40.7 | 200+ |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.1 | -1.1 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 12 | \$5,505 | \$5,505 | 30.2 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 12 | \$5,505 | \$5,505 | 30.2 | | | |
| (15) Certified African American-owned | 12 | \$5,505 | \$5,505 | 30.2 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-35.
Agency: INDOT
Funding: FHWA- and state-funded contracts
Type: Support services
Region: South Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 44 | \$13,172 | \$13,172 | | | | |
| (2) MBE/WBE | 14 | \$1,214 | \$1,214 | 9.2 | 31.9 | -22.7 | 28.9 |
| (3) WBE | 11 | \$1,121 | \$1,121 | 8.5 | 28.0 | -19.5 | 30.4 |
| (4) MBE | 3 | \$94 | \$94 | 0.7 | 3.9 | -3.2 | 18.1 |
| (5) African American-owned | 3 | \$94 | \$94 | 0.7 | 3.8 | -3.1 | 18.6 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 4 | \$134 | \$134 | 1.0 | | | |
| (13) Certified woman-owned | 4 | \$134 | \$134 | 1.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-101.
Agency: INDOT
Funding: FHWA-funded contracts
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 6,901 | \$3,945,296 | \$3,945,296 | | | | |
| (2) MBE/WBE | 2,287 | \$390,702 | \$390,702 | 9.9 | 12.1 | -2.2 | 82.2 |
| (3) WBE | 1,730 | \$244,705 | \$244,705 | 6.2 | 9.0 | -2.8 | 68.7 |
| (4) MBE | 557 | \$145,996 | \$145,996 | 3.7 | 3.0 | 0.7 | 122.1 |
| (5) African American-owned | 170 | \$38,949 | \$40,259 | 1.0 | 0.9 | 0.1 | 113.8 |
| (6) Total Asian American-owned | 232 | \$48,726 | \$50,366 | 1.3 | 1.2 | 0.1 | 108.7 |
| (7) Asian-Pacific American-owned | 85 | \$11,824 | \$12,221 | 0.3 | 0.5 | -0.2 | 63.1 |
| (8) Subcontinent Asian American-owned | 147 | \$36,902 | \$38,144 | 1.0 | 0.7 | 0.3 | 141.4 |
| (9) Hispanic American-owned | 86 | \$28,640 | \$29,604 | 0.8 | 0.3 | 0.5 | 200+ |
| (10) Native American-owned | 46 | \$24,929 | \$25,768 | 0.7 | 0.7 | 0.0 | 97.1 |
| (11) Unknown MBE | 23 | \$4,753 | | | | | |
| (12) Certified | 881 | \$98,419 | \$98,419 | 2.5 | | | |
| (13) Certified woman-owned | 670 | \$64,372 | \$64,372 | 1.6 | | | |
| (14) Certified minority-owned | 211 | \$34,047 | \$34,047 | 0.9 | | | |
| (15) Certified African American-owned | 85 | \$13,409 | \$13,409 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 12 | \$1,598 | \$1,598 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 57 | \$10,836 | \$10,836 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 51 | \$3,447 | \$3,447 | 0.1 | | | |
| (19) Certified Native American-owned | 6 | \$4,758 | \$4,758 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-102.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 5,320 | \$3,375,091 | \$3,375,091 | | | | |
| (2) MBE/WBE | 1,708 | \$288,109 | \$288,109 | 8.5 | 10.6 | -2.1 | 80.3 |
| (3) WBE | 1,433 | \$210,721 | \$210,721 | 6.2 | 8.9 | -2.7 | 70.2 |
| (4) MBE | 275 | \$77,388 | \$77,388 | 2.3 | 1.7 | 0.6 | 131.9 |
| (5) African American-owned | 106 | \$29,687 | \$31,584 | 0.9 | 0.6 | 0.3 | 150.7 |
| (6) Total Asian American-owned | 44 | \$2,105 | \$2,240 | 0.1 | 0.3 | -0.2 | 21.1 |
| (7) Asian-Pacific American-owned | 32 | \$1,774 | \$1,887 | 0.1 | 0.1 | -0.1 | 42.9 |
| (8) Subcontinent Asian American-owned | 12 | \$332 | \$353 | 0.0 | 0.2 | -0.2 | 5.7 |
| (9) Hispanic American-owned | 69 | \$18,174 | \$19,336 | 0.6 | 0.1 | 0.4 | 200+ |
| (10) Native American-owned | 36 | \$22,772 | \$24,228 | 0.7 | 0.7 | 0.1 | 109.6 |
| (11) Unknown MBE | 20 | \$4,648 | | | | | |
| (12) Certified | 657 | \$62,194 | \$62,194 | 1.8 | | | |
| (13) Certified woman-owned | 542 | \$46,806 | \$46,806 | 1.4 | | | |
| (14) Certified minority-owned | 115 | \$15,388 | \$15,388 | 0.5 | | | |
| (15) Certified African American-owned | 49 | \$7,887 | \$7,887 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$283 | \$283 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 12 | \$332 | \$332 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 46 | \$2,128 | \$2,128 | 0.1 | | | |
| (19) Certified Native American-owned | 6 | \$4,758 | \$4,758 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-103.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,391 | \$531,467 | \$531,467 | | | | |
| (2) MBE/WBE | 540 | \$96,576 | \$96,576 | 18.2 | 19.6 | -1.4 | 92.9 |
| (3) WBE | 263 | \$28,088 | \$28,088 | 5.3 | 8.7 | -3.4 | 60.5 |
| (4) MBE | 277 | \$68,488 | \$68,488 | 12.9 | 10.8 | 2.1 | 118.9 |
| (5) African American-owned | 59 | \$9,141 | \$9,155 | 1.7 | 2.5 | -0.7 | 69.7 |
| (6) Total Asian American-owned | 188 | \$46,621 | \$46,692 | 8.8 | 6.7 | 2.1 | 130.7 |
| (7) Asian-Pacific American-owned | 53 | \$10,050 | \$10,065 | 1.9 | 2.8 | -0.9 | 67.2 |
| (8) Subcontinent Asian American-owned | 135 | \$36,571 | \$36,627 | 6.9 | 3.9 | 3.0 | 176.6 |
| (9) Hispanic American-owned | 17 | \$10,466 | \$10,482 | 2.0 | 0.8 | 1.2 | 200+ |
| (10) Native American-owned | 10 | \$2,156 | \$2,159 | 0.4 | 0.8 | -0.4 | 49.0 |
| (11) Unknown MBE | 3 | \$105 | | | | | |
| (12) Certified | 215 | \$35,975 | \$35,975 | 6.8 | | | |
| (13) Certified woman-owned | 119 | \$17,316 | \$17,316 | 3.3 | | | |
| (14) Certified minority-owned | 96 | \$18,659 | \$18,659 | 3.5 | | | |
| (15) Certified African American-owned | 36 | \$5,521 | \$5,521 | 1.0 | | | |
| (16) Certified Asian-Pacific American-owned | 10 | \$1,315 | \$1,315 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 45 | \$10,504 | \$10,504 | 2.0 | | | |
| (18) Certified Hispanic American-owned | 5 | \$1,319 | \$1,319 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-104.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 68 | \$7,975 | \$7,975 | | | | |
| (2) MBE/WBE | 12 | \$4,014 | \$4,014 | 50.3 | 37.6 | 12.7 | 133.8 |
| (3) WBE | 11 | \$3,994 | \$3,994 | 50.1 | 35.1 | 15.0 | 142.6 |
| (4) MBE | 1 | \$20 | \$20 | 0.2 | 2.5 | -2.3 | 9.8 |
| (5) African American-owned | 1 | \$20 | \$20 | 0.2 | 0.7 | -0.5 | 33.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.5 | -1.5 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-105.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 122 | \$30,763 | \$30,763 | | | | |
| (2) MBE/WBE | 27 | \$2,003 | \$2,003 | 6.5 | 31.0 | -24.5 | 21.0 |
| (3) WBE | 23 | \$1,902 | \$1,902 | 6.2 | 20.8 | -14.6 | 29.8 |
| (4) MBE | 4 | \$101 | \$101 | 0.3 | 10.3 | -9.9 | 3.2 |
| (5) African American-owned | 4 | \$101 | \$101 | 0.3 | 3.9 | -3.6 | 8.3 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 6.2 | -6.2 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 9 | \$250 | \$250 | 0.8 | | | |
| (13) Certified woman-owned | 9 | \$250 | \$250 | 0.8 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-106.
Agency: INDOT
Funding: FHWA-funded contracts
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,142 | \$3,460,660 | \$3,460,660 | | | | |
| (2) MBE/WBE | 429 | \$218,692 | \$218,692 | 6.3 | 10.7 | -4.4 | 58.9 |
| (3) WBE | 234 | \$131,109 | \$131,109 | 3.8 | 8.1 | -4.3 | 47.1 |
| (4) MBE | 195 | \$87,584 | \$87,584 | 2.5 | 2.7 | -0.2 | 94.2 |
| (5) African American-owned | 27 | \$12,093 | \$12,649 | 0.4 | 0.8 | -0.4 | 46.8 |
| (6) Total Asian American-owned | 95 | \$34,277 | \$35,855 | 1.0 | 1.0 | 0.0 | 101.9 |
| (7) Asian-Pacific American-owned | 27 | \$5,157 | \$5,394 | 0.2 | 0.5 | -0.3 | 34.0 |
| (8) Subcontinent Asian American-owned | 68 | \$29,120 | \$30,460 | 0.9 | 0.6 | 0.3 | 157.6 |
| (9) Hispanic American-owned | 30 | \$24,510 | \$25,638 | 0.7 | 0.3 | 0.5 | 200+ |
| (10) Native American-owned | 24 | \$12,850 | \$13,441 | 0.4 | 0.6 | -0.2 | 61.6 |
| (11) Unknown MBE | 19 | \$3,854 | | | | | |
| (12) Certified | 48 | \$24,670 | \$24,670 | 0.7 | | | |
| (13) Certified woman-owned | 29 | \$9,234 | \$9,234 | 0.3 | | | |
| (14) Certified minority-owned | 19 | \$15,436 | \$15,436 | 0.4 | | | |
| (15) Certified African American-owned | 7 | \$4,771 | \$4,771 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$130 | \$130 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 4 | \$4,529 | \$4,529 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 3 | \$1,301 | \$1,301 | 0.0 | | | |
| (19) Certified Native American-owned | 4 | \$4,705 | \$4,705 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-107.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,189 | \$3,018,995 | \$3,018,995 | | | | |
| (2) MBE/WBE | 232 | \$160,226 | \$160,226 | 5.3 | 9.5 | -4.2 | 55.9 |
| (3) WBE | 171 | \$120,112 | \$120,112 | 4.0 | 8.0 | -4.0 | 50.0 |
| (4) MBE | 61 | \$40,114 | \$40,114 | 1.3 | 1.5 | -0.2 | 86.3 |
| (5) African American-owned | 10 | \$9,676 | \$10,674 | 0.4 | 0.5 | -0.2 | 64.9 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (9) Hispanic American-owned | 21 | \$15,995 | \$17,644 | 0.6 | 0.1 | 0.5 | 200+ |
| (10) Native American-owned | 14 | \$10,693 | \$11,796 | 0.4 | 0.6 | -0.2 | 64.5 |
| (11) Unknown MBE | 16 | \$3,750 | | | | | |
| (12) Certified | 33 | \$17,164 | \$17,164 | 0.6 | | | |
| (13) Certified woman-owned | 24 | \$8,270 | \$8,270 | 0.3 | | | |
| (14) Certified minority-owned | 9 | \$8,894 | \$8,894 | 0.3 | | | |
| (15) Certified African American-owned | 5 | \$4,189 | \$4,189 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 4 | \$4,705 | \$4,705 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-108.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 824 | \$409,672 | \$409,672 | | | | |
| (2) MBE/WBE | 188 | \$55,029 | \$55,029 | 13.4 | 18.0 | -4.6 | 74.6 |
| (3) WBE | 55 | \$7,579 | \$7,579 | 1.8 | 7.4 | -5.6 | 25.0 |
| (4) MBE | 133 | \$47,450 | \$47,450 | 11.6 | 10.6 | 1.0 | 109.3 |
| (5) African American-owned | 16 | \$2,397 | \$2,402 | 0.6 | 2.3 | -1.7 | 25.3 |
| (6) Total Asian American-owned | 95 | \$34,277 | \$34,353 | 8.4 | 6.6 | 1.7 | 126.4 |
| (7) Asian-Pacific American-owned | 27 | \$5,157 | \$5,168 | 1.3 | 3.1 | -1.8 | 41.3 |
| (8) Subcontinent Asian American-owned | 68 | \$29,120 | \$29,184 | 7.1 | 3.6 | 3.5 | 198.9 |
| (9) Hispanic American-owned | 9 | \$8,515 | \$8,534 | 2.1 | 0.8 | 1.3 | 200+ |
| (10) Native American-owned | 10 | \$2,156 | \$2,161 | 0.5 | 0.9 | -0.3 | 61.1 |
| (11) Unknown MBE | 3 | \$105 | | | | | |
| (12) Certified | 15 | \$7,506 | \$7,506 | 1.8 | | | |
| (13) Certified woman-owned | 5 | \$965 | \$965 | 0.2 | | | |
| (14) Certified minority-owned | 10 | \$6,541 | \$6,541 | 1.6 | | | |
| (15) Certified African American-owned | 2 | \$582 | \$582 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$130 | \$130 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 4 | \$4,529 | \$4,529 | 1.1 | | | |
| (18) Certified Hispanic American-owned | 3 | \$1,301 | \$1,301 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-109.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 59 | \$6,781 | \$6,781 | | | | |
| (2) MBE/WBE | 8 | \$3,428 | \$3,428 | 50.6 | 39.6 | 10.9 | 127.6 |
| (3) WBE | 7 | \$3,409 | \$3,409 | 50.3 | 37.3 | 13.0 | 134.8 |
| (4) MBE | 1 | \$20 | \$20 | 0.3 | 2.3 | -2.0 | 12.3 |
| (5) African American-owned | 1 | \$20 | \$20 | 0.3 | 0.6 | -0.3 | 47.2 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.6 | -1.6 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-110.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 70 | \$25,213 | \$25,213 | | | | |
| (2) MBE/WBE | 1 | \$9 | \$9 | 0.0 | 33.4 | -33.4 | 0.1 |
| (3) WBE | 1 | \$9 | \$9 | 0.0 | 21.7 | -21.6 | 0.2 |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 11.7 | -11.7 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 4.2 | -4.2 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 7.5 | -7.5 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-111.
Agency: INDOT
Funding: FHWA-funded contracts
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,759 | \$484,636 | \$484,636 | | | | |
| (2) MBE/WBE | 1,858 | \$172,010 | \$172,010 | 35.5 | 21.4 | 14.0 | 165.5 |
| (3) WBE | 1,496 | \$113,597 | \$113,597 | 23.4 | 16.0 | 7.5 | 146.9 |
| (4) MBE | 362 | \$58,413 | \$58,413 | 12.1 | 5.5 | 6.6 | 200+ |
| (5) African American-owned | 143 | \$26,856 | \$27,276 | 5.6 | 1.7 | 3.9 | 200+ |
| (6) Total Asian American-owned | 137 | \$14,449 | \$14,675 | 3.0 | 2.3 | 0.7 | 131.3 |
| (7) Asian-Pacific American-owned | 58 | \$6,667 | \$6,771 | 1.4 | 0.7 | 0.7 | 192.3 |
| (8) Subcontinent Asian American-owned | 79 | \$7,783 | \$7,904 | 1.6 | 1.6 | 0.1 | 103.3 |
| (9) Hispanic American-owned | 56 | \$4,130 | \$4,194 | 0.9 | 0.5 | 0.4 | 180.5 |
| (10) Native American-owned | 22 | \$12,079 | \$12,268 | 2.5 | 1.0 | 1.6 | 200+ |
| (11) Unknown MBE | 4 | \$899 | | | | | |
| (12) Certified | 833 | \$73,749 | \$73,749 | 15.2 | | | |
| (13) Certified woman-owned | 641 | \$55,137 | \$55,137 | 11.4 | | | |
| (14) Certified minority-owned | 192 | \$18,611 | \$18,611 | 3.8 | | | |
| (15) Certified African American-owned | 78 | \$8,638 | \$8,638 | 1.8 | | | |
| (16) Certified Asian-Pacific American-owned | 11 | \$1,468 | \$1,468 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 53 | \$6,307 | \$6,307 | 1.3 | | | |
| (18) Certified Hispanic American-owned | 48 | \$2,146 | \$2,146 | 0.4 | | | |
| (19) Certified Native American-owned | 2 | \$53 | \$53 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-112.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,131 | \$356,097 | \$356,097 | | | | |
| (2) MBE/WBE | 1,476 | \$127,883 | \$127,883 | 35.9 | 20.3 | 15.6 | 176.9 |
| (3) WBE | 1,262 | \$90,609 | \$90,609 | 25.4 | 16.9 | 8.6 | 150.8 |
| (4) MBE | 214 | \$37,274 | \$37,274 | 10.5 | 3.4 | 7.0 | 200+ |
| (5) African American-owned | 96 | \$20,011 | \$20,506 | 5.8 | 1.3 | 4.5 | 200+ |
| (6) Total Asian American-owned | 44 | \$2,105 | \$2,157 | 0.6 | 0.7 | -0.1 | 82.6 |
| (7) Asian-Pacific American-owned | 32 | \$1,774 | \$1,817 | 0.5 | 0.3 | 0.2 | 172.3 |
| (8) Subcontinent Asian American-owned | 12 | \$332 | \$340 | 0.1 | 0.4 | -0.3 | 21.8 |
| (9) Hispanic American-owned | 48 | \$2,179 | \$2,233 | 0.6 | 0.3 | 0.3 | 189.6 |
| (10) Native American-owned | 22 | \$12,079 | \$12,378 | 3.5 | 1.1 | 2.4 | 200+ |
| (11) Unknown MBE | 4 | \$899 | | | | | |
| (12) Certified | 624 | \$45,030 | \$45,030 | 12.6 | | | |
| (13) Certified woman-owned | 518 | \$38,536 | \$38,536 | 10.8 | | | |
| (14) Certified minority-owned | 106 | \$6,493 | \$6,493 | 1.8 | | | |
| (15) Certified African American-owned | 44 | \$3,698 | \$3,698 | 1.0 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$283 | \$283 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 12 | \$332 | \$332 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 46 | \$2,128 | \$2,128 | 0.6 | | | |
| (19) Certified Native American-owned | 2 | \$53 | \$53 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-113.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 567 | \$121,796 | \$121,796 | | | | |
| (2) MBE/WBE | 352 | \$41,548 | \$41,548 | 34.1 | 24.8 | 9.3 | 137.4 |
| (3) WBE | 208 | \$20,509 | \$20,509 | 16.8 | 13.2 | 3.6 | 127.6 |
| (4) MBE | 144 | \$21,038 | \$21,038 | 17.3 | 11.6 | 5.6 | 148.5 |
| (5) African American-owned | 43 | \$6,744 | \$6,744 | 5.5 | 3.0 | 2.6 | 185.9 |
| (6) Total Asian American-owned | 93 | \$12,344 | \$12,344 | 10.1 | 7.0 | 3.1 | 144.6 |
| (7) Asian-Pacific American-owned | 26 | \$4,893 | \$4,893 | 4.0 | 2.0 | 2.0 | 198.9 |
| (8) Subcontinent Asian American-owned | 67 | \$7,451 | \$7,451 | 6.1 | 5.0 | 1.1 | 122.7 |
| (9) Hispanic American-owned | 8 | \$1,950 | \$1,950 | 1.6 | 0.9 | 0.7 | 172.2 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 200 | \$28,469 | \$28,469 | 23.4 | | | |
| (13) Certified woman-owned | 114 | \$16,351 | \$16,351 | 13.4 | | | |
| (14) Certified minority-owned | 86 | \$12,118 | \$12,118 | 9.9 | | | |
| (15) Certified African American-owned | 34 | \$4,940 | \$4,940 | 4.1 | | | |
| (16) Certified Asian-Pacific American-owned | 9 | \$1,185 | \$1,185 | 1.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 41 | \$5,976 | \$5,976 | 4.9 | | | |
| (18) Certified Hispanic American-owned | 2 | \$18 | \$18 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-116.
Agency: INDOT
Funding: FHWA-funded contracts
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,241 | \$57,859 | \$57,859 | | | | |
| (2) MBE/WBE | 218 | \$11,011 | \$11,011 | 19.0 | 21.5 | -2.4 | 88.6 |
| (3) WBE | 115 | \$6,902 | \$6,902 | 11.9 | 15.9 | -4.0 | 75.1 |
| (4) MBE | 103 | \$4,109 | \$4,109 | 7.1 | 5.6 | 1.5 | 127.2 |
| (5) African American-owned | 14 | \$743 | \$837 | 1.4 | 2.4 | -0.9 | 60.7 |
| (6) Total Asian American-owned | 61 | \$1,922 | \$2,166 | 3.7 | 1.6 | 2.1 | 200+ |
| (7) Asian-Pacific American-owned | 15 | \$617 | \$696 | 1.2 | 0.7 | 0.5 | 164.3 |
| (8) Subcontinent Asian American-owned | 46 | \$1,305 | \$1,470 | 2.5 | 0.9 | 1.7 | 200+ |
| (9) Hispanic American-owned | 6 | \$507 | \$572 | 1.0 | 0.7 | 0.3 | 135.8 |
| (10) Native American-owned | 12 | \$475 | \$535 | 0.9 | 0.8 | 0.1 | 109.0 |
| (11) Unknown MBE | 10 | \$462 | | | | | |
| (12) Certified | 20 | \$1,012 | \$1,012 | 1.7 | | | |
| (13) Certified woman-owned | 15 | \$796 | \$796 | 1.4 | | | |
| (14) Certified minority-owned | 5 | \$216 | \$216 | 0.4 | | | |
| (15) Certified African American-owned | 1 | \$67 | \$67 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$34 | \$34 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 1 | \$115 | \$115 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-117.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 674 | \$35,965 | \$35,965 | | | | |
| (2) MBE/WBE | 86 | \$6,080 | \$6,080 | 16.9 | 19.6 | -2.7 | 86.3 |
| (3) WBE | 70 | \$5,028 | \$5,028 | 14.0 | 16.1 | -2.1 | 86.8 |
| (4) MBE | 16 | \$1,053 | \$1,053 | 2.9 | 3.5 | -0.6 | 83.9 |
| (5) African American-owned | 1 | \$13 | \$20 | 0.1 | 2.1 | -2.0 | 2.7 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 5 | \$392 | \$594 | 1.7 | 0.2 | 1.5 | 200+ |
| (10) Native American-owned | 3 | \$290 | \$438 | 1.2 | 0.9 | 0.3 | 139.1 |
| (11) Unknown MBE | 7 | \$358 | | | | | |
| (12) Certified | 12 | \$694 | \$694 | 1.9 | | | |
| (13) Certified woman-owned | 12 | \$694 | \$694 | 1.9 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-118.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 477 | \$18,134 | \$18,134 | | | | |
| (2) MBE/WBE | 128 | \$4,863 | \$4,863 | 26.8 | 25.6 | 1.2 | 104.7 |
| (3) WBE | 42 | \$1,826 | \$1,826 | 10.1 | 15.4 | -5.3 | 65.5 |
| (4) MBE | 86 | \$3,037 | \$3,037 | 16.7 | 10.3 | 6.5 | 163.3 |
| (5) African American-owned | 12 | \$709 | \$735 | 4.1 | 3.0 | 1.0 | 133.2 |
| (6) Total Asian American-owned | 61 | \$1,922 | \$1,991 | 11.0 | 4.5 | 6.5 | 200+ |
| (7) Asian-Pacific American-owned | 15 | \$617 | \$639 | 3.5 | 2.0 | 1.5 | 176.6 |
| (8) Subcontinent Asian American-owned | 46 | \$1,305 | \$1,352 | 7.5 | 2.5 | 5.0 | 200+ |
| (9) Hispanic American-owned | 1 | \$115 | \$119 | 0.7 | 1.8 | -1.1 | 37.2 |
| (10) Native American-owned | 9 | \$185 | \$192 | 1.1 | 0.9 | 0.1 | 112.3 |
| (11) Unknown MBE | 3 | \$105 | | | | | |
| (12) Certified | 8 | \$318 | \$318 | 1.8 | | | |
| (13) Certified woman-owned | 3 | \$101 | \$101 | 0.6 | | | |
| (14) Certified minority-owned | 5 | \$216 | \$216 | 1.2 | | | |
| (15) Certified African American-owned | 1 | \$67 | \$67 | 0.4 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$34 | \$34 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 1 | \$115 | \$115 | 0.6 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-119.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 50 | \$2,285 | \$2,285 | | | | |
| (2) MBE/WBE | 3 | \$58 | \$58 | 2.6 | 14.1 | -11.5 | 18.2 |
| (3) WBE | 2 | \$39 | \$39 | 1.7 | 10.5 | -8.8 | 16.1 |
| (4) MBE | 1 | \$20 | \$20 | 0.9 | 3.5 | -2.7 | 24.2 |
| (5) African American-owned | 1 | \$20 | \$20 | 0.9 | 1.5 | -0.7 | 56.7 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.8 | -1.8 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-120.
Agency: INDOT
Funding: FHWA-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 40 | \$1,476 | \$1,476 | | | | |
| (2) MBE/WBE | 1 | \$9 | \$9 | 0.6 | 27.8 | -27.2 | 2.2 |
| (3) WBE | 1 | \$9 | \$9 | 0.6 | 25.3 | -24.7 | 2.4 |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 2.5 | -2.5 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 2.5 | -2.5 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-201.
Agency: INDOT
Funding: State-funded contracts
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 14,877 | \$1,599,541 | \$1,599,541 | | | | |
| (2) MBE/WBE | 2,513 | \$216,736 | \$216,736 | 13.5 | 13.4 | 0.2 | 101.3 |
| (3) WBE | 1,164 | \$93,126 | \$93,126 | 5.8 | 8.6 | -2.8 | 67.6 |
| (4) MBE | 1,349 | \$123,610 | \$123,610 | 7.7 | 4.8 | 3.0 | 162.4 |
| (5) African American-owned | 441 | \$63,969 | \$65,218 | 4.1 | 1.5 | 2.6 | 200+ |
| (6) Total Asian American-owned | 563 | \$22,235 | \$22,669 | 1.4 | 1.6 | -0.2 | 86.6 |
| (7) Asian-Pacific American-owned | 201 | \$4,939 | \$5,035 | 0.3 | 0.7 | -0.4 | 46.7 |
| (8) Subcontinent Asian American-owned | 362 | \$17,296 | \$17,634 | 1.1 | 1.0 | 0.1 | 114.7 |
| (9) Hispanic American-owned | 164 | \$11,881 | \$12,113 | 0.8 | 0.6 | 0.1 | 123.8 |
| (10) Native American-owned | 169 | \$23,157 | \$23,610 | 1.5 | 1.0 | 0.5 | 146.9 |
| (11) Unknown MBE | 12 | \$2,368 | | | | | |
| (12) Certified | 612 | \$78,956 | \$78,956 | 4.9 | | | |
| (13) Certified woman-owned | 273 | \$23,815 | \$23,815 | 1.5 | | | |
| (14) Certified minority-owned | 339 | \$55,140 | \$55,140 | 3.4 | | | |
| (15) Certified African American-owned | 275 | \$45,320 | \$45,320 | 2.8 | | | |
| (16) Certified Asian-Pacific American-owned | 15 | \$773 | \$773 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 16 | \$1,845 | \$1,845 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 30 | \$4,515 | \$4,515 | 0.3 | | | |
| (19) Certified Native American-owned | 3 | \$2,688 | \$2,688 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-202.
Agency: INDOT
Funding: State-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 5,418 | \$1,110,907 | \$1,110,907 | | | | |
| (2) MBE/WBE | 828 | \$121,728 | \$121,728 | 11.0 | 10.2 | 0.8 | 107.9 |
| (3) WBE | 615 | \$75,893 | \$75,893 | 6.8 | 7.6 | -0.8 | 89.7 |
| (4) MBE | 213 | \$45,836 | \$45,836 | 4.1 | 2.5 | 1.6 | 162.5 |
| (5) African American-owned | 110 | \$16,220 | \$17,096 | 1.5 | 0.9 | 0.6 | 166.1 |
| (6) Total Asian American-owned | 27 | \$1,782 | \$1,878 | 0.2 | 0.4 | -0.2 | 48.3 |
| (7) Asian-Pacific American-owned | 25 | \$1,697 | \$1,788 | 0.2 | 0.1 | 0.0 | 140.8 |
| (8) Subcontinent Asian American-owned | 2 | \$85 | \$90 | 0.0 | 0.2 | -0.2 | 3.4 |
| (9) Hispanic American-owned | 24 | \$3,773 | \$3,977 | 0.4 | 0.1 | 0.2 | 200+ |
| (10) Native American-owned | 42 | \$21,713 | \$22,885 | 2.1 | 1.1 | 0.9 | 185.1 |
| (11) Unknown MBE | 10 | \$2,347 | | | | | |
| (12) Certified | 300 | \$35,959 | \$35,959 | 3.2 | | | |
| (13) Certified woman-owned | 244 | \$22,730 | \$22,730 | 2.0 | | | |
| (14) Certified minority-owned | 56 | \$13,230 | \$13,230 | 1.2 | | | |
| (15) Certified African American-owned | 31 | \$8,751 | \$8,751 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 9 | \$584 | \$584 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$85 | \$85 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 11 | \$1,121 | \$1,121 | 0.1 | | | |
| (19) Certified Native American-owned | 3 | \$2,688 | \$2,688 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-203.
Agency: INDOT
Funding: State-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 6,986 | \$364,365 | \$364,365 | | | | |
| (2) MBE/WBE | 1,242 | \$45,104 | \$45,104 | 12.4 | 23.6 | -11.2 | 52.5 |
| (3) WBE | 446 | \$14,565 | \$14,565 | 4.0 | 11.6 | -7.6 | 34.6 |
| (4) MBE | 796 | \$30,538 | \$30,538 | 8.4 | 12.0 | -3.6 | 69.7 |
| (5) African American-owned | 73 | \$2,645 | \$2,645 | 0.7 | 3.2 | -2.5 | 22.8 |
| (6) Total Asian American-owned | 525 | \$19,792 | \$19,792 | 5.4 | 6.0 | -0.6 | 89.8 |
| (7) Asian-Pacific American-owned | 175 | \$3,237 | \$3,237 | 0.9 | 2.5 | -1.7 | 34.9 |
| (8) Subcontinent Asian American-owned | 350 | \$16,555 | \$16,555 | 4.5 | 3.5 | 1.0 | 129.8 |
| (9) Hispanic American-owned | 71 | \$6,657 | \$6,657 | 1.8 | 1.8 | 0.0 | 99.8 |
| (10) Native American-owned | 127 | \$1,444 | \$1,444 | 0.4 | 1.0 | -0.6 | 41.3 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 76 | \$6,693 | \$6,693 | 1.8 | | | |
| (13) Certified woman-owned | 27 | \$1,025 | \$1,025 | 0.3 | | | |
| (14) Certified minority-owned | 49 | \$5,668 | \$5,668 | 1.6 | | | |
| (15) Certified African American-owned | 11 | \$332 | \$332 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 5 | \$183 | \$183 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 14 | \$1,759 | \$1,759 | 0.5 | | | |
| (18) Certified Hispanic American-owned | 19 | \$3,394 | \$3,394 | 0.9 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-204.
Agency: INDOT
Funding: State-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,140 | \$112,219 | \$112,219 | | | | |
| (2) MBE/WBE | 436 | \$49,764 | \$49,764 | 44.3 | 10.3 | 34.1 | 200+ |
| (3) WBE | 98 | \$2,563 | \$2,563 | 2.3 | 7.1 | -4.8 | 32.2 |
| (4) MBE | 338 | \$47,201 | \$47,201 | 42.1 | 3.2 | 38.9 | 200+ |
| (5) African American-owned | 256 | \$45,068 | \$45,088 | 40.2 | 1.6 | 38.6 | 200+ |
| (6) Total Asian American-owned | 11 | \$661 | \$661 | 0.6 | 0.2 | 0.4 | 200+ |
| (7) Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | 0.2 | -0.2 | 2.6 |
| (8) Subcontinent Asian American-owned | 10 | \$656 | \$656 | 0.6 | 0.0 | 0.6 | 200+ |
| (9) Hispanic American-owned | 69 | \$1,451 | \$1,451 | 1.3 | 1.3 | 0.0 | 97.5 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 2 | \$21 | | | | | |
| (12) Certified | 234 | \$36,243 | \$36,243 | 32.3 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 234 | \$36,243 | \$36,243 | 32.3 | | | |
| (15) Certified African American-owned | 233 | \$36,237 | \$36,237 | 32.3 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-205.
Agency: INDOT
Funding: State-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 333 | \$12,050 | \$12,050 | | | | |
| (2) MBE/WBE | 7 | \$140 | \$140 | 1.2 | 29.5 | -28.3 | 3.9 |
| (3) WBE | 5 | \$105 | \$105 | 0.9 | 25.3 | -24.4 | 3.4 |
| (4) MBE | 2 | \$35 | \$35 | 0.3 | 4.2 | -3.9 | 6.9 |
| (5) African American-owned | 2 | \$35 | \$35 | 0.3 | 2.7 | -2.4 | 10.7 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 2 | \$61 | \$61 | 0.5 | | | |
| (13) Certified woman-owned | 2 | \$61 | \$61 | 0.5 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-206.
Agency: INDOT
Funding: State-funded contracts
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 14,293 | \$1,397,421 | \$1,397,421 | | | | |
| (2) MBE/WBE | 2,235 | \$149,404 | \$149,404 | 10.7 | 12.6 | -1.9 | 84.9 |
| (3) WBE | 967 | \$59,277 | \$59,277 | 4.2 | 8.1 | -3.8 | 52.7 |
| (4) MBE | 1,268 | \$90,127 | \$90,127 | 6.4 | 4.5 | 1.9 | 141.9 |
| (5) African American-owned | 411 | \$51,706 | \$52,873 | 3.8 | 1.5 | 2.3 | 200+ |
| (6) Total Asian American-owned | 547 | \$20,998 | \$21,471 | 1.5 | 1.8 | -0.2 | 86.6 |
| (7) Asian-Pacific American-owned | 188 | \$3,799 | \$3,884 | 0.3 | 0.7 | -0.4 | 38.4 |
| (8) Subcontinent Asian American-owned | 359 | \$17,199 | \$17,587 | 1.3 | 1.1 | 0.2 | 119.8 |
| (9) Hispanic American-owned | 151 | \$9,606 | \$9,822 | 0.7 | 0.7 | 0.0 | 106.3 |
| (10) Native American-owned | 148 | \$5,828 | \$5,960 | 0.4 | 0.6 | -0.2 | 72.9 |
| (11) Unknown MBE | 11 | \$1,989 | | | | | |
| (12) Certified | 488 | \$56,324 | \$56,324 | 4.0 | | | |
| (13) Certified woman-owned | 182 | \$10,886 | \$10,886 | 0.8 | | | |
| (14) Certified minority-owned | 306 | \$45,438 | \$45,438 | 3.3 | | | |
| (15) Certified African American-owned | 257 | \$37,121 | \$37,121 | 2.7 | | | |
| (16) Certified Asian-Pacific American-owned | 13 | \$475 | \$475 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 14 | \$1,759 | \$1,759 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 19 | \$3,394 | \$3,394 | 0.2 | | | |
| (19) Certified Native American-owned | 3 | \$2,688 | \$2,688 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-207.
Agency: INDOT
Funding: State-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,863 | \$910,536 | \$910,536 | | | | |
| (2) MBE/WBE | 564 | \$55,044 | \$55,044 | 6.0 | 8.3 | -2.2 | 73.0 |
| (3) WBE | 428 | \$42,389 | \$42,389 | 4.7 | 6.6 | -1.9 | 71.1 |
| (4) MBE | 136 | \$12,655 | \$12,655 | 1.4 | 1.7 | -0.3 | 80.5 |
| (5) African American-owned | 82 | \$4,239 | \$5,020 | 0.6 | 0.8 | -0.3 | 66.5 |
| (6) Total Asian American-owned | 13 | \$566 | \$670 | 0.1 | 0.3 | -0.2 | 26.1 |
| (7) Asian-Pacific American-owned | 13 | \$566 | \$670 | 0.1 | 0.1 | 0.0 | 107.6 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (9) Hispanic American-owned | 11 | \$1,498 | \$1,774 | 0.2 | 0.1 | 0.1 | 173.2 |
| (10) Native American-owned | 21 | \$4,384 | \$5,191 | 0.6 | 0.5 | 0.1 | 115.6 |
| (11) Unknown MBE | 9 | \$1,968 | | | | | |
| (12) Certified | 182 | \$13,594 | \$13,594 | 1.5 | | | |
| (13) Certified woman-owned | 158 | \$10,017 | \$10,017 | 1.1 | | | |
| (14) Certified minority-owned | 24 | \$3,577 | \$3,577 | 0.4 | | | |
| (15) Certified African American-owned | 14 | \$602 | \$602 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 7 | \$287 | \$287 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 3 | \$2,688 | \$2,688 | 0.3 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-208.
Agency: INDOT
Funding: State-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 6,964 | \$362,849 | \$362,849 | | | | |
| (2) MBE/WBE | 1,231 | \$44,535 | \$44,535 | 12.3 | 23.6 | -11.3 | 52.0 |
| (3) WBE | 439 | \$14,299 | \$14,299 | 3.9 | 11.5 | -7.6 | 34.1 |
| (4) MBE | 792 | \$30,236 | \$30,236 | 8.3 | 12.0 | -3.7 | 69.2 |
| (5) African American-owned | 71 | \$2,364 | \$2,364 | 0.7 | 3.2 | -2.5 | 20.5 |
| (6) Total Asian American-owned | 523 | \$19,771 | \$19,771 | 5.4 | 6.1 | -0.6 | 89.9 |
| (7) Asian-Pacific American-owned | 174 | \$3,228 | \$3,228 | 0.9 | 2.6 | -1.7 | 34.9 |
| (8) Subcontinent Asian American-owned | 349 | \$16,543 | \$16,543 | 4.6 | 3.5 | 1.1 | 130.0 |
| (9) Hispanic American-owned | 71 | \$6,657 | \$6,657 | 1.8 | 1.8 | 0.0 | 100.2 |
| (10) Native American-owned | 127 | \$1,444 | \$1,444 | 0.4 | 1.0 | -0.6 | 41.4 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 72 | \$6,487 | \$6,487 | 1.8 | | | |
| (13) Certified woman-owned | 24 | \$869 | \$869 | 0.2 | | | |
| (14) Certified minority-owned | 48 | \$5,618 | \$5,618 | 1.5 | | | |
| (15) Certified African American-owned | 10 | \$282 | \$282 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 5 | \$183 | \$183 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 14 | \$1,759 | \$1,759 | 0.5 | | | |
| (18) Certified Hispanic American-owned | 19 | \$3,394 | \$3,394 | 0.9 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-209.
Agency: INDOT
Funding: State-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,140 | \$112,219 | \$112,219 | | | | |
| (2) MBE/WBE | 436 | \$49,764 | \$49,764 | 44.3 | 10.3 | 34.1 | 200+ |
| (3) WBE | 98 | \$2,563 | \$2,563 | 2.3 | 7.1 | -4.8 | 32.2 |
| (4) MBE | 338 | \$47,201 | \$47,201 | 42.1 | 3.2 | 38.9 | 200+ |
| (5) African American-owned | 256 | \$45,068 | \$45,088 | 40.2 | 1.6 | 38.6 | 200+ |
| (6) Total Asian American-owned | 11 | \$661 | \$661 | 0.6 | 0.2 | 0.4 | 200+ |
| (7) Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | 0.2 | -0.2 | 2.6 |
| (8) Subcontinent Asian American-owned | 10 | \$656 | \$656 | 0.6 | 0.0 | 0.6 | 200+ |
| (9) Hispanic American-owned | 69 | \$1,451 | \$1,451 | 1.3 | 1.3 | 0.0 | 97.5 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 2 | \$21 | | | | | |
| (12) Certified | 234 | \$36,243 | \$36,243 | 32.3 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 234 | \$36,243 | \$36,243 | 32.3 | | | |
| (15) Certified African American-owned | 233 | \$36,237 | \$36,237 | 32.3 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-210.
Agency: INDOT
Funding: State-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 326 | \$11,817 | \$11,817 | | | | |
| (2) MBE/WBE | 4 | \$60 | \$60 | 0.5 | 29.6 | -29.1 | 1.7 |
| (3) WBE | 2 | \$26 | \$26 | 0.2 | 25.5 | -25.2 | 0.9 |
| (4) MBE | 2 | \$35 | \$35 | 0.3 | 4.1 | -3.8 | 7.1 |
| (5) African American-owned | 2 | \$35 | \$35 | 0.3 | 2.7 | -2.4 | 10.9 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-211.
Agency: INDOT
Funding: State-funded contracts
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 584 | \$202,120 | \$202,120 | | | | |
| (2) MBE/WBE | 278 | \$67,332 | \$67,332 | 33.3 | 18.7 | 14.6 | 177.9 |
| (3) WBE | 197 | \$33,849 | \$33,849 | 16.7 | 12.5 | 4.3 | 134.2 |
| (4) MBE | 81 | \$33,483 | \$33,483 | 16.6 | 6.2 | 10.3 | 200+ |
| (5) African American-owned | 30 | \$12,263 | \$12,403 | 6.1 | 1.4 | 4.8 | 200+ |
| (6) Total Asian American-owned | 16 | \$1,237 | \$1,252 | 0.6 | 0.7 | -0.1 | 91.0 |
| (7) Asian-Pacific American-owned | 13 | \$1,140 | \$1,153 | 0.6 | 0.3 | 0.2 | 171.7 |
| (8) Subcontinent Asian American-owned | 3 | \$97 | \$98 | 0.0 | 0.3 | -0.3 | 14.0 |
| (9) Hispanic American-owned | 13 | \$2,275 | \$2,301 | 1.1 | 0.3 | 0.9 | 200+ |
| (10) Native American-owned | 21 | \$17,329 | \$17,527 | 8.7 | 3.9 | 4.8 | 200+ |
| (11) Unknown MBE | 1 | \$379 | | | | | |
| (12) Certified | 124 | \$22,632 | \$22,632 | 11.2 | | | |
| (13) Certified woman-owned | 91 | \$12,930 | \$12,930 | 6.4 | | | |
| (14) Certified minority-owned | 33 | \$9,703 | \$9,703 | 4.8 | | | |
| (15) Certified African American-owned | 18 | \$8,199 | \$8,199 | 4.1 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$297 | \$297 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$85 | \$85 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 11 | \$1,121 | \$1,121 | 0.6 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-212.
Agency: INDOT
Funding: State-funded contracts
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 555 | \$200,371 | \$200,371 | | | | |
| (2) MBE/WBE | 264 | \$66,684 | \$66,684 | 33.3 | 18.7 | 14.6 | 178.2 |
| (3) WBE | 187 | \$33,503 | \$33,503 | 16.7 | 12.4 | 4.3 | 134.4 |
| (4) MBE | 77 | \$33,181 | \$33,181 | 16.6 | 6.2 | 10.3 | 200+ |
| (5) African American-owned | 28 | \$11,981 | \$12,120 | 6.0 | 1.4 | 4.7 | 200+ |
| (6) Total Asian American-owned | 14 | \$1,216 | \$1,230 | 0.6 | 0.7 | 0.0 | 92.8 |
| (7) Asian-Pacific American-owned | 12 | \$1,131 | \$1,144 | 0.6 | 0.3 | 0.2 | 176.6 |
| (8) Subcontinent Asian American-owned | 2 | \$85 | \$86 | 0.0 | 0.3 | -0.3 | 12.7 |
| (9) Hispanic American-owned | 13 | \$2,275 | \$2,301 | 1.1 | 0.3 | 0.9 | 200+ |
| (10) Native American-owned | 21 | \$17,329 | \$17,529 | 8.7 | 3.9 | 4.8 | 200+ |
| (11) Unknown MBE | 1 | \$379 | | | | | |
| (12) Certified | 118 | \$22,365 | \$22,365 | 11.2 | | | |
| (13) Certified woman-owned | 86 | \$12,713 | \$12,713 | 6.3 | | | |
| (14) Certified minority-owned | 32 | \$9,653 | \$9,653 | 4.8 | | | |
| (15) Certified African American-owned | 17 | \$8,149 | \$8,149 | 4.1 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$297 | \$297 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$85 | \$85 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 11 | \$1,121 | \$1,121 | 0.6 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-213.
Agency: INDOT
Funding: State-funded contracts
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 22 | \$1,516 | \$1,516 | | | | |
| (2) MBE/WBE | 11 | \$569 | \$569 | 37.5 | 25.2 | 12.4 | 149.1 |
| (3) WBE | 7 | \$266 | \$266 | 17.6 | 16.7 | 0.8 | 104.9 |
| (4) MBE | 4 | \$303 | \$303 | 20.0 | 8.4 | 11.5 | 200+ |
| (5) African American-owned | 2 | \$282 | \$282 | 18.6 | 2.8 | 15.8 | 200+ |
| (6) Total Asian American-owned | 2 | \$21 | \$21 | 1.4 | 3.1 | -1.7 | 45.0 |
| (7) Asian-Pacific American-owned | 1 | \$9 | \$9 | 0.6 | 1.5 | -0.9 | 39.5 |
| (8) Subcontinent Asian American-owned | 1 | \$12 | \$12 | 0.8 | 1.6 | -0.8 | 50.2 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.5 | -1.5 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.1 | -1.1 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 4 | \$206 | \$206 | 13.6 | | | |
| (13) Certified woman-owned | 3 | \$156 | \$156 | 10.3 | | | |
| (14) Certified minority-owned | 1 | \$50 | \$50 | 3.3 | | | |
| (15) Certified African American-owned | 1 | \$50 | \$50 | 3.3 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-216.
Agency: INDOT
Funding: State-funded contracts
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 13,141 | \$347,430 | \$347,430 | | | | |
| (2) MBE/WBE | 2,043 | \$56,743 | \$56,743 | 16.3 | 20.4 | -4.1 | 80.0 |
| (3) WBE | 882 | \$22,503 | \$22,503 | 6.5 | 13.2 | -6.8 | 48.9 |
| (4) MBE | 1,161 | \$34,239 | \$34,239 | 9.9 | 7.2 | 2.7 | 137.5 |
| (5) African American-owned | 347 | \$15,454 | \$15,561 | 4.5 | 2.5 | 2.0 | 182.2 |
| (6) Total Asian American-owned | 526 | \$13,627 | \$13,721 | 3.9 | 2.5 | 1.5 | 158.2 |
| (7) Asian-Pacific American-owned | 188 | \$3,799 | \$3,825 | 1.1 | 1.2 | -0.1 | 92.4 |
| (8) Subcontinent Asian American-owned | 338 | \$9,829 | \$9,897 | 2.8 | 1.3 | 1.5 | 200+ |
| (9) Hispanic American-owned | 140 | \$3,279 | \$3,301 | 1.0 | 1.3 | -0.4 | 72.1 |
| (10) Native American-owned | 141 | \$1,645 | \$1,656 | 0.5 | 0.9 | -0.4 | 54.3 |
| (11) Unknown MBE | 7 | \$234 | | | | | |
| (12) Certified | 413 | \$17,237 | \$17,237 | 5.0 | | | |
| (13) Certified woman-owned | 161 | \$4,504 | \$4,504 | 1.3 | | | |
| (14) Certified minority-owned | 252 | \$12,733 | \$12,733 | 3.7 | | | |
| (15) Certified African American-owned | 212 | \$11,349 | \$11,349 | 3.3 | | | |
| (16) Certified Asian-Pacific American-owned | 13 | \$475 | \$475 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 11 | \$304 | \$304 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 15 | \$596 | \$596 | 0.2 | | | |
| (19) Certified Native American-owned | 1 | \$8 | \$8 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-217.
Agency: INDOT
Funding: State-funded contracts
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,265 | \$110,574 | \$110,574 | | | | |
| (2) MBE/WBE | 477 | \$14,770 | \$14,770 | 13.4 | 15.0 | -1.7 | 88.8 |
| (3) WBE | 362 | \$10,872 | \$10,872 | 9.8 | 12.4 | -2.6 | 79.3 |
| (4) MBE | 115 | \$3,897 | \$3,897 | 3.5 | 2.6 | 0.9 | 133.6 |
| (5) African American-owned | 76 | \$2,466 | \$2,609 | 2.4 | 1.4 | 1.0 | 172.4 |
| (6) Total Asian American-owned | 13 | \$566 | \$598 | 0.5 | 0.2 | 0.4 | 200+ |
| (7) Asian-Pacific American-owned | 13 | \$566 | \$598 | 0.5 | 0.1 | 0.4 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 7 | \$452 | \$478 | 0.4 | 0.2 | 0.2 | 200+ |
| (10) Native American-owned | 14 | \$200 | \$212 | 0.2 | 0.8 | -0.7 | 22.7 |
| (11) Unknown MBE | 5 | \$214 | | | | | |
| (12) Certified | 161 | \$5,031 | \$5,031 | 4.5 | | | |
| (13) Certified woman-owned | 139 | \$4,133 | \$4,133 | 3.7 | | | |
| (14) Certified minority-owned | 22 | \$898 | \$898 | 0.8 | | | |
| (15) Certified African American-owned | 14 | \$602 | \$602 | 0.5 | | | |
| (16) Certified Asian-Pacific American-owned | 7 | \$287 | \$287 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 1 | \$8 | \$8 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-218.
Agency: INDOT
Funding: State-funded contracts
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 6,557 | \$174,647 | \$174,647 | | | | |
| (2) MBE/WBE | 1,186 | \$27,228 | \$27,228 | 15.6 | 25.2 | -9.7 | 61.8 |
| (3) WBE | 422 | \$9,455 | \$9,455 | 5.4 | 14.4 | -9.0 | 37.7 |
| (4) MBE | 764 | \$17,773 | \$17,773 | 10.2 | 10.9 | -0.7 | 93.6 |
| (5) African American-owned | 70 | \$2,124 | \$2,124 | 1.2 | 3.2 | -2.0 | 38.2 |
| (6) Total Asian American-owned | 503 | \$12,828 | \$12,828 | 7.3 | 4.7 | 2.6 | 155.3 |
| (7) Asian-Pacific American-owned | 174 | \$3,228 | \$3,228 | 1.8 | 2.2 | -0.3 | 84.4 |
| (8) Subcontinent Asian American-owned | 329 | \$9,601 | \$9,601 | 5.5 | 2.5 | 3.0 | 200+ |
| (9) Hispanic American-owned | 64 | \$1,376 | \$1,376 | 0.8 | 1.8 | -1.1 | 42.8 |
| (10) Native American-owned | 127 | \$1,444 | \$1,444 | 0.8 | 1.1 | -0.3 | 75.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 63 | \$1,735 | \$1,735 | 1.0 | | | |
| (13) Certified woman-owned | 22 | \$371 | \$371 | 0.2 | | | |
| (14) Certified minority-owned | 41 | \$1,365 | \$1,365 | 0.8 | | | |
| (15) Certified African American-owned | 10 | \$282 | \$282 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 5 | \$183 | \$183 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 11 | \$304 | \$304 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 15 | \$596 | \$596 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-219.
Agency: INDOT
Funding: State-funded contracts
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,006 | \$54,749 | \$54,749 | | | | |
| (2) MBE/WBE | 376 | \$14,684 | \$14,684 | 26.8 | 14.7 | 12.2 | 182.9 |
| (3) WBE | 96 | \$2,150 | \$2,150 | 3.9 | 9.8 | -5.9 | 40.1 |
| (4) MBE | 280 | \$12,534 | \$12,534 | 22.9 | 4.9 | 18.0 | 200+ |
| (5) African American-owned | 199 | \$10,829 | \$10,847 | 19.8 | 2.3 | 17.5 | 200+ |
| (6) Total Asian American-owned | 10 | \$233 | \$234 | 0.4 | 0.3 | 0.1 | 127.0 |
| (7) Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | 0.3 | -0.3 | 3.0 |
| (8) Subcontinent Asian American-owned | 9 | \$228 | \$228 | 0.4 | 0.0 | 0.4 | 200+ |
| (9) Hispanic American-owned | 69 | \$1,451 | \$1,453 | 2.7 | 2.0 | 0.7 | 135.6 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (11) Unknown MBE | 2 | \$21 | | | | | |
| (12) Certified | 189 | \$10,471 | \$10,471 | 19.1 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 189 | \$10,471 | \$10,471 | 19.1 | | | |
| (15) Certified African American-owned | 188 | \$10,465 | \$10,465 | 19.1 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-220.
Agency: INDOT
Funding: State-funded contracts
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 313 | \$7,460 | \$7,460 | | | | |
| (2) MBE/WBE | 4 | \$60 | \$60 | 0.8 | 29.5 | -28.7 | 2.7 |
| (3) WBE | 2 | \$26 | \$26 | 0.3 | 25.1 | -24.8 | 1.4 |
| (4) MBE | 2 | \$35 | \$35 | 0.5 | 4.4 | -3.9 | 10.6 |
| (5) African American-owned | 2 | \$35 | \$35 | 0.5 | 2.6 | -2.1 | 17.9 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-221.
Agency: INDOT
Funding: State-funded contracts
Type: All
Region: North Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,212 | \$373,212 | \$373,212 | | | | |
| (2) MBE/WBE | 190 | \$42,590 | \$42,590 | 11.4 | 8.1 | 3.3 | 140.2 |
| (3) WBE | 119 | \$12,277 | \$12,277 | 3.3 | 6.1 | -2.8 | 53.6 |
| (4) MBE | 71 | \$30,314 | \$30,314 | 8.1 | 2.0 | 6.1 | 200+ |
| (5) African American-owned | 41 | \$15,219 | \$15,219 | 4.1 | 0.5 | 3.6 | 200+ |
| (6) Total Asian American-owned | 5 | \$164 | \$164 | 0.0 | 0.2 | -0.2 | 19.5 |
| (7) Asian-Pacific American-owned | 5 | \$164 | \$164 | 0.0 | 0.0 | 0.0 | 147.9 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (9) Hispanic American-owned | 12 | \$1,834 | \$1,834 | 0.5 | 0.1 | 0.4 | 200+ |
| (10) Native American-owned | 13 | \$13,096 | \$13,096 | 3.5 | 1.1 | 2.4 | 200+ |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 69 | \$13,579 | \$13,579 | 3.6 | | | |
| (13) Certified woman-owned | 41 | \$2,688 | \$2,688 | 0.7 | | | |
| (14) Certified minority-owned | 28 | \$10,891 | \$10,891 | 2.9 | | | |
| (15) Certified African American-owned | 24 | \$10,728 | \$10,728 | 2.9 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$124 | \$124 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 2 | \$39 | \$39 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-222.
Agency: INDOT
Funding: State-funded contracts
Type: Construction
Region: North Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 921 | \$351,537 | \$351,537 | | | | |
| (2) MBE/WBE | 147 | \$30,757 | \$30,757 | 8.7 | 8.1 | 0.7 | 108.4 |
| (3) WBE | 108 | \$11,687 | \$11,687 | 3.3 | 6.1 | -2.8 | 54.2 |
| (4) MBE | 39 | \$19,071 | \$19,071 | 5.4 | 1.9 | 3.5 | 200+ |
| (5) African American-owned | 14 | \$4,030 | \$4,030 | 1.1 | 0.5 | 0.7 | 200+ |
| (6) Total Asian American-owned | 2 | \$128 | \$128 | 0.0 | 0.2 | -0.2 | 17.8 |
| (7) Asian-Pacific American-owned | 2 | \$128 | \$128 | 0.0 | 0.0 | 0.0 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (9) Hispanic American-owned | 10 | \$1,816 | \$1,816 | 0.5 | 0.0 | 0.5 | 200+ |
| (10) Native American-owned | 13 | \$13,096 | \$13,096 | 3.7 | 1.2 | 2.5 | 200+ |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 45 | \$5,782 | \$5,782 | 1.6 | | | |
| (13) Certified woman-owned | 39 | \$2,626 | \$2,626 | 0.7 | | | |
| (14) Certified minority-owned | 6 | \$3,155 | \$3,155 | 0.9 | | | |
| (15) Certified African American-owned | 3 | \$2,998 | \$2,998 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$118 | \$118 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 2 | \$39 | \$39 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-223.
Agency: INDOT
Funding: State-funded contracts
Type: Professional services
Region: North Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 36 | \$1,990 | \$1,990 | | | | |
| (2) MBE/WBE | 3 | \$66 | \$66 | 3.3 | 24.1 | -20.8 | 13.8 |
| (3) WBE | 0 | \$0 | \$0 | 0.0 | 12.0 | -12.0 | 0.0 |
| (4) MBE | 3 | \$66 | \$66 | 3.3 | 12.1 | -8.8 | 27.5 |
| (5) African American-owned | 1 | \$35 | \$35 | 1.8 | 3.1 | -1.3 | 56.8 |
| (6) Total Asian American-owned | 2 | \$31 | \$31 | 1.6 | 5.8 | -4.2 | 27.2 |
| (7) Asian-Pacific American-owned | 2 | \$31 | \$31 | 1.6 | 2.2 | -0.6 | 72.1 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 3.6 | -3.6 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 2.5 | -2.5 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.8 | -0.8 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-224.
Agency: INDOT
Funding: State-funded contracts
Type: Goods
Region: North Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 215 | \$18,507 | \$18,507 | | | | |
| (2) MBE/WBE | 36 | \$11,678 | \$11,678 | 63.1 | 6.6 | 56.5 | 200+ |
| (3) WBE | 8 | \$511 | \$511 | 2.8 | 4.5 | -1.7 | 62.0 |
| (4) MBE | 28 | \$11,167 | \$11,167 | 60.3 | 2.2 | 58.2 | 200+ |
| (5) African American-owned | 25 | \$11,144 | \$11,144 | 60.2 | 1.0 | 59.2 | 200+ |
| (6) Total Asian American-owned | 1 | \$5 | \$5 | 0.0 | 0.0 | 0.0 | 74.7 |
| (7) Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | 0.0 | 0.0 | 77.4 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 2 | \$18 | \$18 | 0.1 | 1.1 | -1.0 | 8.9 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 22 | \$7,736 | \$7,736 | 41.8 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 22 | \$7,736 | \$7,736 | 41.8 | | | |
| (15) Certified African American-owned | 21 | \$7,731 | \$7,731 | 41.8 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-225.
Agency: INDOT
Funding: State-funded contracts
Type: Support services
Region: North Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 40 | \$1,178 | \$1,178 | | | | |
| (2) MBE/WBE | 4 | \$88 | \$88 | 7.5 | 25.3 | -17.7 | 29.7 |
| (3) WBE | 3 | \$79 | \$79 | 6.7 | 23.6 | -16.9 | 28.5 |
| (4) MBE | 1 | \$9 | \$9 | 0.8 | 1.7 | -0.9 | 47.9 |
| (5) African American-owned | 1 | \$9 | \$9 | 0.8 | 0.7 | 0.1 | 121.1 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 2 | \$61 | \$61 | 5.2 | | | |
| (13) Certified woman-owned | 2 | \$61 | \$61 | 5.2 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-226.
Agency: INDOT
Funding: State-funded contracts
Type: All
Region: Central Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 12,598 | \$941,395 | \$941,395 | | | | |
| (2) MBE/WBE | 2,128 | \$141,767 | \$141,767 | 15.1 | 16.7 | -1.6 | 90.2 |
| (3) WBE | 914 | \$66,070 | \$66,070 | 7.0 | 10.3 | -3.3 | 68.1 |
| (4) MBE | 1,214 | \$75,697 | \$75,697 | 8.0 | 6.4 | 1.6 | 125.7 |
| (5) African American-owned | 366 | \$36,701 | \$37,013 | 3.9 | 2.1 | 1.9 | 191.5 |
| (6) Total Asian American-owned | 548 | \$21,292 | \$21,473 | 2.3 | 2.6 | -0.3 | 88.9 |
| (7) Asian-Pacific American-owned | 189 | \$4,029 | \$4,064 | 0.4 | 1.1 | -0.6 | 41.0 |
| (8) Subcontinent Asian American-owned | 359 | \$17,263 | \$17,410 | 1.8 | 1.5 | 0.3 | 122.2 |
| (9) Hispanic American-owned | 149 | \$9,207 | \$9,286 | 1.0 | 0.9 | 0.0 | 105.2 |
| (10) Native American-owned | 145 | \$7,858 | \$7,925 | 0.8 | 0.8 | 0.0 | 101.8 |
| (11) Unknown MBE | 6 | \$639 | | | | | |
| (12) Certified | 463 | \$47,711 | \$47,711 | 5.1 | | | |
| (13) Certified woman-owned | 175 | \$12,637 | \$12,637 | 1.3 | | | |
| (14) Certified minority-owned | 288 | \$35,074 | \$35,074 | 3.7 | | | |
| (15) Certified African American-owned | 233 | \$26,450 | \$26,450 | 2.8 | | | |
| (16) Certified Asian-Pacific American-owned | 12 | \$470 | \$470 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 15 | \$1,830 | \$1,830 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 25 | \$3,637 | \$3,637 | 0.4 | | | |
| (19) Certified Native American-owned | 3 | \$2,688 | \$2,688 | 0.3 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-227.
Agency: INDOT
Funding: State-funded contracts
Type: Construction
Region: Central Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,698 | \$496,124 | \$496,124 | | | | |
| (2) MBE/WBE | 529 | \$66,858 | \$66,858 | 13.5 | 12.3 | 1.2 | 109.9 |
| (3) WBE | 395 | \$49,940 | \$49,940 | 10.1 | 9.4 | 0.6 | 106.6 |
| (4) MBE | 134 | \$16,918 | \$16,918 | 3.4 | 2.8 | 0.6 | 120.8 |
| (5) African American-owned | 81 | \$7,841 | \$8,139 | 1.6 | 1.3 | 0.3 | 126.2 |
| (6) Total Asian American-owned | 19 | \$919 | \$954 | 0.2 | 0.5 | -0.3 | 42.7 |
| (7) Asian-Pacific American-owned | 18 | \$849 | \$881 | 0.2 | 0.1 | 0.1 | 158.1 |
| (8) Subcontinent Asian American-owned | 1 | \$70 | \$73 | 0.0 | 0.3 | -0.3 | 4.3 |
| (9) Hispanic American-owned | 11 | \$1,118 | \$1,160 | 0.2 | 0.2 | 0.0 | 106.9 |
| (10) Native American-owned | 19 | \$6,421 | \$6,665 | 1.3 | 0.8 | 0.5 | 160.1 |
| (11) Unknown MBE | 4 | \$618 | | | | | |
| (12) Certified | 190 | \$18,136 | \$18,136 | 3.7 | | | |
| (13) Certified woman-owned | 150 | \$11,682 | \$11,682 | 2.4 | | | |
| (14) Certified minority-owned | 40 | \$6,454 | \$6,454 | 1.3 | | | |
| (15) Certified African American-owned | 23 | \$3,166 | \$3,166 | 0.6 | | | |
| (16) Certified Asian-Pacific American-owned | 7 | \$287 | \$287 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$70 | \$70 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 6 | \$243 | \$243 | 0.0 | | | |
| (19) Certified Native American-owned | 3 | \$2,688 | \$2,688 | 0.5 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-228.
Agency: INDOT
Funding: State-funded contracts
Type: Professional services
Region: Central Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 6,896 | \$356,663 | \$356,663 | | | | |
| (2) MBE/WBE | 1,228 | \$44,787 | \$44,787 | 12.6 | 23.6 | -11.1 | 53.2 |
| (3) WBE | 441 | \$14,416 | \$14,416 | 4.0 | 11.6 | -7.5 | 34.9 |
| (4) MBE | 787 | \$30,371 | \$30,371 | 8.5 | 12.0 | -3.5 | 70.7 |
| (5) African American-owned | 71 | \$2,560 | \$2,560 | 0.7 | 3.2 | -2.4 | 22.8 |
| (6) Total Asian American-owned | 519 | \$19,718 | \$19,718 | 5.5 | 6.1 | -0.6 | 90.9 |
| (7) Asian-Pacific American-owned | 171 | \$3,181 | \$3,181 | 0.9 | 2.6 | -1.7 | 34.9 |
| (8) Subcontinent Asian American-owned | 348 | \$16,537 | \$16,537 | 4.6 | 3.5 | 1.1 | 131.6 |
| (9) Hispanic American-owned | 71 | \$6,657 | \$6,657 | 1.9 | 1.8 | 0.0 | 101.5 |
| (10) Native American-owned | 126 | \$1,437 | \$1,437 | 0.4 | 1.0 | -0.6 | 41.5 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 73 | \$6,573 | \$6,573 | 1.8 | | | |
| (13) Certified woman-owned | 25 | \$955 | \$955 | 0.3 | | | |
| (14) Certified minority-owned | 48 | \$5,618 | \$5,618 | 1.6 | | | |
| (15) Certified African American-owned | 10 | \$282 | \$282 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 5 | \$183 | \$183 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 14 | \$1,759 | \$1,759 | 0.5 | | | |
| (18) Certified Hispanic American-owned | 19 | \$3,394 | \$3,394 | 1.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-229.
Agency: INDOT
Funding: State-funded contracts
Type: Goods
Region: Central Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,718 | \$79,397 | \$79,397 | | | | |
| (2) MBE/WBE | 368 | \$30,071 | \$30,071 | 37.9 | 11.9 | 26.0 | 200+ |
| (3) WBE | 76 | \$1,688 | \$1,688 | 2.1 | 8.4 | -6.2 | 25.4 |
| (4) MBE | 292 | \$28,383 | \$28,383 | 35.7 | 3.5 | 32.2 | 200+ |
| (5) African American-owned | 213 | \$26,274 | \$26,293 | 33.1 | 1.7 | 31.4 | 200+ |
| (6) Total Asian American-owned | 10 | \$656 | \$656 | 0.8 | 0.3 | 0.6 | 200+ |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (8) Subcontinent Asian American-owned | 10 | \$656 | \$656 | 0.8 | 0.0 | 0.8 | 200+ |
| (9) Hispanic American-owned | 67 | \$1,433 | \$1,434 | 1.8 | 1.4 | 0.4 | 129.7 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 2 | \$21 | | | | | |
| (12) Certified | 200 | \$23,002 | \$23,002 | 29.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 200 | \$23,002 | \$23,002 | 29.0 | | | |
| (15) Certified African American-owned | 200 | \$23,002 | \$23,002 | 29.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-230.
Agency: INDOT
Funding: State-funded contracts
Type: Support services
Region: Central Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 286 | \$9,211 | \$9,211 | | | | |
| (2) MBE/WBE | 3 | \$51 | \$51 | 0.6 | 29.4 | -28.8 | 1.9 |
| (3) WBE | 2 | \$26 | \$26 | 0.3 | 24.6 | -24.4 | 1.1 |
| (4) MBE | 1 | \$25 | \$25 | 0.3 | 4.7 | -4.4 | 5.8 |
| (5) African American-owned | 1 | \$25 | \$25 | 0.3 | 2.9 | -2.6 | 9.4 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-231.
Agency: INDOT
Funding: State-funded contracts
Type: All
Region: South Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,057 | \$282,059 | \$282,059 | | | | |
| (2) MBE/WBE | 192 | \$32,259 | \$32,259 | 11.4 | 9.1 | 2.3 | 125.6 |
| (3) WBE | 129 | \$14,709 | \$14,709 | 5.2 | 6.2 | -1.0 | 83.9 |
| (4) MBE | 63 | \$17,549 | \$17,549 | 6.2 | 2.9 | 3.3 | 200+ |
| (5) African American-owned | 33 | \$11,999 | \$13,311 | 4.7 | 0.9 | 3.8 | 200+ |
| (6) Total Asian American-owned | 10 | \$778 | \$864 | 0.3 | 0.4 | -0.1 | 78.2 |
| (7) Asian-Pacific American-owned | 7 | \$745 | \$826 | 0.3 | 0.3 | 0.0 | 111.4 |
| (8) Subcontinent Asian American-owned | 3 | \$33 | \$37 | 0.0 | 0.1 | -0.1 | 10.2 |
| (9) Hispanic American-owned | 3 | \$839 | \$931 | 0.3 | 0.2 | 0.1 | 182.0 |
| (10) Native American-owned | 11 | \$2,203 | \$2,444 | 0.9 | 1.4 | -0.6 | 61.1 |
| (11) Unknown MBE | 6 | \$1,729 | | | | | |
| (12) Certified | 77 | \$17,546 | \$17,546 | 6.2 | | | |
| (13) Certified woman-owned | 55 | \$8,421 | \$8,421 | 3.0 | | | |
| (14) Certified minority-owned | 22 | \$9,125 | \$9,125 | 3.2 | | | |
| (15) Certified African American-owned | 17 | \$8,092 | \$8,092 | 2.9 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$179 | \$179 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$15 | \$15 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$839 | \$839 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-232.
Agency: INDOT
Funding: State-funded contracts
Type: Construction
Region: South Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 799 | \$263,246 | \$263,246 | | | | |
| (2) MBE/WBE | 152 | \$24,113 | \$24,113 | 9.2 | 8.9 | 0.2 | 102.4 |
| (3) WBE | 112 | \$14,266 | \$14,266 | 5.4 | 6.1 | -0.7 | 88.2 |
| (4) MBE | 40 | \$9,847 | \$9,847 | 3.7 | 2.8 | 0.9 | 133.3 |
| (5) African American-owned | 15 | \$4,348 | \$5,275 | 2.0 | 0.8 | 1.2 | 200+ |
| (6) Total Asian American-owned | 6 | \$735 | \$892 | 0.3 | 0.4 | 0.0 | 94.9 |
| (7) Asian-Pacific American-owned | 5 | \$720 | \$874 | 0.3 | 0.2 | 0.1 | 133.6 |
| (8) Subcontinent Asian American-owned | 1 | \$15 | \$18 | 0.0 | 0.1 | -0.1 | 6.4 |
| (9) Hispanic American-owned | 3 | \$839 | \$1,018 | 0.4 | 0.1 | 0.3 | 200+ |
| (10) Native American-owned | 10 | \$2,195 | \$2,663 | 1.0 | 1.5 | -0.5 | 67.4 |
| (11) Unknown MBE | 6 | \$1,729 | | | | | |
| (12) Certified | 65 | \$12,042 | \$12,042 | 4.6 | | | |
| (13) Certified woman-owned | 55 | \$8,421 | \$8,421 | 3.2 | | | |
| (14) Certified minority-owned | 10 | \$3,621 | \$3,621 | 1.4 | | | |
| (15) Certified African American-owned | 5 | \$2,588 | \$2,588 | 1.0 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$179 | \$179 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$15 | \$15 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$839 | \$839 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-233.
Agency: INDOT
Funding: State-funded contracts
Type: Professional services
Region: South Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 44 | \$2,836 | \$2,836 | | | | |
| (2) MBE/WBE | 8 | \$130 | \$130 | 4.6 | 24.1 | -19.5 | 19.0 |
| (3) WBE | 3 | \$79 | \$79 | 2.8 | 12.9 | -10.2 | 21.6 |
| (4) MBE | 5 | \$51 | \$51 | 1.8 | 11.2 | -9.4 | 16.1 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 3.7 | -3.7 | 0.0 |
| (6) Total Asian American-owned | 4 | \$43 | \$43 | 1.5 | 5.7 | -4.2 | 26.7 |
| (7) Asian-Pacific American-owned | 2 | \$25 | \$25 | 0.9 | 3.0 | -2.1 | 28.9 |
| (8) Subcontinent Asian American-owned | 2 | \$18 | \$18 | 0.6 | 2.7 | -2.0 | 24.3 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.2 | -1.2 | 0.0 |
| (10) Native American-owned | 1 | \$8 | \$8 | 0.3 | 0.6 | -0.3 | 49.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-234.
Agency: INDOT
Funding: State-funded contracts
Type: Goods
Region: South Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 207 | \$14,315 | \$14,315 | | | | |
| (2) MBE/WBE | 32 | \$8,015 | \$8,015 | 56.0 | 6.3 | 49.7 | 200+ |
| (3) WBE | 14 | \$364 | \$364 | 2.5 | 3.4 | -0.9 | 74.4 |
| (4) MBE | 18 | \$7,651 | \$7,651 | 53.4 | 2.9 | 50.5 | 200+ |
| (5) African American-owned | 18 | \$7,651 | \$7,651 | 53.4 | 1.4 | 52.1 | 200+ |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.3 | -1.3 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 12 | \$5,505 | \$5,505 | 38.5 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 12 | \$5,505 | \$5,505 | 38.5 | | | |
| (15) Certified African American-owned | 12 | \$5,505 | \$5,505 | 38.5 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Q-235.
Agency: INDOT
Funding: State-funded contracts
Type: Support services
Region: South Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 7 | \$1,662 | \$1,662 | | | | |
| (2) MBE/WBE | 0 | \$0 | \$0 | 0.0 | 33.1 | -33.1 | 0.0 |
| (3) WBE | 0 | \$0 | \$0 | 0.0 | 30.1 | -30.1 | 0.0 |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 3.0 | -3.0 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 2.9 | -2.9 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX R.

INDOT Summary Report

The State of Indiana commissioned BBC Research & Consulting (BBC) to conduct a disparity study as part of a periodic evaluation of its Minority and Women's Business Enterprises (MBE/WBE) Program and the Indiana Department of Transportation's (INDOT's) implementation of the Federal Disadvantaged Business Enterprise (DBE) Program.

As one of the study's primary focuses, BBC analyzed utilization of minority- and women-owned firms (MBE/WBEs) in contracts and subcontracts that INDOT awarded between July 1, 2006 and June 30, 2009 (fiscal years 2007 through 2009).¹ The study team compared MBE/WBE utilization to what those firms would be expected to receive based on their availability for specific types of INDOT work. BBC's estimates of MBE/WBE utilization and availability include data about minority- and women-owned firms regardless of whether they were MBE/WBE/DBE-certified.

Results from the study will help INDOT make decisions concerning its implementation of the Federal DBE Program, which transportation agencies throughout the country must implement in order to receive U.S. Department of Transportation (USDOT) funds.²

INDOT's summary report is organized in five parts:

- A. Establishing an overall annual DBE goal based on MBE/WBE availability;
- B. MBE/WBE utilization on INDOT contracts and subcontracts and disparity results;
- C. Marketplace conditions for MBE/WBEs;
- D. Percentage of the overall annual DBE goal that could be met through neutral means; and
- E. Specific DBE program elements and DBE groups that may be eligible.

¹ BBC defines WBEs as white women-owned firms. The rationale for doing so is presented in Chapter 5.

² See 49 CFR Part 26.

A. Establishing an Overall Annual DBE Goal Based on MBE/WBE Availability

INDOT must develop an overall annual aspirational goal for DBE participation in Federal Highway Administration (FHWA)-funded contracts. The Federal DBE Program requires a “base figure analysis” and consideration of any “step 2” adjustments.

Base figure analysis. When establishing a base figure for its overall annual goal, INDOT must consider the availability of MBE/WBEs to perform its contracts. As part of the disparity study, BBC estimated the percentage of INDOT procurement dollars that each racial/ethnic/gender group would be expected to receive based on availability for specific types, sizes and locations of INDOT prime contracts and subcontracts (MBE/WBE availability).³

BBC collected information about potentially available firms by contacting Indiana firms in the construction, professional services, goods and support services industries. More than 9,000 firms completed telephone interviews, allowing the study team to build a database of firms available for specific types of INDOT work. BBC conducted an analysis of the number of MBEs and WBEs available for each INDOT procurement and dollar-weighted the results when determining overall MBE/WBE availability for INDOT work. Chapter 5 and Appendix D explain the availability analysis in detail.

Figure R-1 presents availability estimates of “potential DBEs” for FHWA-funded procurements that INDOT awarded during the study period. “Potential DBEs” are minority- and women-owned firms that are DBE-certified or appear that they could potentially be DBE-certified based on firm revenues. Figure R-1 presents availability estimates by racial/ethnic/gender group.

Figure R-1.
Availability of potential DBEs for INDOT FHWA-funded contracts,
by race, ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) |
|-----------------------------------|---|
| African American-owned | 0.8 % |
| Asian-Pacific American-owned | 0.4 |
| Subcontinent Asian American-owned | 0.7 |
| Hispanic American-owned | 0.2 |
| Native American-owned | 0.1 |
| Total MBE | 2.2 % |
| WBE (white women-owned) | <u>8.0</u> |
| Total MBE/WBE | 10.2 % |
| Majority-owned | 89.8 |
| Total | 100.0 % |

Note: Includes certified DBEs and minority- and women-owned firms potentially certified as DBEs. Total reflects a weight of 85.5 percent for construction, 13.5 percent for professional services, 0.2 percent for goods and 0.8 percent for support services, reflecting FHWA-funded contract dollars for July 2006–June 2009.

Source: BBC Research & Consulting from 2009/2010 Availability Survey.

³ BBC uses the words “contract” and “procurement” interchangeably throughout the report.

BBC's availability analysis indicates that MBE/WBEs currently or potentially certified as DBEs would be expected to receive 10.2 percent of INDOT FHWA-funded contract dollars. INDOT should consider 10.2 percent as the base figure for its overall annual aspirational DBE goal, if the agency expects that the distribution of FHWA-funded contracts for the time period that the goal will cover will be similar to that of FHWA-funded contracts awarded during the study period.⁴

Consideration of step 2 adjustments. Per federal regulations, INDOT must consider possible adjustments to its overall annual DBE goal through a "step 2" process.⁵ BBC's analysis suggests that INDOT could consider the following options.

Option 1 – making an upward adjustment. There are reasons that INDOT might consider a higher overall annual aspirational DBE goal than the 10.2 percent base figure.

- BBC identified disparities in business ownership rates for certain MBE/WBE groups. If INDOT were to make an upward step 2 adjustment to its annual DBE goal, it might consider a figure of 13.4 percent, which reflects adjustments for disparities in business ownership rates for minorities and women (for more detail, see Chapter 17).
- Analyses of access to capital and other marketplace information also support an upward step 2 adjustment (for more detail, see Chapter 4 and Appendices E-H).

Option 2 – making a downward adjustment. BBC's independent analyses of DBE utilization indicate that the performance of DBEs on INDOT contracts in recent years is below the 10.2 percent base figure (2.5%). In accordance with 49 CFR Section 26.45, INDOT might consider an overall annual DBE goal of less than 10.2 percent.

Option 3 – making no step 2 adjustment. USDOT regulations clearly state that an agency such as INDOT is required to review a broad range of information when considering whether a step 2 adjustment is necessary. INDOT, however, is not required to make such an adjustment as long as it can explain what factors were considered and why no adjustment is warranted. After considering marketplace conditions and past DBE participation, INDOT might adopt the 10.2 percent base figure for its overall annual aspirational goal for DBE participation without making a step 2 adjustment.

⁴ The 12.4 percent availability for all MBE/WBEs for INDOT's contracts reported in Figure 5-6 of Chapter 5 is higher than the level BBC suggests as the base figure for the agency's overall annual aspirational DBE goal. BBC's calculation of the base figure excludes firms that are both currently not DBE-certified and are likely too large to meet certification requirements. For more detail, see Chapter 5.

⁵ 49 CFR Section 26.45 (d).

B. MBE/WBE Utilization on INDOT Contracts and Subcontracts and Disparity Results

For INDOT's utilization analysis, BBC examined about 22,000 procurements totaling \$5.5 billion for the three-year study period.⁶ BBC then compared MBE/WBE utilization to what those firms would be expected to receive based on their availability for INDOT contracts and subcontracts. For more detail about INDOT's utilization and disparity results, see Chapter 8.

During the study period, INDOT applied DBE contract goals to its FHWA-funded construction and professional services contracts and applied MBE/WBE contracts goals to its state-funded construction and professional services contracts. INDOT did not typically apply contract goals to its goods or support services contracts, regardless of funding source.

MBE/WBE utilization. BBC began its analyses by examining the percentage of INDOT contract and subcontract dollars that went to minority- and women-owned firms, regardless of whether they were certified as DBEs.

Overall MBE/WBE utilization. Figure R-2 presents MBE/WBE and DBE utilization on INDOT's FHWA-funded contracts, state-funded contracts and all contracts. Each bar in Figure R-2 shows the total percentage of contract dollars that went to minority- and women-owned firms across the four study industries (the percentage shown on the top of the bar). The darker shading in the bottom portion of each bar presents the percentage of contract dollars going to only those firms that were DBE-certified. The difference between DBE utilization and total MBE/WBE utilization represents utilization of MBE/WBEs that were not certified as DBEs (the lighter portion of each bar).

Figure R-2.
MBE/WBE and DBE share of prime contract/subcontract dollars for INDOT contracts, July 2006–June 2009, by funding source

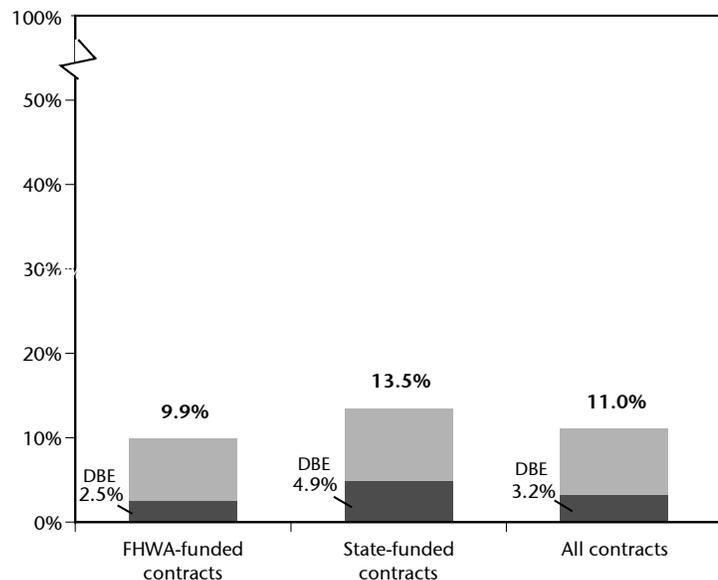
Note:

Number of contracts/subcontracts analyzed was 6,901 for FHWA-funded contracts, 14,877 for state-funded contracts and 21,778 for all contracts.

For more detail and results by group, see Figures Q-1, Q-101 and Q-201 in Appendix Q.

Source:

BBC Research & Consulting from data on INDOT contracts.



⁶ BBC began by considering more than \$7.1 billion in INDOT contracts and procurements. However, many of those procurement dollars were not analyzed as part of the study because they went to organizations that were not businesses, such as government agencies, universities and non-profit organizations. For more detail about the dollars that the study team included in the disparity study, see Chapter 3 and Appendix C.

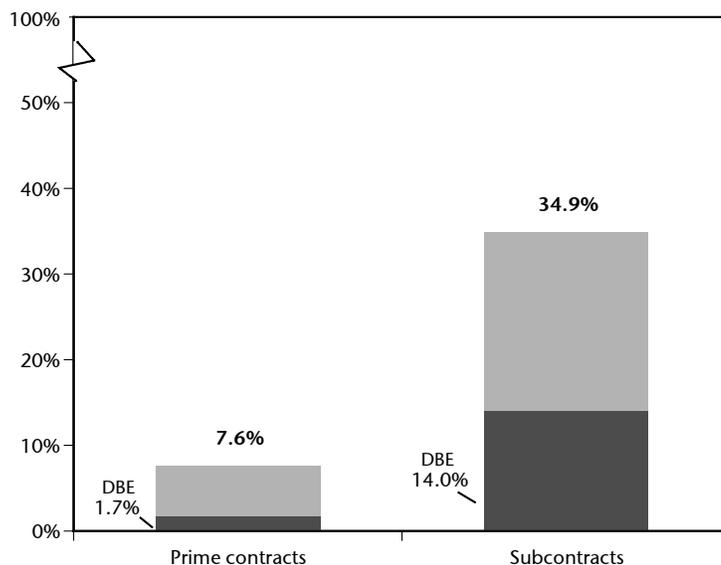
As shown in Figure R-2, MBE/WBEs received 9.9 percent of FHWA-funded contract dollars and 13.5 percent of state-funded contract dollars that INDOT awarded during the study period. INDOT applied DBE contract goals on FHWA-funded construction and professional services contracts and applied MBE/WBE contract goals on state-funded construction and professional services contracts. Construction and professional services contracts accounted for most of the contract dollars that BBC examined in the disparity study (99% of FHWA-funded contracts and 92% of state-funded contracts).

MBE/WBE utilization on prime contracts and subcontracts. Of the approximately \$5.5 billion of INDOT contracts examined in the study, BBC identified \$700 million in subcontracts. Figure R-3 presents the percent of dollars going to MBE/WBEs on INDOT prime contracts and subcontracts. MBE/WBEs received a much larger share of INDOT subcontract dollars than prime contract dollars during the study period — more than one-third of subcontract dollars went to MBE/WBEs (34.9%), compared to only 7.6 percent of prime contract dollars. The study team observed similar trends when considering FHWA- and state-funded procurements separately.

These outcomes may be largely due to DBE and MBE/WBE contract goals that INDOT set on its FHWA- and state-funded contracts, respectively. Prime contractors often meet those goals by subcontracting work to certified firms. Results in Figure R-3 indicate that INDOT’s implementation of the Federal DBE Program and the State of Indiana MBE/WBE Program may have expanded opportunities for minority- and women-owned firms to work as subcontractors.⁷

Figure R-3.
MBE/WBE and DBE share of prime contract/subcontract dollars for INDOT construction and professional services contracts, July 2006–June 2009

Note:
 Number of contracts/subcontracts analyzed was 17,435 for prime contracts and 4,343 for subcontracts.
 For more detail and results by group, see Figures Q-6 and Q-11 in Appendix Q.
 Source:
 BBC Research & Consulting from data on INDOT contracts.



⁷ Subcontracting is industry practice for many types of construction and some professional services work. Accordingly, virtually all (99%) of the subcontract dollars in Figure R-3 pertain to INDOT construction and professional services contracts.

Disparity results. Utilization results alone do not indicate whether MBE/WBEs were underutilized on INDOT contracts during the study period. To determine if MBE/WBEs were underutilized, BBC carried out disparity analyses in which the study team compared the utilization of MBE/WBEs to what those firms would be expected to receive based on their availability for INDOT contracts and subcontracts.

To help compare results between groups and across sets of contracts, BBC calculated disparity indices by dividing the utilization percentage by availability and then multiplying by 100.⁸ A disparity index of 100 indicates “parity” — that is, for a particular set of contracts, an MBE/WBE group received 100 percent of the dollars that it would be expected to receive based on availability. An index below 80 may indicate a substantial disparity.

Overall disparity results. Figure R-4 presents overall MBE/WBE disparity indices for FHWA-funded contracts, state-funded contracts and all contracts. MBE/WBEs were somewhat underutilized on INDOT FHWA-funded contracts (disparity index of 82). MBE/WBEs were not underutilized on state-funded contracts (disparity index of 101).

Figure R-4.
Disparity indices for
MBE/WBE utilization on
INDOT contracts, July
2006–June 2009, by
funding source

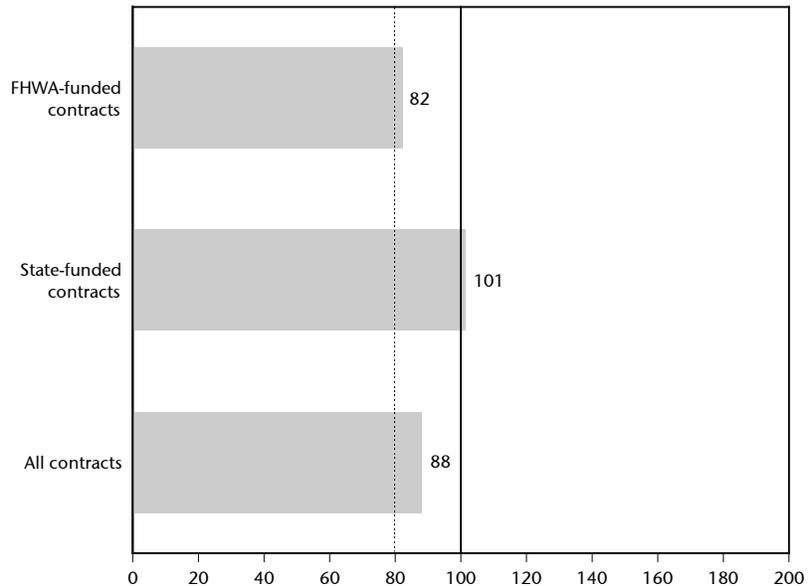
Note:

Number of contracts/subcontracts analyzed was 6,901 for FHWA-funded contracts, 14,877 for state-funded contracts and 21,778 for all contracts.

For more detail and results by group, see Figures Q-1, Q-101 and Q-201 in Appendix Q.

Source:

BBC Research & Consulting from data on INDOT contracts.



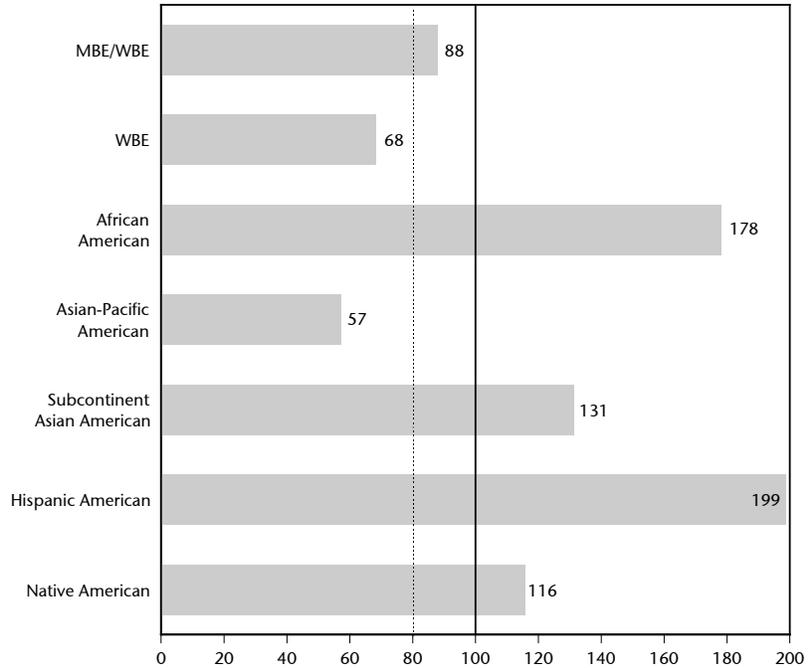
⁸ For example, if utilization of WBEs for a set of INDOT contracts was 2 percent and availability was 10 percent, the disparity index would be 20 (i.e., 2% divided by 10%, then multiplied by 100).

Results by MBE/WBE. Figure R-5 presents disparity indices by MBE/WBE group. The results in Figure R-5 include data from INDOT prime contracts and subcontracts. Two MBE/WBE groups showed substantial disparities for INDOT contracts — WBEs (disparity index of 68) and Asian-Pacific American-owned firms (disparity index of 57).⁹

Figure R-5
Disparity indices for utilization on INDOT contracts, July 2006–June 2009, by MBE/WBE group

Note:
 See Figures Q-1 in Appendix Q.

Source:
 BBC Research & Consulting from data on INDOT contracts.



Disparity results for prime contracts and subcontracts. Figure R-6 shows disparity results separately for prime contracts and subcontracts. Utilization of MBE/WBEs exceeded availability for INDOT subcontracts (disparity index of 169). In contrast, MBE/WBEs were substantially underutilized on INDOT prime contracts (disparity index of 67). These results may indicate the success of the MBE/WBE/DBE contract goals that INDOT applied to its contracts during the study period. It appears that the State of Indiana MBE/WBE Program and INDOT’s implementation of the Federal DBE Program may expand opportunities for minority- and women-owned firms through work as subcontractors.

⁹ BBC’s use of the word “substantial” in describing certain disparity indices reflects the opinion of some courts that a disparity index of less than 80 reflects a substantial disparity.

Figure R-6.
Disparity indices for
MBE/WBE utilization on
INDOT prime contracts and
subcontracts, July 2006–
June 2009

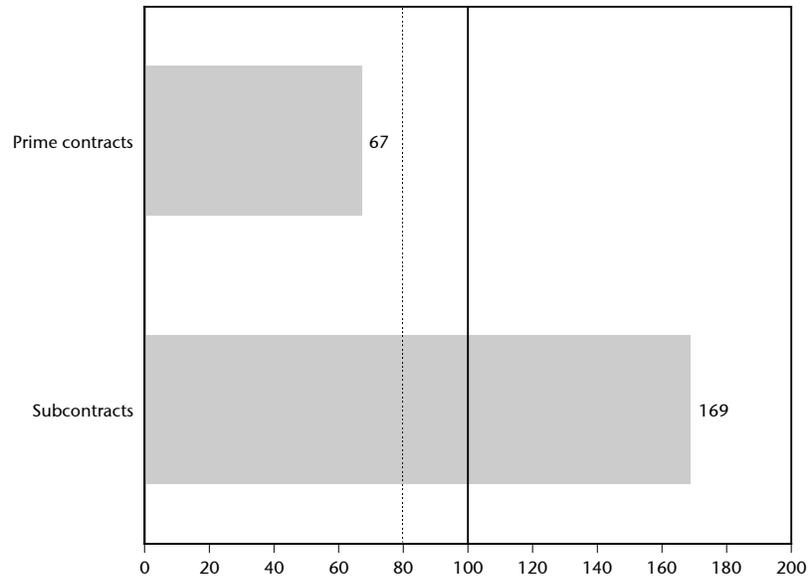
Note:

Number of contracts/subcontracts analyzed was 17,435 for prime contracts and 4,343 for subcontracts.

For more detail and results by group, see Figures Q-6 and Q-11 in Appendix Q.

Source:

BBC Research & Consulting from data on INDOT contracts.



C. Marketplace Conditions for MBE/WBEs

BBC examined whether certain barriers exist for minority- and women-owned firms in the Indiana marketplace as a whole. Barriers in the marketplace may help explain some of the disparities that BBC observed for certain MBE/WBE groups in INDOT’s construction, professional services, goods and support services contracts. BBC examined potential barriers in the Indiana marketplace in four primary areas:

1. Entry and advancement;
2. Business ownership;
3. Access to capital, bonding and insurance; and
4. Success of businesses.

Chapter 4 and Appendices E through H and Appendix J of the full report provide detailed information about marketplace conditions in Indiana.

Entry and advancement. BBC’s analyses indicated that certain minority groups and women are underrepresented in the construction, professional services, goods and support services industries in Indiana, compared to non-Hispanic whites and men, even after accounting for factors such as education. Results indicated that:

- African Americans and women exhibited relatively low representation in the Indiana construction industry compared to their representation in the entire Indiana workforce. In addition, there appeared to be barriers to advancement for minorities and women.

- There was relatively low representation of African Americans, Hispanic Americans and women in the Indiana professional services industry. Among all professional services workers, there was particularly low representation of African Americans and women in engineering- and architecture-related lines of work.
- African Americans and women exhibited relatively low representation in the Indiana goods industry compared to their representation in the entire Indiana workforce. Among goods workers, African Americans and women were also less likely than non-Hispanic whites and males to advance to supervisory and managerial positions.
- Two groups showed lower representation in the support services industry compared to their representation in all Indiana industries considered together — Asian Americans and women. Minorities and women were far less likely to advance to supervisory or managerial positions.
- During in-depth interviews and public forums that BBC held as part of the disparity study, some individuals reported stereotypical attitudes on the part of customers and buyers in Indiana as a contributor to unfavorable work environments for minorities and women. Other interviewees reported instances of racial slurs or sexist comments. Some interviewees indicated that they have not experienced difficulties associated with entry and advancement, or that certain factors — such as stereotypical attitudes — have worked to their advantage.

Business ownership. Quantitative analyses of the Indiana construction, professional services, goods and support services industries revealed statistically significant disparities in business ownership for some racial/ethnic/gender groups after accounting for various neutral factors such as age and education.

- Compared to similarly-situated non-Hispanic whites and men, there were disparities in business ownership rates for African Americans, Hispanic Americans and women working in the Indiana construction industry.
- Asian Americans and women exhibited substantial disparities in business ownership rates in the professional services industry.
- White women own goods businesses at less than two-thirds the rate of similarly-situated white men in Indiana.
- African Americans exhibited a substantial disparity in business ownership rates in the support services industry compared to similarly-situated non-Hispanic whites.

Access to capital, bonding and insurance. If race/ethnicity or gender discrimination exists in capital, bonding and insurance markets, minorities and women may have difficulty starting or expanding a business. BBC examined whether MBE/WBEs' access to capital — both from their homes and businesses — is comparable to that of majority-owned firms. In addition, BBC examined information about whether minorities and women face barriers in obtaining bonding and insurance.

- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Indiana were more likely to have their applications denied. In addition, African Americans and Hispanic Americans were approved for business loans at rates that were much lower than that of similarly-situated non-Hispanic whites.
- Several interviewees reported that business credit is difficult to obtain and indicated that race and gender discrimination affected access to business credit. There was also some information that indicated difficulties for small businesses — particularly MBE/WBEs — in obtaining bonding and insurance in Indiana. Some interviewees reported that they have not experienced difficulties associated with access to capital, bonding or insurance.

Success of businesses. BBC completed analyses that assessed whether the success of minority- and women-owned businesses differ from that of majority-owned businesses in the Indiana marketplace. The study team examined business success primarily in terms of business closures, contractions and expansions, and in terms of business receipts and earnings.

- Between 1997 and 2001, African American- and Hispanic American-owned firms in Indiana closed at higher rates than all firms considered together.¹⁰
- African-American-owned firms were less likely than other firms to expand. However, Hispanic American- and Native American-owned firms were more likely to expand than other firms.
- African American-, Hispanic American- and Native American-owned firms in Indiana were less likely than all firms considered together to experience contraction between 1997 and 2001. Asian American-owned firms were as likely as all Indiana firms considered together to experience contraction.
- African American-, Hispanic American-, Native American- and women-owned firms in Indiana earned substantially less in gross revenue than all firms considered together. The study team also developed regression models of business owner earnings in the East North Central region, which includes Indiana, based on 2000 U.S. Census data.¹¹ The models examined the impact of race/ethnicity/gender on business owner earnings after statistically controlling for neutral factors. The study team identified statistically significant disparities in business earnings for female business owners in construction,

¹⁰ These were the most recent business closure, contractions and expansion data available for Indiana at the time of the disparity study.

¹¹ This was the most current Census data source available at the time of this study.

professional services, goods and support services. There were also statistically significant disparities for African American construction business owners.

- Data from telephone interviews that BBC conducted as part of the availability analysis indicated that, across all subindustries except professional services, a larger share of majority-owned firms than of MBE/WBEs reported gross revenues of \$5 million or more.
- Several interviewees described difficulties that may affect business success for MBE/WBEs in the study industries. Interviewees discussed participation as prime- and subcontractors; unfair denial of bid opportunities and contract awards; and the existence of a “good ol’ boy” network.” Other interviewees indicated experiencing no difficulties in these areas.

D. Percentage of the Overall Annual DBE Goal that Could Be Met through Neutral Means

The Federal DBE Program requires agencies to determine whether their overall annual aspirational DBE goals can be met solely through neutral measures, or whether race- and gender-conscious measures — such as DBE contract goals — are also needed. Accordingly, agencies must project the portion of their overall annual DBE goals that could be met through neutral means and the portion for which race- and gender-conscious means might be needed. Based on 49 CFR Part 26 and related USDOT guidance, transportation agencies might consider factors including:

- Past experience of the agency in meeting its overall annual DBE goal;
- DBE participation when the agency did not apply DBE contract goals (or other race- or gender-conscious remedies); and
- The extent and effectiveness of race- and gender-neutral means that the agency could have in place for the next fiscal year.

Past experience in meeting the overall annual DBE goal. Only firms certified as DBEs at the time of the contract can be counted toward meeting the annual DBE goal. Based on BBC’s independent measurement of DBE utilization on INDOT contracts (2.5% overall DBE utilization), it appears that INDOT fell substantially short of its past overall annual DBE goal.

DBE participation in contracts for which DBE goal did not apply. The disparity results described above are pertinent to examining DBE participation on contracts to which INDOT did not apply DBE goals. During the study period, INDOT used DBE goals on its FHWA-funded construction and professional services contracts, and used State of Indiana MBE/WBE goals on its state-funded contracts for construction and professional services. However, those goals may have primarily influenced utilization of minority- and women-owned firms as subcontractors — and even then only on construction and professional services subcontracts — and may have had little or no effect on MBE/WBE utilization as prime contractors.

MBE/WBEs were substantially underutilized on prime contracts, receiving approximately two-thirds of the dollars that they would be expected to received based on availability (disparity index of 67).

MBE/WBE utilization on prime contracts within each study industry was similar to that when all prime contracts were considered together.

That information may be helpful to INDOT when estimating the portion of its overall annual DBE goal that might be met through neutral means. Chapter 17 of the full report presents a framework that INDOT might use when projecting the portion of its annual DBE goal that can be achieved through neutral means.

Neutral measures that could be in place for the next fiscal year. INDOT currently uses a broad range of measures to assist small businesses, including MBE/WBEs. Many other organizations also use small business development programs in Indiana. After reviewing contracting practices and business assistance programs that INDOT currently has in place, BBC suggests several steps that INDOT might consider to further encourage the future participation of small businesses — including MBE/WBEs — in its contracting and procurement. Some of those suggestions may require changes to existing state and administrative code.

When implementing any program focusing on minority- and women-owned firms, INDOT must ensure that it is in compliance with U.S. Supreme Court and other federal and state court decisions regarding such programs.¹² For a review of relevant court decisions, see Chapter 2 and Appendix B

Expand use of small business set-asides and preferences. Indiana state code allows state agencies to solicit bids or quotes only from businesses that qualify as small businesses for certain goods and support services contracts. In addition, state code allows state agencies to use price preferences for small businesses bidding on certain goods and support services contracts. INDOT and other state agencies might consider expanding this program to include certain construction and professional services contracts. These types of neutral measures are also allowable under the Federal DBE Program.

Increase competitive opportunities for small contracts. INDOT might consider increasing the number of small contracts that it awards by segmenting large contracts into multiple, smaller contract elements. Encouraging bid opportunities on small contracts might increase the likelihood of small businesses — including MBE/WBEs — to compete for them. BBC's analyses indicated that INDOT showed higher MBE/WBE utilization on small contracts than on all contracts (see Chapter 8).

Insurance and bonding requirements. INDOT might consider reviewing its insurance and bonding requirements to ensure that they do not act as barriers to smaller and newer firms. BBC's analyses of the Indiana marketplace indicated that certain MBE/WBE groups may face barriers in obtaining insurance and bonding and that those barriers may lead to reduced participation in state contracting (see Chapter 4).

Finance, bonding and insurance assistance. BBC's analyses identified disparities in access to capital, bonding and insurance for certain MBE/WBE groups. INDOT offers some technical assistance related to obtaining finance, bonding and insurance, but it might also consider exploring ways to better connect its contractors and consultants with programs offered by local public and private organizations.

¹² *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995). See Appendix B for more detail about related case law.

Technical assistance and mentoring. INDOT offers many technical assistance programs in various business areas, such as managing financial resources, developing a business plan and doing business with state agencies. INDOT might consider partnering with local organizations to offer further technical assistance and training. For example, some agencies in other states host a construction management school that staff members from a local construction firm teach. INDOT might consider partnering with a large construction firm or other organizations to host similar construction management or general business management courses.

Outreach and advocacy, including notification of bid opportunities. INDOT hosts and participates in many outreach and advocacy events that include information about marketing, the DBE certification process, doing business with the State of Indiana and available bid opportunities. Some firms interviewed as part of the disparity study complimented INDOT on its outreach and advocacy efforts in the Indiana marketplace (see Appendix J for specific comments). INDOT might consider broadening its outreach and advocacy efforts to include more partnerships with local trade organizations and other public agencies.

Expand MBE/WBE outreach and assistance measures, and data collection, to include uncertified firms. INDOT might consider expanding the neutral measures it uses to include minority- and women-owned firms that are not currently DBE-certified. BBC's analyses indicate that a large portion of INDOT's MBE/WBE utilization occurred with firms that were not certified as DBEs or MBE/WBEs. Further cultivating relationships with those firms could help encourage MBE/WBE participation of minority- and women-owned firms in INDOT contracting.

E. Specific DBE Program Elements and DBE Groups that May Be Eligible

INDOT must determine whether it will continue to apply DBE contract goals to FHWA-funded contracts, and, if so, to what types of contracts. Although certain stronger race- and gender-conscious measures are permissible in the Federal DBE Program under extreme circumstances, they might not be appropriate for INDOT at this time.

In addition, if INDOT continues to apply DBE contract goals, it must decide whether all DBE groups or only certain DBE groups would be included in meeting contract goals. INDOT would need to request a waiver from USDOT if it were to implement a program in which only underutilized DBEs (UDBEs) were eligible to meet DBE contract goals. Several departments of transportation in other states have obtained waivers that allow them to implement DBE contract goals for which only UDBEs are eligible. INDOT should review disparity results for its contracts, results for state educational institutions (which typically do not apply MBE/WBE contract goals), and marketplace conditions when making these decisions.

APPENDIX S.
Ball State University Disparity Tables

Figure S-1.
Agency: Ball State University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,318 | \$227,403 | \$227,403 | | | | |
| (2) MBE/WBE | 418 | \$30,328 | \$30,328 | 13.3 | 16.3 | -3.0 | 81.8 |
| (3) WBE | 336 | \$23,048 | \$23,048 | 10.1 | 7.1 | 3.0 | 142.0 |
| (4) MBE | 82 | \$7,280 | \$7,280 | 3.2 | 9.2 | -6.0 | 35.0 |
| (5) African American-owned | 26 | \$1,724 | \$1,769 | 0.8 | 4.5 | -3.8 | 17.1 |
| (6) Total Asian American-owned | 23 | \$3,967 | \$4,071 | 1.8 | 3.7 | -1.9 | 48.6 |
| (7) Asian-Pacific American-owned | 21 | \$498 | \$511 | 0.2 | 0.8 | -0.6 | 27.2 |
| (8) Subcontinent Asian American-owned | 2 | \$3,469 | \$3,560 | 1.6 | 2.9 | -1.3 | 54.7 |
| (9) Hispanic American-owned | 19 | \$1,191 | \$1,222 | 0.5 | 0.7 | -0.1 | 79.0 |
| (10) Native American-owned | 1 | \$211 | \$217 | 0.1 | 0.2 | -0.1 | 44.3 |
| (11) Unknown MBE | 13 | \$187 | | | | | |
| (12) Certified | 223 | \$19,292 | \$19,292 | 8.5 | | | |
| (13) Certified woman-owned | 176 | \$13,309 | \$13,309 | 5.9 | | | |
| (14) Certified minority-owned | 47 | \$5,983 | \$5,983 | 2.6 | | | |
| (15) Certified African American-owned | 21 | \$1,641 | \$1,641 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 11 | \$353 | \$353 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$3,469 | \$3,469 | 1.5 | | | |
| (18) Certified Hispanic American-owned | 12 | \$308 | \$308 | 0.1 | | | |
| (19) Certified Native American-owned | 1 | \$211 | \$211 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-2.
Agency: Ball State University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 715 | \$155,443 | \$155,443 | | | | |
| (2) MBE/WBE | 76 | \$12,139 | \$12,139 | 7.8 | 12.3 | -4.5 | 63.3 |
| (3) WBE | 54 | \$7,332 | \$7,332 | 4.7 | 3.7 | 1.0 | 128.2 |
| (4) MBE | 22 | \$4,807 | \$4,807 | 3.1 | 8.7 | -5.6 | 35.7 |
| (5) African American-owned | 8 | \$337 | \$337 | 0.2 | 4.5 | -4.3 | 4.8 |
| (6) Total Asian American-owned | 2 | \$3,469 | \$3,469 | 2.2 | 3.8 | -1.6 | 58.5 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 2 | \$3,469 | \$3,469 | 2.2 | 3.6 | -1.4 | 62.2 |
| (9) Hispanic American-owned | 11 | \$789 | \$789 | 0.5 | 0.1 | 0.4 | 200+ |
| (10) Native American-owned | 1 | \$211 | \$211 | 0.1 | 0.2 | 0.0 | 78.3 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 29 | \$6,665 | \$6,665 | 4.3 | | | |
| (13) Certified woman-owned | 10 | \$2,423 | \$2,423 | 1.6 | | | |
| (14) Certified minority-owned | 19 | \$4,242 | \$4,242 | 2.7 | | | |
| (15) Certified African American-owned | 7 | \$283 | \$283 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$3,469 | \$3,469 | 2.2 | | | |
| (18) Certified Hispanic American-owned | 9 | \$279 | \$279 | 0.2 | | | |
| (19) Certified Native American-owned | 1 | \$211 | \$211 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-3.
Agency: Ball State University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 682 | \$40,181 | \$40,181 | | | | |
| (2) MBE/WBE | 189 | \$13,191 | \$13,191 | 32.8 | 23.8 | 9.1 | 138.2 |
| (3) WBE | 162 | \$11,453 | \$11,453 | 28.5 | 13.3 | 15.2 | 200+ |
| (4) MBE | 27 | \$1,739 | \$1,739 | 4.3 | 10.5 | -6.2 | 41.3 |
| (5) African American-owned | 6 | \$1,258 | \$1,264 | 3.1 | 4.8 | -1.7 | 65.0 |
| (6) Total Asian American-owned | 20 | \$473 | \$475 | 1.2 | 4.4 | -3.2 | 27.0 |
| (7) Asian-Pacific American-owned | 20 | \$473 | \$475 | 1.2 | 2.2 | -1.0 | 54.9 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 2.2 | -2.2 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 1 | \$7 | | | | | |
| (12) Certified | 129 | \$11,241 | \$11,241 | 28.0 | | | |
| (13) Certified woman-owned | 113 | \$9,654 | \$9,654 | 24.0 | | | |
| (14) Certified minority-owned | 16 | \$1,587 | \$1,587 | 3.9 | | | |
| (15) Certified African American-owned | 6 | \$1,258 | \$1,258 | 3.1 | | | |
| (16) Certified Asian-Pacific American-owned | 10 | \$328 | \$328 | 0.8 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-4.
Agency: Ball State University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 824 | \$30,215 | \$30,215 | | | | |
| (2) MBE/WBE | 123 | \$4,651 | \$4,651 | 15.4 | 25.9 | -10.5 | 59.4 |
| (3) WBE | 98 | \$3,979 | \$3,979 | 13.2 | 15.8 | -2.7 | 83.2 |
| (4) MBE | 25 | \$671 | \$671 | 2.2 | 10.1 | -7.8 | 22.1 |
| (5) African American-owned | 12 | \$128 | \$155 | 0.5 | 4.5 | -3.9 | 11.5 |
| (6) Total Asian American-owned | 1 | \$25 | \$30 | 0.1 | 2.3 | -2.2 | 4.4 |
| (7) Asian-Pacific American-owned | 1 | \$25 | \$30 | 0.1 | 2.1 | -2.0 | 4.7 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 8 | \$402 | \$486 | 1.6 | 3.4 | -1.8 | 47.8 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (11) Unknown MBE | 4 | \$116 | | | | | |
| (12) Certified | 53 | \$1,271 | \$1,271 | 4.2 | | | |
| (13) Certified woman-owned | 41 | \$1,117 | \$1,117 | 3.7 | | | |
| (14) Certified minority-owned | 12 | \$154 | \$154 | 0.5 | | | |
| (15) Certified African American-owned | 8 | \$99 | \$99 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$25 | \$25 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$29 | \$29 | 0.1 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-5.
Agency: Ball State University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 97 | \$1,564 | \$1,564 | | | | |
| (2) MBE/WBE | 30 | \$347 | \$347 | 22.2 | 32.3 | -10.1 | 68.7 |
| (3) WBE | 22 | \$284 | \$284 | 18.2 | 25.6 | -7.4 | 71.0 |
| (4) MBE | 8 | \$63 | \$63 | 4.0 | 6.7 | -2.7 | 60.0 |
| (5) African American-owned | 0 | | | | 2.8 | | |
| (6) Total Asian American-owned | 0 | | | | 0.6 | | |
| (7) Asian-Pacific American-owned | 0 | | | | 0.5 | | |
| (8) Subcontinent Asian American-owned | 0 | | | | 0.0 | | |
| (9) Hispanic American-owned | 0 | | | | 1.9 | | |
| (10) Native American-owned | 0 | | | | 1.4 | | |
| (11) Unknown MBE | 8 | \$63 | | | | | |
| (12) Certified | 12 | \$115 | \$115 | 7.4 | | | |
| (13) Certified woman-owned | 12 | \$115 | \$115 | 7.4 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-6.
Agency: Ball State University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,172 | \$190,276 | \$190,276 | | | | |
| (2) MBE/WBE | 390 | \$22,156 | \$22,156 | 11.6 | 17.0 | -5.3 | 68.7 |
| (3) WBE | 318 | \$19,837 | \$19,837 | 10.4 | 7.1 | 3.3 | 146.8 |
| (4) MBE | 72 | \$2,319 | \$2,319 | 1.2 | 9.9 | -8.6 | 12.4 |
| (5) African American-owned | 19 | \$444 | \$483 | 0.3 | 4.9 | -4.7 | 5.2 |
| (6) Total Asian American-owned | 21 | \$498 | \$541 | 0.3 | 4.0 | -3.7 | 7.1 |
| (7) Asian-Pacific American-owned | 21 | \$498 | \$541 | 0.3 | 0.8 | -0.5 | 36.1 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 3.2 | -3.2 | 0.0 |
| (9) Hispanic American-owned | 19 | \$1,191 | \$1,295 | 0.7 | 0.7 | 0.0 | 96.2 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (11) Unknown MBE | 13 | \$187 | | | | | |
| (12) Certified | 208 | \$13,013 | \$13,013 | 6.8 | | | |
| (13) Certified woman-owned | 171 | \$11,991 | \$11,991 | 6.3 | | | |
| (14) Certified minority-owned | 37 | \$1,022 | \$1,022 | 0.5 | | | |
| (15) Certified African American-owned | 14 | \$361 | \$361 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 11 | \$353 | \$353 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 12 | \$308 | \$308 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-7.
Agency: Ball State University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 583 | \$120,149 | \$120,149 | | | | |
| (2) MBE/WBE | 51 | \$4,987 | \$4,987 | 4.2 | 12.4 | -8.2 | 33.5 |
| (3) WBE | 37 | \$4,129 | \$4,129 | 3.4 | 2.7 | 0.8 | 129.6 |
| (4) MBE | 14 | \$858 | \$858 | 0.7 | 9.7 | -9.0 | 7.3 |
| (5) African American-owned | 3 | \$69 | \$69 | 0.1 | 5.0 | -5.0 | 1.1 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 4.5 | -4.5 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 4.4 | -4.4 | 0.0 |
| (9) Hispanic American-owned | 11 | \$789 | \$789 | 0.7 | 0.1 | 0.6 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 17 | \$1,406 | \$1,406 | 1.2 | | | |
| (13) Certified woman-owned | 6 | \$1,112 | \$1,112 | 0.9 | | | |
| (14) Certified minority-owned | 11 | \$293 | \$293 | 0.2 | | | |
| (15) Certified African American-owned | 2 | \$15 | \$15 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 9 | \$279 | \$279 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-8.
Agency: Ball State University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 668 | \$38,348 | \$38,348 | | | | |
| (2) MBE/WBE | 186 | \$12,171 | \$12,171 | 31.7 | 23.6 | 8.1 | 134.3 |
| (3) WBE | 161 | \$11,445 | \$11,445 | 29.8 | 13.4 | 16.4 | 200+ |
| (4) MBE | 25 | \$727 | \$727 | 1.9 | 10.2 | -8.3 | 18.5 |
| (5) African American-owned | 4 | \$247 | \$249 | 0.6 | 4.9 | -4.3 | 13.1 |
| (6) Total Asian American-owned | 20 | \$473 | \$478 | 1.2 | 4.1 | -2.9 | 30.2 |
| (7) Asian-Pacific American-owned | 20 | \$473 | \$478 | 1.2 | 2.1 | -0.8 | 59.9 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 2.0 | -2.0 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 1 | \$7 | | | | | |
| (12) Certified | 126 | \$10,221 | \$10,221 | 26.7 | | | |
| (13) Certified woman-owned | 112 | \$9,646 | \$9,646 | 25.2 | | | |
| (14) Certified minority-owned | 14 | \$575 | \$575 | 1.5 | | | |
| (15) Certified African American-owned | 4 | \$247 | \$247 | 0.6 | | | |
| (16) Certified Asian-Pacific American-owned | 10 | \$328 | \$328 | 0.9 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-9.
Agency: Ball State University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 824 | \$30,215 | \$30,215 | | | | |
| (2) MBE/WBE | 123 | \$4,651 | \$4,651 | 15.4 | 25.9 | -10.5 | 59.4 |
| (3) WBE | 98 | \$3,979 | \$3,979 | 13.2 | 15.8 | -2.7 | 83.2 |
| (4) MBE | 25 | \$671 | \$671 | 2.2 | 10.1 | -7.8 | 22.1 |
| (5) African American-owned | 12 | \$128 | \$155 | 0.5 | 4.5 | -3.9 | 11.5 |
| (6) Total Asian American-owned | 1 | \$25 | \$30 | 0.1 | 2.3 | -2.2 | 4.4 |
| (7) Asian-Pacific American-owned | 1 | \$25 | \$30 | 0.1 | 2.1 | -2.0 | 4.7 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 8 | \$402 | \$486 | 1.6 | 3.4 | -1.8 | 47.8 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (11) Unknown MBE | 4 | \$116 | | | | | |
| (12) Certified | 53 | \$1,271 | \$1,271 | 4.2 | | | |
| (13) Certified woman-owned | 41 | \$1,117 | \$1,117 | 3.7 | | | |
| (14) Certified minority-owned | 12 | \$154 | \$154 | 0.5 | | | |
| (15) Certified African American-owned | 8 | \$99 | \$99 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$25 | \$25 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$29 | \$29 | 0.1 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-10.
Agency: Ball State University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 97 | \$1,564 | \$1,564 | | | | |
| (2) MBE/WBE | 30 | \$347 | \$347 | 22.2 | 32.3 | -10.1 | 68.7 |
| (3) WBE | 22 | \$284 | \$284 | 18.2 | 25.6 | -7.4 | 71.0 |
| (4) MBE | 8 | \$63 | \$63 | 4.0 | 6.7 | -2.7 | 60.0 |
| (5) African American-owned | 0 | | | | 2.8 | | |
| (6) Total Asian American-owned | 0 | | | | 0.6 | | |
| (7) Asian-Pacific American-owned | 0 | | | | 0.5 | | |
| (8) Subcontinent Asian American-owned | 0 | | | | 0.0 | | |
| (9) Hispanic American-owned | 0 | | | | 1.9 | | |
| (10) Native American-owned | 0 | | | | 1.4 | | |
| (11) Unknown MBE | 8 | \$63 | | | | | |
| (12) Certified | 12 | \$115 | \$115 | 7.4 | | | |
| (13) Certified woman-owned | 12 | \$115 | \$115 | 7.4 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-11.
Agency: Ball State University
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 146 | \$37,127 | \$37,127 | | | | |
| (2) MBE/WBE | 28 | \$8,172 | \$8,172 | 22.0 | 12.9 | 9.1 | 170.7 |
| (3) WBE | 18 | \$3,211 | \$3,211 | 8.6 | 7.3 | 1.3 | 117.9 |
| (4) MBE | 10 | \$4,961 | \$4,961 | 13.4 | 5.6 | 7.8 | 200+ |
| (5) African American-owned | 7 | \$1,280 | \$1,280 | 3.4 | 2.6 | 0.8 | 131.2 |
| (6) Total Asian American-owned | 2 | \$3,469 | \$3,469 | 9.3 | 2.0 | 7.3 | 200+ |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 2 | \$3,469 | \$3,469 | 9.3 | 1.0 | 8.3 | 200+ |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (10) Native American-owned | 1 | \$211 | \$211 | 0.6 | 0.3 | 0.3 | 188.2 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 15 | \$6,279 | \$6,279 | 16.9 | | | |
| (13) Certified woman-owned | 5 | \$1,318 | \$1,318 | 3.6 | | | |
| (14) Certified minority-owned | 10 | \$4,961 | \$4,961 | 13.4 | | | |
| (15) Certified African American-owned | 7 | \$1,280 | \$1,280 | 3.4 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$3,469 | \$3,469 | 9.3 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 1 | \$211 | \$211 | 0.6 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-12.
Agency: Ball State University
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 132 | \$35,294 | \$35,294 | | | | |
| (2) MBE/WBE | 25 | \$7,152 | \$7,152 | 20.3 | 12.2 | 8.1 | 166.0 |
| (3) WBE | 17 | \$3,203 | \$3,203 | 9.1 | 7.2 | 1.9 | 126.4 |
| (4) MBE | 8 | \$3,949 | \$3,949 | 11.2 | 5.0 | 6.2 | 200+ |
| (5) African American-owned | 5 | \$269 | \$269 | 0.8 | 2.6 | -1.9 | 28.9 |
| (6) Total Asian American-owned | 2 | \$3,469 | \$3,469 | 9.8 | 1.7 | 8.2 | 200+ |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (8) Subcontinent Asian American-owned | 2 | \$3,469 | \$3,469 | 9.8 | 0.8 | 9.0 | 200+ |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.4 | -0.4 | 0.0 |
| (10) Native American-owned | 1 | \$211 | \$211 | 0.6 | 0.3 | 0.3 | 200+ |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 12 | \$5,259 | \$5,259 | 14.9 | | | |
| (13) Certified woman-owned | 4 | \$1,310 | \$1,310 | 3.7 | | | |
| (14) Certified minority-owned | 8 | \$3,949 | \$3,949 | 11.2 | | | |
| (15) Certified African American-owned | 5 | \$269 | \$269 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$3,469 | \$3,469 | 9.8 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 1 | \$211 | \$211 | 0.6 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-13.
Agency: Ball State University
Funding: All
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 14 | \$1,833 | \$1,833 | | | | |
| (2) MBE/WBE | 3 | \$1,020 | \$1,020 | 55.6 | 26.2 | 29.4 | 200+ |
| (3) WBE | 1 | \$8 | \$8 | 0.4 | 10.4 | -10.0 | 4.3 |
| (4) MBE | 2 | \$1,012 | \$1,012 | 55.2 | 15.8 | 39.4 | 200+ |
| (5) African American-owned | 2 | \$1,012 | \$1,012 | 55.2 | 2.5 | 52.7 | 200+ |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 9.5 | -9.5 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 3.6 | -3.6 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 5.8 | -5.8 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 2.7 | -2.7 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.1 | -1.1 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 3 | \$1,020 | \$1,020 | 55.6 | | | |
| (13) Certified woman-owned | 1 | \$8 | \$8 | 0.4 | | | |
| (14) Certified minority-owned | 2 | \$1,012 | \$1,012 | 55.2 | | | |
| (15) Certified African American-owned | 2 | \$1,012 | \$1,012 | 55.2 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-16.
Agency: Ball State University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,046 | \$42,745 | \$42,745 | | | | |
| (2) MBE/WBE | 365 | \$8,577 | \$8,577 | 20.1 | 23.8 | -3.8 | 84.2 |
| (3) WBE | 295 | \$6,922 | \$6,922 | 16.2 | 15.7 | 0.5 | 103.0 |
| (4) MBE | 70 | \$1,655 | \$1,655 | 3.9 | 8.1 | -4.2 | 47.7 |
| (5) African American-owned | 19 | \$444 | \$500 | 1.2 | 4.5 | -3.3 | 26.0 |
| (6) Total Asian American-owned | 21 | \$498 | \$561 | 1.3 | 1.7 | -0.4 | 75.7 |
| (7) Asian-Pacific American-owned | 21 | \$498 | \$561 | 1.3 | 1.1 | 0.2 | 117.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (9) Hispanic American-owned | 17 | \$527 | \$594 | 1.4 | 1.4 | 0.0 | 99.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.4 | -0.4 | 0.0 |
| (11) Unknown MBE | 13 | \$187 | | | | | |
| (12) Certified | 198 | \$5,152 | \$5,152 | 12.1 | | | |
| (13) Certified woman-owned | 161 | \$4,130 | \$4,130 | 9.7 | | | |
| (14) Certified minority-owned | 37 | \$1,022 | \$1,022 | 2.4 | | | |
| (15) Certified African American-owned | 14 | \$361 | \$361 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 11 | \$353 | \$353 | 0.8 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 12 | \$308 | \$308 | 0.7 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-17.
Agency: Ball State University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 530 | \$10,019 | \$10,019 | | | | |
| (2) MBE/WBE | 45 | \$1,023 | \$1,023 | 10.2 | 17.2 | -7.0 | 59.4 |
| (3) WBE | 32 | \$653 | \$653 | 6.5 | 12.0 | -5.5 | 54.4 |
| (4) MBE | 13 | \$370 | \$370 | 3.7 | 5.2 | -1.5 | 70.7 |
| (5) African American-owned | 3 | \$69 | \$69 | 0.7 | 3.4 | -2.7 | 20.3 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.4 | -0.4 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (9) Hispanic American-owned | 10 | \$301 | \$301 | 3.0 | 0.4 | 2.6 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.1 | -1.1 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 15 | \$530 | \$530 | 5.3 | | | |
| (13) Certified woman-owned | 4 | \$236 | \$236 | 2.4 | | | |
| (14) Certified minority-owned | 11 | \$293 | \$293 | 2.9 | | | |
| (15) Certified African American-owned | 2 | \$15 | \$15 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 9 | \$279 | \$279 | 2.8 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-18.
Agency: Ball State University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 625 | \$15,033 | \$15,033 | | | | |
| (2) MBE/WBE | 175 | \$4,357 | \$4,357 | 29.0 | 21.7 | 7.3 | 133.4 |
| (3) WBE | 150 | \$3,630 | \$3,630 | 24.1 | 13.9 | 10.3 | 174.2 |
| (4) MBE | 25 | \$727 | \$727 | 4.8 | 7.9 | -3.0 | 61.5 |
| (5) African American-owned | 4 | \$247 | \$249 | 1.7 | 3.5 | -1.8 | 47.7 |
| (6) Total Asian American-owned | 20 | \$473 | \$478 | 3.2 | 2.9 | 0.3 | 109.9 |
| (7) Asian-Pacific American-owned | 20 | \$473 | \$478 | 3.2 | 1.5 | 1.6 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (11) Unknown MBE | 1 | \$7 | | | | | |
| (12) Certified | 118 | \$3,236 | \$3,236 | 21.5 | | | |
| (13) Certified woman-owned | 104 | \$2,662 | \$2,662 | 17.7 | | | |
| (14) Certified minority-owned | 14 | \$575 | \$575 | 3.8 | | | |
| (15) Certified African American-owned | 4 | \$247 | \$247 | 1.6 | | | |
| (16) Certified Asian-Pacific American-owned | 10 | \$328 | \$328 | 2.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-19.
Agency: Ball State University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 795 | \$16,314 | \$16,314 | | | | |
| (2) MBE/WBE | 115 | \$2,850 | \$2,850 | 17.5 | 29.0 | -11.5 | 60.3 |
| (3) WBE | 91 | \$2,355 | \$2,355 | 14.4 | 18.7 | -4.3 | 77.1 |
| (4) MBE | 24 | \$496 | \$496 | 3.0 | 10.3 | -7.2 | 29.6 |
| (5) African American-owned | 12 | \$128 | \$168 | 1.0 | 6.2 | -5.2 | 16.5 |
| (6) Total Asian American-owned | 1 | \$25 | \$33 | 0.2 | 1.6 | -1.4 | 12.5 |
| (7) Asian-Pacific American-owned | 1 | \$25 | \$33 | 0.2 | 1.4 | -1.2 | 14.5 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (9) Hispanic American-owned | 7 | \$226 | \$295 | 1.8 | 2.4 | -0.6 | 74.4 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (11) Unknown MBE | 4 | \$116 | | | | | |
| (12) Certified | 53 | \$1,271 | \$1,271 | 7.8 | | | |
| (13) Certified woman-owned | 41 | \$1,117 | \$1,117 | 6.8 | | | |
| (14) Certified minority-owned | 12 | \$154 | \$154 | 0.9 | | | |
| (15) Certified African American-owned | 8 | \$99 | \$99 | 0.6 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$25 | \$25 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$29 | \$29 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure S-20.
Agency: Ball State University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 96 | \$1,379 | \$1,379 | | | | |
| (2) MBE/WBE | 30 | \$347 | \$347 | 25.1 | 34.3 | -9.1 | 73.4 |
| (3) WBE | 22 | \$284 | \$284 | 20.6 | 27.8 | -7.3 | 73.9 |
| (4) MBE | 8 | \$63 | \$63 | 4.6 | 6.4 | -1.9 | 70.9 |
| (5) African American-owned | 0 | | | | 3.2 | | |
| (6) Total Asian American-owned | 0 | | | | 0.6 | | |
| (7) Asian-Pacific American-owned | 0 | | | | 0.6 | | |
| (8) Subcontinent Asian American-owned | 0 | | | | 0.0 | | |
| (9) Hispanic American-owned | 0 | | | | 1.6 | | |
| (10) Native American-owned | 0 | | | | 1.0 | | |
| (11) Unknown MBE | 8 | \$63 | | | | | |
| (12) Certified | 12 | \$115 | \$115 | 8.3 | | | |
| (13) Certified woman-owned | 12 | \$115 | \$115 | 8.3 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX T.

BSU Summary Report

The State of Indiana commissioned BBC Research & Consulting (BBC) to conduct a disparity study as part of a periodic evaluation of its Minority and Women's Business Enterprises (MBE/WBE) Program. BBC analyzed participation of minority- and women-owned firms — regardless of whether they were certified as such with the State of Indiana — in contracts and subcontracts Ball State University (BSU) awarded between July 1, 2006 and June 30, 2009 (fiscal years 2007 through 2009).¹ The study team then compared MBE/WBE utilization to what those firms would be expected to receive based on their availability for specific types of BSU work.

BSU's summary report is organized in five parts:

- A. Availability of MBE/WBEs for BSU contracts and subcontracts²;
- B. Utilization of MBE/WBEs on BSU contracts and subcontracts;
- C. Disparity analyses and results;
- D. Marketplace conditions for MBE/WBEs; and
- E. Options for improving MBE/WBEs' access to BSU contracting opportunities.

A. Availability of MBE/WBEs for BSU Contracts and Subcontracts

In the disparity analysis, the study team compared the percentage of BSU contract dollars going to each racial/ethnic/gender group (MBE/WBE utilization) to the percentage of dollars that each group would be expected to receive based on availability for specific types, sizes and locations of BSU prime contracts and subcontracts (MBE/WBE availability).

BBC collected information about potentially available firms by contacting Indiana businesses in the local construction, professional services, goods and support services industries. More than 9,000 firms completed telephone interviews, allowing the study team to build a database of firms available for specific types of BSU work. BBC conducted a sophisticated analysis of the number of MBEs and WBEs available for each BSU contract and subcontract and dollar-weighted the results when determining overall availability for BSU work. Chapter 5 and Appendix D of the full report explain the availability analysis in detail.

¹ BBC defines WBEs as white women-owned firms. The rationale for doing so is presented in Chapter 5 of the full disparity study report.

² BBC uses the words "contract" and "procurement" interchangeably throughout the report.

Figure T-1 presents the availability of MBE/WBE firms for BSU procurements by racial/ethnic/gender group. As shown in Figure T-1, MBE/WBE firms might be expected to receive about 16 percent of BSU contract dollars given their availability for specific types, sizes and locations of BSU prime contracts and subcontracts during the study period. This “availability benchmark” reflects dollar-weighted availability — it is not based on a headcount of MBE/WBEs. White women-owned firms comprise a large share of total MBE/WBE availability for BSU contracts and procurements.

Figure T-1.
Availability of firms for BSU contracts, July 2006–June 2009,
by race/ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) |
|-----------------------------------|---|
| African American-owned | 4.5 % |
| Asian-Pacific American-owned | 0.8 |
| Subcontinent Asian American-owned | 2.9 |
| Hispanic American-owned | 0.7 |
| Native American-owned | 0.2 |
| Total MBE | 9.2 % |
| WBE (white women-owned) | <u>7.1</u> |
| Total MBE/WBE | 16.3 % |
| Majority-owned | 83.7 |
| Total | 100.0 % |

Note: See Figure S-1 in Appendix S.
 Numbers may not sum perfectly due to rounding.
 Source: BBC Research & Consulting from 2009/2010 Availability Survey.

The study team found that MBE/WBE availability is highest for BSU support services contracts (32%) and lowest for construction contracts (12%). The tables in Appendix S present MBE/WBE availability for different subsets of BSU contracts and subcontracts.

B. Utilization of MBE/WBEs on BSU Contracts and Subcontracts

To determine MBE/WBE utilization on BSU contracts, BBC examined more than 2,300 contracts and subcontracts totaling \$227 million for the three-year study period. Figure T-2 examines BSU’s utilization of each MBE/WBE group (top half of the figure) and BSU’s utilization of only those firms certified as MBE/WBEs (bottom half of the figure). MBE/WBE firms received 13.3 percent of BSU contract and subcontract dollars during the study period. WBEs accounted for most of the overall MBE/WBE utilization.

Figure T-2.
Utilization of MBE/WBEs and certified MBE/WBEs for BSU contracts,
July 2006–June 2009

| Race, ethnicity and gender | Utilization % |
|-----------------------------------|----------------|
| MBE/WBEs | |
| African American-owned | 0.8 % |
| Asian-Pacific American-owned | 0.2 |
| Subcontinent Asian American-owned | 1.6 |
| Hispanic American-owned | 0.5 |
| Native American-owned | 0.1 |
| Total MBE | 3.2 % |
| WBE (white women-owned) | 10.1 |
| Total MBE/WBE | 13.3 % |
| Majority-owned | 86.7 |
| Total | 100.0 % |
| Certified MBE/WBEs | |
| African American-owned | 0.7 % |
| Asian-Pacific American-owned | 0.2 |
| Subcontinent Asian American-owned | 1.5 |
| Hispanic American-owned | 0.1 |
| Native American-owned | 0.1 |
| Total MBE certified | 2.6 % |
| WBE (white women-owned) | 5.9 |
| Total MBE/WBE certified | 8.5 % |
| Non-certified | 91.5 |
| Total | 100.0 % |

Note: See Figure S-1 in Appendix S.

Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from data on BSU contracts.

When examining BSU contract dollars by industry, MBE/WBE utilization was 7.8 percent for construction, 32.8 percent for professional services, 15.4 percent for goods and 22.2 percent for support services. For more detail about MBE/WBE utilization by study industry, see Chapter 9 and Figures S-2 through S-5 of Appendix S.

C. Disparity Analysis

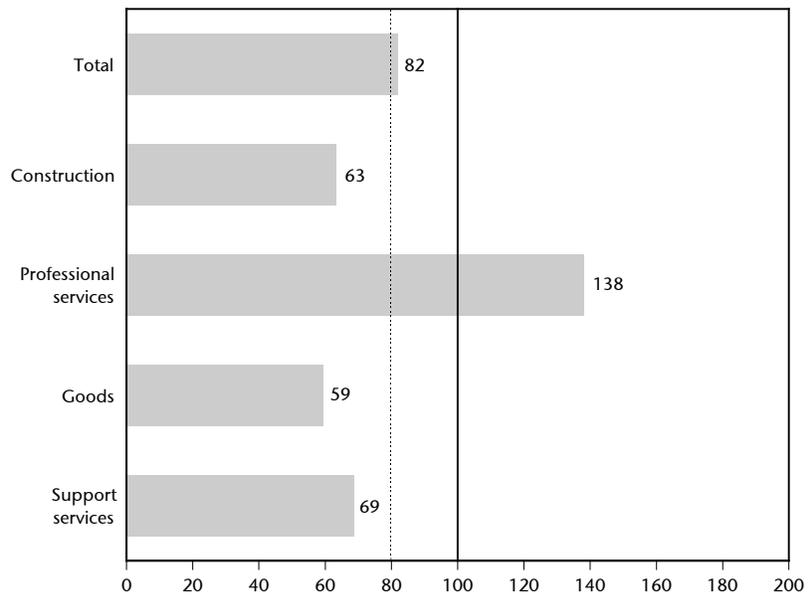
BBC compared actual utilization of MBE/WBEs on BSU contracts (as a percentage of total dollars) to the percentage of dollars that those firms might be expected to receive based on the availability analysis. To help compare results between groups and across sets of contracts, BBC calculated disparity indices by dividing the utilization percentage by availability and then multiplying by 100.³ A disparity index of 100 indicates “parity” — that is, for a particular set of contracts, an MBE/WBE group received 100 percent of the dollars that it would be expected to receive based on availability.

Results by industry. Figure T-3 presents overall MBE/WBE disparity indices for BSU contracts by study industry. The results in Figure T-3 include data from BSU prime contracts and subcontracts. Overall, MBE/WBEs considered together were underutilized on BSU contracts — they received about 80 percent of the procurement dollars that they would be expected to receive based on availability (disparity index of 82). MBE/WBEs showed substantial disparities in each study industry except for professional services (disparity index of 138).⁴

Figure T-3.
Disparity indices for
MBE/WBE utilization on
BSU contracts, July 2006–
June 2009, by study
industry

Note:
See Figures S-1 through S-5 in Appendix S.

Source:
BBC Research & Consulting from data on
BSU contracts.



³ For example, if utilization of WBEs for a set of BSU contracts was 2 percent and availability was 10 percent, the disparity index would be 20 (i.e., 2% divided by 10%, then multiplied by 100).

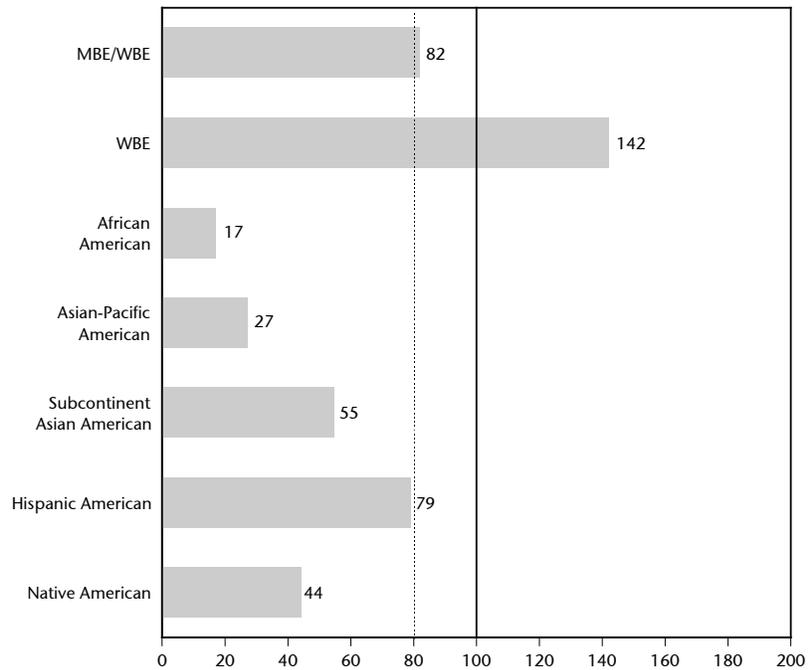
⁴ BBC’s use of the word “substantial” in describing certain disparity indices reflects the opinion of some courts that a disparity index of less than 80 reflects a substantial disparity.

Results by MBE/WBE. Figure T-4 presents disparity indices by MBE/WBE group. The results in Figure P-4 include data from BSU prime contracts and subcontracts. Every MBE group showed substantial disparities on BSU contracts and subcontracts during the study period.

Figure T-4.
Disparity indices for utilization on BSU contracts, July 2006–June 2009, by MBE/WBE group

Note:
 See Figures S-1 in Appendix S.

Source:
 BBC Research & Consulting from data on BSU contracts.

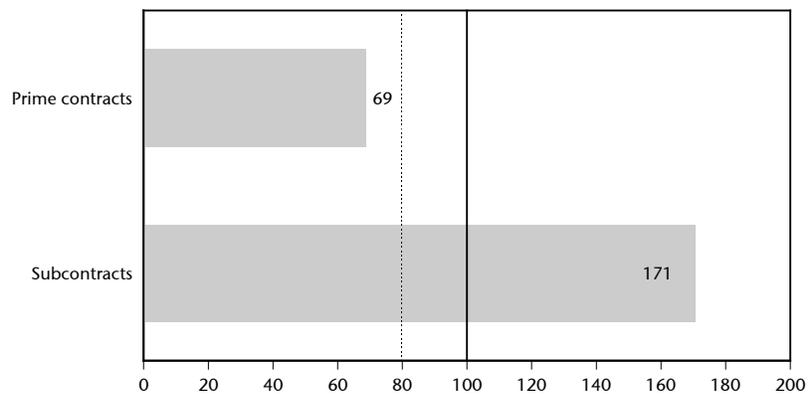


Prime contracts and subcontracts. Figure T-5 shows overall MBE/WBE disparity results for prime contracts and subcontracts. MBE/WBEs were substantially underutilized on BSU prime contracts (disparity index of 69). In contrast, MBE/WBEs showed a disparity index of 171 for BSU subcontracts.

Figure T-5.
Disparity indices for MBE/WBE utilization on BSU prime contracts and subcontracts, July 2006–June 2009

Note:
 See Figure S-6 and S-11 in Appendix S.

Source:
 BBC Research & Consulting from data on BSU contracts.



Comparison of disparity results between IDOA/INDOT and SEI contracts. The disparity study examined MBE/WBE utilization and availability for the Indiana Department of Administration (IDOA), Indiana Department of Transportation (INDOT) and seven state colleges and universities (state educational institutions or “SEIs”).

- IDOA and INDOT applied MBE/WBE contract goals to certain state-funded contracts. For federally-funded construction and professional services contracts, which represent most of INDOT’s contracting, INDOT applied Disadvantaged Business Enterprise (DBE) goals.
- SEIs did not apply MBE/WBE contract goals to their contracts or there were no consequences if prime contractors did not meet the goals (or fulfill good faith efforts).

BBC analyzed MBE/WBE disparities for IDOA and INDOT combined (the “state”) and for all SEIs combined. Although disparity results for MBE/WBEs did not differ between state contracts (disparity index of 70) and SEI contracts (disparity index of 71) when considering prime contracts and subcontracts together, disparity results differed considerably when only considering subcontracts. There were no disparities for minority- and women-owned firms on state subcontracts (disparity index of 180), but MBE/WBEs were substantially underutilized on SEI subcontracts (disparity index of 68). These results indicate that the use of MBE/WBE/DBE goals may expand opportunities for minority- and women-owned firms through work as subcontractors. For more details about these combined analyses, see Chapter 6.⁵

D. Marketplace Conditions for MBE/WBEs

BBC examined whether certain barriers exist for minority- and women-owned firms in the Indiana marketplace as a whole. Barriers in the marketplace may help explain some of the disparities that BBC observed for certain MBE/WBE groups in BSU’s construction, professional services, goods and support services procurements. BBC examined potential barriers in the Indiana marketplace in four primary areas:

1. Entry and advancement;
2. Business ownership;
3. Access to capital, bonding and insurance; and
4. Success of businesses.

Chapter 4 and Appendices E – H and Appendix J of the full report provide detailed information about marketplace conditions in Indiana.

⁵ State contracts included contracts awarded by the Indiana Stadium and Convention Building Authority (ISCBA). During the study period, ISCBA awarded contract dollars in connection with two large construction projects — building Lucas Oil Stadium and the Indiana Convention Center — using an MBE/WBE contracting program. In addition to the analyses presented here, the study team examined MBE/WBE disparity indices for state and SEI contracts after removing contract dollars awarded by ISCBA. Without ISCBA, the disparity index for MBE/WBEs was 66 for state prime contracts and subcontracts considered together and 171 for state subcontracts.

Entry and advancement. BBC's analyses indicated that certain minority groups and women are underrepresented in the construction, professional services, goods and support services industries in Indiana, compared to non-Hispanic whites and men, even after accounting for factors such as education. Results indicated that:

- African Americans and women exhibited relatively low representation in the Indiana construction industry compared to their representation in the entire Indiana workforce. In addition, there appeared to be barriers to advancement for minorities and women.
- There was relatively low representation of African Americans, Hispanic Americans and women in the Indiana professional services industry. Among all professional services workers, there was particularly low representation of African Americans and women in engineering- and architecture-related lines of work.
- African Americans and women exhibited relatively low representation in the Indiana goods industry compared to their representation in the entire Indiana workforce. Among goods workers, African Americans and women were also less likely than non-Hispanic whites and males to advance to supervisory and managerial positions.
- Two groups showed lower representation in the support services industry compared to their representation in all Indiana industries considered together — Asian Americans and women. Minorities and women were far less likely to advance to supervisory or managerial positions.
- During in-depth interviews and public forums that BBC held as part of the disparity study, some individuals reported stereotypical attitudes on the part of customers and buyers in Indiana as a contributor to unfavorable work environments for minorities and women. Other interviewees reported instances of racial slurs or sexist comments. Some interviewees indicated that they have not experienced difficulties associated with entry and advancement, or that certain factors — such as stereotypical attitudes — have worked to their advantage.

Business ownership. Quantitative analyses of the Indiana construction, professional services, goods and support services industries revealed statistically significant disparities in business ownership for some racial/ethnic/gender groups after accounting for various neutral factors such as age and education.

- Compared to similarly-situated non-Hispanic whites and men, there were disparities in business ownership rates for African Americans, Hispanic Americans and women working in the Indiana construction industry.
- Asian Americans and women exhibited substantial disparities in business ownership rates in the professional services industry.
- White women own goods businesses at less than two-thirds the rate of similarly-situated white men in Indiana.

- African Americans exhibited a substantial disparity in business ownership rates in the support services industry compared to similarly-situated non-Hispanic whites.

Access to capital, bonding and insurance. If race/ethnicity or gender discrimination exists in capital, bonding and insurance markets, minorities and women may have difficulty starting or expanding a business. BBC examined whether MBE/WBEs' access to capital — both from their homes and businesses — is comparable to that of majority-owned firms. In addition, BBC examined information about whether minorities and women face barriers in obtaining bonding and insurance.

- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Indiana were more likely to have their applications denied. In addition, African Americans and Hispanic Americans were approved for business loans at rates that were much lower than that of similarly-situated non-Hispanic whites.
- Several interviewees reported that business credit is difficult to obtain and indicated that race and gender discrimination affected access to business credit. There was also some information that indicated difficulties for small businesses — particularly MBE/WBEs — in obtaining bonding and insurance in Indiana. Other interviewees indicated that they have not experienced difficulties associated with access to capital, bonding or insurance.

Success of businesses. BBC completed analyses that assessed whether the success of minority- and women-owned businesses differ from that of majority-owned businesses in the Indiana marketplace. The study team examined business success primarily in terms of business closures, contractions and expansions, and in terms of business receipts and earnings.

- Between 1997 and 2001, African American- and Hispanic American-owned firms in Indiana closed at higher rates than all firms considered together.⁶
- African-American-owned firms were less likely than other firms to expand. However, Hispanic American- and Native American-owned firms were more likely to expand than other firms.
- African American-, Hispanic American- and Native American-owned firms in Indiana were less likely than all firms considered together to experience contraction between 1997 and 2001. Asian American-owned firms were as likely as all Indiana firms considered together to experience contraction.

⁶ These were the most recent business closure, contractions and expansion data available for Indiana at the time of the disparity study.

- African American-, Hispanic American-, Native American- and women-owned firms in Indiana earned substantially less in gross revenue than all firms considered together. The study team also developed regression models of business owner earnings in the East North Central region, which includes Indiana, based on 2000 U.S. Census data.⁷ The models examined the impact of race/ethnicity/gender on business owner earnings after statistically controlling for neutral factors. The study team identified statistically significant disparities in business earnings for female business owners in construction, professional services, goods and support services. There were also statistically significant disparities for African American construction business owners.
- Data from telephone interviews that BBC conducted as part of the availability analysis indicated that, across all subindustries except professional services, a larger share of majority-owned firms than of MBE/WBEs reported gross revenues of \$5 million or more.
- Several interviewees described difficulties that may affect business success for MBE/WBEs in the study industries. Interviewees discussed participation as prime- and subcontractors; unfair denial of bid opportunities and contract awards; and the existence of a “good ol’ boy” network.” Other interviewees indicated experiencing no difficulties in these areas.

E. Options for Improving MBE/WBEs’ Access to BSU Contracting Opportunities

After reviewing contracting practices and business assistance programs that BSU currently has in place, BBC suggests several steps that BSU might consider to further encourage the future participation of small businesses — including MBE/WBEs — in its contracting and procurement. Some of those suggestions may require changes to existing state and administrative code. When implementing any program focusing on minority- and women-owned firms, the State of Indiana and BSU must ensure that it is in compliance with U.S. Supreme Court, federal and state court decisions regarding such programs.⁸ For more detail, see Chapter 2 and Appendix B.

Increase competitive opportunities for small contracts. BSU might consider increasing the number of small contracts that it awards by segmenting large contracts into multiple, smaller contract elements. Encouraging bid opportunities on small contracts might increase the likelihood of small businesses — including MBE/WBEs — to compete for them. BBC’s analyses indicated that BSU showed higher MBE/WBE utilization on small contracts than on all contracts (see Chapter 9).

Insurance and bonding requirements. BSU might consider reviewing its insurance and bonding requirements to ensure that they do not act as barriers to smaller and newer firms. BBC’s analyses of the Indiana marketplace indicated that certain MBE/WBE groups may face barriers in obtaining insurance and bonding and that those barriers may lead to reduced participation in state contracting (see Chapter 4). BSU currently works with small and emerging businesses to help them meet insurance requirements,

⁷ This was the most current Census data source available at the time of this study.

⁸ *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995). See Appendix B for more detail about related case law.

Finance, bonding and insurance assistance. BBC's analyses identified disparities in access to capital, bonding and insurance for certain MBE/WBE groups. BSU might also consider exploring ways to better connect its contractors and consultants with programs offered by local public and private organizations related to finance, bonding and insurance.

Technical assistance and mentoring. BSU might consider partnering with local organizations to offer further technical assistance and training to small businesses, including MBE/WBEs. For example, some agencies in other states host a construction management school that staff members from a local construction firm teach. BSU might consider partnering with a large construction firm or other organizations to host similar construction management or general business management courses.

Outreach and advocacy, including notification of bid opportunities. BSU participates in many outreach and advocacy events — including hosting its own annual event — that include information about marketing, the MBE/WBE certification process, doing business with the State of Indiana and available bid opportunities. BSU might consider broadening its outreach and advocacy efforts to include more partnerships with local trade organizations and other public agencies.

Expand MBE/WBE outreach and assistance measures, and data collection, to include uncertified firms. BSU might consider expanding the measures that it uses to encourage the participation of MBE/WBE-certified firms to include minority- and women-owned firms that are not currently certified. BBC's analyses indicate that a large portion of BSU's MBE/WBE utilization occurred with firms that were not certified. Further cultivating relationships with those firms could help encourage MBE/WBE participation in BSU contracting. In addition, BSU might consider monitoring utilization of all minority- and women-owned firms as prime contractors and subcontractors, not just certified MBE/WBEs.

APPENDIX U.
Indiana State University Disparity Tables

Figure U-1.
Agency: Indiana State University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,356 | \$124,227 | \$124,227 | | | | |
| (2) MBE/WBE | 298 | \$37,027 | \$37,027 | 29.8 | 15.0 | 14.8 | 199.1 |
| (3) WBE | 192 | \$35,354 | \$35,354 | 28.5 | 8.8 | 19.6 | 200+ |
| (4) MBE | 106 | \$1,673 | \$1,673 | 1.3 | 6.1 | -4.8 | 21.9 |
| (5) African American-owned | 14 | \$151 | \$174 | 0.1 | 2.8 | -2.7 | 5.0 |
| (6) Total Asian American-owned | 79 | \$1,256 | \$1,449 | 1.2 | 1.9 | -0.8 | 60.0 |
| (7) Asian-Pacific American-owned | 71 | \$1,182 | \$1,364 | 1.1 | 0.5 | 0.6 | 200+ |
| (8) Subcontinent Asian American-owned | 7 | \$51 | \$59 | 0.0 | 1.4 | -1.4 | 3.3 |
| (9) Hispanic American-owned | 4 | \$27 | \$31 | 0.0 | 0.4 | -0.4 | 5.8 |
| (10) Native American-owned | 1 | \$17 | \$20 | 0.0 | 0.8 | -0.8 | 2.0 |
| (11) Unknown MBE | 8 | \$223 | | | | | |
| (12) Certified | 125 | \$2,434 | \$2,434 | 2.0 | | | |
| (13) Certified woman-owned | 52 | \$1,263 | \$1,263 | 1.0 | | | |
| (14) Certified minority-owned | 73 | \$1,171 | \$1,171 | 0.9 | | | |
| (15) Certified African American-owned | 11 | \$110 | \$110 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 59 | \$1,040 | \$1,040 | 0.8 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$21 | \$21 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-2.
Agency: Indiana State University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 550 | \$93,294 | \$93,294 | | | | |
| (2) MBE/WBE | 73 | \$29,521 | \$29,521 | 31.6 | 13.6 | 18.1 | 200+ |
| (3) WBE | 62 | \$29,378 | \$29,378 | 31.5 | 7.9 | 23.6 | 200+ |
| (4) MBE | 11 | \$143 | \$143 | 0.2 | 5.6 | -5.5 | 2.7 |
| (5) African American-owned | 5 | \$37 | \$111 | 0.1 | 2.7 | -2.6 | 4.4 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.6 | -1.6 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.6 | -1.6 | 0.0 |
| (9) Hispanic American-owned | 2 | \$11 | \$32 | 0.0 | 0.1 | -0.1 | 23.2 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (11) Unknown MBE | 4 | \$96 | | | | | |
| (12) Certified | 9 | \$109 | \$109 | 0.1 | | | |
| (13) Certified woman-owned | 4 | \$72 | \$72 | 0.1 | | | |
| (14) Certified minority-owned | 5 | \$37 | \$37 | 0.0 | | | |
| (15) Certified African American-owned | 5 | \$37 | \$37 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-3.
Agency: Indiana State University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 341 | \$15,505 | \$15,505 | | | | |
| (2) MBE/WBE | 113 | \$5,532 | \$5,532 | 35.7 | 24.7 | 11.0 | 144.5 |
| (3) WBE | 37 | \$4,172 | \$4,172 | 26.9 | 14.0 | 12.9 | 192.4 |
| (4) MBE | 76 | \$1,360 | \$1,360 | 8.8 | 10.7 | -1.9 | 81.9 |
| (5) African American-owned | 1 | \$35 | \$38 | 0.2 | 4.1 | -3.9 | 6.0 |
| (6) Total Asian American-owned | 72 | \$1,205 | \$1,322 | 8.5 | 4.8 | 3.7 | 177.8 |
| (7) Asian-Pacific American-owned | 71 | \$1,182 | \$1,297 | 8.4 | 2.7 | 5.7 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 2.1 | -2.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.1 | -1.1 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (11) Unknown MBE | 3 | \$120 | | | | | |
| (12) Certified | 70 | \$1,827 | \$1,827 | 11.8 | | | |
| (13) Certified woman-owned | 10 | \$752 | \$752 | 4.9 | | | |
| (14) Certified minority-owned | 60 | \$1,075 | \$1,075 | 6.9 | | | |
| (15) Certified African American-owned | 1 | \$35 | \$35 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 59 | \$1,040 | \$1,040 | 6.7 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-4.
Agency: Indiana State University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 393 | \$13,815 | \$13,815 | | | | |
| (2) MBE/WBE | 85 | \$1,228 | \$1,228 | 8.9 | 11.1 | -2.2 | 80.2 |
| (3) WBE | 67 | \$1,076 | \$1,076 | 7.8 | 7.4 | 0.4 | 105.2 |
| (4) MBE | 18 | \$152 | \$152 | 1.1 | 3.7 | -2.6 | 29.9 |
| (5) African American-owned | 8 | \$79 | \$83 | 0.6 | 1.4 | -0.8 | 43.3 |
| (6) Total Asian American-owned | 7 | \$51 | \$53 | 0.4 | 0.8 | -0.4 | 46.1 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (8) Subcontinent Asian American-owned | 7 | \$51 | \$53 | 0.4 | 0.1 | 0.3 | 200+ |
| (9) Hispanic American-owned | 2 | \$16 | \$17 | 0.1 | 1.4 | -1.3 | 8.3 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 1 | \$6 | | | | | |
| (12) Certified | 33 | \$320 | \$320 | 2.3 | | | |
| (13) Certified woman-owned | 25 | \$261 | \$261 | 1.9 | | | |
| (14) Certified minority-owned | 8 | \$59 | \$59 | 0.4 | | | |
| (15) Certified African American-owned | 5 | \$39 | \$39 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$21 | \$21 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-5.
Agency: Indiana State University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 72 | \$1,612 | \$1,612 | | | | |
| (2) MBE/WBE | 27 | \$746 | \$746 | 46.2 | 35.6 | 10.6 | 129.8 |
| (3) WBE | 26 | \$728 | \$728 | 45.2 | 24.0 | 21.2 | 188.5 |
| (4) MBE | 1 | \$17 | \$17 | 1.1 | 11.7 | -10.6 | 9.2 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 8.3 | -8.3 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.3 | -1.3 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.2 | -1.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (10) Native American-owned | 1 | \$17 | \$17 | 1.1 | 0.7 | 0.4 | 164.1 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 13 | \$179 | \$179 | 11.1 | | | |
| (13) Certified woman-owned | 13 | \$179 | \$179 | 11.1 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-6.
Agency: Indiana State University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,292 | \$120,054 | \$120,054 | | | | |
| (2) MBE/WBE | 282 | \$36,527 | \$36,527 | 30.4 | 14.8 | 15.6 | 200+ |
| (3) WBE | 177 | \$34,876 | \$34,876 | 29.1 | 8.6 | 20.4 | 200+ |
| (4) MBE | 105 | \$1,651 | \$1,651 | 1.4 | 6.1 | -4.8 | 22.4 |
| (5) African American-owned | 14 | \$151 | \$172 | 0.1 | 2.8 | -2.7 | 5.1 |
| (6) Total Asian American-owned | 79 | \$1,256 | \$1,430 | 1.2 | 2.0 | -0.8 | 60.2 |
| (7) Asian-Pacific American-owned | 71 | \$1,182 | \$1,346 | 1.1 | 0.5 | 0.6 | 200+ |
| (8) Subcontinent Asian American-owned | 7 | \$51 | \$58 | 0.0 | 1.5 | -1.4 | 3.3 |
| (9) Hispanic American-owned | 4 | \$27 | \$30 | 0.0 | 0.4 | -0.4 | 6.3 |
| (10) Native American-owned | 1 | \$17 | \$20 | 0.0 | 0.8 | -0.8 | 2.0 |
| (11) Unknown MBE | 7 | \$201 | | | | | |
| (12) Certified | 123 | \$2,379 | \$2,379 | 2.0 | | | |
| (13) Certified woman-owned | 50 | \$1,208 | \$1,208 | 1.0 | | | |
| (14) Certified minority-owned | 73 | \$1,171 | \$1,171 | 1.0 | | | |
| (15) Certified African American-owned | 11 | \$110 | \$110 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 59 | \$1,040 | \$1,040 | 0.9 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$21 | \$21 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-7.
Agency: Indiana State University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|----------------------------------|--|---|---|---|--------------------------------------|
| (1) All firms | 486 | \$89,121 | \$89,121 | | | | |
| (2) MBE/WBE | 57 | \$29,021 | \$29,021 | 32.6 | 13.3 | 19.3 | 200+ |
| (3) WBE | 47 | \$28,899 | \$28,899 | 32.4 | 7.6 | 24.8 | 200+ |
| (4) MBE | 10 | \$121 | \$121 | 0.1 | 5.6 | -5.5 | 2.4 |
| (5) African American-owned | 5 | \$37 | \$94 | 0.1 | 2.7 | -2.6 | 3.9 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.7 | -1.7 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.6 | -1.6 | 0.0 |
| (9) Hispanic American-owned | 2 | \$11 | \$27 | 0.0 | 0.1 | -0.1 | 28.5 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (11) Unknown MBE | 3 | \$74 | | | | | |
| (12) Certified | 7 | \$53 | \$53 | 0.1 | | | |
| (13) Certified woman-owned | 2 | \$17 | \$17 | 0.0 | | | |
| (14) Certified minority-owned | 5 | \$37 | \$37 | 0.0 | | | |
| (15) Certified African American-owned | 5 | \$37 | \$37 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-8.
Agency: Indiana State University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 341 | \$15,505 | \$15,505 | | | | |
| (2) MBE/WBE | 113 | \$5,532 | \$5,532 | 35.7 | 24.7 | 11.0 | 144.5 |
| (3) WBE | 37 | \$4,172 | \$4,172 | 26.9 | 14.0 | 12.9 | 192.4 |
| (4) MBE | 76 | \$1,360 | \$1,360 | 8.8 | 10.7 | -1.9 | 81.9 |
| (5) African American-owned | 1 | \$35 | \$38 | 0.2 | 4.1 | -3.9 | 6.0 |
| (6) Total Asian American-owned | 72 | \$1,205 | \$1,322 | 8.5 | 4.8 | 3.7 | 177.8 |
| (7) Asian-Pacific American-owned | 71 | \$1,182 | \$1,297 | 8.4 | 2.7 | 5.7 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 2.1 | -2.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.1 | -1.1 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (11) Unknown MBE | 3 | \$120 | | | | | |
| (12) Certified | 70 | \$1,827 | \$1,827 | 11.8 | | | |
| (13) Certified woman-owned | 10 | \$752 | \$752 | 4.9 | | | |
| (14) Certified minority-owned | 60 | \$1,075 | \$1,075 | 6.9 | | | |
| (15) Certified African American-owned | 1 | \$35 | \$35 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 59 | \$1,040 | \$1,040 | 6.7 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-9.
Agency: Indiana State University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 393 | \$13,815 | \$13,815 | | | | |
| (2) MBE/WBE | 85 | \$1,228 | \$1,228 | 8.9 | 11.1 | -2.2 | 80.2 |
| (3) WBE | 67 | \$1,076 | \$1,076 | 7.8 | 7.4 | 0.4 | 105.2 |
| (4) MBE | 18 | \$152 | \$152 | 1.1 | 3.7 | -2.6 | 29.9 |
| (5) African American-owned | 8 | \$79 | \$83 | 0.6 | 1.4 | -0.8 | 43.3 |
| (6) Total Asian American-owned | 7 | \$51 | \$53 | 0.4 | 0.8 | -0.4 | 46.1 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (8) Subcontinent Asian American-owned | 7 | \$51 | \$53 | 0.4 | 0.1 | 0.3 | 200+ |
| (9) Hispanic American-owned | 2 | \$16 | \$17 | 0.1 | 1.4 | -1.3 | 8.3 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 1 | \$6 | | | | | |
| (12) Certified | 33 | \$320 | \$320 | 2.3 | | | |
| (13) Certified woman-owned | 25 | \$261 | \$261 | 1.9 | | | |
| (14) Certified minority-owned | 8 | \$59 | \$59 | 0.4 | | | |
| (15) Certified African American-owned | 5 | \$39 | \$39 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$21 | \$21 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-10.
Agency: Indiana State University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 72 | \$1,612 | \$1,612 | | | | |
| (2) MBE/WBE | 27 | \$746 | \$746 | 46.2 | 35.6 | 10.6 | 129.8 |
| (3) WBE | 26 | \$728 | \$728 | 45.2 | 24.0 | 21.2 | 188.5 |
| (4) MBE | 1 | \$17 | \$17 | 1.1 | 11.7 | -10.6 | 9.2 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 8.3 | -8.3 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.3 | -1.3 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.2 | -1.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (10) Native American-owned | 1 | \$17 | \$17 | 1.1 | 0.7 | 0.4 | 164.1 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 13 | \$179 | \$179 | 11.1 | | | |
| (13) Certified woman-owned | 13 | \$179 | \$179 | 11.1 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-11.
Agency: Indiana State University
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 64 | \$4,173 | \$4,173 | | | | |
| (2) MBE/WBE | 16 | \$500 | \$500 | 12.0 | 20.1 | -8.1 | 59.8 |
| (3) WBE | 15 | \$478 | \$478 | 11.5 | 14.1 | -2.6 | 81.4 |
| (4) MBE | 1 | \$22 | \$22 | 0.5 | 6.0 | -5.4 | 8.8 |
| (5) African American-owned | 0 | | | | 2.5 | | |
| (6) Total Asian American-owned | 0 | | | | 0.9 | | |
| (7) Asian-Pacific American-owned | 0 | | | | 0.6 | | |
| (8) Subcontinent Asian American-owned | 0 | | | | 0.3 | | |
| (9) Hispanic American-owned | 0 | | | | 1.0 | | |
| (10) Native American-owned | 0 | | | | 0.8 | | |
| (11) Unknown MBE | 1 | \$22 | | | | | |
| (12) Certified | 2 | \$55 | \$55 | 1.3 | | | |
| (13) Certified woman-owned | 2 | \$55 | \$55 | 1.3 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-12.
Agency: Indiana State University
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 64 | \$4,173 | \$4,173 | | | | |
| (2) MBE/WBE | 16 | \$500 | \$500 | 12.0 | 20.1 | -8.1 | 59.8 |
| (3) WBE | 15 | \$478 | \$478 | 11.5 | 14.1 | -2.6 | 81.4 |
| (4) MBE | 1 | \$22 | \$22 | 0.5 | 6.0 | -5.4 | 8.8 |
| (5) African American-owned | 0 | | | | 2.5 | | |
| (6) Total Asian American-owned | 0 | | | | 0.9 | | |
| (7) Asian-Pacific American-owned | 0 | | | | 0.6 | | |
| (8) Subcontinent Asian American-owned | 0 | | | | 0.3 | | |
| (9) Hispanic American-owned | 0 | | | | 1.0 | | |
| (10) Native American-owned | 0 | | | | 0.8 | | |
| (11) Unknown MBE | 1 | \$22 | | | | | |
| (12) Certified | 2 | \$55 | \$55 | 1.3 | | | |
| (13) Certified woman-owned | 2 | \$55 | \$55 | 1.3 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-16.
Agency: Indiana State University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,216 | \$26,531 | \$26,531 | | | | |
| (2) MBE/WBE | 265 | \$4,588 | \$4,588 | 17.3 | 20.6 | -3.3 | 83.8 |
| (3) WBE | 160 | \$2,936 | \$2,936 | 11.1 | 13.7 | -2.6 | 81.1 |
| (4) MBE | 105 | \$1,651 | \$1,651 | 6.2 | 7.0 | -0.8 | 89.1 |
| (5) African American-owned | 14 | \$151 | \$172 | 0.6 | 2.9 | -2.3 | 22.2 |
| (6) Total Asian American-owned | 79 | \$1,256 | \$1,430 | 5.4 | 2.0 | 3.4 | 200+ |
| (7) Asian-Pacific American-owned | 71 | \$1,182 | \$1,346 | 5.1 | 1.3 | 3.8 | 200+ |
| (8) Subcontinent Asian American-owned | 7 | \$51 | \$58 | 0.2 | 0.7 | -0.5 | 30.5 |
| (9) Hispanic American-owned | 4 | \$27 | \$30 | 0.1 | 1.3 | -1.2 | 8.5 |
| (10) Native American-owned | 1 | \$17 | \$20 | 0.1 | 0.6 | -0.5 | 13.0 |
| (11) Unknown MBE | 7 | \$201 | | | | | |
| (12) Certified | 121 | \$1,739 | \$1,739 | 6.6 | | | |
| (13) Certified woman-owned | 48 | \$568 | \$568 | 2.1 | | | |
| (14) Certified minority-owned | 73 | \$1,171 | \$1,171 | 4.4 | | | |
| (15) Certified African American-owned | 11 | \$110 | \$110 | 0.4 | | | |
| (16) Certified Asian-Pacific American-owned | 59 | \$1,040 | \$1,040 | 3.9 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$21 | \$21 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-17.
Agency: Indiana State University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 442 | \$11,530 | \$11,530 | | | | |
| (2) MBE/WBE | 53 | \$1,044 | \$1,044 | 9.1 | 17.2 | -8.1 | 52.7 |
| (3) WBE | 43 | \$923 | \$923 | 8.0 | 12.5 | -4.5 | 63.9 |
| (4) MBE | 10 | \$121 | \$121 | 1.1 | 4.7 | -3.6 | 22.5 |
| (5) African American-owned | 5 | \$37 | \$94 | 0.8 | 2.4 | -1.6 | 33.3 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (9) Hispanic American-owned | 2 | \$11 | \$27 | 0.2 | 0.4 | -0.1 | 64.2 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (11) Unknown MBE | 3 | \$74 | | | | | |
| (12) Certified | 7 | \$53 | \$53 | 0.5 | | | |
| (13) Certified woman-owned | 2 | \$17 | \$17 | 0.1 | | | |
| (14) Certified minority-owned | 5 | \$37 | \$37 | 0.3 | | | |
| (15) Certified African American-owned | 5 | \$37 | \$37 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-18.
Agency: Indiana State University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 318 | \$7,853 | \$7,853 | | | | |
| (2) MBE/WBE | 103 | \$2,172 | \$2,172 | 27.7 | 23.0 | 4.7 | 120.4 |
| (3) WBE | 27 | \$812 | \$812 | 10.3 | 13.1 | -2.8 | 78.9 |
| (4) MBE | 76 | \$1,360 | \$1,360 | 17.3 | 9.9 | 7.5 | 175.6 |
| (5) African American-owned | 1 | \$35 | \$38 | 0.5 | 3.3 | -2.8 | 15.0 |
| (6) Total Asian American-owned | 72 | \$1,205 | \$1,322 | 16.8 | 4.7 | 12.2 | 200+ |
| (7) Asian-Pacific American-owned | 71 | \$1,182 | \$1,297 | 16.5 | 2.8 | 13.7 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.9 | -1.9 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.5 | -1.5 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (11) Unknown MBE | 3 | \$120 | | | | | |
| (12) Certified | 68 | \$1,187 | \$1,187 | 15.1 | | | |
| (13) Certified woman-owned | 8 | \$112 | \$112 | 1.4 | | | |
| (14) Certified minority-owned | 60 | \$1,075 | \$1,075 | 13.7 | | | |
| (15) Certified African American-owned | 1 | \$35 | \$35 | 0.4 | | | |
| (16) Certified Asian-Pacific American-owned | 59 | \$1,040 | \$1,040 | 13.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-19.
Agency: Indiana State University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 387 | \$6,186 | \$6,186 | | | | |
| (2) MBE/WBE | 84 | \$956 | \$956 | 15.4 | 21.9 | -6.5 | 70.5 |
| (3) WBE | 66 | \$803 | \$803 | 13.0 | 14.5 | -1.5 | 89.6 |
| (4) MBE | 18 | \$152 | \$152 | 2.5 | 7.4 | -5.0 | 33.2 |
| (5) African American-owned | 8 | \$79 | \$83 | 1.3 | 3.1 | -1.7 | 43.3 |
| (6) Total Asian American-owned | 7 | \$51 | \$53 | 0.9 | 1.5 | -0.6 | 59.1 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.2 | -1.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 7 | \$51 | \$53 | 0.9 | 0.2 | 0.6 | 200+ |
| (9) Hispanic American-owned | 2 | \$16 | \$17 | 0.3 | 2.8 | -2.5 | 9.6 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 1 | \$6 | | | | | |
| (12) Certified | 33 | \$320 | \$320 | 5.2 | | | |
| (13) Certified woman-owned | 25 | \$261 | \$261 | 4.2 | | | |
| (14) Certified minority-owned | 8 | \$59 | \$59 | 1.0 | | | |
| (15) Certified African American-owned | 5 | \$39 | \$39 | 0.6 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$21 | \$21 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure U-20.
Agency: Indiana State University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 69 | \$962 | \$962 | | | | |
| (2) MBE/WBE | 25 | \$415 | \$415 | 43.2 | 34.5 | 8.7 | 125.1 |
| (3) WBE | 24 | \$398 | \$398 | 41.4 | 26.2 | 15.2 | 158.1 |
| (4) MBE | 1 | \$17 | \$17 | 1.8 | 8.3 | -6.5 | 21.6 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 4.5 | -4.5 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.8 | -0.8 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.8 | -1.8 | 0.0 |
| (10) Native American-owned | 1 | \$17 | \$17 | 1.8 | 1.1 | 0.7 | 164.1 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 13 | \$179 | \$179 | 18.6 | | | |
| (13) Certified woman-owned | 13 | \$179 | \$179 | 18.6 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX V.

ISU Summary Report

The State of Indiana commissioned BBC Research & Consulting (BBC) to conduct a disparity study as part of a periodic evaluation of its Minority and Women's Business Enterprises (MBE/WBE) Program. BBC analyzed participation of minority- and women-owned firms — regardless of whether they were certified as such with the State of Indiana — in contracts and subcontracts Indiana State University (ISU) awarded between July 1, 2006 and June 30, 2009 (fiscal years 2007 through 2009).¹ The study team then compared MBE/WBE utilization to what those firms would be expected to receive based on their availability for specific types of ISU work.

ISU's summary report is organized in five parts:

- A. Availability of MBE/WBEs for ISU contracts and subcontracts²;
- B. Utilization of MBE/WBEs on ISU contracts and subcontracts;
- C. Disparity analyses and results;
- D. Marketplace conditions for MBE/WBEs; and
- E. Options for improving MBE/WBEs' access to ISU contracting opportunities.

A. Availability of MBE/WBEs for ISU Contracts and Subcontracts

In the disparity analysis, the study team compared the percentage of ISU contract dollars going to each racial/ethnic/gender group (MBE/WBE utilization) to the percentage of dollars that each group would be expected to receive based on availability for specific types, sizes and locations of ISU prime contracts and subcontracts (MBE/WBE availability).

BBC collected information about potentially available firms by contacting Indiana businesses in the local construction, professional services, goods and support services industries. More than 9,000 firms completed telephone interviews, allowing the study team to build a database of firms available for specific types of ISU work. BBC conducted a sophisticated analysis of the number of MBEs and WBEs available for each ISU contract and subcontract and dollar-weighted the results when determining overall availability for ISU work. Chapter 5 and Appendix D of the full report explain the availability analysis in detail.

¹ BBC defines WBEs as white women-owned firms. The rationale for doing so is presented in Chapter 5 of the full disparity study report.

² BBC uses the words "contract" and "procurement" interchangeably throughout the report.

Figure V-1 presents the availability of MBE/WBE firms for ISU procurements by racial/ethnic/gender group. As shown in Figure V-1, MBE/WBE firms might be expected to receive about 15 percent of ISU contract dollars given their availability for specific types, sizes and locations of ISU prime contracts and subcontracts during the study period. This “availability benchmark” reflects dollar-weighted availability — it is not based on a headcount of MBE/WBEs. White women-owned firms comprise a large share of total MBE/WBE availability for ISU contracts and procurements.

Figure V-1.
Availability of firms for ISU contracts, July 2006–June 2009,
by race/ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) |
|-----------------------------------|---|
| African American-owned | 2.8 % |
| Asian-Pacific American-owned | 0.5 |
| Subcontinent Asian American-owned | 1.4 |
| Hispanic American-owned | 0.4 |
| Native American-owned | 0.8 |
| Total MBE | 6.1 % |
| WBE (white women-owned) | <u>8.8</u> |
| Total MBE/WBE | 15.0 % |
| Majority-owned | 85.0 |
| Total | 100.0 % |

Note: See Figure U-1 in Appendix U.
 Numbers may not sum perfectly due to rounding.
 Source: BBC Research & Consulting from 2009/2010 Availability Survey.

The study team found that MBE/WBE availability is highest for ISU support services contracts (36%) and lowest for goods contracts (11%). The tables in Appendix U present MBE/WBE availability for different subsets of ISU contracts and subcontracts.

B. Utilization of MBE/WBEs on ISU Contracts and Subcontracts

To determine MBE/WBE utilization on ISU contracts, BBC examined more than 1,300 contracts and subcontracts totaling \$124 million for the three-year study period. Figure V-2 examines ISU’s utilization of each MBE/WBE group (top half of the figure) and ISU’s utilization of only those firms certified as MBE/WBEs (bottom half of the figure). MBE/WBE firms received 29.8 percent of ISU contract and subcontract dollars during the study period. WBEs accounted for most of the overall MBE/WBE utilization.

Figure V-2.
Utilization of MBE/WBEs and certified MBE/WBEs for ISU contracts,
July 2006–June 2009

| Race, ethnicity and gender | Utilization % |
|-----------------------------------|----------------|
| MBE/WBEs | |
| African American-owned | 0.1 % |
| Asian-Pacific American-owned | 1.1 |
| Subcontinent Asian American-owned | 0.0 |
| Hispanic American-owned | 0.0 |
| Native American-owned | 0.0 |
| Total MBE | 1.3 % |
| WBE (white women-owned) | 28.5 |
| Total MBE/WBE | 29.8 % |
| Majority-owned | 70.2 |
| Total | 100.0 % |
| Certified MBE/WBEs | |
| African American-owned | 0.1 % |
| Asian-Pacific American-owned | 0.8 |
| Subcontinent Asian American-owned | 0.0 |
| Hispanic American-owned | 0.0 |
| Native American-owned | 0.0 |
| Total MBE certified | 0.9 % |
| WBE (white women-owned) | 1.0 |
| Total MBE/WBE certified | 2.0 % |
| Non-certified | 98.0 |
| Total | 100.0 % |

Note: See Figure U-1 in Appendix U.
 Numbers may not sum perfectly due to rounding.
 Source: BBC Research & Consulting from data on ISU contracts.

When examining ISU contract dollars by industry, MBE/WBE utilization was 31.6 percent for construction, 35.7 percent for professional services, 8.9 percent for goods and 46.2 percent for support services. For more detail about MBE/WBE utilization by study industry, see Chapter 10 and Figures U-2 through U-5 of Appendix U.

C. Disparity Analysis

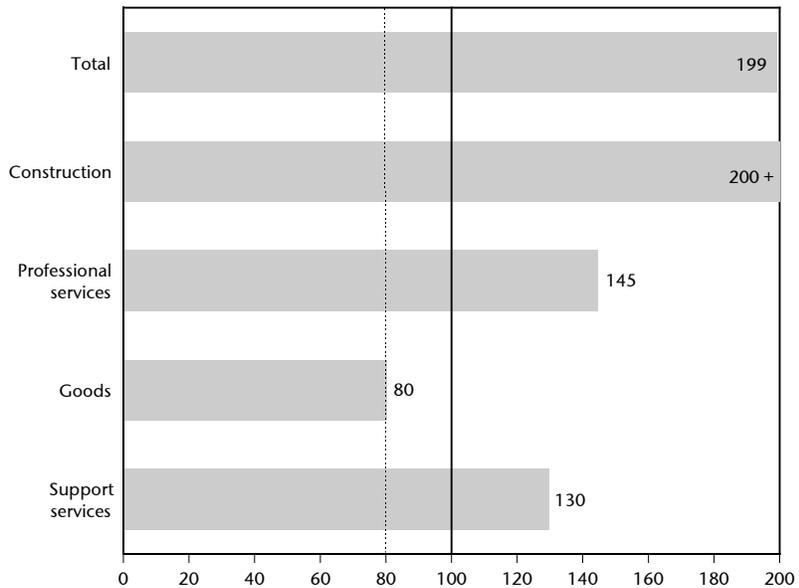
BBC compared actual utilization of MBE/WBEs on ISU contracts (as a percentage of total dollars) to the percentage of dollars that those firms might be expected to receive based on the availability analysis. To help compare results between groups and across sets of contracts, BBC calculated disparity indices by dividing the utilization percentage by availability and then multiplying by 100.³ A disparity index of 100 indicates “parity” — that is, for a particular set of contracts, an MBE/WBE group received 100 percent of the dollars that it would be expected to receive based on availability.

Results by industry. Figure V-3 presents overall MBE/WBE disparity indices for ISU contracts by study industry. The results in Figure V-3 include data from ISU prime contracts and subcontracts. Overall, MBE/WBE utilization exceeded availability on ISU contracts (disparity index of 199). MBE/WBEs showed a disparity only for goods contracts (disparity index of 80).

Figure V-3.
Disparity indices for
MBE/WBE utilization on ISU
contracts, July 2006–June
2009, by study industry

Note:
 See Figures U-1 through U-5 in Appendix U.

Source:
 BBC Research & Consulting from data on
 ISU contracts.



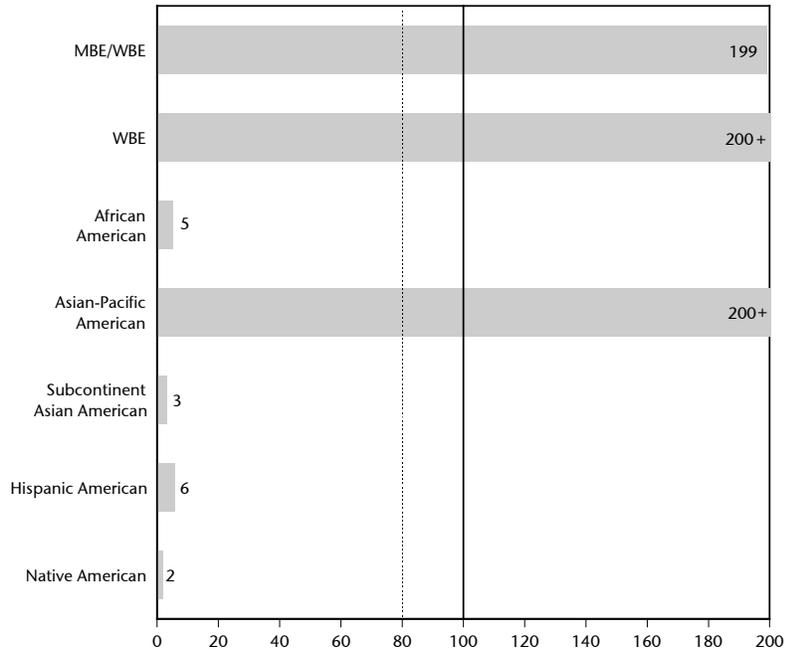
³ For example, if utilization of WBEs for a set of ISU contracts was 2 percent and availability was 10 percent, the disparity index would be 20 (i.e., 2% divided by 10%, then multiplied by 100).

Results by MBE/WBE. Figure V-4 presents disparity indices by MBE/WBE group. The results in Figure V-4 include data from ISU prime contracts and subcontracts. Despite overall MBE/WBE utilization far exceeding availability for ISU contracts, only two groups did not show substantial disparities — WBEs (disparity index greater than 200) and Asian-Pacific-owned firms (disparity index greater than 200).⁴

Figure V-4.
Disparity indices for utilization on ISU contracts, July 2006–June 2009, by MBE/WBE group

Note:
 See Figures U-1 in Appendix U.

Source:
 BBC Research & Consulting from data on BSU contracts.



Prime contracts and subcontracts. Figure V-5 shows overall MBE/WBE disparity results for prime contracts and subcontracts. MBE/WBE utilization exceeded availability on ISU prime contracts (disparity index greater than 200). In contrast, MBE/WBEs showed a substantial disparity for ISU subcontracts (disparity index of 60).

Those results are very different from BBC’s analysis of Indiana Department of Administration (IDOA) and Indiana Department of Transportation (INDOT) contracts, to which MBE/WBE and DBE contract goals are sometimes applied. As discussed in Chapter 7 for IDOA and Chapter 8 for INDOT, overall, MBE/WBEs were not underutilized on IDOA and INDOT subcontracts. The difference in results may be due in part to the absence of MBE/WBE contract goals on ISU contracts during the study period.⁵

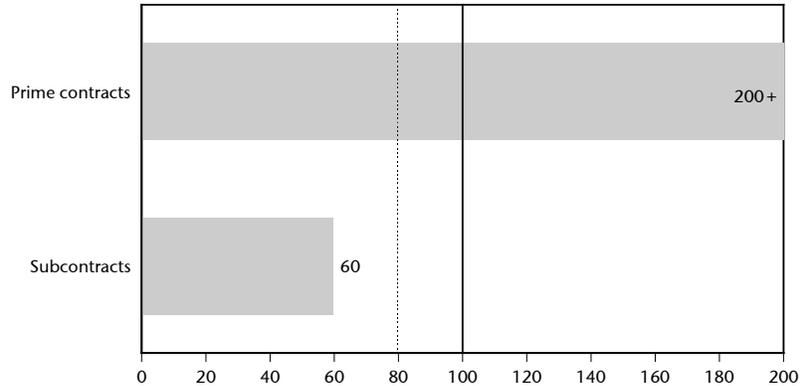
⁴ BBC’s use of the word “substantial” in describing certain disparity indices reflects the opinion of some courts that a disparity index of less than 80 reflects a substantial disparity.

⁵ As of March 2010, ISU began using a 5 percent MBE subcontracting goal and a 5 percent WBE subcontracting goal on its construction contracts, consistent with the goals that IDOA and INDOT use as part of the State of Indiana MBE/WBE program. However, there are no consequences for prime contractors who fail to meet ISU goals or fail to fulfill good faith efforts.

Figure V-5.
Disparity indices for
MBE/WBE utilization on ISU
prime contracts and
subcontracts, July 2006–
June 2009

Note:
 See Figure U-6 and U-11 in Appendix U.

Source:
 BBC Research & Consulting from data on
 ISU contracts.



Comparison of disparity results between IDOA/INDOT and SEI contracts. The disparity study examined MBE/WBE utilization and availability for IDOA, INDOT and seven state colleges and universities (state educational institutions or “SEIs”).

- IDOA and INDOT applied MBE/WBE contract goals to certain state-funded contracts. For federally-funded construction and professional services contracts, which represent most of INDOT’s contracting, INDOT applied Disadvantaged Business Enterprise (DBE) goals.
- SEIs did not apply MBE/WBE contract goals to their contracts or there were no consequences if prime contractors did not meet the goals (or fulfill good faith efforts).

BBC analyzed MBE/WBE disparities for IDOA and INDOT combined (the “state”) and for all SEIs combined. Although disparity results for MBE/WBEs did not differ between state contracts (disparity index of 70) and SEI contracts (disparity index of 71) when considering prime contracts and subcontracts together, disparity results differed considerably when only considering subcontracts. There were no disparities for minority- and women-owned firms on state subcontracts (disparity index of 180), but MBE/WBEs were substantially underutilized on SEI subcontracts (disparity index of 68). These results indicate that the use of MBE/WBE/DBE goals may expand opportunities for minority- and women-owned firms through work as subcontractors. For more details about these combined analyses, see Chapter 6.⁶

⁶ State contracts included contracts awarded by the Indiana Stadium and Convention Building Authority (ISCBA). During the study period, ISCBA awarded contract dollars in connection with two large construction projects — building Lucas Oil Stadium and the Indiana Convention Center — using an MBE/WBE contracting program. In addition to the analyses presented here, the study team examined MBE/WBE disparity indices for state and SEI contracts after removing contract dollars awarded by ISCBA. Without ISCBA, the disparity index for MBE/WBEs was 66 for state prime contracts and subcontracts considered together and 171 for state subcontracts.

D. Marketplace Conditions for MBE/WBEs

BBC examined whether certain barriers exist for minority- and women-owned firms in the Indiana marketplace as a whole. Barriers in the marketplace may help explain some of the disparities that BBC observed for certain MBE/WBE groups in ISU's construction, professional services, goods and support services procurements. BBC examined potential barriers in the Indiana marketplace in four primary areas:

1. Entry and advancement;
2. Business ownership;
3. Access to capital, bonding and insurance; and
4. Success of businesses.

Chapter 4 and Appendices E – H and Appendix J of the full report provide detailed information about marketplace conditions in Indiana.

Entry and advancement. BBC's analyses indicated that certain minority groups and women are underrepresented in the construction, professional services, goods and support services industries in Indiana, compared to non-Hispanic whites and men, even after accounting for factors such as education. Results indicated that:

- African Americans and women exhibited relatively low representation in the Indiana construction industry compared to their representation in the entire Indiana workforce. In addition, there appeared to be barriers to advancement for minorities and women.
- There was relatively low representation of African Americans, Hispanic Americans and women in the Indiana professional services industry. Among all professional services workers, there was particularly low representation of African Americans and women in engineering- and architecture-related lines of work.
- African Americans and women exhibited relatively low representation in the Indiana goods industry compared to their representation in the entire Indiana workforce. Among goods workers, African Americans and women were also less likely than non-Hispanic whites and males to advance to supervisory and managerial positions.
- Two groups showed lower representation in the support services industry compared to their representation in all Indiana industries considered together — Asian Americans and women. Minorities and women were far less likely to advance to supervisory or managerial positions.

- During in-depth interviews and public forums that BBC held as part of the disparity study, some individuals reported stereotypical attitudes on the part of customers and buyers in Indiana as a contributor to unfavorable work environments for minorities and women. Other interviewees reported instances of racial slurs or sexist comments. Some interviewees indicated that they have not experienced difficulties associated with entry and advancement, or that certain factors — such as stereotypical attitudes — have worked to their advantage.

Business ownership. Quantitative analyses of the Indiana construction, professional services, goods and support services industries revealed statistically significant disparities in business ownership for some racial/ethnic/gender groups after accounting for various neutral factors such as age and education.

- Compared to similarly-situated non-Hispanic whites and men, there were disparities in business ownership rates for African Americans, Hispanic Americans and women working in the Indiana construction industry.
- Asian Americans and women exhibited substantial disparities in business ownership rates in the professional services industry.
- White women own goods businesses at less than two-thirds the rate of similarly-situated white men in Indiana.
- African Americans exhibited a substantial disparity in business ownership rates in the support services industry compared to similarly-situated non-Hispanic whites.

Access to capital, bonding and insurance. If race/ethnicity or gender discrimination exists in capital, bonding and insurance markets, minorities and women may have difficulty starting or expanding a business. BBC examined whether MBE/WBEs' access to capital — both from their homes and businesses — is comparable to that of majority-owned firms. In addition, BBC examined information about whether minorities and women face barriers in obtaining bonding and insurance.

- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Indiana were more likely to have their applications denied. In addition, African Americans and Hispanic Americans were approved for business loans at rates that were much lower than that of similarly-situated non-Hispanic whites.
- Several interviewees reported that business credit is difficult to obtain and indicated that race and gender discrimination affected access to business credit. There was also some information that indicated difficulties for small businesses — particularly MBE/WBEs — in obtaining bonding and insurance in Indiana. Other interviewees indicated that they have not experienced difficulties associated with access to capital, bonding or insurance.

Success of businesses. BBC completed analyses that assessed whether the success of minority- and women-owned businesses differ from that of majority-owned businesses in the Indiana marketplace. The study team examined business success primarily in terms of business closures, contractions and expansions, and in terms of business receipts and earnings.

- Between 1997 and 2001, African American- and Hispanic American-owned firms in Indiana closed at higher rates than all firms considered together.⁷
- African-American-owned firms were less likely than other firms to expand. However, Hispanic American- and Native American-owned firms were more likely to expand than other firms.
- African American-, Hispanic American- and Native American-owned firms in Indiana were less likely than all firms considered together to experience contraction between 1997 and 2001. Asian American-owned firms were as likely as all Indiana firms considered together to experience contraction.
- African American-, Hispanic American-, Native American- and women-owned firms in Indiana earned substantially less in gross revenue than all firms considered together. The study team also developed regression models of business owner earnings in the East North Central region, which includes Indiana, based on 2000 U.S. Census data.⁸ The models examined the impact of race/ethnicity/gender on business owner earnings after statistically controlling for neutral factors. The study team identified statistically significant disparities in business earnings for female business owners in construction, professional services, goods and support services. There were also statistically significant disparities for African American construction business owners.
- Data from telephone interviews that BBC conducted as part of the availability analysis indicated that, across all subindustries except professional services, a larger share of majority-owned firms than of MBE/WBEs reported gross revenues of \$5 million or more.
- Several interviewees described difficulties that may affect business success for MBE/WBEs in the study industries. Interviewees discussed participation as prime- and subcontractors; unfair denial of bid opportunities and contract awards; and the existence of a “good ol’ boy” network.” Other interviewees indicated experiencing no difficulties in these areas.

⁷ These were the most recent business closure, contractions and expansion data available for Indiana at the time of the disparity study.

⁸ This was the most current Census data source available at the time of this study.

E. Options for Improving MBE/WBEs' Access to ISU Contracting Opportunities

After reviewing contracting practices and business assistance programs that ISU currently has in place, BBC suggests several steps that ISU might consider to further encourage the future participation of small businesses — including MBE/WBEs — in its contracting and procurement. Some of those suggestions may require changes to existing state and administrative code. When implementing any program focusing on minority- and women-owned firms, the State of Indiana and ISU must ensure that it is in compliance with U.S. Supreme Court, federal and state court decisions regarding such programs.⁹ For more detail, see Chapter 2 and Appendix B.

Increase competitive opportunities for small contracts. ISU might consider increasing the number of small contracts that it awards by segmenting large contracts into multiple, smaller contract elements. Encouraging bid opportunities on small contracts might increase the likelihood of small businesses — including MBE/WBEs — to compete for them.

Insurance and bonding requirements. ISU might consider reviewing its insurance and bonding requirements to ensure that they do not act as barriers to smaller and newer firms. BBC's analyses of the Indiana marketplace indicated that certain MBE/WBE groups may face barriers in obtaining insurance and bonding and that those barriers may lead to reduced participation in state contracting (see Chapter 4). ISU currently works with small and emerging businesses to reduce bonding requirements on certain projects.

Finance, bonding and insurance assistance. BBC's analyses identified disparities in access to capital, bonding and insurance for certain MBE/WBE groups. ISU might consider exploring ways to better connect its contractors and consultants with programs offered by local public and private organizations related to those business areas.

Technical assistance and mentoring. ISU might consider partnering with local organizations to offer further technical assistance and training to small businesses, including MBE/WBEs. For example, some agencies in other states host a construction management school that staff members from a local construction firm teach. ISU might consider partnering with a large construction firm or other organizations to host similar construction management or general business management courses.

Outreach and advocacy, including notification of bid opportunities. ISU participates in many outreach and advocacy events that include information about marketing, the MBE/WBE certification process, doing business with the State of Indiana and available bid opportunities. ISU might consider broadening its outreach and advocacy efforts to include more partnerships with local trade organizations and other public agencies.

⁹ *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995). See Appendix B for more detail about related case law.

Expand MBE/WBE outreach and assistance measures, and data collection, to include uncertified firms. ISU might consider expanding the measures that it uses to encourage the participation of MBE/WBE-certified firms to include minority- and women-owned firms that are not currently certified. BBC's analyses indicate that a large portion of ISU's MBE/WBE utilization occurred with firms that were not certified. Further cultivating relationships with those firms could help encourage MBE/WBE participation in ISU contracting. In addition, ISU might consider monitoring utilization of all minority- and women-owned firms as prime contractors and subcontractors, not just certified MBE/WBEs.

APPENDIX W.
Indiana University Disparity Tables

Figure W-1.
Agency: Indiana University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 11,251 | \$726,033 | \$726,033 | | | | |
| (2) MBE/WBE | 2,375 | \$84,686 | \$84,686 | 11.7 | 18.2 | -6.6 | 64.0 |
| (3) WBE | 1,917 | \$69,280 | \$69,280 | 9.5 | 10.5 | -1.0 | 90.8 |
| (4) MBE | 458 | \$15,407 | \$15,407 | 2.1 | 7.7 | -5.6 | 27.5 |
| (5) African American-owned | 110 | \$4,348 | \$4,831 | 0.7 | 3.1 | -2.4 | 21.7 |
| (6) Total Asian American-owned | 111 | \$3,159 | \$3,509 | 0.5 | 3.0 | -2.5 | 16.3 |
| (7) Asian-Pacific American-owned | 91 | \$2,766 | \$3,073 | 0.4 | 1.2 | -0.8 | 34.4 |
| (8) Subcontinent Asian American-owned | 16 | \$333 | \$370 | 0.1 | 1.7 | -1.7 | 2.9 |
| (9) Hispanic American-owned | 155 | \$5,017 | \$5,574 | 0.8 | 1.0 | -0.2 | 77.1 |
| (10) Native American-owned | 44 | \$1,343 | \$1,492 | 0.2 | 0.6 | -0.4 | 34.5 |
| (11) Unknown MBE | 38 | \$1,540 | | | | | |
| (12) Certified | 1,105 | \$34,957 | \$34,957 | 4.8 | | | |
| (13) Certified woman-owned | 871 | \$26,132 | \$26,363 | 3.6 | | | |
| (14) Certified minority-owned | 219 | \$8,519 | \$8,594 | 1.2 | | | |
| (15) Certified African American-owned | 62 | \$2,881 | \$2,906 | 0.4 | | | |
| (16) Certified Asian-Pacific American-owned | 53 | \$1,589 | \$1,603 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 6 | \$169 | \$171 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 91 | \$3,451 | \$3,481 | 0.5 | | | |
| (19) Certified Native American-owned | 7 | \$429 | \$432 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 15 | \$305 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-2.
Agency: Indiana University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,166 | \$445,593 | \$445,593 | | | | |
| (2) MBE/WBE | 428 | \$39,425 | \$39,425 | 8.8 | 15.5 | -6.6 | 57.1 |
| (3) WBE | 315 | \$33,575 | \$33,575 | 7.5 | 7.8 | -0.2 | 96.9 |
| (4) MBE | 113 | \$5,849 | \$5,849 | 1.3 | 7.7 | -6.4 | 17.0 |
| (5) African American-owned | 42 | \$2,725 | \$3,133 | 0.7 | 3.2 | -2.5 | 22.1 |
| (6) Total Asian American-owned | 18 | \$802 | \$922 | 0.2 | 3.0 | -2.8 | 6.9 |
| (7) Asian-Pacific American-owned | 17 | \$795 | \$914 | 0.2 | 0.9 | -0.7 | 22.9 |
| (8) Subcontinent Asian American-owned | 1 | \$7 | \$8 | 0.0 | 2.1 | -2.1 | 0.1 |
| (9) Hispanic American-owned | 17 | \$676 | \$778 | 0.2 | 0.6 | -0.4 | 28.0 |
| (10) Native American-owned | 28 | \$884 | \$1,017 | 0.2 | 0.8 | -0.6 | 29.1 |
| (11) Unknown MBE | 8 | \$762 | | | | | |
| (12) Certified | 131 | \$11,200 | \$11,200 | 2.5 | | | |
| (13) Certified woman-owned | 78 | \$8,089 | \$8,089 | 1.8 | | | |
| (14) Certified minority-owned | 53 | \$3,111 | \$3,111 | 0.7 | | | |
| (15) Certified African American-owned | 27 | \$2,218 | \$2,218 | 0.5 | | | |
| (16) Certified Asian-Pacific American-owned | 13 | \$476 | \$476 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 11 | \$312 | \$312 | 0.1 | | | |
| (19) Certified Native American-owned | 2 | \$105 | \$105 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-3.
Agency: Indiana University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,166 | \$141,248 | \$141,248 | | | | |
| (2) MBE/WBE | 844 | \$19,223 | \$19,223 | 13.6 | 24.9 | -11.3 | 54.7 |
| (3) WBE | 723 | \$15,478 | \$15,478 | 11.0 | 16.0 | -5.0 | 68.5 |
| (4) MBE | 121 | \$3,745 | \$3,745 | 2.7 | 8.9 | -6.2 | 29.8 |
| (5) African American-owned | 39 | \$1,032 | \$1,193 | 0.8 | 3.5 | -2.7 | 23.8 |
| (6) Total Asian American-owned | 47 | \$791 | \$914 | 0.6 | 4.2 | -3.6 | 15.4 |
| (7) Asian-Pacific American-owned | 33 | \$530 | \$612 | 0.4 | 1.9 | -1.5 | 22.3 |
| (8) Subcontinent Asian American-owned | 11 | \$209 | \$241 | 0.2 | 2.3 | -2.1 | 7.6 |
| (9) Hispanic American-owned | 21 | \$1,340 | \$1,549 | 1.1 | 0.7 | 0.4 | 154.0 |
| (10) Native American-owned | 5 | \$78 | \$90 | 0.1 | 0.4 | -0.3 | 16.1 |
| (11) Unknown MBE | 9 | \$505 | | | | | |
| (12) Certified | 454 | \$9,559 | \$9,559 | 6.8 | | | |
| (13) Certified woman-owned | 403 | \$7,864 | \$7,864 | 5.6 | | | |
| (14) Certified minority-owned | 51 | \$1,695 | \$1,695 | 1.2 | | | |
| (15) Certified African American-owned | 18 | \$364 | \$364 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 12 | \$194 | \$194 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 5 | \$138 | \$138 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 15 | \$967 | \$967 | 0.7 | | | |
| (19) Certified Native American-owned | 1 | \$31 | \$31 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-4.
Agency: Indiana University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,744 | \$119,968 | \$119,968 | | | | |
| (2) MBE/WBE | 774 | \$22,058 | \$22,058 | 18.4 | 18.2 | 0.2 | 101.1 |
| (3) WBE | 635 | \$17,089 | \$17,089 | 14.2 | 12.1 | 2.1 | 117.7 |
| (4) MBE | 139 | \$4,969 | \$4,969 | 4.1 | 6.1 | -1.9 | 68.2 |
| (5) African American-owned | 7 | \$364 | \$378 | 0.3 | 1.7 | -1.4 | 18.2 |
| (6) Total Asian American-owned | 41 | \$1,509 | \$1,568 | 1.3 | 1.8 | -0.5 | 74.2 |
| (7) Asian-Pacific American-owned | 36 | \$1,384 | \$1,438 | 1.2 | 1.7 | -0.5 | 69.9 |
| (8) Subcontinent Asian American-owned | 4 | \$118 | \$122 | 0.1 | 0.0 | 0.1 | 200+ |
| (9) Hispanic American-owned | 74 | \$2,617 | \$2,719 | 2.3 | 2.6 | -0.3 | 88.8 |
| (10) Native American-owned | 4 | \$293 | \$304 | 0.3 | 0.0 | 0.2 | 200+ |
| (11) Unknown MBE | 13 | \$186 | | | | | |
| (12) Certified | 430 | \$12,806 | \$12,806 | 10.7 | | | |
| (13) Certified woman-owned | 321 | \$8,999 | \$9,218 | 7.7 | | | |
| (14) Certified minority-owned | 94 | \$3,502 | \$3,588 | 3.0 | | | |
| (15) Certified African American-owned | 3 | \$172 | \$176 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 24 | \$867 | \$888 | 0.7 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$31 | \$32 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 62 | \$2,139 | \$2,191 | 1.8 | | | |
| (19) Certified Native American-owned | 4 | \$293 | \$300 | 0.2 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 15 | \$305 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-5.
Agency: Indiana University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,175 | \$19,224 | \$19,224 | | | | |
| (2) MBE/WBE | 329 | \$3,981 | \$3,981 | 20.7 | 32.9 | -12.2 | 62.8 |
| (3) WBE | 244 | \$3,138 | \$3,138 | 16.3 | 23.6 | -7.3 | 69.2 |
| (4) MBE | 85 | \$843 | \$843 | 4.4 | 9.4 | -5.0 | 46.9 |
| (5) African American-owned | 22 | \$227 | \$252 | 1.3 | 5.4 | -4.0 | 24.5 |
| (6) Total Asian American-owned | 5 | \$57 | \$64 | 0.3 | 0.7 | -0.4 | 47.3 |
| (7) Asian-Pacific American-owned | 5 | \$57 | \$64 | 0.3 | 0.7 | -0.3 | 50.8 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 43 | \$384 | \$428 | 2.2 | 2.0 | 0.3 | 113.5 |
| (10) Native American-owned | 7 | \$89 | \$99 | 0.5 | 1.3 | -0.8 | 38.5 |
| (11) Unknown MBE | 8 | \$86 | | | | | |
| (12) Certified | 90 | \$1,392 | \$1,392 | 7.2 | | | |
| (13) Certified woman-owned | 69 | \$1,181 | \$1,181 | 6.1 | | | |
| (14) Certified minority-owned | 21 | \$212 | \$212 | 1.1 | | | |
| (15) Certified African American-owned | 14 | \$127 | \$127 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$52 | \$52 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$33 | \$33 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-6.
Agency: Indiana University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 10,241 | \$582,768 | \$582,768 | | | | |
| (2) MBE/WBE | 2,218 | \$68,873 | \$68,873 | 11.8 | 18.1 | -6.3 | 65.1 |
| (3) WBE | 1,812 | \$58,230 | \$58,230 | 10.0 | 10.1 | -0.2 | 98.4 |
| (4) MBE | 406 | \$10,643 | \$10,643 | 1.8 | 8.0 | -6.2 | 22.8 |
| (5) African American-owned | 86 | \$2,042 | \$2,204 | 0.4 | 3.2 | -2.8 | 11.9 |
| (6) Total Asian American-owned | 104 | \$2,722 | \$2,936 | 0.5 | 3.4 | -2.9 | 15.0 |
| (7) Asian-Pacific American-owned | 84 | \$2,329 | \$2,512 | 0.4 | 1.4 | -0.9 | 31.6 |
| (8) Subcontinent Asian American-owned | 16 | \$333 | \$359 | 0.1 | 2.0 | -1.9 | 3.1 |
| (9) Hispanic American-owned | 145 | \$4,466 | \$4,818 | 0.8 | 1.0 | -0.2 | 83.9 |
| (10) Native American-owned | 41 | \$635 | \$685 | 0.1 | 0.4 | -0.3 | 29.1 |
| (11) Unknown MBE | 30 | \$778 | | | | | |
| (12) Certified | 1,045 | \$25,667 | \$25,667 | 4.4 | | | |
| (13) Certified woman-owned | 840 | \$19,213 | \$19,444 | 3.3 | | | |
| (14) Certified minority-owned | 190 | \$6,149 | \$6,223 | 1.1 | | | |
| (15) Certified African American-owned | 46 | \$971 | \$982 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 49 | \$1,457 | \$1,474 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 6 | \$169 | \$172 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 84 | \$3,228 | \$3,267 | 0.6 | | | |
| (19) Certified Native American-owned | 5 | \$324 | \$328 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 15 | \$305 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-7.
Agency: Indiana University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,178 | \$307,475 | \$307,475 | | | | |
| (2) MBE/WBE | 273 | \$24,068 | \$24,068 | 7.8 | 14.2 | -6.4 | 55.1 |
| (3) WBE | 212 | \$22,983 | \$22,983 | 7.5 | 6.0 | 1.5 | 124.2 |
| (4) MBE | 61 | \$1,085 | \$1,085 | 0.4 | 8.2 | -7.8 | 4.3 |
| (5) African American-owned | 18 | \$420 | \$420 | 0.1 | 3.4 | -3.3 | 4.0 |
| (6) Total Asian American-owned | 11 | \$365 | \$365 | 0.1 | 3.7 | -3.6 | 3.2 |
| (7) Asian-Pacific American-owned | 10 | \$358 | \$358 | 0.1 | 1.0 | -0.9 | 11.8 |
| (8) Subcontinent Asian American-owned | 1 | \$7 | \$7 | 0.0 | 2.7 | -2.7 | 0.1 |
| (9) Hispanic American-owned | 7 | \$125 | \$125 | 0.0 | 0.4 | -0.4 | 9.3 |
| (10) Native American-owned | 25 | \$176 | \$176 | 0.1 | 0.5 | -0.4 | 11.5 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 72 | \$2,351 | \$2,351 | 0.8 | | | |
| (13) Certified woman-owned | 48 | \$1,610 | \$1,610 | 0.5 | | | |
| (14) Certified minority-owned | 24 | \$740 | \$740 | 0.2 | | | |
| (15) Certified African American-owned | 11 | \$308 | \$308 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 9 | \$344 | \$344 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 4 | \$89 | \$89 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-8.
Agency: Indiana University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,161 | \$140,344 | \$140,344 | | | | |
| (2) MBE/WBE | 844 | \$19,223 | \$19,223 | 13.7 | 24.9 | -11.2 | 55.0 |
| (3) WBE | 723 | \$15,478 | \$15,478 | 11.0 | 16.0 | -5.0 | 68.9 |
| (4) MBE | 121 | \$3,745 | \$3,745 | 2.7 | 8.9 | -6.2 | 30.0 |
| (5) African American-owned | 39 | \$1,032 | \$1,193 | 0.9 | 3.6 | -2.7 | 23.9 |
| (6) Total Asian American-owned | 47 | \$791 | \$914 | 0.7 | 4.2 | -3.6 | 15.4 |
| (7) Asian-Pacific American-owned | 33 | \$530 | \$612 | 0.4 | 2.0 | -1.5 | 22.3 |
| (8) Subcontinent Asian American-owned | 11 | \$209 | \$241 | 0.2 | 2.3 | -2.1 | 7.6 |
| (9) Hispanic American-owned | 21 | \$1,340 | \$1,549 | 1.1 | 0.7 | 0.4 | 158.1 |
| (10) Native American-owned | 5 | \$78 | \$90 | 0.1 | 0.4 | -0.3 | 16.3 |
| (11) Unknown MBE | 9 | \$505 | | | | | |
| (12) Certified | 454 | \$9,559 | \$9,559 | 6.8 | | | |
| (13) Certified woman-owned | 403 | \$7,864 | \$7,864 | 5.6 | | | |
| (14) Certified minority-owned | 51 | \$1,695 | \$1,695 | 1.2 | | | |
| (15) Certified African American-owned | 18 | \$364 | \$364 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 12 | \$194 | \$194 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 5 | \$138 | \$138 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 15 | \$967 | \$967 | 0.7 | | | |
| (19) Certified Native American-owned | 1 | \$31 | \$31 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-9.
Agency: Indiana University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,727 | \$115,725 | \$115,725 | | | | |
| (2) MBE/WBE | 772 | \$21,601 | \$21,601 | 18.7 | 18.0 | 0.7 | 103.9 |
| (3) WBE | 633 | \$16,632 | \$16,632 | 14.4 | 11.8 | 2.6 | 121.9 |
| (4) MBE | 139 | \$4,969 | \$4,969 | 4.3 | 6.2 | -1.9 | 69.5 |
| (5) African American-owned | 7 | \$364 | \$378 | 0.3 | 1.7 | -1.4 | 18.9 |
| (6) Total Asian American-owned | 41 | \$1,509 | \$1,568 | 1.4 | 1.8 | -0.5 | 74.9 |
| (7) Asian-Pacific American-owned | 36 | \$1,384 | \$1,438 | 1.2 | 1.8 | -0.5 | 70.5 |
| (8) Subcontinent Asian American-owned | 4 | \$118 | \$122 | 0.1 | 0.0 | 0.1 | 200+ |
| (9) Hispanic American-owned | 74 | \$2,617 | \$2,719 | 2.3 | 2.6 | -0.3 | 89.3 |
| (10) Native American-owned | 4 | \$293 | \$304 | 0.3 | 0.0 | 0.3 | 200+ |
| (11) Unknown MBE | 13 | \$186 | | | | | |
| (12) Certified | 429 | \$12,365 | \$12,365 | 10.7 | | | |
| (13) Certified woman-owned | 320 | \$8,558 | \$8,774 | 7.6 | | | |
| (14) Certified minority-owned | 94 | \$3,502 | \$3,591 | 3.1 | | | |
| (15) Certified African American-owned | 3 | \$172 | \$176 | 0.2 | | | |
| (16) Certified Asian-Pacific American-owned | 24 | \$867 | \$889 | 0.8 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$31 | \$32 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 62 | \$2,139 | \$2,193 | 1.9 | | | |
| (19) Certified Native American-owned | 4 | \$293 | \$300 | 0.3 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 15 | \$305 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-10.
Agency: Indiana University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,175 | \$19,224 | \$19,224 | | | | |
| (2) MBE/WBE | 329 | \$3,981 | \$3,981 | 20.7 | 32.9 | -12.2 | 62.8 |
| (3) WBE | 244 | \$3,138 | \$3,138 | 16.3 | 23.6 | -7.3 | 69.2 |
| (4) MBE | 85 | \$843 | \$843 | 4.4 | 9.4 | -5.0 | 46.9 |
| (5) African American-owned | 22 | \$227 | \$252 | 1.3 | 5.4 | -4.0 | 24.5 |
| (6) Total Asian American-owned | 5 | \$57 | \$64 | 0.3 | 0.7 | -0.4 | 47.3 |
| (7) Asian-Pacific American-owned | 5 | \$57 | \$64 | 0.3 | 0.7 | -0.3 | 50.8 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 43 | \$384 | \$428 | 2.2 | 2.0 | 0.3 | 113.5 |
| (10) Native American-owned | 7 | \$89 | \$99 | 0.5 | 1.3 | -0.8 | 38.5 |
| (11) Unknown MBE | 8 | \$86 | | | | | |
| (12) Certified | 90 | \$1,392 | \$1,392 | 7.2 | | | |
| (13) Certified woman-owned | 69 | \$1,181 | \$1,181 | 6.1 | | | |
| (14) Certified minority-owned | 21 | \$212 | \$212 | 1.1 | | | |
| (15) Certified African American-owned | 14 | \$127 | \$127 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$52 | \$52 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$33 | \$33 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-11.
Agency: Indiana University
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,010 | \$143,265 | \$143,265 | | | | |
| (2) MBE/WBE | 157 | \$15,814 | \$15,814 | 11.0 | 18.6 | -7.5 | 59.4 |
| (3) WBE | 105 | \$11,050 | \$11,050 | 7.7 | 12.0 | -4.3 | 64.4 |
| (4) MBE | 52 | \$4,764 | \$4,764 | 3.3 | 6.6 | -3.3 | 50.4 |
| (5) African American-owned | 24 | \$2,305 | \$2,744 | 1.9 | 2.6 | -0.7 | 72.4 |
| (6) Total Asian American-owned | 7 | \$437 | \$520 | 0.4 | 1.3 | -0.9 | 27.9 |
| (7) Asian-Pacific American-owned | 7 | \$437 | \$520 | 0.4 | 0.7 | -0.3 | 53.4 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (9) Hispanic American-owned | 10 | \$552 | \$657 | 0.5 | 1.0 | -0.6 | 44.2 |
| (10) Native American-owned | 3 | \$708 | \$843 | 0.6 | 1.4 | -0.8 | 42.7 |
| (11) Unknown MBE | 8 | \$762 | | | | | |
| (12) Certified | 60 | \$9,290 | \$9,290 | 6.5 | | | |
| (13) Certified woman-owned | 31 | \$6,920 | \$6,920 | 4.8 | | | |
| (14) Certified minority-owned | 29 | \$2,371 | \$2,371 | 1.7 | | | |
| (15) Certified African American-owned | 16 | \$1,910 | \$1,910 | 1.3 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$132 | \$132 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 7 | \$223 | \$223 | 0.2 | | | |
| (19) Certified Native American-owned | 2 | \$105 | \$105 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-12.
Agency: Indiana University
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 988 | \$138,118 | \$138,118 | | | | |
| (2) MBE/WBE | 155 | \$15,357 | \$15,357 | 11.1 | 18.4 | -7.3 | 60.5 |
| (3) WBE | 103 | \$10,593 | \$10,593 | 7.7 | 11.7 | -4.0 | 65.6 |
| (4) MBE | 52 | \$4,764 | \$4,764 | 3.4 | 6.7 | -3.2 | 51.6 |
| (5) African American-owned | 24 | \$2,305 | \$2,744 | 2.0 | 2.7 | -0.7 | 74.5 |
| (6) Total Asian American-owned | 7 | \$437 | \$520 | 0.4 | 1.3 | -1.0 | 28.3 |
| (7) Asian-Pacific American-owned | 7 | \$437 | \$520 | 0.4 | 0.7 | -0.3 | 54.9 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (9) Hispanic American-owned | 10 | \$552 | \$657 | 0.5 | 1.0 | -0.6 | 45.5 |
| (10) Native American-owned | 3 | \$708 | \$843 | 0.6 | 1.4 | -0.8 | 43.1 |
| (11) Unknown MBE | 8 | \$762 | | | | | |
| (12) Certified | 59 | \$8,849 | \$8,849 | 6.4 | | | |
| (13) Certified woman-owned | 30 | \$6,478 | \$6,478 | 4.7 | | | |
| (14) Certified minority-owned | 29 | \$2,371 | \$2,371 | 1.7 | | | |
| (15) Certified African American-owned | 16 | \$1,910 | \$1,910 | 1.4 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$132 | \$132 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 7 | \$223 | \$223 | 0.2 | | | |
| (19) Certified Native American-owned | 2 | \$105 | \$105 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-13.
Agency: Indiana University
Funding: All
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 5 | \$904 | \$904 | | | | |
| (2) MBE/WBE | 0 | \$0 | \$0 | 0.0 | 21.1 | -21.1 | 0.0 |
| (3) WBE | 0 | \$0 | \$0 | 0.0 | 13.8 | -13.8 | 0.0 |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 7.2 | -7.2 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 2.6 | -2.6 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 2.9 | -2.9 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-16.
Agency: Indiana University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 9,754 | \$189,623 | \$189,623 | | | | |
| (2) MBE/WBE | 2,162 | \$38,936 | \$38,936 | 20.5 | 22.8 | -2.3 | 89.9 |
| (3) WBE | 1,772 | \$31,924 | \$31,924 | 16.8 | 15.7 | 1.1 | 107.3 |
| (4) MBE | 390 | \$7,012 | \$7,012 | 3.7 | 7.2 | -3.5 | 51.7 |
| (5) African American-owned | 85 | \$1,870 | \$2,052 | 1.1 | 3.1 | -2.0 | 34.7 |
| (6) Total Asian American-owned | 100 | \$1,716 | \$1,882 | 1.0 | 1.9 | -0.9 | 52.0 |
| (7) Asian-Pacific American-owned | 80 | \$1,323 | \$1,452 | 0.8 | 1.4 | -0.6 | 56.4 |
| (8) Subcontinent Asian American-owned | 16 | \$333 | \$365 | 0.2 | 0.6 | -0.4 | 35.0 |
| (9) Hispanic American-owned | 136 | \$2,439 | \$2,675 | 1.4 | 1.6 | -0.2 | 90.0 |
| (10) Native American-owned | 40 | \$367 | \$402 | 0.2 | 0.5 | -0.3 | 44.4 |
| (11) Unknown MBE | 29 | \$620 | | | | | |
| (12) Certified | 1,017 | \$18,543 | \$18,543 | 9.8 | | | |
| (13) Certified woman-owned | 823 | \$14,677 | \$14,923 | 7.9 | | | |
| (14) Certified minority-owned | 179 | \$3,560 | \$3,620 | 1.9 | | | |
| (15) Certified African American-owned | 46 | \$971 | \$987 | 0.5 | | | |
| (16) Certified Asian-Pacific American-owned | 46 | \$723 | \$735 | 0.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 6 | \$169 | \$172 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 77 | \$1,641 | \$1,669 | 0.9 | | | |
| (19) Certified Native American-owned | 4 | \$55 | \$56 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 15 | \$305 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-17.
Agency: Indiana University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,950 | \$39,095 | \$39,095 | | | | |
| (2) MBE/WBE | 262 | \$5,272 | \$5,272 | 13.5 | 19.6 | -6.1 | 68.8 |
| (3) WBE | 202 | \$4,356 | \$4,356 | 11.1 | 14.2 | -3.1 | 78.3 |
| (4) MBE | 60 | \$916 | \$916 | 2.3 | 5.4 | -3.0 | 43.5 |
| (5) African American-owned | 18 | \$420 | \$420 | 1.1 | 2.8 | -1.7 | 38.8 |
| (6) Total Asian American-owned | 10 | \$195 | \$195 | 0.5 | 0.6 | -0.1 | 89.0 |
| (7) Asian-Pacific American-owned | 9 | \$188 | \$188 | 0.5 | 0.3 | 0.2 | 148.8 |
| (8) Subcontinent Asian American-owned | 1 | \$7 | \$7 | 0.0 | 0.2 | -0.2 | 7.3 |
| (9) Hispanic American-owned | 7 | \$125 | \$125 | 0.3 | 0.5 | -0.2 | 63.6 |
| (10) Native American-owned | 25 | \$176 | \$176 | 0.5 | 1.3 | -0.8 | 35.1 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 69 | \$1,670 | \$1,670 | 4.3 | | | |
| (13) Certified woman-owned | 46 | \$1,100 | \$1,100 | 2.8 | | | |
| (14) Certified minority-owned | 23 | \$571 | \$571 | 1.5 | | | |
| (15) Certified African American-owned | 11 | \$308 | \$308 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 8 | \$174 | \$174 | 0.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 4 | \$89 | \$89 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-18.
Agency: Indiana University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,021 | \$65,555 | \$65,555 | | | | |
| (2) MBE/WBE | 823 | \$14,353 | \$14,353 | 21.9 | 25.9 | -4.1 | 84.4 |
| (3) WBE | 708 | \$11,870 | \$11,870 | 18.1 | 17.6 | 0.5 | 102.6 |
| (4) MBE | 115 | \$2,483 | \$2,483 | 3.8 | 8.3 | -4.5 | 45.6 |
| (5) African American-owned | 38 | \$860 | \$1,000 | 1.5 | 3.8 | -2.3 | 40.2 |
| (6) Total Asian American-owned | 47 | \$791 | \$919 | 1.4 | 3.2 | -1.8 | 44.4 |
| (7) Asian-Pacific American-owned | 33 | \$530 | \$616 | 0.9 | 1.8 | -0.9 | 52.1 |
| (8) Subcontinent Asian American-owned | 11 | \$209 | \$243 | 0.4 | 1.4 | -1.0 | 27.3 |
| (9) Hispanic American-owned | 17 | \$407 | \$474 | 0.7 | 1.0 | -0.3 | 73.2 |
| (10) Native American-owned | 5 | \$78 | \$90 | 0.1 | 0.3 | -0.2 | 47.1 |
| (11) Unknown MBE | 8 | \$348 | | | | | |
| (12) Certified | 445 | \$7,258 | \$7,258 | 11.1 | | | |
| (13) Certified woman-owned | 397 | \$6,296 | \$6,296 | 9.6 | | | |
| (14) Certified minority-owned | 48 | \$962 | \$962 | 1.5 | | | |
| (15) Certified African American-owned | 18 | \$364 | \$364 | 0.6 | | | |
| (16) Certified Asian-Pacific American-owned | 12 | \$194 | \$194 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 5 | \$138 | \$138 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 12 | \$235 | \$235 | 0.4 | | | |
| (19) Certified Native American-owned | 1 | \$31 | \$31 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-19.
Agency: Indiana University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,618 | \$68,425 | \$68,425 | | | | |
| (2) MBE/WBE | 749 | \$15,696 | \$15,696 | 22.9 | 19.1 | 3.9 | 120.2 |
| (3) WBE | 619 | \$12,926 | \$12,926 | 18.9 | 12.4 | 6.5 | 152.6 |
| (4) MBE | 130 | \$2,770 | \$2,770 | 4.0 | 6.7 | -2.7 | 60.3 |
| (5) African American-owned | 7 | \$364 | \$390 | 0.6 | 2.2 | -1.7 | 25.4 |
| (6) Total Asian American-owned | 38 | \$673 | \$722 | 1.1 | 1.8 | -0.7 | 59.4 |
| (7) Asian-Pacific American-owned | 33 | \$548 | \$588 | 0.9 | 1.7 | -0.8 | 50.7 |
| (8) Subcontinent Asian American-owned | 4 | \$118 | \$126 | 0.2 | 0.1 | 0.1 | 200+ |
| (9) Hispanic American-owned | 69 | \$1,523 | \$1,632 | 2.4 | 2.7 | -0.3 | 89.2 |
| (10) Native American-owned | 3 | \$24 | \$26 | 0.0 | 0.0 | 0.0 | 200+ |
| (11) Unknown MBE | 13 | \$186 | | | | | |
| (12) Certified | 414 | \$8,588 | \$8,588 | 12.6 | | | |
| (13) Certified woman-owned | 312 | \$6,467 | \$6,705 | 9.8 | | | |
| (14) Certified minority-owned | 87 | \$1,816 | \$1,883 | 2.8 | | | |
| (15) Certified African American-owned | 3 | \$172 | \$178 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 22 | \$304 | \$315 | 0.5 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$31 | \$32 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 58 | \$1,285 | \$1,332 | 1.9 | | | |
| (19) Certified Native American-owned | 3 | \$24 | \$25 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 15 | \$305 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure W-20.
Agency: Indiana University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,165 | \$16,548 | \$16,548 | | | | |
| (2) MBE/WBE | 328 | \$3,615 | \$3,615 | 21.8 | 33.8 | -11.9 | 64.6 |
| (3) WBE | 243 | \$2,772 | \$2,772 | 16.8 | 25.2 | -8.4 | 66.6 |
| (4) MBE | 85 | \$843 | \$843 | 5.1 | 8.6 | -3.5 | 59.0 |
| (5) African American-owned | 22 | \$227 | \$252 | 1.5 | 4.9 | -3.4 | 31.2 |
| (6) Total Asian American-owned | 5 | \$57 | \$64 | 0.4 | 0.7 | -0.3 | 55.1 |
| (7) Asian-Pacific American-owned | 5 | \$57 | \$64 | 0.4 | 0.6 | -0.3 | 59.9 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 43 | \$384 | \$428 | 2.6 | 1.8 | 0.8 | 141.7 |
| (10) Native American-owned | 7 | \$89 | \$99 | 0.6 | 1.2 | -0.6 | 49.1 |
| (11) Unknown MBE | 8 | \$86 | | | | | |
| (12) Certified | 89 | \$1,026 | \$1,026 | 6.2 | | | |
| (13) Certified woman-owned | 68 | \$815 | \$815 | 4.9 | | | |
| (14) Certified minority-owned | 21 | \$212 | \$212 | 1.3 | | | |
| (15) Certified African American-owned | 14 | \$127 | \$127 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 4 | \$52 | \$52 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$33 | \$33 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX X.

IU Summary Report

The State of Indiana commissioned BBC Research & Consulting (BBC) to conduct a disparity study as part of a periodic evaluation of its Minority and Women's Business Enterprises (MBE/WBE) Program. BBC analyzed participation of minority- and women-owned firms — regardless of whether they were certified as such with the State of Indiana — in contracts and subcontracts Indiana University (IU) awarded between July 1, 2006 and June 30, 2009 (fiscal years 2007 through 2009).¹ The study team then compared MBE/WBE utilization to what those firms would be expected to receive based on their availability for specific types of IU work.

IU's summary report is organized in five parts:

- A. Availability of MBE/WBEs for IU contracts and subcontracts²;
- B. Utilization of MBE/WBEs on IU contracts and subcontracts;
- C. Disparity analyses and results;
- D. Marketplace conditions for MBE/WBEs; and
- E. Options for improving MBE/WBEs' access to IU contracting opportunities.

A. Availability of MBE/WBEs for IU Contracts and Subcontracts

In the disparity analysis, the study team compared the percentage of IU contract dollars going to each racial/ethnic/gender group (MBE/WBE utilization) to the percentage of dollars that each group would be expected to receive based on availability for specific types, sizes and locations of IU prime contracts and subcontracts (MBE/WBE availability).

BBC collected information about potentially available firms by contacting Indiana businesses in the local construction, professional services, goods and support services industries. More than 9,000 firms completed telephone interviews, allowing the study team to build a database of firms available for specific types of IU work. BBC conducted a sophisticated analysis of the number of MBEs and WBEs available for each IU contract and subcontract and dollar-weighted the results when determining overall availability for IU work. Chapter 5 and Appendix D of the full report explain the availability analysis in detail.

¹ BBC defines WBEs as white women-owned firms. The rationale for doing so is presented in Chapter 5 of the full disparity study report.

² BBC uses the words "contract" and "procurement" interchangeably throughout the report.

Figure X-1 presents the availability of MBE/WBE firms for IU procurements by racial/ethnic/gender group. As shown in Figure X-1, MBE/WBE firms might be expected to receive about 18 percent of IU contract dollars given their availability for specific types, sizes and locations of IU prime contracts and subcontracts during the study period. This “availability benchmark” reflects dollar-weighted availability — it is not based on a headcount of MBE/WBEs. White women-owned firms comprise a large share of total MBE/WBE availability for IU contracts and procurements.

Figure X-1.
Availability of firms for IU contracts, July 2006–June 2009,
by race/ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) |
|-----------------------------------|---|
| African American-owned | 3.1 % |
| Asian-Pacific American-owned | 1.2 |
| Subcontinent Asian American-owned | 1.7 |
| Hispanic American-owned | 1.0 |
| Native American-owned | 0.6 |
| Total MBE | 7.7 % |
| WBE (white women-owned) | <u>10.5</u> |
| Total MBE/WBE | 18.2 % |
| Majority-owned | 81.8 |
| Total | 100.0 % |

Note: See Figure W-1 in Appendix W.

Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from 2009/2010 Availability Survey.

The study team found that MBE/WBE availability is highest for IU support services contracts (33%) and lowest for construction contracts (16%). The tables in Appendix W present MBE/WBE availability for different subsets of IU contracts and subcontracts.

B. Utilization of MBE/WBEs on IU Contracts and Subcontracts

To determine MBE/WBE utilization on IU contracts, BBC examined more than 11,200 contracts and subcontracts totaling \$726 million for the three-year study period. Figure X-2 examines IU’s utilization of each MBE/WBE group (top half of the figure) and IU’s utilization of only those firms certified as MBE/WBEs (bottom half of the figure). MBE/WBE firms received 11.7 percent of IU contract and subcontract dollars during the study period. WBEs accounted for most of the overall MBE/WBE utilization.

Figure X-2.
Utilization of MBE/WBEs and certified MBE/WBEs for IU contracts,
July 2006–June 2009

| Race, ethnicity and gender | Utilization % |
|-----------------------------------|----------------|
| MBE/WBEs | |
| African American-owned | 0.7 % |
| Asian-Pacific American-owned | 0.4 |
| Subcontinent Asian American-owned | 0.1 |
| Hispanic American-owned | 0.8 |
| Native American-owned | 0.2 |
| Total MBE | 2.1 % |
| WBE (white women-owned) | 9.5 |
| Total MBE/WBE | 11.7 % |
| Majority-owned | 88.3 |
| Total | 100.0 % |
| Certified MBE/WBEs | |
| African American-owned | 0.4 % |
| Asian-Pacific American-owned | 0.2 |
| Subcontinent Asian American-owned | 0.0 |
| Hispanic American-owned | 0.5 |
| Native American-owned | 0.1 |
| Total MBE certified | 1.2 % |
| WBE (white women-owned) | 3.6 |
| Total MBE/WBE certified | 4.8 % |
| Non-certified | 95.2 |
| Total | 100.0 % |

Note: See Figure W-1 in Appendix W.

Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from data on IU contracts.

When examining IU contract dollars by industry, MBE/WBE utilization was 8.8 percent for construction, 13.6 percent for professional services, 18.4 percent for goods and 20.7 percent for support services. For more detail about MBE/WBE utilization by study industry, see Chapter 11 and Figures W-2 through W-5 of Appendix W.

C. Disparity Analysis

BBC compared actual utilization of MBE/WBEs on IU contracts (as a percentage of total dollars) to the percentage of dollars that those firms might be expected to receive based on the availability analysis. To help compare results between groups and across sets of contracts, BBC calculated disparity indices by dividing the utilization percentage by availability and then multiplying by 100.³ A disparity index of 100 indicates “parity” — that is, for a particular set of contracts, an MBE/WBE group received 100 percent of the dollars that it would be expected to receive based on availability.

Results by industry. Figure X-3 presents overall MBE/WBE disparity indices for IU contracts by study industry. The results in Figure X-3 include data from IU prime contracts and subcontracts. Overall, MBE/WBEs considered together were substantially underutilized on IU contracts (disparity index of 64).⁴ MBE/WBEs showed substantial disparities for every study industry except for goods (disparity index of 101).

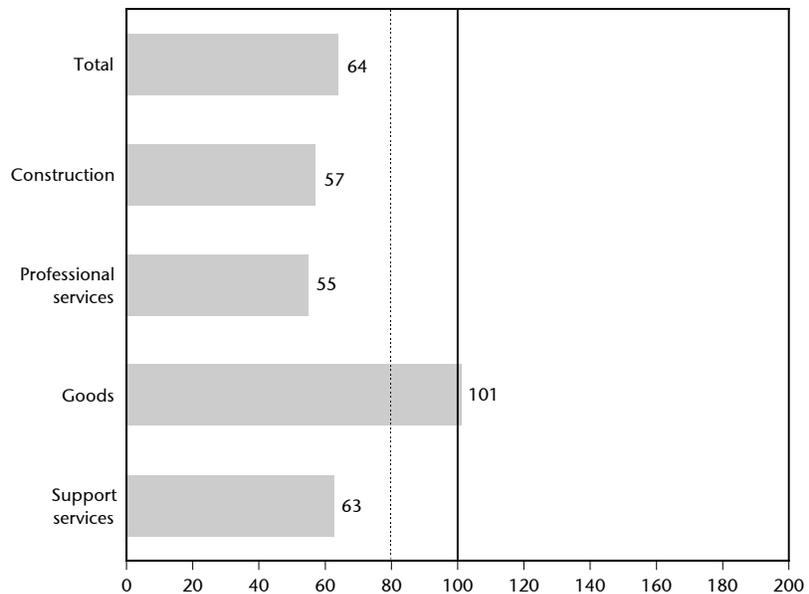
Figure X-3.
Disparity indices for
MBE/WBE utilization on IU
contracts, July 2006–June
2009, by study industry

Note:

See Figures W-1 through W-5 in
Appendix W.

Source:

BBC Research & Consulting from data on IU
contracts.



³ For example, if utilization of WBEs for a set of IU contracts was 2 percent and availability was 10 percent, the disparity index would be 20 (i.e., 2% divided by 10%, then multiplied by 100).

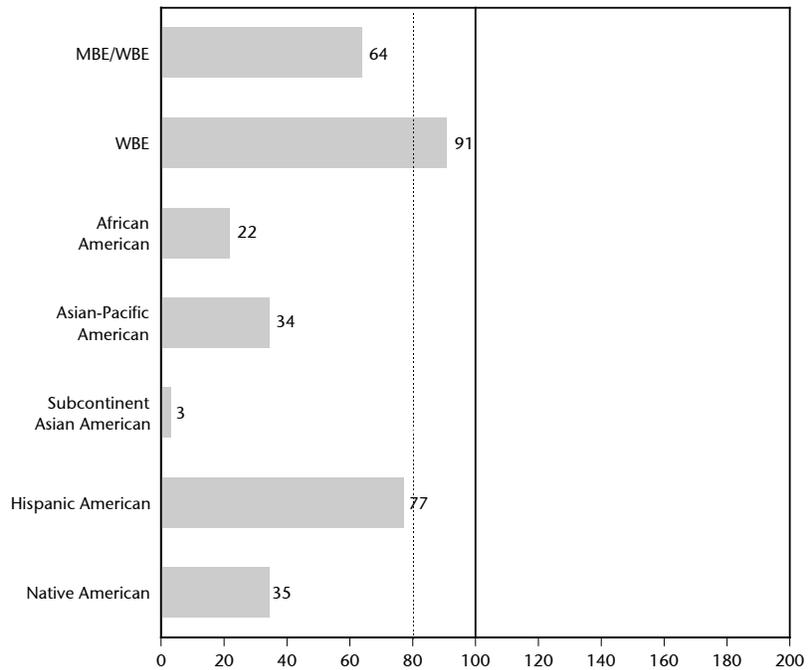
⁴ BBC’s use of the word “substantial” in describing certain disparity indices reflects the opinion of some courts that a disparity index of less than 80 reflects a substantial disparity.

Results by MBE/WBE. Figure X-4 presents disparity indices by MBE/WBE group. The results in Figure X-4 include data from IU prime contracts and subcontracts. Every MBE group showed a substantial disparity for IU contracts and subcontracts during the study period.

Figure X-4.
Disparity indices for utilization on IU contracts, July 2006–June 2009, by MBE/WBE group

Note:
 See Figures W-1 in Appendix W.

Source:
 BBC Research & Consulting from data on IU contracts.



Prime contracts and subcontracts. Figure X-5 shows overall MBE/WBE disparity results for prime contracts and subcontracts. MBE/WBEs were substantially underutilized on both IU prime contracts (disparity index of 65) and on IU subcontracts (disparity index of 59).

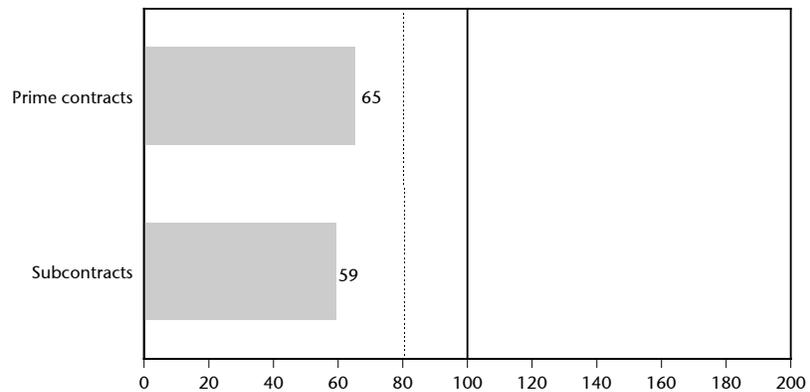
Disparity results for IU subcontracts are very different from those for Indiana Department of Administration (IDOA) and Indiana Department of Transportation (INDOT) subcontracts. IDOA and INDOT often applied MBE/WBE and DBE goals to their contracts during the study period. As discussed in Chapter 7 for IDOA and Chapter 8 for INDOT, overall, MBE/WBEs were not underutilized on IDOA and INDOT subcontracts. The difference in results may be due in part to the absence of MBE/WBE contract goals on IU contracts during the study period.⁵

⁵ Although Indiana University sets subcontracting goals on some of its contracts, there are no consequences for prime contractors who fail to meet those goals or fail to fulfill good faith efforts.

Figure X-5.
Disparity indices for
MBE/WBE utilization on IU
prime contracts and
subcontracts, July 2006–
June 2009

Note:
 See Figure W-6 and W-11 in Appendix W.

Source:
 BBC Research & Consulting from data on IU
 contracts.



Comparison of disparity results between IDOA/INDOT and SEI contracts. The disparity study examined MBE/WBE utilization and availability for IDOA, INDOT and seven state colleges and universities (state educational institutions or “SEIs”).

- IDOA and INDOT applied MBE/WBE contract goals to certain state-funded contracts. For federally-funded construction and professional services contracts, which represent most of INDOT’s contracting, INDOT applied Disadvantaged Business Enterprise (DBE) goals.
- SEIs did not apply MBE/WBE contract goals to their contracts or there were no consequences if prime contractors did not meet the goals (or fulfill good faith efforts).

BBC analyzed MBE/WBE disparities for IDOA and INDOT combined (the “state”) and for all SEIs combined. Although disparity results for MBE/WBEs did not differ between state contracts (disparity index of 70) and SEI contracts (disparity index of 71) when considering prime contracts and subcontracts together, disparity results differed considerably when only considering subcontracts. There were no disparities for minority- and women-owned firms on state subcontracts (disparity index of 180), but MBE/WBEs were substantially underutilized on SEI subcontracts (disparity index of 68). These results indicate that the use of MBE/WBE/DBE goals may expand opportunities for minority- and women-owned firms through work as subcontractors. For more details about these combined analyses, see Chapter 6.⁶

⁶ State contracts included contracts awarded by the Indiana Stadium and Convention Building Authority (ISCBA). During the study period, ISCBA awarded contract dollars in connection with two large construction projects — building Lucas Oil Stadium and the Indiana Convention Center — using an MBE/WBE contracting program. In addition to the analyses presented here, the study team examined MBE/WBE disparity indices for state and SEI contracts after removing contract dollars awarded by ISCBA. Without ISCBA, the disparity index for MBE/WBEs was 66 for state prime contracts and subcontracts considered together and 171 for state subcontracts.

D. Marketplace Conditions for MBE/WBEs

BBC examined whether certain barriers exist for minority- and women-owned firms in the Indiana marketplace as a whole. Barriers in the marketplace may help explain some of the disparities that BBC observed for certain MBE/WBE groups in IU's construction, professional services, goods and support services procurements. BBC examined potential barriers in the Indiana marketplace in four primary areas:

1. Entry and advancement;
2. Business ownership;
3. Access to capital, bonding and insurance; and
4. Success of businesses.

Chapter 4 and Appendices E – H and Appendix J of the full report provide detailed information about marketplace conditions in Indiana.

Entry and advancement. BBC's analyses indicated that certain minority groups and women are underrepresented in the construction, professional services, goods and support services industries in Indiana, compared to non-Hispanic whites and men, even after accounting for factors such as education. Results indicated that:

- African Americans and women exhibited relatively low representation in the Indiana construction industry compared to their representation in the entire Indiana workforce. In addition, there appeared to be barriers to advancement for minorities and women.
- There was relatively low representation of African Americans, Hispanic Americans and women in the Indiana professional services industry. Among all professional services workers, there was particularly low representation of African Americans and women in engineering- and architecture-related lines of work.
- African Americans and women exhibited relatively low representation in the Indiana goods industry compared to their representation in the entire Indiana workforce. Among goods workers, African Americans and women were also less likely than non-Hispanic whites and males to advance to supervisory and managerial positions.
- Two groups showed lower representation in the support services industry compared to their representation in all Indiana industries considered together — Asian Americans and women. Minorities and women were far less likely to advance to supervisory or managerial positions.

- During in-depth interviews and public forums that BBC held as part of the disparity study, some individuals reported stereotypical attitudes on the part of customers and buyers in Indiana as a contributor to unfavorable work environments for minorities and women. Other interviewees reported instances of racial slurs or sexist comments. Some interviewees indicated that they have not experienced difficulties associated with entry and advancement, or that certain factors — such as stereotypical attitudes — have worked to their advantage.

Business ownership. Quantitative analyses of the Indiana construction, professional services, goods and support services industries revealed statistically significant disparities in business ownership for some racial/ethnic/gender groups after accounting for various neutral factors such as age and education.

- Compared to similarly-situated non-Hispanic whites and men, there were disparities in business ownership rates for African Americans, Hispanic Americans and women working in the Indiana construction industry.
- Asian Americans and women exhibited substantial disparities in business ownership rates in the professional services industry.
- White women own goods businesses at less than two-thirds the rate of similarly-situated white men in Indiana.
- African Americans exhibited a substantial disparity in business ownership rates in the support services industry compared to similarly-situated non-Hispanic whites.

Access to capital, bonding and insurance. If race/ethnicity or gender discrimination exists in capital, bonding and insurance markets, minorities and women may have difficulty starting or expanding a business. BBC examined whether MBE/WBEs' access to capital — both from their homes and businesses — is comparable to that of majority-owned firms. In addition, BBC examined information about whether minorities and women face barriers in obtaining bonding and insurance.

- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Indiana were more likely to have their applications denied. In addition, African Americans and Hispanic Americans were approved for business loans at rates that were much lower than that of similarly-situated non-Hispanic whites.
- Several interviewees reported that business credit is difficult to obtain and indicated that race and gender discrimination affected access to business credit. There was also some information that indicated difficulties for small businesses — particularly MBE/WBEs — in obtaining bonding and insurance in Indiana. Other interviewees indicated that they have not experienced difficulties associated with access to capital, bonding or insurance.

Success of businesses. BBC completed analyses that assessed whether the success of minority- and women-owned businesses differ from that of majority-owned businesses in the Indiana marketplace. The study team examined business success primarily in terms of business closures, contractions and expansions, and in terms of business receipts and earnings.

- Between 1997 and 2001, African American- and Hispanic American-owned firms in Indiana closed at higher rates than all firms considered together.⁷
- African-American-owned firms were less likely than other firms to expand. However, Hispanic American- and Native American-owned firms were more likely to expand than other firms.
- African American-, Hispanic American- and Native American-owned firms in Indiana were less likely than all firms considered together to experience contraction between 1997 and 2001. Asian American-owned firms were as likely as all Indiana firms considered together to experience contraction.
- African American-, Hispanic American-, Native American- and women-owned firms in Indiana earned substantially less in gross revenue than all firms considered together. The study team also developed regression models of business owner earnings in the East North Central region, which includes Indiana, based on 2000 U.S. Census data.⁸ The models examined the impact of race/ethnicity/gender on business owner earnings after statistically controlling for neutral factors. The study team identified statistically significant disparities in business earnings for female business owners in construction, professional services, goods and support services. There were also statistically significant disparities for African American construction business owners.
- Data from telephone interviews that BBC conducted as part of the availability analysis indicated that, across all subindustries except professional services, a larger share of majority-owned firms than of MBE/WBEs reported gross revenues of \$5 million or more.
- Several interviewees described difficulties that may affect business success for MBE/WBEs in the study industries. Interviewees discussed participation as prime- and subcontractors; unfair denial of bid opportunities and contract awards; and the existence of a “good ol’ boy” network.” Other interviewees indicated experiencing no difficulties in these areas.

⁷ These were the most recent business closure, contractions and expansion data available for Indiana at the time of the disparity study.

⁸ This was the most current Census data source available at the time of this study.

E. Options for Improving MBE/WBEs' Access to IU Contracting Opportunities

After reviewing contracting practices and business assistance programs that IU currently has in place, BBC suggests several steps that IU might consider to further encourage the future participation of small businesses — including MBE/WBEs — in its contracting and procurement. Some of those suggestions may require changes to existing state and administrative code. When implementing any program focusing on minority- and women-owned firms, the State of Indiana and IU must ensure that it is in compliance with U.S. Supreme Court, federal and state court decisions regarding such programs.⁹ For more detail, see Chapter 2 and Appendix B.

Increase competitive opportunities for small contracts. IU might consider increasing the number of small contracts that it awards by segmenting large contracts into multiple, smaller contract elements. Encouraging bid opportunities on small contracts might increase the likelihood of small businesses — including MBE/WBEs — to compete for them. BBC's analyses indicated that IU showed higher MBE/WBE utilization on small contracts than on all contracts (see Chapter 11).

Insurance and bonding requirements. IU might consider reviewing its insurance and bonding requirements to ensure that they do not act as barriers to smaller and newer firms. BBC's analyses of the Indiana marketplace indicated that certain MBE/WBE groups may face barriers in obtaining insurance and bonding and that those barriers may lead to reduced participation in state contracting (see Chapter 4).

Finance, bonding and insurance assistance. BBC's analyses identified disparities in access to capital, bonding and insurance for certain MBE/WBE groups. IU might consider exploring ways to better connect its contractors and consultants with programs offered by local public and private organizations related to those business areas.

Technical assistance and mentoring. IU might consider partnering with local organizations to offer further technical assistance and training to small businesses, including MBE/WBEs. For example, some agencies in other states host a construction management school that staff members from a local construction firm teach. IU might consider partnering with a large construction firm or other organizations to host similar construction management or general business management courses.

Outreach and advocacy, including notification of bid opportunities. IU participates in many outreach and advocacy events that include information about marketing, the MBE/WBE certification process, doing business with the State of Indiana and available bid opportunities. IU might consider broadening its outreach and advocacy efforts to include more partnerships with local trade organizations and other public agencies.

⁹ *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995). See Appendix B for more detail about related case law.

Expand MBE/WBE outreach and assistance measures, and data collection, to include uncertified firms. IU might consider expanding the measures that it uses to encourage the participation of MBE/WBE-certified firms to include minority- and women-owned firms that are not currently certified. BBC's analyses indicate that a large portion of IU's MBE/WBE utilization occurred with firms that were not certified. Further cultivating relationships with those firms could help encourage MBE/WBE participation in IU contracting. In addition, IU might consider monitoring utilization of all minority- and women-owned firms as prime contractors and subcontractors, not just certified MBE/WBEs.

APPENDIX Y.
Ivy Tech Disparity Tables

Figure Y-1.
Agency: Ivy Tech
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,659 | \$188,467 | \$188,467 | | | | |
| (2) MBE/WBE | 846 | \$25,828 | \$25,828 | 13.7 | 22.9 | -9.2 | 59.8 |
| (3) WBE | 541 | \$17,151 | \$17,151 | 9.1 | 14.9 | -5.8 | 61.0 |
| (4) MBE | 305 | \$8,678 | \$8,678 | 4.6 | 8.0 | -3.4 | 57.4 |
| (5) African American-owned | 185 | \$6,183 | \$6,578 | 3.5 | 4.4 | -0.9 | 79.0 |
| (6) Total Asian American-owned | 41 | \$862 | \$917 | 0.5 | 1.5 | -1.0 | 32.7 |
| (7) Asian-Pacific American-owned | 39 | \$837 | \$890 | 0.5 | 0.9 | -0.4 | 52.8 |
| (8) Subcontinent Asian American-owned | 2 | \$25 | \$27 | 0.0 | 0.6 | -0.6 | 2.4 |
| (9) Hispanic American-owned | 57 | \$1,085 | \$1,154 | 0.6 | 1.3 | -0.7 | 46.6 |
| (10) Native American-owned | 1 | \$27 | \$29 | 0.0 | 0.7 | -0.7 | 2.1 |
| (11) Unknown MBE | 21 | \$521 | | | | | |
| (12) Certified | 326 | \$10,104 | \$10,104 | 5.4 | | | |
| (13) Certified woman-owned | 204 | \$5,433 | \$5,439 | 2.9 | | | |
| (14) Certified minority-owned | 121 | \$4,660 | \$4,665 | 2.5 | | | |
| (15) Certified African American-owned | 65 | \$3,514 | \$3,518 | 1.9 | | | |
| (16) Certified Asian-Pacific American-owned | 23 | \$583 | \$583 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$25 | \$25 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 31 | \$538 | \$538 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$10 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-2.
Agency: Ivy Tech
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,220 | \$98,089 | \$98,089 | | | | |
| (2) MBE/WBE | 204 | \$10,492 | \$10,492 | 10.7 | 18.1 | -7.4 | 59.0 |
| (3) WBE | 139 | \$8,630 | \$8,630 | 8.8 | 12.0 | -3.2 | 73.5 |
| (4) MBE | 65 | \$1,862 | \$1,862 | 1.9 | 6.2 | -4.3 | 30.7 |
| (5) African American-owned | 31 | \$1,000 | \$1,025 | 1.0 | 3.2 | -2.1 | 33.1 |
| (6) Total Asian American-owned | 9 | \$483 | \$496 | 0.5 | 0.9 | -0.4 | 55.4 |
| (7) Asian-Pacific American-owned | 9 | \$483 | \$496 | 0.5 | 0.4 | 0.1 | 128.9 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (9) Hispanic American-owned | 21 | \$333 | \$341 | 0.3 | 0.7 | -0.4 | 47.1 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.3 | -1.3 | 0.0 |
| (11) Unknown MBE | 4 | \$46 | | | | | |
| (12) Certified | 60 | \$2,211 | \$2,211 | 2.3 | | | |
| (13) Certified woman-owned | 17 | \$693 | \$693 | 0.7 | | | |
| (14) Certified minority-owned | 43 | \$1,518 | \$1,518 | 1.5 | | | |
| (15) Certified African American-owned | 26 | \$923 | \$923 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$362 | \$362 | 0.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 15 | \$233 | \$233 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-3.
Agency: Ivy Tech
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,200 | \$39,750 | \$39,750 | | | | |
| (2) MBE/WBE | 273 | \$7,812 | \$7,812 | 19.7 | 28.8 | -9.1 | 68.3 |
| (3) WBE | 135 | \$3,676 | \$3,676 | 9.2 | 19.9 | -10.7 | 46.5 |
| (4) MBE | 138 | \$4,137 | \$4,137 | 10.4 | 8.9 | 1.5 | 117.3 |
| (5) African American-owned | 99 | \$3,138 | \$3,499 | 8.8 | 5.1 | 3.7 | 173.6 |
| (6) Total Asian American-owned | 8 | \$106 | \$119 | 0.3 | 2.7 | -2.4 | 11.0 |
| (7) Asian-Pacific American-owned | 7 | \$88 | \$98 | 0.2 | 1.4 | -1.2 | 17.7 |
| (8) Subcontinent Asian American-owned | 1 | \$18 | \$21 | 0.1 | 1.3 | -1.3 | 4.0 |
| (9) Hispanic American-owned | 18 | \$439 | \$489 | 1.2 | 0.9 | 0.3 | 137.9 |
| (10) Native American-owned | 1 | \$27 | \$30 | 0.1 | 0.2 | -0.1 | 48.5 |
| (11) Unknown MBE | 12 | \$427 | | | | | |
| (12) Certified | 70 | \$3,423 | \$3,423 | 8.6 | | | |
| (13) Certified woman-owned | 46 | \$1,886 | \$1,886 | 4.7 | | | |
| (14) Certified minority-owned | 24 | \$1,537 | \$1,537 | 3.9 | | | |
| (15) Certified African American-owned | 15 | \$1,392 | \$1,392 | 3.5 | | | |
| (16) Certified Asian-Pacific American-owned | 6 | \$73 | \$73 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$18 | \$18 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 2 | \$53 | \$53 | 0.1 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-4.
Agency: Ivy Tech
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,773 | \$37,345 | \$37,345 | | | | |
| (2) MBE/WBE | 254 | \$4,007 | \$4,007 | 10.7 | 21.7 | -11.0 | 49.4 |
| (3) WBE | 208 | \$3,394 | \$3,394 | 9.1 | 14.5 | -5.5 | 62.5 |
| (4) MBE | 46 | \$613 | \$613 | 1.6 | 7.2 | -5.5 | 22.9 |
| (5) African American-owned | 4 | \$49 | \$54 | 0.1 | 2.3 | -2.1 | 6.3 |
| (6) Total Asian American-owned | 24 | \$272 | \$295 | 0.8 | 1.7 | -0.9 | 45.7 |
| (7) Asian-Pacific American-owned | 23 | \$266 | \$288 | 0.8 | 1.5 | -0.7 | 51.2 |
| (8) Subcontinent Asian American-owned | 1 | \$7 | \$7 | 0.0 | 0.2 | -0.2 | 8.8 |
| (9) Hispanic American-owned | 13 | \$243 | \$264 | 0.7 | 3.1 | -2.4 | 22.5 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 5 | \$48 | | | | | |
| (12) Certified | 143 | \$2,521 | \$2,521 | 6.8 | | | |
| (13) Certified woman-owned | 115 | \$2,135 | \$2,144 | 5.7 | | | |
| (14) Certified minority-owned | 27 | \$376 | \$378 | 1.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 15 | \$148 | \$149 | 0.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$7 | \$7 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 11 | \$221 | \$222 | 0.6 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$10 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-5.
Agency: Ivy Tech
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 466 | \$13,283 | \$13,283 | | | | |
| (2) MBE/WBE | 115 | \$3,518 | \$3,518 | 26.5 | 44.1 | -17.6 | 60.0 |
| (3) WBE | 59 | \$1,452 | \$1,452 | 10.9 | 22.8 | -11.8 | 48.0 |
| (4) MBE | 56 | \$2,066 | \$2,066 | 15.6 | 21.4 | -5.8 | 72.8 |
| (5) African American-owned | 51 | \$1,996 | \$1,996 | 15.0 | 17.7 | -2.7 | 84.7 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 5 | \$70 | \$70 | 0.5 | 1.7 | -1.2 | 31.1 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 53 | \$1,948 | \$1,948 | 14.7 | | | |
| (13) Certified woman-owned | 26 | \$719 | \$719 | 5.4 | | | |
| (14) Certified minority-owned | 27 | \$1,229 | \$1,229 | 9.3 | | | |
| (15) Certified African American-owned | 24 | \$1,199 | \$1,199 | 9.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$30 | \$30 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-6.
Agency: Ivy Tech
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,442 | \$171,285 | \$171,285 | | | | |
| (2) MBE/WBE | 819 | \$24,103 | \$24,103 | 14.1 | 23.4 | -9.3 | 60.2 |
| (3) WBE | 521 | \$15,968 | \$15,968 | 9.3 | 15.0 | -5.7 | 62.1 |
| (4) MBE | 298 | \$8,135 | \$8,135 | 4.7 | 8.4 | -3.6 | 56.7 |
| (5) African American-owned | 182 | \$6,031 | \$6,419 | 3.7 | 4.7 | -0.9 | 80.2 |
| (6) Total Asian American-owned | 39 | \$500 | \$532 | 0.3 | 1.6 | -1.3 | 19.9 |
| (7) Asian-Pacific American-owned | 37 | \$475 | \$505 | 0.3 | 0.9 | -0.6 | 31.6 |
| (8) Subcontinent Asian American-owned | 2 | \$25 | \$27 | 0.0 | 0.6 | -0.6 | 2.5 |
| (9) Hispanic American-owned | 57 | \$1,085 | \$1,155 | 0.7 | 1.4 | -0.7 | 49.8 |
| (10) Native American-owned | 1 | \$27 | \$29 | 0.0 | 0.7 | -0.7 | 2.4 |
| (11) Unknown MBE | 19 | \$493 | | | | | |
| (12) Certified | 315 | \$9,511 | \$9,511 | 5.6 | | | |
| (13) Certified woman-owned | 198 | \$5,355 | \$5,361 | 3.1 | | | |
| (14) Certified minority-owned | 116 | \$4,146 | \$4,150 | 2.4 | | | |
| (15) Certified African American-owned | 62 | \$3,362 | \$3,366 | 2.0 | | | |
| (16) Certified Asian-Pacific American-owned | 21 | \$221 | \$221 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$25 | \$25 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 31 | \$538 | \$538 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$10 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-7.
Agency: Ivy Tech
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,003 | \$80,907 | \$80,907 | | | | |
| (2) MBE/WBE | 177 | \$8,766 | \$8,766 | 10.8 | 18.1 | -7.3 | 59.8 |
| (3) WBE | 119 | \$7,447 | \$7,447 | 9.2 | 11.6 | -2.4 | 79.6 |
| (4) MBE | 58 | \$1,319 | \$1,319 | 1.6 | 6.5 | -4.9 | 24.9 |
| (5) African American-owned | 28 | \$848 | \$859 | 1.1 | 3.4 | -2.4 | 30.9 |
| (6) Total Asian American-owned | 7 | \$121 | \$123 | 0.2 | 0.9 | -0.8 | 16.1 |
| (7) Asian-Pacific American-owned | 7 | \$121 | \$123 | 0.2 | 0.4 | -0.2 | 41.3 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (9) Hispanic American-owned | 21 | \$333 | \$337 | 0.4 | 0.7 | -0.3 | 59.3 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.3 | -1.3 | 0.0 |
| (11) Unknown MBE | 2 | \$18 | | | | | |
| (12) Certified | 49 | \$1,619 | \$1,619 | 2.0 | | | |
| (13) Certified woman-owned | 11 | \$615 | \$615 | 0.8 | | | |
| (14) Certified minority-owned | 38 | \$1,004 | \$1,004 | 1.2 | | | |
| (15) Certified African American-owned | 23 | \$771 | \$771 | 1.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 15 | \$233 | \$233 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-8.
Agency: Ivy Tech
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,200 | \$39,750 | \$39,750 | | | | |
| (2) MBE/WBE | 273 | \$7,812 | \$7,812 | 19.7 | 28.8 | -9.1 | 68.3 |
| (3) WBE | 135 | \$3,676 | \$3,676 | 9.2 | 19.9 | -10.7 | 46.5 |
| (4) MBE | 138 | \$4,137 | \$4,137 | 10.4 | 8.9 | 1.5 | 117.3 |
| (5) African American-owned | 99 | \$3,138 | \$3,499 | 8.8 | 5.1 | 3.7 | 173.6 |
| (6) Total Asian American-owned | 8 | \$106 | \$119 | 0.3 | 2.7 | -2.4 | 11.0 |
| (7) Asian-Pacific American-owned | 7 | \$88 | \$98 | 0.2 | 1.4 | -1.2 | 17.7 |
| (8) Subcontinent Asian American-owned | 1 | \$18 | \$21 | 0.1 | 1.3 | -1.3 | 4.0 |
| (9) Hispanic American-owned | 18 | \$439 | \$489 | 1.2 | 0.9 | 0.3 | 137.9 |
| (10) Native American-owned | 1 | \$27 | \$30 | 0.1 | 0.2 | -0.1 | 48.5 |
| (11) Unknown MBE | 12 | \$427 | | | | | |
| (12) Certified | 70 | \$3,423 | \$3,423 | 8.6 | | | |
| (13) Certified woman-owned | 46 | \$1,886 | \$1,886 | 4.7 | | | |
| (14) Certified minority-owned | 24 | \$1,537 | \$1,537 | 3.9 | | | |
| (15) Certified African American-owned | 15 | \$1,392 | \$1,392 | 3.5 | | | |
| (16) Certified Asian-Pacific American-owned | 6 | \$73 | \$73 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$18 | \$18 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 2 | \$53 | \$53 | 0.1 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-9.
Agency: Ivy Tech
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,773 | \$37,345 | \$37,345 | | | | |
| (2) MBE/WBE | 254 | \$4,007 | \$4,007 | 10.7 | 21.7 | -11.0 | 49.4 |
| (3) WBE | 208 | \$3,394 | \$3,394 | 9.1 | 14.5 | -5.5 | 62.5 |
| (4) MBE | 46 | \$613 | \$613 | 1.6 | 7.2 | -5.5 | 22.9 |
| (5) African American-owned | 4 | \$49 | \$54 | 0.1 | 2.3 | -2.1 | 6.3 |
| (6) Total Asian American-owned | 24 | \$272 | \$295 | 0.8 | 1.7 | -0.9 | 45.7 |
| (7) Asian-Pacific American-owned | 23 | \$266 | \$288 | 0.8 | 1.5 | -0.7 | 51.2 |
| (8) Subcontinent Asian American-owned | 1 | \$7 | \$7 | 0.0 | 0.2 | -0.2 | 8.8 |
| (9) Hispanic American-owned | 13 | \$243 | \$264 | 0.7 | 3.1 | -2.4 | 22.5 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 5 | \$48 | | | | | |
| (12) Certified | 143 | \$2,521 | \$2,521 | 6.8 | | | |
| (13) Certified woman-owned | 115 | \$2,135 | \$2,144 | 5.7 | | | |
| (14) Certified minority-owned | 27 | \$376 | \$378 | 1.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 15 | \$148 | \$149 | 0.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$7 | \$7 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 11 | \$221 | \$222 | 0.6 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$10 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-10.
Agency: Ivy Tech
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 466 | \$13,283 | \$13,283 | | | | |
| (2) MBE/WBE | 115 | \$3,518 | \$3,518 | 26.5 | 44.1 | -17.6 | 60.0 |
| (3) WBE | 59 | \$1,452 | \$1,452 | 10.9 | 22.8 | -11.8 | 48.0 |
| (4) MBE | 56 | \$2,066 | \$2,066 | 15.6 | 21.4 | -5.8 | 72.8 |
| (5) African American-owned | 51 | \$1,996 | \$1,996 | 15.0 | 17.7 | -2.7 | 84.7 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 5 | \$70 | \$70 | 0.5 | 1.7 | -1.2 | 31.1 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 53 | \$1,948 | \$1,948 | 14.7 | | | |
| (13) Certified woman-owned | 26 | \$719 | \$719 | 5.4 | | | |
| (14) Certified minority-owned | 27 | \$1,229 | \$1,229 | 9.3 | | | |
| (15) Certified African American-owned | 24 | \$1,199 | \$1,199 | 9.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$30 | \$30 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-11.
Agency: Ivy Tech
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 55 | \$17,182 | \$17,182 | | | | |
| (2) MBE/WBE | 27 | \$1,726 | \$1,726 | 10.0 | 18.3 | -8.3 | 54.9 |
| (3) WBE | 20 | \$1,183 | \$1,183 | 6.9 | 13.9 | -7.0 | 49.7 |
| (4) MBE | 7 | \$543 | \$543 | 3.2 | 4.4 | -1.3 | 71.1 |
| (5) African American-owned | 3 | \$152 | \$161 | 0.9 | 1.9 | -0.9 | 49.8 |
| (6) Total Asian American-owned | 2 | \$362 | \$382 | 2.2 | 0.8 | 1.5 | 200+ |
| (7) Asian-Pacific American-owned | 2 | \$362 | \$382 | 2.2 | 0.5 | 1.7 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (11) Unknown MBE | 2 | \$29 | | | | | |
| (12) Certified | 11 | \$592 | \$592 | 3.4 | | | |
| (13) Certified woman-owned | 6 | \$78 | \$78 | 0.5 | | | |
| (14) Certified minority-owned | 5 | \$514 | \$514 | 3.0 | | | |
| (15) Certified African American-owned | 3 | \$152 | \$152 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$362 | \$362 | 2.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-12.
Agency: Ivy Tech
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 217 | \$17,182 | \$17,182 | | | | |
| (2) MBE/WBE | 27 | \$1,726 | \$1,726 | 10.0 | 18.3 | -8.3 | 54.9 |
| (3) WBE | 20 | \$1,183 | \$1,183 | 6.9 | 13.9 | -7.0 | 49.7 |
| (4) MBE | 7 | \$543 | \$543 | 3.2 | 4.4 | -1.3 | 71.1 |
| (5) African American-owned | 3 | \$152 | \$161 | 0.9 | 1.9 | -0.9 | 49.8 |
| (6) Total Asian American-owned | 2 | \$362 | \$382 | 2.2 | 0.8 | 1.5 | 200+ |
| (7) Asian-Pacific American-owned | 2 | \$362 | \$382 | 2.2 | 0.5 | 1.7 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (11) Unknown MBE | 2 | \$29 | | | | | |
| (12) Certified | 11 | \$592 | \$592 | 3.4 | | | |
| (13) Certified woman-owned | 6 | \$78 | \$78 | 0.5 | | | |
| (14) Certified minority-owned | 5 | \$514 | \$514 | 3.0 | | | |
| (15) Certified African American-owned | 3 | \$152 | \$152 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$362 | \$362 | 2.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-16.
Agency: Ivy Tech
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 4,235 | \$77,113 | \$77,113 | | | | |
| (2) MBE/WBE | 785 | \$13,355 | \$13,355 | 17.3 | 25.9 | -8.6 | 66.9 |
| (3) WBE | 496 | \$7,689 | \$7,689 | 10.0 | 17.0 | -7.0 | 58.6 |
| (4) MBE | 289 | \$5,666 | \$5,666 | 7.3 | 8.9 | -1.5 | 82.6 |
| (5) African American-owned | 174 | \$3,758 | \$3,966 | 5.1 | 4.9 | 0.2 | 104.6 |
| (6) Total Asian American-owned | 39 | \$500 | \$528 | 0.7 | 1.7 | -1.0 | 41.0 |
| (7) Asian-Pacific American-owned | 37 | \$475 | \$501 | 0.6 | 1.1 | -0.5 | 56.7 |
| (8) Subcontinent Asian American-owned | 2 | \$25 | \$27 | 0.0 | 0.5 | -0.5 | 6.6 |
| (9) Hispanic American-owned | 57 | \$1,085 | \$1,145 | 1.5 | 1.8 | -0.3 | 83.3 |
| (10) Native American-owned | 1 | \$27 | \$28 | 0.0 | 0.5 | -0.4 | 8.2 |
| (11) Unknown MBE | 18 | \$297 | | | | | |
| (12) Certified | 302 | \$5,201 | \$5,201 | 6.7 | | | |
| (13) Certified woman-owned | 192 | \$3,149 | \$3,156 | 4.1 | | | |
| (14) Certified minority-owned | 109 | \$2,041 | \$2,045 | 2.7 | | | |
| (15) Certified African American-owned | 55 | \$1,257 | \$1,260 | 1.6 | | | |
| (16) Certified Asian-Pacific American-owned | 21 | \$221 | \$221 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$25 | \$25 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 31 | \$538 | \$539 | 0.7 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$10 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-17.
Agency: Ivy Tech
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 885 | \$16,267 | \$16,267 | | | | |
| (2) MBE/WBE | 158 | \$2,568 | \$2,568 | 15.8 | 19.0 | -3.2 | 83.2 |
| (3) WBE | 101 | \$1,665 | \$1,665 | 10.2 | 13.3 | -3.1 | 76.7 |
| (4) MBE | 57 | \$902 | \$902 | 5.5 | 5.6 | -0.1 | 98.7 |
| (5) African American-owned | 27 | \$431 | \$439 | 2.7 | 2.6 | 0.1 | 103.0 |
| (6) Total Asian American-owned | 7 | \$121 | \$124 | 0.8 | 0.6 | 0.2 | 128.7 |
| (7) Asian-Pacific American-owned | 7 | \$121 | \$124 | 0.8 | 0.3 | 0.4 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (9) Hispanic American-owned | 21 | \$333 | \$339 | 2.1 | 0.7 | 1.4 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.5 | -1.5 | 0.0 |
| (11) Unknown MBE | 2 | \$18 | | | | | |
| (12) Certified | 46 | \$713 | \$713 | 4.4 | | | |
| (13) Certified woman-owned | 9 | \$126 | \$126 | 0.8 | | | |
| (14) Certified minority-owned | 37 | \$587 | \$587 | 3.6 | | | |
| (15) Certified African American-owned | 22 | \$354 | \$354 | 2.2 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 15 | \$233 | \$233 | 1.4 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-18.
Agency: Ivy Tech
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,158 | \$23,435 | \$23,435 | | | | |
| (2) MBE/WBE | 265 | \$5,005 | \$5,005 | 21.4 | 28.8 | -7.5 | 74.0 |
| (3) WBE | 131 | \$2,085 | \$2,085 | 8.9 | 20.1 | -11.2 | 44.4 |
| (4) MBE | 134 | \$2,920 | \$2,920 | 12.5 | 8.8 | 3.7 | 141.7 |
| (5) African American-owned | 96 | \$2,117 | \$2,299 | 9.8 | 4.5 | 5.3 | 200+ |
| (6) Total Asian American-owned | 8 | \$106 | \$116 | 0.5 | 2.8 | -2.3 | 17.6 |
| (7) Asian-Pacific American-owned | 7 | \$88 | \$96 | 0.4 | 1.7 | -1.2 | 24.6 |
| (8) Subcontinent Asian American-owned | 1 | \$18 | \$20 | 0.1 | 1.1 | -1.1 | 7.5 |
| (9) Hispanic American-owned | 18 | \$439 | \$476 | 2.0 | 1.2 | 0.8 | 166.3 |
| (10) Native American-owned | 1 | \$27 | \$29 | 0.1 | 0.2 | 0.0 | 79.5 |
| (11) Unknown MBE | 11 | \$231 | | | | | |
| (12) Certified | 65 | \$1,225 | \$1,225 | 5.2 | | | |
| (13) Certified woman-owned | 44 | \$709 | \$709 | 3.0 | | | |
| (14) Certified minority-owned | 21 | \$516 | \$516 | 2.2 | | | |
| (15) Certified African American-owned | 12 | \$372 | \$372 | 1.6 | | | |
| (16) Certified Asian-Pacific American-owned | 6 | \$73 | \$73 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$18 | \$18 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 2 | \$53 | \$53 | 0.2 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-19.
Agency: Ivy Tech
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,742 | \$28,033 | \$28,033 | | | | |
| (2) MBE/WBE | 254 | \$4,007 | \$4,007 | 14.3 | 21.7 | -7.4 | 65.9 |
| (3) WBE | 208 | \$3,394 | \$3,394 | 12.1 | 14.6 | -2.5 | 83.1 |
| (4) MBE | 46 | \$613 | \$613 | 2.2 | 7.1 | -4.9 | 30.7 |
| (5) African American-owned | 4 | \$49 | \$54 | 0.2 | 2.6 | -2.4 | 7.4 |
| (6) Total Asian American-owned | 24 | \$272 | \$295 | 1.1 | 1.6 | -0.5 | 66.8 |
| (7) Asian-Pacific American-owned | 23 | \$266 | \$288 | 1.0 | 1.3 | -0.3 | 80.4 |
| (8) Subcontinent Asian American-owned | 1 | \$7 | \$7 | 0.0 | 0.3 | -0.3 | 8.8 |
| (9) Hispanic American-owned | 13 | \$243 | \$264 | 0.9 | 3.0 | -2.0 | 31.9 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 5 | \$48 | | | | | |
| (12) Certified | 143 | \$2,521 | \$2,521 | 9.0 | | | |
| (13) Certified woman-owned | 115 | \$2,135 | \$2,144 | 7.6 | | | |
| (14) Certified minority-owned | 27 | \$376 | \$378 | 1.3 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 15 | \$148 | \$149 | 0.5 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$7 | \$7 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 11 | \$221 | \$222 | 0.8 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$10 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure Y-20.
Agency: Ivy Tech
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 450 | \$9,377 | \$9,377 | | | | |
| (2) MBE/WBE | 108 | \$1,776 | \$1,776 | 18.9 | 43.2 | -24.3 | 43.8 |
| (3) WBE | 56 | \$545 | \$545 | 5.8 | 23.1 | -17.3 | 25.1 |
| (4) MBE | 52 | \$1,231 | \$1,231 | 13.1 | 20.1 | -7.0 | 65.3 |
| (5) African American-owned | 47 | \$1,161 | \$1,161 | 12.4 | 16.9 | -4.5 | 73.3 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 5 | \$70 | \$70 | 0.8 | 1.6 | -0.9 | 46.4 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 48 | \$742 | \$742 | 7.9 | | | |
| (13) Certified woman-owned | 24 | \$180 | \$180 | 1.9 | | | |
| (14) Certified minority-owned | 24 | \$562 | \$562 | 6.0 | | | |
| (15) Certified African American-owned | 21 | \$532 | \$532 | 5.7 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$30 | \$30 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX Z.

Ivy Tech Summary Report

The State of Indiana commissioned BBC Research & Consulting (BBC) to conduct a disparity study as part of a periodic evaluation of its Minority and Women's Business Enterprises (MBE/WBE) Program. BBC analyzed participation of minority- and women-owned firms — regardless of whether they were certified as such with the State of Indiana — in contracts and subcontracts Ivy Tech Community College (Ivy Tech) awarded between July 1, 2006 and June 30, 2009 (fiscal years 2007 through 2009).¹ The study team then compared MBE/WBE utilization to what those firms would be expected to receive based on their availability for specific types of Ivy Tech work.

Ivy Tech's summary report is organized in five parts:

- A. Availability of MBE/WBEs for Ivy Tech contracts and subcontracts²;
- B. Utilization of MBE/WBEs on Ivy Tech contracts and subcontracts;
- C. Disparity analyses and results;
- D. Marketplace conditions for MBE/WBEs; and
- E. Options for improving MBE/WBEs' access to Ivy Tech contracting opportunities.

A. Availability of MBE/WBEs for Ivy Tech Contracts and Subcontracts

In the disparity analysis, the study team compared the percentage of Ivy Tech contract dollars going to each racial/ethnic/gender group (MBE/WBE utilization) to the percentage of dollars that each group would be expected to receive based on availability for specific types, sizes and locations of Ivy Tech prime contracts and subcontracts (MBE/WBE availability).

BBC collected information about potentially available firms by contacting Indiana businesses in the local construction, professional services, goods and support services industries. More than 9,000 firms completed telephone interviews, allowing the study team to build a database of firms available for specific types of Ivy Tech work. BBC conducted a sophisticated analysis of the number of MBEs and WBEs available for each Ivy Tech contract and subcontract and dollar-weighted the results when determining overall availability for Ivy Tech work. Chapter 5 and Appendix D of the full report explain the availability analysis in detail.

¹ BBC defines WBEs as white women-owned firms. The rationale for doing so is presented in Chapter 5 of the full disparity study report.

² BBC uses the words "contract" and "procurement" interchangeably throughout the report.

Figure Z-1 presents the availability of MBE/WBE firms for Ivy Tech procurements by racial/ethnic/gender group. As shown in Figure Z-1, MBE/WBE firms might be expected to receive about 23 percent of Ivy Tech contract dollars given their availability for specific types, sizes and locations of Ivy Tech prime contracts and subcontracts during the study period. This “availability benchmark” reflects dollar-weighted availability — it is not based on a headcount of MBE/WBEs. White women-owned firms comprise a large share of total MBE/WBE availability for Ivy Tech contracts and procurements.

Figure Z-1.
Availability of firms for Ivy Tech contracts, July 2006–June 2009,
by race/ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) |
|-----------------------------------|---|
| African American-owned | 4.4 % |
| Asian-Pacific American-owned | 0.9 |
| Subcontinent Asian American-owned | 0.6 |
| Hispanic American-owned | 1.3 |
| Native American-owned | 0.7 |
| Total MBE | 8.0 % |
| WBE (white women-owned) | <u>14.9</u> |
| Total MBE/WBE | 22.9 % |
| Majority-owned | 77.1 |
| Total | 100.0 % |

Note: See Figure Y-1 in Appendix Y.
 Numbers may not sum perfectly due to rounding.
 Source: BBC Research & Consulting from 2009/2010 Availability Survey.

The study team found that MBE/WBE availability is highest for Ivy Tech support services contracts (44%) and lowest for construction contracts (18%). The tables in Appendix Y present MBE/WBE availability for different subsets of Ivy Tech contracts and subcontracts.

B. Utilization of MBE/WBEs on Ivy Tech Contracts and Subcontracts

To determine MBE/WBE utilization on Ivy Tech contracts, BBC examined more than 4,600 contracts and subcontracts totaling \$188 million for the three-year study period.³ Figure Z-2 examines Ivy Tech’s utilization of each MBE/WBE group (top half of the figure) and Ivy Tech’s utilization of only those firms certified as MBE/WBEs (bottom half of the figure). MBE/WBE firms received 13.7 percent of Ivy Tech contract and subcontract dollars during the study period. WBEs accounted for most of the overall MBE/WBE utilization.

³ BBC began by considering more than \$540 million in Ivy Tech contracts and procurements. However, many of those dollars were not analyzed as part of the study because they represented procurements that are not typically included in a disparity study. For more detail about the dollars that the study team included in the disparity study, see Chapter 3 and Appendix C.

Figure Z-2.
Utilization of MBE/WBEs and certified MBE/WBEs for Ivy Tech contracts,
July 2006–June 2009

| Race, ethnicity and gender | Utilization % |
|-----------------------------------|----------------|
| MBE/WBEs | |
| African American-owned | 3.5 % |
| Asian-Pacific American-owned | 0.5 |
| Subcontinent Asian American-owned | 0.0 |
| Hispanic American-owned | 0.6 |
| Native American-owned | 0.0 |
| Total MBE | 4.6 % |
| WBE (white women-owned) | 9.1 |
| Total MBE/WBE | 13.7 % |
| Majority-owned | 86.3 |
| Total | 100.0 % |
| Certified MBE/WBEs | |
| African American-owned | 1.9 % |
| Asian-Pacific American-owned | 0.3 |
| Subcontinent Asian American-owned | 0.0 |
| Hispanic American-owned | 0.3 |
| Native American-owned | 0.0 |
| Total MBE certified | 2.5 % |
| WBE (white women-owned) | 2.9 |
| Total MBE/WBE certified | 5.4 % |
| Non-certified | 94.6 |
| Total | 100.0 % |

Note: See Figure Y-1 in Appendix Y.
 Numbers may not sum perfectly due to rounding.
 Source: BBC Research & Consulting from data on Ivy Tech contracts.

When examining Ivy Tech contract dollars by industry, MBE/WBE utilization was 10.7 percent for construction, 19.7 percent for professional services, 10.7 percent for goods and 26.5 percent for support services. For more detail about MBE/WBE utilization by study industry, see Chapter 12 and Figures Y-2 through Y-5 of Appendix Y.

C. Disparity Analysis

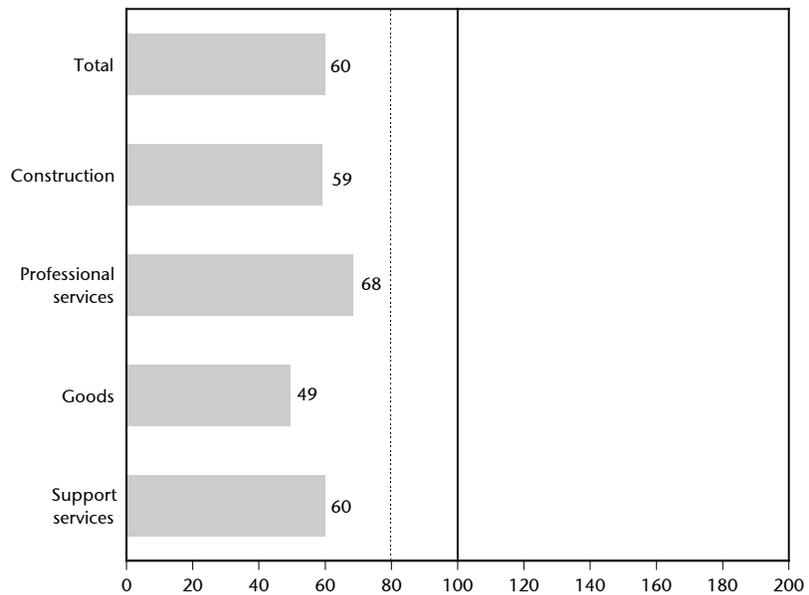
BBC compared actual utilization of MBE/WBEs on Ivy Tech contracts (as a percentage of total dollars) to the percentage of dollars that those firms might be expected to receive based on the availability analysis. To help compare results between groups or across sets of contracts, BBC calculated disparity indices by dividing the utilization percentage by availability and then multiplying by 100.⁴ A disparity index of 100 indicates “parity” — that is, for a particular set of contracts, an MBE/WBE group received 100 percent of the dollars that it would be expected to receive based on availability.

Results by industry. Figure Z-3 presents overall MBE/WBE disparity indices for Ivy Tech contracts by study industry. The results in Figure Z-3 include data from Ivy Tech prime contracts and subcontracts. Overall, MBE/WBEs considered together were substantially underutilized on Ivy Tech contracts (disparity index of 60).⁵ MBE/WBEs showed substantial disparities for every study industry.

Figure Z-3.
Disparity indices for MBE/WBE utilization on Ivy Tech contracts, July 2006–June 2009, by study industry

Note:
See Figures Y-1 through Y-5 in Appendix Y.

Source:
BBC Research & Consulting from data on Ivy Tech contracts.



⁴ For example, if utilization of WBEs for a set of Ivy Tech contracts was 2 percent and availability was 10 percent, the disparity index would be 20 (i.e., 2% divided by 10%, then multiplied by 100).

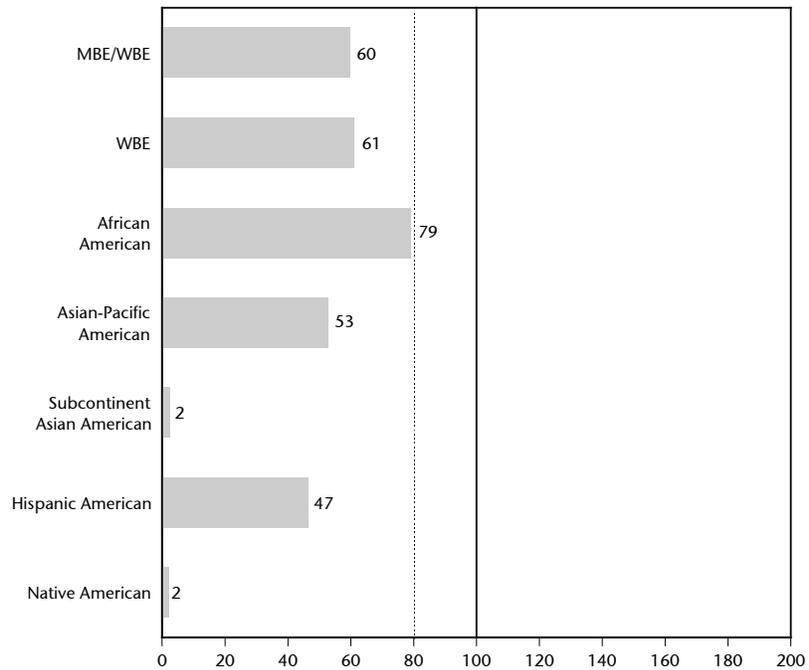
⁵ BBC’s use of the word “substantial” in describing certain disparity indices reflects the opinion of some courts that a disparity index of less than 80 reflects a substantial disparity.

Results by MBE/WBE. Figure Z-4 presents disparity indices by MBE/WBE group. The results in Figure Z-4 include data from Ivy Tech prime contracts and subcontracts. Every MBE/WBE group showed a substantial disparity for Ivy Tech contracts and subcontracts during the study period.

Figure Z-4.
Disparity indices for utilization on Ivy Tech contracts, July 2006–June 2009, by MBE/WBE group

Note:
 See Figures Y-1 in Appendix Y.

Source:
 BBC Research & Consulting from data on Ivy Tech contracts.



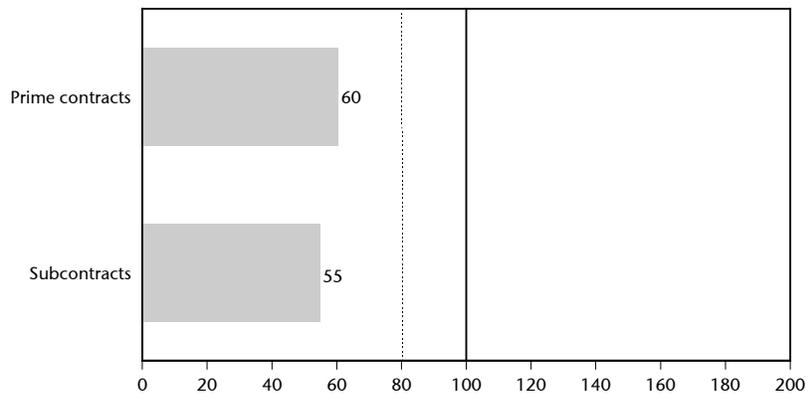
Prime contracts and subcontracts. Figure Z-5 shows overall MBE/WBE disparity results for prime contracts and subcontracts. MBE/WBEs were substantially underutilized on both Ivy Tech prime contracts (disparity index of 60) and on Ivy Tech subcontracts (disparity index of 55).

Disparity results for Ivy Tech subcontracts are very different from those of Indiana Department of Administration (IDOA) and Indiana Department of Transportation (INDOT) subcontracts. IDOA and INDOT often applied MBE/WBE and DBE goals to their contracts during the study period. As discussed in Chapter 7 for IDOA and Chapter 8 for INDOT, overall, MBE/WBEs were not underutilized on IDOA and INDOT subcontracts. The difference in results may be due in part to the absence of MBE/WBE contract goals on Ivy Tech contracts during the study period.

Figure Z-5.
Disparity indices for
MBE/WBE utilization on Ivy
Tech prime contracts and
subcontracts, July 2006–
June 2009

Note:
 See Figure Y-6 and Y-11 in Appendix Y.

Source:
 BBC Research & Consulting from data on
 Ivy Tech contracts.



Comparison of disparity results between Ivy Tech/INDOT and SEI contracts. The disparity study examined MBE/WBE utilization and availability for IDOA, INDOT and seven state colleges and universities (state educational institutions or “SEIs”).

- IDOA and INDOT applied MBE/WBE contract goals to certain state-funded contracts. For federally-funded construction and professional services contracts, which represent most of INDOT’s contracting, INDOT applied Disadvantaged Business Enterprise (DBE) goals.
- SEIs did not apply MBE/WBE contract goals to their contracts or there were no consequences if prime contractors did not meet the goals (or fulfill good faith efforts).

BBC analyzed MBE/WBE disparities for IDOA and INDOT combined (the “state”) and for all SEIs combined. Although disparity results for MBE/WBEs did not differ between state contracts (disparity index of 70) and SEI contracts (disparity index of 71) when considering prime contracts and subcontracts together, disparity results differed considerably when only considering subcontracts. There were no disparities for minority- and women-owned firms on state subcontracts (disparity index of 180), but MBE/WBEs were substantially underutilized on SEI subcontracts (disparity index of 68). These results indicate that the use of MBE/WBE/DBE goals may expand opportunities for minority- and women-owned firms through work as subcontractors. For more details about these combined analyses, see Chapter 6.⁶

⁶ State contracts included contracts awarded by the Indiana Stadium and Convention Building Authority (ISCBA). During the study period, ISCBA awarded contract dollars in connection with two large construction projects — building Lucas Oil Stadium and the Indiana Convention Center — using an MBE/WBE contracting program. In addition to the analyses presented here, the study team examined MBE/WBE disparity indices for state and SEI contracts after removing contract dollars awarded by ISCBA. Without ISCBA, the disparity index for MBE/WBEs was 66 for state prime contracts and subcontracts considered together and 171 for state subcontracts.

D. Marketplace Conditions for MBE/WBEs

BBC examined whether certain barriers exist for minority- and women-owned firms in the Indiana marketplace as a whole. Barriers in the marketplace may help explain some of the disparities that BBC observed for certain MBE/WBE groups in Ivy Tech's construction, professional services, goods and support services procurements. BBC examined potential barriers in the Indiana marketplace in four primary areas:

1. Entry and advancement;
2. Business ownership;
3. Access to capital, bonding and insurance; and
4. Success of businesses.

Chapter 4 and Appendices E – H and Appendix J of the full report provide detailed information about marketplace conditions in Indiana.

Entry and advancement. BBC's analyses indicated that certain minority groups and women are underrepresented in the construction, professional services, goods and support services industries in Indiana, compared to non-Hispanic whites and men, even after accounting for factors such as education. Results indicated that:

- African Americans and women exhibited relatively low representation in the Indiana construction industry compared to their representation in the entire Indiana workforce. In addition, there appeared to be barriers to advancement for minorities and women.
- There was relatively low representation of African Americans, Hispanic Americans and women in the Indiana professional services industry. Among all professional services workers, there was particularly low representation of African Americans and women in engineering- and architecture-related lines of work.
- African Americans and women exhibited relatively low representation in the Indiana goods industry compared to their representation in the entire Indiana workforce. Among goods workers, African Americans and women were also less likely than non-Hispanic whites and males to advance to supervisory and managerial positions.
- Two groups showed lower representation in the support services industry compared to their representation in all Indiana industries considered together — Asian Americans and women. Minorities and women were far less likely to advance to supervisory or managerial positions.

- During in-depth interviews and public forums that BBC held as part of the disparity study, some individuals reported stereotypical attitudes on the part of customers and buyers in Indiana as a contributor to unfavorable work environments for minorities and women. Other interviewees reported instances of racial slurs or sexist comments. Some interviewees indicated that they have not experienced difficulties associated with entry and advancement, or that certain factors — such as stereotypical attitudes — have worked to their advantage.

Business ownership. Quantitative analyses of the Indiana construction, professional services, goods and support services industries revealed statistically significant disparities in business ownership for some racial/ethnic/gender groups after accounting for various neutral factors such as age and education.

- Compared to similarly-situated non-Hispanic whites and men, there were disparities in business ownership rates for African Americans, Hispanic Americans and women working in the Indiana construction industry.
- Asian Americans and women exhibited substantial disparities in business ownership rates in the professional services industry.
- White women own goods businesses at less than two-thirds the rate of similarly-situated white men in Indiana.
- African Americans exhibited a substantial disparity in business ownership rates in the support services industry compared to similarly-situated non-Hispanic whites.

Access to capital, bonding and insurance. If race/ethnicity or gender discrimination exists in capital, bonding and insurance markets, minorities and women may have difficulty starting or expanding a business. BBC examined whether MBE/WBEs' access to capital — both from their homes and businesses — is comparable to that of majority-owned firms. In addition, BBC examined information about whether minorities and women face barriers in obtaining bonding and insurance.

- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Indiana were more likely to have their applications denied. In addition, African Americans and Hispanic Americans were approved for business loans at rates that were much lower than that of similarly-situated non-Hispanic whites.
- Several interviewees reported that business credit is difficult to obtain and indicated that race and gender discrimination affected access to business credit. There was also some information that indicated difficulties for small businesses — particularly MBE/WBEs — in obtaining bonding and insurance in Indiana. Other interviewees indicated that they have not experienced difficulties associated with access to capital, bonding or insurance.

Success of businesses. BBC completed analyses that assessed whether the success of minority- and women-owned businesses differ from that of majority-owned businesses in the Indiana marketplace. The study team examined business success primarily in terms of business closures, contractions and expansions, and in terms of business receipts and earnings.

- Between 1997 and 2001, African American- and Hispanic American-owned firms in Indiana closed at higher rates than all firms considered together.⁷
- African-American-owned firms were less likely than other firms to expand. However, Hispanic American- and Native American-owned firms were more likely to expand than other firms.
- African American-, Hispanic American- and Native American-owned firms in Indiana were less likely than all firms considered together to experience contraction between 1997 and 2001. Asian American-owned firms were as likely as all Indiana firms considered together to experience contraction.
- African American-, Hispanic American-, Native American- and women-owned firms in Indiana earned substantially less in gross revenue than all firms considered together. The study team also developed regression models of business owner earnings in the East North Central region, which includes Indiana, based on 2000 U.S. Census data.⁸ The models examined the impact of race/ethnicity/gender on business owner earnings after statistically controlling for neutral factors. The study team identified statistically significant disparities in business earnings for female business owners in construction, professional services, goods and support services. There were also statistically significant disparities for African American construction business owners.
- Data from telephone interviews that BBC conducted as part of the availability analysis indicated that, across all subindustries except professional services, a larger share of majority-owned firms than of MBE/WBEs reported gross revenues of \$5 million or more.
- Several interviewees described difficulties that may affect business success for MBE/WBEs in the study industries. Interviewees discussed participation as prime- and subcontractors; unfair denial of bid opportunities and contract awards; and the existence of a “good ol’ boy” network.” Other interviewees indicated experiencing no difficulties in these areas.

⁷ These were the most recent business closure, contractions and expansion data available for Indiana at the time of the disparity study.

⁸ This was the most current Census data source available at the time of this study.

E. Options for Improving MBE/WBEs' Access to Ivy Tech Contracting Opportunities

After reviewing contracting practices and business assistance programs that Ivy Tech currently has in place, BBC suggests several steps that Ivy Tech might consider to further encourage the future participation of small businesses — including MBE/WBEs — in its contracting and procurement. Some of those suggestions may require changes to existing state and administrative code. When implementing any program focusing on minority- and women-owned firms, the State of Indiana and Ivy Tech must ensure that it is in compliance with U.S. Supreme Court, federal and state court decisions regarding such programs.⁹ For more detail, see Chapter 2 and Appendix B.

Increase competitive opportunities for small contracts. Ivy Tech might consider increasing the number of small contracts that it awards by segmenting large contracts into multiple, smaller contract elements. Encouraging bid opportunities on small contracts might increase the likelihood of small businesses — including MBE/WBEs — to compete for them. BBC's analyses indicated that Ivy Tech showed higher MBE/WBE utilization on small contracts than on all contracts (see Chapter 12).

Insurance and bonding requirements. Ivy Tech might consider reviewing its insurance and bonding requirements to ensure that they do not act as barriers to smaller and newer firms. BBC's analyses of the Indiana marketplace indicated that certain MBE/WBE groups may face barriers in obtaining insurance and bonding and that those barriers may lead to reduced participation in state contracting (see Chapter 4).

Finance, bonding and insurance assistance. BBC's analyses identified disparities in access to capital, bonding and insurance for certain MBE/WBE groups. Ivy Tech might consider exploring ways to better connect its contractors and consultants with programs offered by local public and private organizations related to those business areas.

Technical assistance and mentoring. Ivy Tech might consider partnering with local organizations to offer further technical assistance and training to small businesses, including MBE/WBEs. For example, some agencies in other states host a construction management school that staff members from a local construction firm teach. Ivy Tech might consider partnering with a large construction firm or other organizations to host similar construction management or general business management courses.

Outreach and advocacy, including notification of bid opportunities. Ivy Tech participates in many outreach and advocacy events that include information about marketing, the MBE/WBE certification process, doing business with the State of Indiana and available bid opportunities. Ivy Tech might consider broadening its outreach and advocacy efforts to include more partnerships with local trade organizations and other public agencies.

⁹ *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995). See Appendix B for more detail about related case law.

Expand MBE/WBE outreach and assistance measures, and data collection, to include uncertified firms. Ivy Tech might consider expanding the measures that it uses to encourage the participation of MBE/WBE-certified firms to include minority- and women-owned firms that are not currently certified. BBC's analyses indicate that a large portion of Ivy Tech's MBE/WBE utilization occurred with firms that were not certified. Further cultivating relationships with those firms could help encourage MBE/WBE participation in Ivy Tech contracting. In addition, Ivy Tech might consider monitoring utilization of all minority- and women-owned firms as prime contractors and subcontractors, not just certified MBE/WBEs.

APPENDIX AA.
Purdue University Disparity Tables

Figure AA-1.
Agency: Purdue University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 8,971 | \$694,688 | \$694,688 | | | | |
| (2) MBE/WBE | 1,452 | \$76,008 | \$76,008 | 10.9 | 17.8 | -6.9 | 61.3 |
| (3) WBE | 1,124 | \$58,766 | \$58,766 | 8.5 | 9.3 | -0.8 | 91.0 |
| (4) MBE | 328 | \$17,241 | \$17,241 | 2.5 | 8.5 | -6.1 | 29.1 |
| (5) African American-owned | 74 | \$6,456 | \$7,008 | 1.0 | 3.8 | -2.8 | 26.7 |
| (6) Total Asian American-owned | 101 | \$4,411 | \$4,788 | 0.7 | 3.4 | -2.7 | 20.5 |
| (7) Asian-Pacific American-owned | 57 | \$2,294 | \$2,490 | 0.4 | 1.2 | -0.8 | 30.9 |
| (8) Subcontinent Asian American-owned | 42 | \$2,093 | \$2,272 | 0.3 | 2.2 | -1.9 | 14.9 |
| (9) Hispanic American-owned | 89 | \$3,735 | \$4,054 | 0.6 | 1.0 | -0.4 | 58.7 |
| (10) Native American-owned | 15 | \$1,281 | \$1,391 | 0.2 | 0.3 | -0.1 | 61.5 |
| (11) Unknown MBE | 49 | \$1,359 | | | | | |
| (12) Certified | 649 | \$45,508 | \$45,508 | 6.6 | | | |
| (13) Certified woman-owned | 510 | \$36,300 | \$36,348 | 5.2 | | | |
| (14) Certified minority-owned | 138 | \$9,147 | \$9,160 | 1.3 | | | |
| (15) Certified African American-owned | 49 | \$5,694 | \$5,702 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 18 | \$517 | \$518 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 13 | \$1,134 | \$1,135 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 56 | \$1,655 | \$1,657 | 0.2 | | | |
| (19) Certified Native American-owned | 2 | \$147 | \$148 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$60 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-2.
Agency: Purdue University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,408 | \$436,434 | \$436,434 | | | | |
| (2) MBE/WBE | 309 | \$41,051 | \$41,051 | 9.4 | 15.9 | -6.5 | 59.1 |
| (3) WBE | 240 | \$38,015 | \$38,015 | 8.7 | 7.8 | 0.9 | 111.7 |
| (4) MBE | 69 | \$3,036 | \$3,036 | 0.7 | 8.1 | -7.4 | 8.6 |
| (5) African American-owned | 23 | \$574 | \$738 | 0.2 | 4.3 | -4.1 | 3.9 |
| (6) Total Asian American-owned | 10 | \$485 | \$623 | 0.1 | 2.9 | -2.8 | 4.9 |
| (7) Asian-Pacific American-owned | 6 | \$76 | \$97 | 0.0 | 0.3 | -0.3 | 7.6 |
| (8) Subcontinent Asian American-owned | 4 | \$409 | \$526 | 0.1 | 2.6 | -2.5 | 4.6 |
| (9) Hispanic American-owned | 11 | \$1,170 | \$1,504 | 0.3 | 0.4 | -0.1 | 78.6 |
| (10) Native American-owned | 2 | \$132 | \$170 | 0.0 | 0.3 | -0.3 | 11.4 |
| (11) Unknown MBE | 23 | \$674 | | | | | |
| (12) Certified | 94 | \$27,037 | \$27,037 | 6.2 | | | |
| (13) Certified woman-owned | 63 | \$25,848 | \$25,848 | 5.9 | | | |
| (14) Certified minority-owned | 31 | \$1,188 | \$1,188 | 0.3 | | | |
| (15) Certified African American-owned | 20 | \$457 | \$457 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$14 | \$14 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 2 | \$347 | \$347 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 7 | \$244 | \$244 | 0.1 | | | |
| (19) Certified Native American-owned | 1 | \$127 | \$127 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-3.
Agency: Purdue University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,644 | \$136,157 | \$136,157 | | | | |
| (2) MBE/WBE | 487 | \$21,339 | \$21,339 | 15.7 | 23.4 | -7.8 | 66.9 |
| (3) WBE | 339 | \$9,696 | \$9,696 | 7.1 | 13.5 | -6.4 | 52.7 |
| (4) MBE | 148 | \$11,643 | \$11,643 | 8.6 | 9.9 | -1.4 | 86.1 |
| (5) African American-owned | 34 | \$5,481 | \$5,736 | 4.2 | 3.6 | 0.7 | 118.3 |
| (6) Total Asian American-owned | 57 | \$3,108 | \$3,252 | 2.4 | 4.9 | -2.5 | 48.6 |
| (7) Asian-Pacific American-owned | 29 | \$1,601 | \$1,675 | 1.2 | 2.2 | -0.9 | 56.7 |
| (8) Subcontinent Asian American-owned | 27 | \$1,489 | \$1,558 | 1.1 | 2.7 | -1.6 | 41.7 |
| (9) Hispanic American-owned | 30 | \$1,564 | \$1,636 | 1.2 | 0.9 | 0.3 | 128.0 |
| (10) Native American-owned | 11 | \$974 | \$1,019 | 0.7 | 0.4 | 0.3 | 166.3 |
| (11) Unknown MBE | 16 | \$516 | | | | | |
| (12) Certified | 269 | \$12,086 | \$12,086 | 8.9 | | | |
| (13) Certified woman-owned | 218 | \$5,238 | \$5,238 | 3.8 | | | |
| (14) Certified minority-owned | 51 | \$6,847 | \$6,847 | 5.0 | | | |
| (15) Certified African American-owned | 22 | \$5,009 | \$5,009 | 3.7 | | | |
| (16) Certified Asian-Pacific American-owned | 12 | \$473 | \$473 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 10 | \$782 | \$782 | 0.6 | | | |
| (18) Certified Hispanic American-owned | 7 | \$584 | \$584 | 0.4 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-4.
Agency: Purdue University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,568 | \$114,339 | \$114,339 | | | | |
| (2) MBE/WBE | 584 | \$12,298 | \$12,298 | 10.8 | 17.4 | -6.7 | 61.8 |
| (3) WBE | 488 | \$10,256 | \$10,256 | 9.0 | 9.1 | -0.1 | 99.1 |
| (4) MBE | 96 | \$2,042 | \$2,042 | 1.8 | 8.4 | -6.6 | 21.4 |
| (5) African American-owned | 12 | \$316 | \$334 | 0.3 | 2.1 | -1.8 | 13.7 |
| (6) Total Asian American-owned | 32 | \$462 | \$488 | 0.4 | 3.3 | -2.9 | 12.7 |
| (7) Asian-Pacific American-owned | 20 | \$261 | \$275 | 0.2 | 3.3 | -3.1 | 7.3 |
| (8) Subcontinent Asian American-owned | 11 | \$195 | \$206 | 0.2 | 0.0 | 0.1 | 200+ |
| (9) Hispanic American-owned | 45 | \$980 | \$1,036 | 0.9 | 2.9 | -2.0 | 31.5 |
| (10) Native American-owned | 2 | \$175 | \$185 | 0.2 | 0.0 | 0.2 | 200+ |
| (11) Unknown MBE | 5 | \$109 | | | | | |
| (12) Certified | 279 | \$6,297 | \$6,297 | 5.5 | | | |
| (13) Certified woman-owned | 228 | \$5,204 | \$5,255 | 4.6 | | | |
| (14) Certified minority-owned | 50 | \$1,033 | \$1,042 | 0.9 | | | |
| (15) Certified African American-owned | 4 | \$169 | \$170 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 5 | \$30 | \$31 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 39 | \$808 | \$816 | 0.7 | | | |
| (19) Certified Native American-owned | 1 | \$20 | \$21 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$60 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-5.
Agency: Purdue University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 351 | \$7,758 | \$7,758 | | | | |
| (2) MBE/WBE | 72 | \$1,319 | \$1,319 | 17.0 | 34.3 | -17.3 | 49.6 |
| (3) WBE | 57 | \$799 | \$799 | 10.3 | 23.1 | -12.8 | 44.5 |
| (4) MBE | 15 | \$520 | \$520 | 6.7 | 11.2 | -4.5 | 60.0 |
| (5) African American-owned | 5 | \$84 | \$95 | 1.2 | 3.0 | -1.8 | 40.3 |
| (6) Total Asian American-owned | 2 | \$357 | \$403 | 5.2 | 0.8 | 4.4 | 200+ |
| (7) Asian-Pacific American-owned | 2 | \$357 | \$403 | 5.2 | 0.7 | 4.5 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 3 | \$20 | \$23 | 0.3 | 5.4 | -5.1 | 5.4 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 2.0 | -2.0 | 0.0 |
| (11) Unknown MBE | 5 | \$60 | | | | | |
| (12) Certified | 7 | \$88 | \$88 | 1.1 | | | |
| (13) Certified woman-owned | 1 | \$9 | \$9 | 0.1 | | | |
| (14) Certified minority-owned | 6 | \$79 | \$79 | 1.0 | | | |
| (15) Certified African American-owned | 3 | \$59 | \$59 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$20 | \$20 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-6.
Agency: Purdue University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 8,250 | \$579,882 | \$579,882 | | | | |
| (2) MBE/WBE | 1,329 | \$64,935 | \$64,935 | 11.2 | 18.0 | -6.8 | 62.2 |
| (3) WBE | 1,059 | \$50,944 | \$50,944 | 8.8 | 9.0 | -0.3 | 97.2 |
| (4) MBE | 270 | \$13,991 | \$13,991 | 2.4 | 9.0 | -6.5 | 26.9 |
| (5) African American-owned | 49 | \$5,308 | \$5,630 | 1.0 | 3.8 | -2.9 | 25.3 |
| (6) Total Asian American-owned | 91 | \$3,850 | \$4,083 | 0.7 | 3.8 | -3.1 | 18.6 |
| (7) Asian-Pacific American-owned | 53 | \$2,210 | \$2,344 | 0.4 | 1.3 | -0.9 | 31.8 |
| (8) Subcontinent Asian American-owned | 36 | \$1,616 | \$1,714 | 0.3 | 2.5 | -2.2 | 11.7 |
| (9) Hispanic American-owned | 77 | \$2,879 | \$3,053 | 0.5 | 1.0 | -0.5 | 53.8 |
| (10) Native American-owned | 14 | \$1,154 | \$1,224 | 0.2 | 0.3 | -0.1 | 80.1 |
| (11) Unknown MBE | 39 | \$800 | | | | | |
| (12) Certified | 587 | \$40,976 | \$40,976 | 7.1 | | | |
| (13) Certified woman-owned | 488 | \$34,162 | \$34,212 | 5.9 | | | |
| (14) Certified minority-owned | 98 | \$6,754 | \$6,764 | 1.2 | | | |
| (15) Certified African American-owned | 27 | \$4,650 | \$4,657 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 16 | \$462 | \$463 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 9 | \$719 | \$720 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 45 | \$902 | \$904 | 0.2 | | | |
| (19) Certified Native American-owned | 1 | \$20 | \$20 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$60 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-7.
Agency: Purdue University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,755 | \$330,562 | \$330,562 | | | | |
| (2) MBE/WBE | 221 | \$33,315 | \$33,315 | 10.1 | 15.6 | -5.5 | 64.6 |
| (3) WBE | 191 | \$31,754 | \$31,754 | 9.6 | 6.9 | 2.7 | 138.5 |
| (4) MBE | 30 | \$1,561 | \$1,561 | 0.5 | 8.7 | -8.2 | 5.5 |
| (5) African American-owned | 5 | \$84 | \$91 | 0.0 | 4.5 | -4.5 | 0.6 |
| (6) Total Asian American-owned | 5 | \$377 | \$407 | 0.1 | 3.5 | -3.4 | 3.5 |
| (7) Asian-Pacific American-owned | 4 | \$47 | \$50 | 0.0 | 0.2 | -0.2 | 7.0 |
| (8) Subcontinent Asian American-owned | 1 | \$331 | \$357 | 0.1 | 3.3 | -3.2 | 3.2 |
| (9) Hispanic American-owned | 6 | \$979 | \$1,057 | 0.3 | 0.2 | 0.1 | 137.3 |
| (10) Native American-owned | 1 | \$5 | \$6 | 0.0 | 0.2 | -0.2 | 0.7 |
| (11) Unknown MBE | 13 | \$115 | | | | | |
| (12) Certified | 59 | \$25,346 | \$25,346 | 7.7 | | | |
| (13) Certified woman-owned | 51 | \$24,902 | \$24,902 | 7.5 | | | |
| (14) Certified minority-owned | 8 | \$444 | \$444 | 0.1 | | | |
| (15) Certified African American-owned | 4 | \$48 | \$48 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$14 | \$14 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$331 | \$331 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 2 | \$52 | \$52 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-8.
Agency: Purdue University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,586 | \$129,002 | \$129,002 | | | | |
| (2) MBE/WBE | 455 | \$18,188 | \$18,188 | 14.1 | 23.5 | -9.4 | 59.9 |
| (3) WBE | 324 | \$8,286 | \$8,286 | 6.4 | 13.5 | -7.1 | 47.5 |
| (4) MBE | 131 | \$9,902 | \$9,902 | 7.7 | 10.0 | -2.3 | 76.6 |
| (5) African American-owned | 29 | \$4,858 | \$5,125 | 4.0 | 3.6 | 0.3 | 109.5 |
| (6) Total Asian American-owned | 52 | \$2,655 | \$2,801 | 2.2 | 5.0 | -2.8 | 43.7 |
| (7) Asian-Pacific American-owned | 27 | \$1,546 | \$1,631 | 1.3 | 2.2 | -0.9 | 57.6 |
| (8) Subcontinent Asian American-owned | 24 | \$1,090 | \$1,150 | 0.9 | 2.8 | -1.9 | 32.1 |
| (9) Hispanic American-owned | 23 | \$899 | \$948 | 0.7 | 0.9 | -0.2 | 79.6 |
| (10) Native American-owned | 11 | \$974 | \$1,027 | 0.8 | 0.4 | 0.4 | 183.4 |
| (11) Unknown MBE | 16 | \$516 | | | | | |
| (12) Certified | 243 | \$9,256 | \$9,256 | 7.2 | | | |
| (13) Certified woman-owned | 208 | \$4,047 | \$4,047 | 3.1 | | | |
| (14) Certified minority-owned | 35 | \$5,210 | \$5,210 | 4.0 | | | |
| (15) Certified African American-owned | 17 | \$4,386 | \$4,386 | 3.4 | | | |
| (16) Certified Asian-Pacific American-owned | 10 | \$418 | \$418 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 7 | \$383 | \$383 | 0.3 | | | |
| (18) Certified Hispanic American-owned | 1 | \$22 | \$22 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-9.
Agency: Purdue University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,558 | \$112,560 | \$112,560 | | | | |
| (2) MBE/WBE | 581 | \$12,113 | \$12,113 | 10.8 | 17.6 | -6.8 | 61.2 |
| (3) WBE | 487 | \$10,105 | \$10,105 | 9.0 | 9.1 | -0.1 | 98.5 |
| (4) MBE | 94 | \$2,008 | \$2,008 | 1.8 | 8.5 | -6.7 | 21.1 |
| (5) African American-owned | 10 | \$281 | \$298 | 0.3 | 2.1 | -1.9 | 12.3 |
| (6) Total Asian American-owned | 32 | \$462 | \$488 | 0.4 | 3.4 | -3.0 | 12.8 |
| (7) Asian-Pacific American-owned | 20 | \$261 | \$276 | 0.2 | 3.3 | -3.1 | 7.3 |
| (8) Subcontinent Asian American-owned | 11 | \$195 | \$206 | 0.2 | 0.0 | 0.1 | 200+ |
| (9) Hispanic American-owned | 45 | \$980 | \$1,037 | 0.9 | 2.9 | -2.0 | 31.5 |
| (10) Native American-owned | 2 | \$175 | \$185 | 0.2 | 0.0 | 0.2 | 200+ |
| (11) Unknown MBE | 5 | \$109 | | | | | |
| (12) Certified | 278 | \$6,285 | \$6,285 | 5.6 | | | |
| (13) Certified woman-owned | 228 | \$5,204 | \$5,255 | 4.7 | | | |
| (14) Certified minority-owned | 49 | \$1,021 | \$1,031 | 0.9 | | | |
| (15) Certified African American-owned | 3 | \$157 | \$159 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 5 | \$30 | \$31 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 39 | \$808 | \$816 | 0.7 | | | |
| (19) Certified Native American-owned | 1 | \$20 | \$21 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$60 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-10.
Agency: Purdue University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 351 | \$7,758 | \$7,758 | | | | |
| (2) MBE/WBE | 72 | \$1,319 | \$1,319 | 17.0 | 34.3 | -17.3 | 49.6 |
| (3) WBE | 57 | \$799 | \$799 | 10.3 | 23.1 | -12.8 | 44.5 |
| (4) MBE | 15 | \$520 | \$520 | 6.7 | 11.2 | -4.5 | 60.0 |
| (5) African American-owned | 5 | \$84 | \$95 | 1.2 | 3.0 | -1.8 | 40.3 |
| (6) Total Asian American-owned | 2 | \$357 | \$403 | 5.2 | 0.8 | 4.4 | 200+ |
| (7) Asian-Pacific American-owned | 2 | \$357 | \$403 | 5.2 | 0.7 | 4.5 | 200+ |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (9) Hispanic American-owned | 3 | \$20 | \$23 | 0.3 | 5.4 | -5.1 | 5.4 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 2.0 | -2.0 | 0.0 |
| (11) Unknown MBE | 5 | \$60 | | | | | |
| (12) Certified | 7 | \$88 | \$88 | 1.1 | | | |
| (13) Certified woman-owned | 1 | \$9 | \$9 | 0.1 | | | |
| (14) Certified minority-owned | 6 | \$79 | \$79 | 1.0 | | | |
| (15) Certified African American-owned | 3 | \$59 | \$59 | 0.8 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$20 | \$20 | 0.3 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-11.
Agency: Purdue University
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 721 | \$114,807 | \$114,807 | | | | |
| (2) MBE/WBE | 123 | \$11,073 | \$11,073 | 9.6 | 17.0 | -7.4 | 56.7 |
| (3) WBE | 65 | \$7,822 | \$7,822 | 6.8 | 10.6 | -3.8 | 64.4 |
| (4) MBE | 58 | \$3,251 | \$3,251 | 2.8 | 6.4 | -3.6 | 44.0 |
| (5) African American-owned | 25 | \$1,148 | \$1,386 | 1.2 | 3.5 | -2.2 | 35.0 |
| (6) Total Asian American-owned | 10 | \$561 | \$678 | 0.6 | 1.1 | -0.5 | 52.2 |
| (7) Asian-Pacific American-owned | 4 | \$84 | \$102 | 0.1 | 0.6 | -0.5 | 14.7 |
| (8) Subcontinent Asian American-owned | 6 | \$477 | \$576 | 0.5 | 0.5 | 0.0 | 94.8 |
| (9) Hispanic American-owned | 12 | \$856 | \$1,034 | 0.9 | 1.1 | -0.2 | 83.8 |
| (10) Native American-owned | 1 | \$127 | \$153 | 0.1 | 0.6 | -0.5 | 20.9 |
| (11) Unknown MBE | 10 | \$559 | | | | | |
| (12) Certified | 62 | \$4,532 | \$4,532 | 3.9 | | | |
| (13) Certified woman-owned | 22 | \$2,138 | \$2,138 | 1.9 | | | |
| (14) Certified minority-owned | 40 | \$2,393 | \$2,393 | 2.1 | | | |
| (15) Certified African American-owned | 22 | \$1,044 | \$1,044 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$55 | \$55 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 4 | \$415 | \$415 | 0.4 | | | |
| (18) Certified Hispanic American-owned | 11 | \$753 | \$753 | 0.7 | | | |
| (19) Certified Native American-owned | 1 | \$127 | \$127 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-12.
Agency: Purdue University
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 653 | \$105,872 | \$105,872 | | | | |
| (2) MBE/WBE | 88 | \$7,736 | \$7,736 | 7.3 | 16.9 | -9.6 | 43.3 |
| (3) WBE | 49 | \$6,261 | \$6,261 | 5.9 | 10.5 | -4.6 | 56.4 |
| (4) MBE | 39 | \$1,475 | \$1,475 | 1.4 | 6.4 | -5.0 | 21.8 |
| (5) African American-owned | 18 | \$490 | \$789 | 0.7 | 3.6 | -2.8 | 20.9 |
| (6) Total Asian American-owned | 5 | \$108 | \$173 | 0.2 | 1.0 | -0.8 | 17.1 |
| (7) Asian-Pacific American-owned | 2 | \$29 | \$47 | 0.0 | 0.5 | -0.5 | 8.3 |
| (8) Subcontinent Asian American-owned | 3 | \$79 | \$127 | 0.1 | 0.4 | -0.3 | 28.1 |
| (9) Hispanic American-owned | 5 | \$191 | \$308 | 0.3 | 1.1 | -0.8 | 26.9 |
| (10) Native American-owned | 1 | \$127 | \$204 | 0.2 | 0.6 | -0.4 | 30.2 |
| (11) Unknown MBE | 10 | \$559 | | | | | |
| (12) Certified | 35 | \$1,691 | \$1,691 | 1.6 | | | |
| (13) Certified woman-owned | 12 | \$947 | \$947 | 0.9 | | | |
| (14) Certified minority-owned | 23 | \$744 | \$744 | 0.7 | | | |
| (15) Certified African American-owned | 16 | \$409 | \$409 | 0.4 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$16 | \$16 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 5 | \$191 | \$191 | 0.2 | | | |
| (19) Certified Native American-owned | 1 | \$127 | \$127 | 0.1 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-13.
Agency: Purdue University
Funding: All
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 58 | \$7,155 | \$7,155 | | | | |
| (2) MBE/WBE | 32 | \$3,151 | \$3,151 | 44.0 | 21.5 | 22.6 | 200+ |
| (3) WBE | 15 | \$1,410 | \$1,410 | 19.7 | 13.3 | 6.4 | 148.6 |
| (4) MBE | 17 | \$1,741 | \$1,741 | 24.3 | 8.2 | 16.1 | 200+ |
| (5) African American-owned | 5 | \$623 | \$623 | 8.7 | 2.3 | 6.4 | 200+ |
| (6) Total Asian American-owned | 5 | \$453 | \$453 | 6.3 | 3.9 | 2.4 | 161.3 |
| (7) Asian-Pacific American-owned | 2 | \$55 | \$55 | 0.8 | 1.7 | -1.0 | 44.5 |
| (8) Subcontinent Asian American-owned | 3 | \$398 | \$398 | 5.6 | 2.2 | 3.4 | 200+ |
| (9) Hispanic American-owned | 7 | \$665 | \$665 | 9.3 | 1.2 | 8.1 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 26 | \$2,829 | \$2,829 | 39.5 | | | |
| (13) Certified woman-owned | 10 | \$1,192 | \$1,192 | 16.7 | | | |
| (14) Certified minority-owned | 16 | \$1,638 | \$1,638 | 22.9 | | | |
| (15) Certified African American-owned | 5 | \$623 | \$623 | 8.7 | | | |
| (16) Certified Asian-Pacific American-owned | 2 | \$55 | \$55 | 0.8 | | | |
| (17) Certified Subcontinent Asian American-owned | 3 | \$398 | \$398 | 5.6 | | | |
| (18) Certified Hispanic American-owned | 6 | \$561 | \$561 | 7.8 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-16.
Agency: Purdue University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 7,752 | \$159,461 | \$159,461 | | | | |
| (2) MBE/WBE | 1,251 | \$26,359 | \$26,359 | 16.5 | 21.3 | -4.8 | 77.5 |
| (3) WBE | 1,000 | \$19,877 | \$19,877 | 12.5 | 13.3 | -0.9 | 93.6 |
| (4) MBE | 251 | \$6,482 | \$6,482 | 4.1 | 8.0 | -3.9 | 50.8 |
| (5) African American-owned | 42 | \$1,155 | \$1,285 | 0.8 | 3.5 | -2.7 | 23.2 |
| (6) Total Asian American-owned | 85 | \$2,159 | \$2,403 | 1.5 | 2.2 | -0.6 | 70.0 |
| (7) Asian-Pacific American-owned | 49 | \$1,060 | \$1,180 | 0.7 | 1.4 | -0.7 | 52.7 |
| (8) Subcontinent Asian American-owned | 34 | \$1,075 | \$1,196 | 0.7 | 0.7 | 0.0 | 100.2 |
| (9) Hispanic American-owned | 74 | \$1,972 | \$2,194 | 1.4 | 1.8 | -0.4 | 75.8 |
| (10) Native American-owned | 12 | \$539 | \$599 | 0.4 | 0.4 | -0.1 | 84.6 |
| (11) Unknown MBE | 38 | \$657 | | | | | |
| (12) Certified | 541 | \$11,629 | \$11,629 | 7.3 | | | |
| (13) Certified woman-owned | 449 | \$9,176 | \$9,224 | 5.8 | | | |
| (14) Certified minority-owned | 91 | \$2,393 | \$2,405 | 1.5 | | | |
| (15) Certified African American-owned | 22 | \$774 | \$778 | 0.5 | | | |
| (16) Certified Asian-Pacific American-owned | 15 | \$307 | \$309 | 0.2 | | | |
| (17) Certified Subcontinent Asian American-owned | 8 | \$388 | \$390 | 0.2 | | | |
| (18) Certified Hispanic American-owned | 45 | \$902 | \$907 | 0.6 | | | |
| (19) Certified Native American-owned | 1 | \$20 | \$21 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$60 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-17.
Agency: Purdue University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,492 | \$34,950 | \$34,950 | | | | |
| (2) MBE/WBE | 171 | \$4,116 | \$4,116 | 11.8 | 18.4 | -6.7 | 63.9 |
| (3) WBE | 144 | \$3,654 | \$3,654 | 10.5 | 12.5 | -2.0 | 83.6 |
| (4) MBE | 27 | \$462 | \$462 | 1.3 | 5.9 | -4.6 | 22.3 |
| (5) African American-owned | 5 | \$84 | \$112 | 0.3 | 3.5 | -3.2 | 9.2 |
| (6) Total Asian American-owned | 4 | \$47 | \$62 | 0.2 | 0.6 | -0.4 | 29.2 |
| (7) Asian-Pacific American-owned | 4 | \$47 | \$62 | 0.2 | 0.3 | -0.1 | 57.4 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (9) Hispanic American-owned | 4 | \$211 | \$281 | 0.8 | 0.6 | 0.2 | 132.9 |
| (10) Native American-owned | 1 | \$5 | \$7 | 0.0 | 1.0 | -0.9 | 2.1 |
| (11) Unknown MBE | 13 | \$115 | | | | | |
| (12) Certified | 23 | \$731 | \$731 | 2.1 | | | |
| (13) Certified woman-owned | 16 | \$617 | \$617 | 1.8 | | | |
| (14) Certified minority-owned | 7 | \$114 | \$114 | 0.3 | | | |
| (15) Certified African American-owned | 4 | \$48 | \$48 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$14 | \$14 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 2 | \$52 | \$52 | 0.1 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-18.
Agency: Purdue University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 2,437 | \$58,914 | \$58,914 | | | | |
| (2) MBE/WBE | 435 | \$10,651 | \$10,651 | 18.1 | 22.8 | -4.8 | 79.2 |
| (3) WBE | 317 | \$6,617 | \$6,617 | 11.2 | 13.5 | -2.2 | 83.4 |
| (4) MBE | 118 | \$4,034 | \$4,034 | 6.8 | 9.4 | -2.5 | 73.1 |
| (5) African American-owned | 23 | \$743 | \$819 | 1.4 | 3.4 | -2.0 | 40.7 |
| (6) Total Asian American-owned | 48 | \$1,645 | \$1,812 | 3.1 | 3.9 | -0.9 | 78.0 |
| (7) Asian-Pacific American-owned | 24 | \$746 | \$823 | 1.4 | 2.2 | -0.8 | 63.7 |
| (8) Subcontinent Asian American-owned | 23 | \$880 | \$969 | 1.6 | 1.8 | -0.1 | 94.0 |
| (9) Hispanic American-owned | 22 | \$760 | \$838 | 1.4 | 1.4 | 0.0 | 102.5 |
| (10) Native American-owned | 10 | \$513 | \$565 | 1.0 | 0.5 | 0.5 | 200+ |
| (11) Unknown MBE | 15 | \$373 | | | | | |
| (12) Certified | 236 | \$5,070 | \$5,070 | 8.6 | | | |
| (13) Certified woman-owned | 207 | \$3,891 | \$3,891 | 6.6 | | | |
| (14) Certified minority-owned | 29 | \$1,179 | \$1,179 | 2.0 | | | |
| (15) Certified African American-owned | 12 | \$510 | \$510 | 0.9 | | | |
| (16) Certified Asian-Pacific American-owned | 9 | \$263 | \$263 | 0.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 7 | \$383 | \$383 | 0.7 | | | |
| (18) Certified Hispanic American-owned | 1 | \$22 | \$22 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-19.
Agency: Purdue University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3,480 | \$59,884 | \$59,884 | | | | |
| (2) MBE/WBE | 574 | \$10,623 | \$10,623 | 17.7 | 20.3 | -2.6 | 87.2 |
| (3) WBE | 482 | \$8,807 | \$8,807 | 14.7 | 12.5 | 2.2 | 117.4 |
| (4) MBE | 92 | \$1,815 | \$1,815 | 3.0 | 7.8 | -4.8 | 38.8 |
| (5) African American-owned | 9 | \$244 | \$259 | 0.4 | 3.5 | -3.1 | 12.3 |
| (6) Total Asian American-owned | 32 | \$462 | \$491 | 0.8 | 1.4 | -0.6 | 58.3 |
| (7) Asian-Pacific American-owned | 20 | \$261 | \$277 | 0.5 | 1.3 | -0.9 | 35.2 |
| (8) Subcontinent Asian American-owned | 11 | \$195 | \$207 | 0.3 | 0.1 | 0.3 | 200+ |
| (9) Hispanic American-owned | 45 | \$980 | \$1,043 | 1.7 | 2.9 | -1.1 | 60.6 |
| (10) Native American-owned | 1 | \$20 | \$22 | 0.0 | 0.0 | 0.0 | 200+ |
| (11) Unknown MBE | 5 | \$109 | | | | | |
| (12) Certified | 275 | \$5,740 | \$5,740 | 9.6 | | | |
| (13) Certified woman-owned | 225 | \$4,659 | \$4,709 | 7.9 | | | |
| (14) Certified minority-owned | 49 | \$1,021 | \$1,032 | 1.7 | | | |
| (15) Certified African American-owned | 3 | \$157 | \$159 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 5 | \$30 | \$31 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$5 | \$5 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 39 | \$808 | \$816 | 1.4 | | | |
| (19) Certified Native American-owned | 1 | \$20 | \$21 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 1 | \$60 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure AA-20.
Agency: Purdue University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 343 | \$5,713 | \$5,713 | | | | |
| (2) MBE/WBE | 71 | \$969 | \$969 | 17.0 | 33.9 | -16.9 | 50.1 |
| (3) WBE | 57 | \$799 | \$799 | 14.0 | 25.2 | -11.2 | 55.5 |
| (4) MBE | 14 | \$170 | \$170 | 3.0 | 8.7 | -5.7 | 34.2 |
| (5) African American-owned | 5 | \$84 | \$130 | 2.3 | 3.5 | -1.2 | 64.9 |
| (6) Total Asian American-owned | 1 | \$7 | \$10 | 0.2 | 0.9 | -0.8 | 18.8 |
| (7) Asian-Pacific American-owned | 1 | \$7 | \$10 | 0.2 | 0.9 | -0.7 | 20.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 3 | \$20 | \$31 | 0.5 | 2.6 | -2.0 | 21.2 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.7 | -1.7 | 0.0 |
| (11) Unknown MBE | 5 | \$60 | | | | | |
| (12) Certified | 7 | \$88 | \$88 | 1.5 | | | |
| (13) Certified woman-owned | 1 | \$9 | \$9 | 0.2 | | | |
| (14) Certified minority-owned | 6 | \$79 | \$79 | 1.4 | | | |
| (15) Certified African American-owned | 3 | \$59 | \$59 | 1.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 3 | \$20 | \$20 | 0.4 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX BB.

Purdue Summary Report

The State of Indiana commissioned BBC Research & Consulting (BBC) to conduct a disparity study as part of a periodic evaluation of its Minority and Women's Business Enterprises (MBE/WBE) Program. BBC analyzed participation of minority- and women-owned firms — regardless of whether they were certified as such with the State of Indiana — in contracts and subcontracts Purdue University (Purdue) awarded between July 1, 2006 and June 30, 2009 (fiscal years 2007 through 2009).¹ The study team then compared MBE/WBE utilization to what those firms would be expected to receive based on their availability for specific types of Purdue work.

Purdue's summary report is organized in five parts:

- A. Availability of MBE/WBEs for Purdue contracts and subcontracts²;
- B. Utilization of MBE/WBEs on Purdue contracts and subcontracts;
- C. Disparity analyses and results;
- D. Marketplace conditions for MBE/WBEs; and
- E. Options for improving MBE/WBEs' access to Purdue contracting opportunities.

A. Availability of MBE/WBEs for Purdue Contracts and Subcontracts

In the disparity analysis, the study team compared the percentage of Purdue contract dollars going to each racial/ethnic/gender group (MBE/WBE utilization) to the percentage of dollars that each group would be expected to receive based on availability for specific types, sizes and locations of Purdue prime contracts and subcontracts (MBE/WBE availability).

BBC collected information about potentially available firms by contacting Indiana businesses in the local construction, professional services, goods and support services industries. More than 9,000 firms completed telephone interviews, allowing the study team to build a database of firms available for specific types of Purdue work. BBC conducted a sophisticated analysis of the number of MBEs and WBEs available for each Purdue contract and subcontract and dollar-weighted the results when determining overall availability for Purdue work. Chapter 5 and Appendix D of the full report explain the availability analysis in detail.

¹ BBC defines WBEs as white women-owned firms. The rationale for doing so is presented in Chapter 5 of the full disparity study report.

² BBC uses the words "contract" and "procurement" interchangeably throughout the report.

Figure BB-1 presents the availability of MBE/WBE firms for Purdue procurements by racial/ethnic/gender group. As shown in Figure BB-1, MBE/WBE firms might be expected to receive about 18 percent of Purdue contract dollars given their availability for specific types, sizes and locations of Purdue prime contracts and subcontracts during the study period. This “availability benchmark” reflects dollar-weighted availability — it is not based on a headcount of MBE/WBEs. White women-owned firms comprise a large share of total MBE/WBE availability for Purdue contracts and procurements.

Figure BB-1.
Availability of firms for Purdue contracts, July 2006–June 2009,
by race/ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) |
|-----------------------------------|---|
| African American-owned | 3.8 % |
| Asian-Pacific American-owned | 1.2 |
| Subcontinent Asian American-owned | 2.2 |
| Hispanic American-owned | 1.0 |
| Native American-owned | 0.3 |
| Total MBE | 8.5 % |
| WBE (white women-owned) | 9.3 |
| Total MBE/WBE | 17.8 % |
| Majority-owned | 82.2 |
| Total | 100.0 % |

Note: See Figure AA-1 in Appendix AA.
 Numbers may not sum perfectly due to rounding.
 Source: BBC Research & Consulting from 2009/2010 Availability Survey.

The study team found that MBE/WBE availability is highest for Purdue support services contracts (34%) and lowest for construction contracts (16%). The tables in Appendix AA present MBE/WBE availability for different subsets of Purdue contracts and subcontracts.

B. Utilization of MBE/WBEs on Purdue Contracts and Subcontracts

To determine MBE/WBE utilization on Purdue contracts, BBC examined approximately 9,000 contracts and subcontracts totaling \$695 million for the three-year study period. Figure BB-2 examines Purdue’s utilization of each MBE/WBE group (top half of the figure) and Purdue’s utilization of only those firms certified as MBE/WBEs (bottom half of the figure). MBE/WBE firms received 10.9 percent of Purdue contract and subcontract dollars during the study period. WBEs accounted for most of the overall MBE/WBE utilization.

Figure BB-2.
Utilization of MBE/WBEs and certified MBE/WBEs for Purdue contracts,
July 2006–June 2009

| Race, ethnicity and gender | Utilization % |
|-----------------------------------|----------------|
| MBE/WBEs | |
| African American-owned | 1.0 % |
| Asian-Pacific American-owned | 0.4 |
| Subcontinent Asian American-owned | 0.3 |
| Hispanic American-owned | 0.6 |
| Native American-owned | 0.2 |
| Total MBE | 2.5 % |
| WBE (white women-owned) | 8.5 |
| Total MBE/WBE | 10.9 % |
| Majority-owned | 89.1 |
| Total | 100.0 % |
| Certified MBE/WBEs | |
| African American-owned | 0.8 % |
| Asian-Pacific American-owned | 0.1 |
| Subcontinent Asian American-owned | 0.2 |
| Hispanic American-owned | 0.2 |
| Native American-owned | 0.0 |
| Total MBE certified | 1.3 % |
| WBE (white women-owned) | 5.2 |
| Total MBE/WBE certified | 6.6 % |
| Non-certified | 93.4 |
| Total | 100.0 % |

Note: See Figure AA-1 in Appendix AA.

Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from data on Purdue contracts.

When examining Purdue contract dollars by industry, MBE/WBE utilization was 9.4 percent for construction, 15.7 percent for professional services, 10.8 percent for goods and 17.0 percent for support services. For more detail about MBE/WBE utilization by study industry, see Chapter 13 and Figures AA-2 through AA-5 of Appendix AA.

C. Disparity Analysis

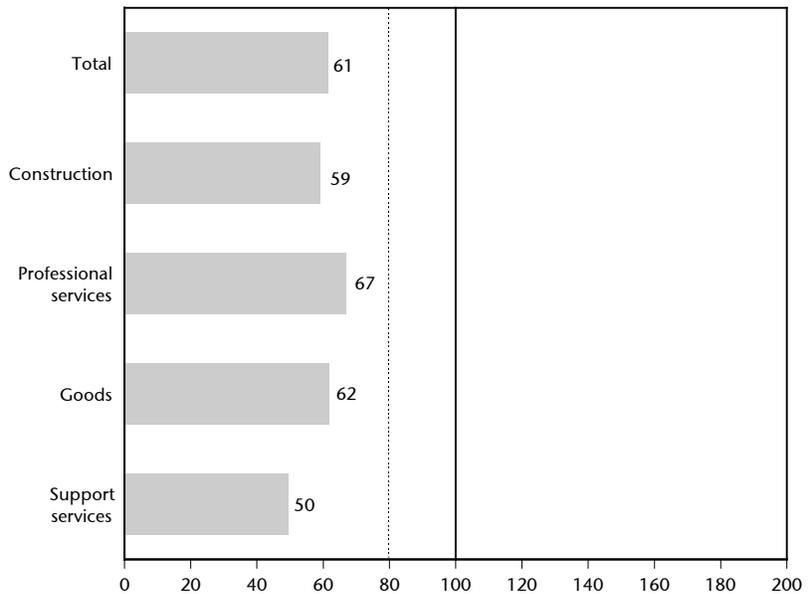
BBC compared actual utilization of MBE/WBEs on Purdue contracts (as a percentage of total dollars) to the percentage of dollars that those firms might be expected to receive based on the availability analysis. To help compare results between groups and across sets of contracts, BBC calculated disparity indices by dividing the utilization percentage by availability and then multiplying by 100.³ A disparity index of 100 indicates “parity” — that is, for a particular set of contracts, an MBE/WBE group received 100 percent of the dollars that it would be expected to receive based on availability.

Results by industry. Figure BB-3 presents overall MBE/WBE disparity indices for Purdue contracts by study industry. The results in Figure BB-3 include data from Purdue prime contracts and subcontracts. Overall, MBE/WBEs considered together were substantially underutilized on Purdue contracts (disparity index of 61).⁴ MBE/WBEs showed substantial disparities for every study industry.

Figure BB-3.
Disparity indices for MBE/WBE utilization on Purdue contracts, July 2006–June 2009, by study industry

Note:
See Figures AA-1 through AA-5 in Appendix AA.

Source:
BBC Research & Consulting from data on Purdue contracts.



³ For example, if utilization of WBEs for a set of Purdue contracts was 2 percent and availability was 10 percent, the disparity index would be 20 (i.e., 2% divided by 10%, then multiplied by 100).

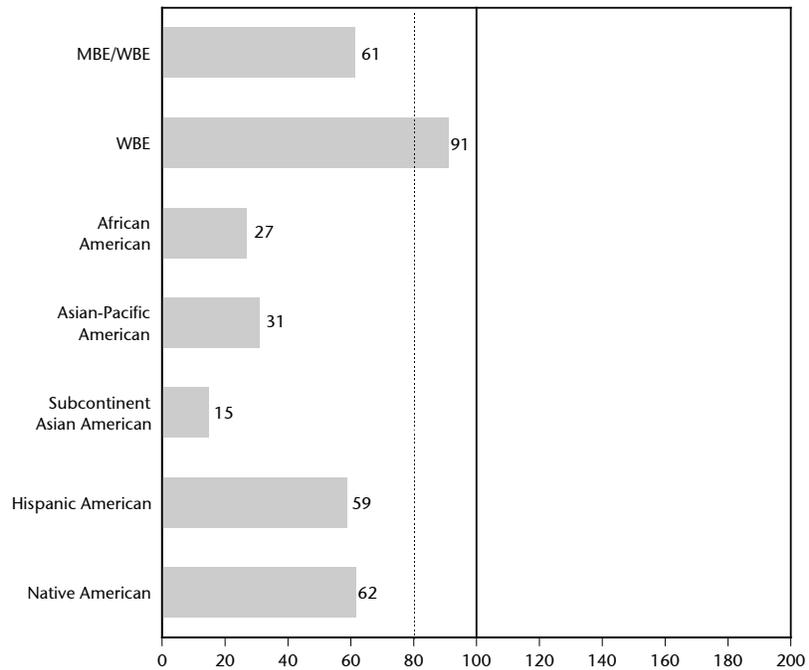
⁴ BBC’s use of the word “substantial” in describing certain disparity indices reflects the opinion of some courts that a disparity index of less than 80 reflects a substantial disparity.

Results by MBE/WBE. Figure BB-4 presents disparity indices by MBE/WBE group. The results in Figure BB-4 include data from Purdue prime contracts and subcontracts. Every MBE group showed a substantial disparity for Purdue contracts and subcontracts during the study period

Figure BB-4.
Disparity indices for utilization on Purdue contracts, July 2006–June 2009, by MBE/WBE group

Note:
 See Figures AA-1 in Appendix AA.

Source:
 BBC Research & Consulting from data on Purdue contracts.



Prime contracts and subcontracts. Figure BB-5 shows overall MBE/WBE disparity results for prime contracts and subcontracts. MBE/WBEs were substantially underutilized on both Purdue prime contracts (disparity index of 62) and on Purdue subcontracts (disparity index of 57).

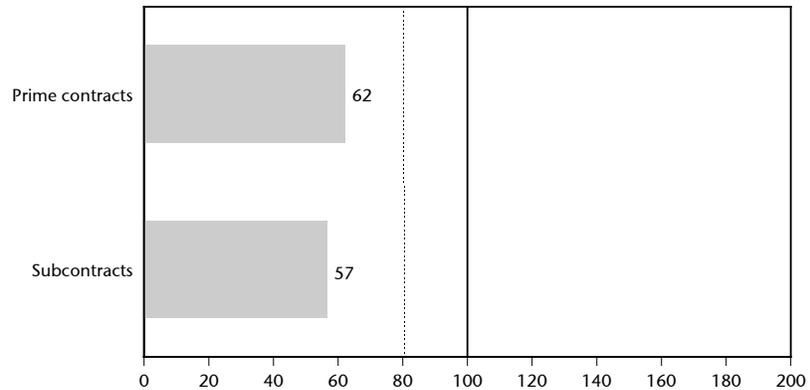
Disparity results for Purdue subcontracts are very different from those for Indiana Department of Administration (IDOA) and Indiana Department of Transportation (INDOT) subcontracts. IDOA and INDOT often applied MBE/WBE and DBE goals to their contracts during the study period. As discussed in Chapter 7 for IDOA and Chapter 8 for INDOT, overall, MBE/WBEs were not underutilized on IDOA and INDOT subcontracts. The difference in results may be due in part to the absence of MBE/WBE contract goals on Purdue contracts during the study period.⁵

⁵ Although Purdue University sets subcontracting goals on some of its contracts, there are no consequences for prime contractors who fail to meet those goals or fail to fulfill good faith efforts.

Figure BB-5.
Disparity indices for
MBE/WBE utilization on
Purdue prime contracts
and subcontracts, July
2006–June 2009

Note:
 See Figure AA-6 and AA-11 in Appendix AA.

Source:
 BBC Research & Consulting from data on
 Purdue contracts.



Comparison of disparity results between Purdue/INDOT and SEI contracts. The disparity study examined MBE/WBE utilization and availability for IDOA, INDOT and seven state colleges and universities (state educational institutions or “SEIs”).

- IDOA and INDOT applied MBE/WBE contract goals to certain state-funded contracts. For federally-funded construction and professional services contracts, which represent most of INDOT’s contracting, INDOT applied Disadvantaged Business Enterprise (DBE) goals.
- SEIs did not apply MBE/WBE contract goals to their contracts or there were no consequences if prime contractors did not meet the goals (or fulfill good faith efforts).

BBC analyzed MBE/WBE disparities for IDOA and INDOT combined (the “state”) and for all SEIs combined. Although disparity results for MBE/WBEs did not differ between state contracts (disparity index of 70) and SEI contracts (disparity index of 71) when considering prime contracts and subcontracts together, disparity results differed considerably when only considering subcontracts. There were no disparities for minority- and women-owned firms on state subcontracts (disparity index of 180), but MBE/WBEs were substantially underutilized on SEI subcontracts (disparity index of 68). These results indicate that the use of MBE/WBE/DBE goals may expand opportunities for minority- and women-owned firms through work as subcontractors. For more details about these combined analyses, see Chapter 6.⁶

⁶ State contracts included contracts awarded by the Indiana Stadium and Convention Building Authority (ISCBA). During the study period, ISCBA awarded contract dollars in connection with two large construction projects — building Lucas Oil Stadium and the Indiana Convention Center — using an MBE/WBE contracting program. In addition to the analyses presented here, the study team examined MBE/WBE disparity indices for state and SEI contracts after removing contract dollars awarded by ISCBA. Without ISCBA, the disparity index for MBE/WBEs was 66 for state prime contracts and subcontracts considered together and 171 for state subcontracts.

D. Marketplace Conditions for MBE/WBEs

BBC examined whether certain barriers exist for minority- and women-owned firms in the Indiana marketplace as a whole. Barriers in the marketplace may help explain some of the disparities that BBC observed for certain MBE/WBE groups in Purdue's construction, professional services, goods and support services procurements. BBC examined potential barriers in the Indiana marketplace in four primary areas:

1. Entry and advancement;
2. Business ownership;
3. Access to capital, bonding and insurance; and
4. Success of businesses.

Chapter 4 and Appendices E – H and Appendix J of the full report provide detailed information about marketplace conditions in Indiana.

Entry and advancement. BBC's analyses indicated that certain minority groups and women are underrepresented in the construction, professional services, goods and support services industries in Indiana, compared to non-Hispanic whites and men, even after accounting for factors such as education. Results indicated that:

- African Americans and women exhibited relatively low representation in the Indiana construction industry compared to their representation in the entire Indiana workforce. In addition, there appeared to be barriers to advancement for minorities and women.
- There was relatively low representation of African Americans, Hispanic Americans and women in the Indiana professional services industry. Among all professional services workers, there was particularly low representation of African Americans and women in engineering- and architecture-related lines of work.
- African Americans and women exhibited relatively low representation in the Indiana goods industry compared to their representation in the entire Indiana workforce. Among goods workers, African Americans and women were also less likely than non-Hispanic whites and males to advance to supervisory and managerial positions.
- Two groups showed lower representation in the support services industry compared to their representation in all Indiana industries considered together — Asian Americans and women. Minorities and women were far less likely to advance to supervisory or managerial positions.

- During in-depth interviews and public forums that BBC held as part of the disparity study, some individuals reported stereotypical attitudes on the part of customers and buyers in Indiana as a contributor to unfavorable work environments for minorities and women. Other interviewees reported instances of racial slurs or sexist comments. Some interviewees indicated that they have not experienced difficulties associated with entry and advancement, or that certain factors — such as stereotypical attitudes — have worked to their advantage.

Business ownership. Quantitative analyses of the Indiana construction, professional services, goods and support services industries revealed statistically significant disparities in business ownership for some racial/ethnic/gender groups after accounting for various neutral factors such as age and education.

- Compared to similarly-situated non-Hispanic whites and men, there were disparities in business ownership rates for African Americans, Hispanic Americans and women working in the Indiana construction industry.
- Asian Americans and women exhibited substantial disparities in business ownership rates in the professional services industry.
- White women own goods businesses at less than two-thirds the rate of similarly-situated white men in Indiana.
- African Americans exhibited a substantial disparity in business ownership rates in the support services industry compared to similarly-situated non-Hispanic whites.

Access to capital, bonding and insurance. If race/ethnicity or gender discrimination exists in capital, bonding and insurance markets, minorities and women may have difficulty starting or expanding a business. BBC examined whether MBE/WBEs' access to capital — both from their homes and businesses — is comparable to that of majority-owned firms. In addition, BBC examined information about whether minorities and women face barriers in obtaining bonding and insurance.

- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Indiana were more likely to have their applications denied. In addition, African Americans and Hispanic Americans were approved for business loans at rates that were much lower than that of similarly-situated non-Hispanic whites.
- Several interviewees reported that business credit is difficult to obtain and indicated that race and gender discrimination affected access to business credit. There was also some information that indicated difficulties for small businesses — particularly MBE/WBEs — in obtaining bonding and insurance in Indiana. Other interviewees indicated that they have not experienced difficulties associated with access to capital, bonding or insurance.

Success of businesses. BBC completed analyses that assessed whether the success of minority- and women-owned businesses differ from that of majority-owned businesses in the Indiana marketplace. The study team examined business success primarily in terms of business closures, contractions and expansions, and in terms of business receipts and earnings.

- Between 1997 and 2001, African American- and Hispanic American-owned firms in Indiana closed at higher rates than all firms considered together.⁷
- African-American-owned firms were less likely than other firms to expand. However, Hispanic American- and Native American-owned firms were more likely to expand than other firms.
- African American-, Hispanic American- and Native American-owned firms in Indiana were less likely than all firms considered together to experience contraction between 1997 and 2001. Asian American-owned firms were as likely as all Indiana firms considered together to experience contraction.
- African American-, Hispanic American-, Native American- and women-owned firms in Indiana earned substantially less in gross revenue than all firms considered together. The study team also developed regression models of business owner earnings in the East North Central region, which includes Indiana, based on 2000 U.S. Census data.⁸ The models examined the impact of race/ethnicity/gender on business owner earnings after statistically controlling for neutral factors. The study team identified statistically significant disparities in business earnings for female business owners in construction, professional services, goods and support services. There were also statistically significant disparities for African American construction business owners.
- Data from telephone interviews that BBC conducted as part of the availability analysis indicated that, across all subindustries except professional services, a larger share of majority-owned firms than of MBE/WBEs reported gross revenues of \$5 million or more.
- Several interviewees described difficulties that may affect business success for MBE/WBEs in the study industries. Interviewees discussed participation as prime- and subcontractors; unfair denial of bid opportunities and contract awards; and the existence of a “good ol’ boy” network.” Other interviewees indicated experiencing no difficulties in these areas.

⁷ These were the most recent business closure, contractions and expansion data available for Indiana at the time of the disparity study.

⁸ This was the most current Census data source available at the time of this study.

E. Options for Improving MBE/WBEs' Access to Purdue Contracting Opportunities

After reviewing contracting practices and business assistance programs that Purdue currently has in place, BBC suggests several steps that Purdue might consider to further encourage the future participation of small businesses — including MBE/WBEs — in its contracting and procurement. Some of those suggestions may require changes to existing state and administrative code. When implementing any program focusing on minority- and women-owned firms, the State of Indiana and Purdue must ensure that it is in compliance with U.S. Supreme Court, federal and state court decisions regarding such programs.⁹ For more detail, see Chapter 2 and Appendix B.

Increase competitive opportunities for small contracts. Purdue might consider increasing the number of small contracts that it awards by segmenting large contracts into multiple, smaller contract elements. Encouraging bid opportunities on small contracts might increase the likelihood of small businesses — including MBE/WBEs — to compete for them. BBC's analyses indicated that Purdue showed higher MBE/WBE utilization on small contracts than on all contracts (see Chapter 13).

Insurance and bonding requirements. Purdue might consider reviewing its insurance and bonding requirements to ensure that they do not act as barriers to smaller and newer firms. BBC's analyses of the Indiana marketplace indicated that certain MBE/WBE groups may face barriers in obtaining insurance and bonding and that those barriers may lead to reduced participation in state contracting (see Chapter 4).

Finance, bonding and insurance assistance. BBC's analyses identified disparities in access to capital, bonding and insurance for certain MBE/WBE groups. Purdue might consider exploring ways to better connect its contractors and consultants with programs offered by local public and private organizations related to those business areas.

Technical assistance and mentoring. Purdue might consider partnering with local organizations to offer further technical assistance and training to small businesses, including MBE/WBEs. For example, some agencies in other states host a construction management school that staff members from a local construction firm teach. Purdue might consider partnering with a large construction firm or other organizations to host similar construction management or general business management courses.

Outreach and advocacy, including notification of bid opportunities. Purdue participates in many outreach and advocacy events — including hosting its own annual event — that include information about marketing, the MBE/WBE certification process, doing business with the State of Indiana and available bid opportunities. Purdue might consider broadening its outreach and advocacy efforts to include more partnerships with local trade organizations and other public agencies.

⁹ *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995). See Appendix B for more detail about related case law.

Expand MBE/WBE outreach and assistance measures, and data collection, to include uncertified firms. Purdue might consider expanding the measures that it uses to encourage the participation of MBE/WBE-certified firms to include minority- and women-owned firms that are not currently certified. BBC's analyses indicate that a large portion of Purdue's MBE/WBE utilization occurred with firms that were not certified. Further cultivating relationships with those firms could help encourage MBE/WBE participation in Purdue contracting. In addition, Purdue might consider monitoring utilization of all minority- and women-owned firms as prime contractors and subcontractors, not just certified MBE/WBEs.

APPENDIX CC.
University of Southern Indiana
Disparity Tables

Figure CC-1.
Agency: University of Southern Indiana
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,530 | \$116,998 | \$116,998 | | | | |
| (2) MBE/WBE | 255 | \$10,902 | \$10,902 | 9.3 | 12.0 | -2.7 | 77.4 |
| (3) WBE | 205 | \$7,536 | \$7,536 | 6.4 | 7.4 | -0.9 | 87.4 |
| (4) MBE | 50 | \$3,366 | \$3,366 | 2.9 | 4.7 | -1.8 | 61.6 |
| (5) African American-owned | 3 | \$45 | \$848 | 0.7 | 1.8 | -1.1 | 39.4 |
| (6) Total Asian American-owned | 1 | \$13 | \$239 | 0.2 | 1.5 | -1.3 | 13.9 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (8) Subcontinent Asian American-owned | 1 | \$13 | \$239 | 0.2 | 1.0 | -0.8 | 20.9 |
| (9) Hispanic American-owned | 3 | \$86 | \$1,598 | 1.4 | 0.8 | 0.6 | 180.7 |
| (10) Native American-owned | 2 | \$36 | \$681 | 0.6 | 0.5 | 0.1 | 112.2 |
| (11) Unknown MBE | 41 | \$3,186 | | | | | |
| (12) Certified | 80 | \$3,871 | \$3,871 | 3.3 | | | |
| (13) Certified woman-owned | 78 | \$3,835 | \$3,835 | 3.3 | | | |
| (14) Certified minority-owned | 2 | \$36 | \$36 | 0.0 | | | |
| (15) Certified African American-owned | 1 | \$24 | \$24 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$13 | \$13 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-2.
Agency: University of Southern Indiana
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 658 | \$79,796 | \$79,796 | | | | |
| (2) MBE/WBE | 130 | \$8,769 | \$8,769 | 11.0 | 11.0 | 0.0 | 100.3 |
| (3) WBE | 86 | \$5,565 | \$5,565 | 7.0 | 6.8 | 0.2 | 103.2 |
| (4) MBE | 44 | \$3,204 | \$3,204 | 4.0 | 4.2 | -0.2 | 95.8 |
| (5) African American-owned | 2 | \$35 | \$1,193 | 1.5 | 1.8 | -0.3 | 84.1 |
| (6) Total Asian American-owned | 1 | \$13 | \$440 | 0.6 | 1.4 | -0.9 | 38.4 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (8) Subcontinent Asian American-owned | 1 | \$13 | \$440 | 0.6 | 1.2 | -0.6 | 47.8 |
| (9) Hispanic American-owned | 1 | \$9 | \$319 | 0.4 | 0.2 | 0.2 | 199.7 |
| (10) Native American-owned | 2 | \$36 | \$1,253 | 1.6 | 0.7 | 0.9 | 200+ |
| (11) Unknown MBE | 38 | \$3,111 | | | | | |
| (12) Certified | 29 | \$3,077 | \$3,077 | 3.9 | | | |
| (13) Certified woman-owned | 27 | \$3,041 | \$3,041 | 3.8 | | | |
| (14) Certified minority-owned | 2 | \$36 | \$36 | 0.0 | | | |
| (15) Certified African American-owned | 1 | \$24 | \$24 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$13 | \$13 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-3.
Agency: University of Southern Indiana
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 448 | \$11,325 | \$11,325 | | | | |
| (2) MBE/WBE | 61 | \$902 | \$902 | 8.0 | 23.5 | -15.6 | 33.8 |
| (3) WBE | 57 | \$811 | \$811 | 7.2 | 15.4 | -8.3 | 46.4 |
| (4) MBE | 4 | \$91 | \$91 | 0.8 | 8.1 | -7.3 | 9.9 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 3.0 | -3.0 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 3.8 | -3.8 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 2.0 | -2.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.8 | -1.8 | 0.0 |
| (9) Hispanic American-owned | 2 | \$76 | \$91 | 0.8 | 0.8 | 0.0 | 106.2 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 2 | \$15 | | | | | |
| (12) Certified | 18 | \$191 | \$191 | 1.7 | | | |
| (13) Certified woman-owned | 18 | \$191 | \$191 | 1.7 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-4.
Agency: University of Southern Indiana
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 350 | \$24,864 | \$24,864 | | | | |
| (2) MBE/WBE | 48 | \$954 | \$954 | 3.8 | 9.3 | -5.4 | 41.4 |
| (3) WBE | 47 | \$943 | \$943 | 3.8 | 4.8 | -1.0 | 78.4 |
| (4) MBE | 1 | \$11 | \$11 | 0.0 | 4.4 | -4.4 | 1.0 |
| (5) African American-owned | 1 | \$11 | \$11 | 0.0 | 1.4 | -1.3 | 3.1 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 2.5 | -2.5 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 23 | \$437 | \$437 | 1.8 | | | |
| (13) Certified woman-owned | 23 | \$437 | \$437 | 1.8 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-5.
Agency: University of Southern Indiana
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 74 | \$1,014 | \$1,014 | | | | |
| (2) MBE/WBE | 16 | \$277 | \$277 | 27.4 | 36.9 | -9.5 | 74.2 |
| (3) WBE | 15 | \$217 | \$217 | 21.5 | 27.2 | -5.7 | 78.9 |
| (4) MBE | 1 | \$60 | \$60 | 5.9 | 9.7 | -3.8 | 61.0 |
| (5) African American-owned | 0 | | | | 5.4 | | |
| (6) Total Asian American-owned | 0 | | | | 0.7 | | |
| (7) Asian-Pacific American-owned | 0 | | | | 0.7 | | |
| (8) Subcontinent Asian American-owned | 0 | | | | 0.0 | | |
| (9) Hispanic American-owned | 0 | | | | 2.2 | | |
| (10) Native American-owned | 0 | | | | 1.4 | | |
| (11) Unknown MBE | 1 | \$60 | | | | | |
| (12) Certified | 10 | \$166 | \$166 | 16.4 | | | |
| (13) Certified woman-owned | 10 | \$166 | \$166 | 16.4 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-6.
Agency: University of Southern Indiana
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,299 | \$85,299 | \$85,299 | | | | |
| (2) MBE/WBE | 222 | \$8,634 | \$8,634 | 10.1 | 11.2 | -1.1 | 90.0 |
| (3) WBE | 175 | \$5,328 | \$5,328 | 6.2 | 6.7 | -0.4 | 93.6 |
| (4) MBE | 47 | \$3,306 | \$3,306 | 3.9 | 4.6 | -0.7 | 84.8 |
| (5) African American-owned | 2 | \$22 | \$599 | 0.7 | 2.0 | -1.2 | 36.0 |
| (6) Total Asian American-owned | 1 | \$13 | \$352 | 0.4 | 1.3 | -0.9 | 32.5 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (8) Subcontinent Asian American-owned | 1 | \$13 | \$352 | 0.4 | 0.7 | -0.3 | 55.5 |
| (9) Hispanic American-owned | 3 | \$86 | \$2,355 | 2.8 | 0.9 | 1.9 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.4 | -0.4 | 0.0 |
| (11) Unknown MBE | 41 | \$3,186 | | | | | |
| (12) Certified | 66 | \$2,925 | \$2,925 | 3.4 | | | |
| (13) Certified woman-owned | 65 | \$2,913 | \$2,913 | 3.4 | | | |
| (14) Certified minority-owned | 1 | \$13 | \$13 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$13 | \$13 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-7.
Agency: University of Southern Indiana
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 433 | \$48,455 | \$48,455 | | | | |
| (2) MBE/WBE | 98 | \$6,511 | \$6,511 | 13.4 | 9.0 | 4.4 | 149.2 |
| (3) WBE | 57 | \$3,367 | \$3,367 | 6.9 | 5.3 | 1.7 | 131.8 |
| (4) MBE | 41 | \$3,144 | \$3,144 | 6.5 | 3.7 | 2.8 | 173.7 |
| (5) African American-owned | 1 | \$11 | \$1,053 | 2.2 | 1.9 | 0.3 | 113.3 |
| (6) Total Asian American-owned | 1 | \$13 | \$1,212 | 2.5 | 1.1 | 1.4 | 200+ |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 1 | \$13 | \$1,212 | 2.5 | 0.8 | 1.7 | 200+ |
| (9) Hispanic American-owned | 1 | \$9 | \$879 | 1.8 | 0.1 | 1.7 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 38 | \$3,111 | | | | | |
| (12) Certified | 15 | \$2,132 | \$2,132 | 4.4 | | | |
| (13) Certified woman-owned | 14 | \$2,119 | \$2,119 | 4.4 | | | |
| (14) Certified minority-owned | 1 | \$13 | \$13 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$13 | \$13 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-8.
Agency: University of Southern Indiana
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 445 | \$11,293 | \$11,293 | | | | |
| (2) MBE/WBE | 61 | \$902 | \$902 | 8.0 | 23.5 | -15.6 | 33.9 |
| (3) WBE | 57 | \$811 | \$811 | 7.2 | 15.4 | -8.3 | 46.5 |
| (4) MBE | 4 | \$91 | \$91 | 0.8 | 8.1 | -7.3 | 9.9 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 3.0 | -3.0 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 3.8 | -3.8 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 2.0 | -2.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.8 | -1.8 | 0.0 |
| (9) Hispanic American-owned | 2 | \$76 | \$91 | 0.8 | 0.8 | 0.1 | 106.6 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 2 | \$15 | | | | | |
| (12) Certified | 18 | \$191 | \$191 | 1.7 | | | |
| (13) Certified woman-owned | 18 | \$191 | \$191 | 1.7 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-9.
Agency: University of Southern Indiana
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 347 | \$24,537 | \$24,537 | | | | |
| (2) MBE/WBE | 47 | \$944 | \$944 | 3.8 | 8.9 | -5.1 | 43.0 |
| (3) WBE | 46 | \$934 | \$934 | 3.8 | 4.6 | -0.8 | 83.1 |
| (4) MBE | 1 | \$11 | \$11 | 0.0 | 4.4 | -4.3 | 1.0 |
| (5) African American-owned | 1 | \$11 | \$11 | 0.0 | 1.4 | -1.3 | 3.1 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.4 | -0.4 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 2.5 | -2.5 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 23 | \$437 | \$437 | 1.8 | | | |
| (13) Certified woman-owned | 23 | \$437 | \$437 | 1.8 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-10.
Agency: University of Southern Indiana
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 74 | \$1,014 | \$1,014 | | | | |
| (2) MBE/WBE | 16 | \$277 | \$277 | 27.4 | 36.9 | -9.5 | 74.2 |
| (3) WBE | 15 | \$217 | \$217 | 21.5 | 27.2 | -5.7 | 78.9 |
| (4) MBE | 1 | \$60 | \$60 | 5.9 | 9.7 | -3.8 | 61.0 |
| (5) African American-owned | 0 | | | | 5.4 | | |
| (6) Total Asian American-owned | 0 | | | | 0.7 | | |
| (7) Asian-Pacific American-owned | 0 | | | | 0.7 | | |
| (8) Subcontinent Asian American-owned | 0 | | | | 0.0 | | |
| (9) Hispanic American-owned | 0 | | | | 2.2 | | |
| (10) Native American-owned | 0 | | | | 1.4 | | |
| (11) Unknown MBE | 1 | \$60 | | | | | |
| (12) Certified | 10 | \$166 | \$166 | 16.4 | | | |
| (13) Certified woman-owned | 10 | \$166 | \$166 | 16.4 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-11.
Agency: University of Southern Indiana
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 231 | \$31,699 | \$31,699 | | | | |
| (2) MBE/WBE | 33 | \$2,268 | \$2,268 | 7.2 | 14.2 | -7.0 | 50.5 |
| (3) WBE | 30 | \$2,208 | \$2,208 | 7.0 | 9.2 | -2.3 | 75.5 |
| (4) MBE | 3 | \$60 | \$60 | 0.2 | 4.9 | -4.8 | 3.8 |
| (5) African American-owned | 1 | \$24 | \$24 | 0.1 | 1.5 | -1.5 | 4.8 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 2.0 | -2.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.4 | -0.4 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.6 | -1.6 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.4 | -0.4 | 0.0 |
| (10) Native American-owned | 2 | \$36 | \$36 | 0.1 | 0.9 | -0.8 | 12.4 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 14 | \$946 | \$946 | 3.0 | | | |
| (13) Certified woman-owned | 13 | \$922 | \$922 | 2.9 | | | |
| (14) Certified minority-owned | 1 | \$24 | \$24 | 0.1 | | | |
| (15) Certified African American-owned | 1 | \$24 | \$24 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-12.
Agency: University of Southern Indiana
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 225 | \$31,340 | \$31,340 | | | | |
| (2) MBE/WBE | 32 | \$2,258 | \$2,258 | 7.2 | 14.0 | -6.8 | 51.6 |
| (3) WBE | 29 | \$2,198 | \$2,198 | 7.0 | 9.1 | -2.0 | 77.4 |
| (4) MBE | 3 | \$60 | \$60 | 0.2 | 4.9 | -4.7 | 3.9 |
| (5) African American-owned | 1 | \$24 | \$24 | 0.1 | 1.6 | -1.5 | 4.8 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 2.0 | -2.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.6 | -1.6 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.4 | -0.4 | 0.0 |
| (10) Native American-owned | 2 | \$36 | \$36 | 0.1 | 0.9 | -0.8 | 12.4 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 14 | \$946 | \$946 | 3.0 | | | |
| (13) Certified woman-owned | 13 | \$922 | \$922 | 2.9 | | | |
| (14) Certified minority-owned | 1 | \$24 | \$24 | 0.1 | | | |
| (15) Certified African American-owned | 1 | \$24 | \$24 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-13.
Agency: University of Southern Indiana
Funding: All
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 3 | \$32 | \$32 | | | | |
| (2) MBE/WBE | 0 | \$0 | \$0 | 0.0 | 26.4 | -26.4 | 0.0 |
| (3) WBE | 0 | \$0 | \$0 | 0.0 | 18.5 | -18.5 | 0.0 |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 7.9 | -7.9 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 2.6 | -2.6 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 3.7 | -3.7 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.6 | -1.6 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 2.1 | -2.1 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.1 | -1.1 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-16.
Agency: University of Southern Indiana
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,227 | \$27,926 | \$27,926 | | | | |
| (2) MBE/WBE | 211 | \$4,592 | \$4,592 | 16.4 | 21.4 | -4.9 | 76.9 |
| (3) WBE | 171 | \$3,500 | \$3,500 | 12.5 | 13.9 | -1.4 | 90.0 |
| (4) MBE | 40 | \$1,092 | \$1,092 | 3.9 | 7.5 | -3.5 | 52.5 |
| (5) African American-owned | 2 | \$22 | \$198 | 0.7 | 3.0 | -2.3 | 23.7 |
| (6) Total Asian American-owned | 1 | \$13 | \$116 | 0.4 | 2.1 | -1.7 | 19.7 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.1 | -1.1 | 0.0 |
| (8) Subcontinent Asian American-owned | 1 | \$13 | \$116 | 0.4 | 1.0 | -0.6 | 42.8 |
| (9) Hispanic American-owned | 3 | \$86 | \$778 | 2.8 | 1.4 | 1.4 | 198.5 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (11) Unknown MBE | 34 | \$972 | | | | | |
| (12) Certified | 62 | \$1,097 | \$1,097 | 3.9 | | | |
| (13) Certified woman-owned | 61 | \$1,084 | \$1,084 | 3.9 | | | |
| (14) Certified minority-owned | 1 | \$13 | \$13 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$13 | \$13 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-17.
Agency: University of Southern Indiana
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 393 | \$9,471 | \$9,471 | | | | |
| (2) MBE/WBE | 87 | \$2,469 | \$2,469 | 26.1 | 19.0 | 7.0 | 137.0 |
| (3) WBE | 53 | \$1,538 | \$1,538 | 16.2 | 13.3 | 3.0 | 122.4 |
| (4) MBE | 34 | \$930 | \$930 | 9.8 | 5.7 | 4.1 | 170.9 |
| (5) African American-owned | 1 | \$11 | \$311 | 3.3 | 2.2 | 1.0 | 146.7 |
| (6) Total Asian American-owned | 1 | \$13 | \$359 | 3.8 | 1.3 | 2.5 | 200+ |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (8) Subcontinent Asian American-owned | 1 | \$13 | \$359 | 3.8 | 0.6 | 3.2 | 200+ |
| (9) Hispanic American-owned | 1 | \$9 | \$260 | 2.7 | 0.3 | 2.4 | 200+ |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.7 | -1.7 | 0.0 |
| (11) Unknown MBE | 31 | \$897 | | | | | |
| (12) Certified | 11 | \$303 | \$303 | 3.2 | | | |
| (13) Certified woman-owned | 10 | \$291 | \$291 | 3.1 | | | |
| (14) Certified minority-owned | 1 | \$13 | \$13 | 0.1 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$13 | \$13 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-18.
Agency: University of Southern Indiana
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 441 | \$10,612 | \$10,612 | | | | |
| (2) MBE/WBE | 61 | \$902 | \$902 | 8.5 | 23.5 | -15.0 | 36.1 |
| (3) WBE | 57 | \$811 | \$811 | 7.6 | 15.3 | -7.7 | 49.8 |
| (4) MBE | 4 | \$91 | \$91 | 0.9 | 8.2 | -7.3 | 10.5 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 3.0 | -3.0 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 3.8 | -3.8 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 2.0 | -2.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.8 | -1.8 | 0.0 |
| (9) Hispanic American-owned | 2 | \$76 | \$91 | 0.9 | 0.8 | 0.1 | 108.5 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (11) Unknown MBE | 2 | \$15 | | | | | |
| (12) Certified | 18 | \$191 | \$191 | 1.8 | | | |
| (13) Certified woman-owned | 18 | \$191 | \$191 | 1.8 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-19.
Agency: University of Southern Indiana
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 319 | \$6,829 | \$6,829 | | | | |
| (2) MBE/WBE | 47 | \$944 | \$944 | 13.8 | 19.1 | -5.2 | 72.6 |
| (3) WBE | 46 | \$934 | \$934 | 13.7 | 10.7 | 3.0 | 128.2 |
| (4) MBE | 1 | \$11 | \$11 | 0.2 | 8.4 | -8.2 | 1.9 |
| (5) African American-owned | 1 | \$11 | \$11 | 0.2 | 3.6 | -3.5 | 4.3 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 3.7 | -3.7 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 23 | \$437 | \$437 | 6.4 | | | |
| (13) Certified woman-owned | 23 | \$437 | \$437 | 6.4 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure CC-20.

Agency: University of Southern Indiana

Funding: All

Type: Support services

Region: Indiana

Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 74 | \$1,014 | \$1,014 | | | | |
| (2) MBE/WBE | 16 | \$277 | \$277 | 27.4 | 36.9 | -9.5 | 74.2 |
| (3) WBE | 15 | \$217 | \$217 | 21.5 | 27.2 | -5.7 | 78.9 |
| (4) MBE | 1 | \$60 | \$60 | 5.9 | 9.7 | -3.8 | 61.0 |
| (5) African American-owned | 0 | | | | 5.4 | | |
| (6) Total Asian American-owned | 0 | | | | 0.7 | | |
| (7) Asian-Pacific American-owned | 0 | | | | 0.7 | | |
| (8) Subcontinent Asian American-owned | 0 | | | | 0.0 | | |
| (9) Hispanic American-owned | 0 | | | | 2.2 | | |
| (10) Native American-owned | 0 | | | | 1.4 | | |
| (11) Unknown MBE | 1 | \$60 | | | | | |
| (12) Certified | 10 | \$166 | \$166 | 16.4 | | | |
| (13) Certified woman-owned | 10 | \$166 | \$166 | 16.4 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX DD.

USI Summary Report

The State of Indiana commissioned BBC Research & Consulting (BBC) to conduct a disparity study as part of a periodic evaluation of its Minority and Women's Business Enterprises (MBE/WBE) Program. BBC analyzed participation of minority- and women-owned firms — regardless of whether they were certified as such with the State of Indiana — in contracts and subcontracts the University of Southern Indiana (USI) awarded between July 1, 2006 and June 30, 2009 (fiscal years 2007 through 2009).¹ The study team then compared MBE/WBE utilization to what those firms would be expected to receive based on their availability for specific types of USI work.

USI's summary report is organized in five parts:

- A. Availability of MBE/WBEs for USI contracts and subcontracts²;
- B. Utilization of MBE/WBEs on USI contracts and subcontracts;
- C. Disparity analyses and results;
- D. Marketplace conditions for MBE/WBEs; and
- E. Options for improving MBE/WBEs' access to USI contracting opportunities.

A. Availability of MBE/WBEs for USI Contracts and Subcontracts

In the disparity analysis, the study team compared the percentage of USI contract dollars going to each racial/ethnic/gender group (MBE/WBE utilization) to the percentage of dollars that each group would be expected to receive based on availability for specific types, sizes and locations of USI prime contracts and subcontracts (MBE/WBE availability).

BBC collected information about potentially available firms by contacting Indiana businesses in the local construction, professional services, goods and support services industries. More than 9,000 firms completed telephone interviews, allowing the study team to build a database of firms available for specific types of USI work. BBC conducted a sophisticated analysis of the number of MBEs and WBEs available for each USI contract and subcontract and dollar-weighted the results when determining overall availability for USI work. Chapter 5 and Appendix D of the full report explain the availability analysis in detail.

¹ BBC defines WBEs as white women-owned firms. The rationale for doing so is presented in Chapter 5 of the full disparity study report.

² BBC uses the words "contract" and "procurement" interchangeably throughout the report.

Figure DD-1 presents the availability of MBE/WBE firms for USI procurements by racial/ethnic/gender group. As shown in Figure DD-1, MBE/WBE firms might be expected to receive about 12 percent of USI contract dollars given their availability for specific types, sizes and locations of USI prime contracts and subcontracts during the study period. This “availability benchmark” reflects dollar-weighted availability — it is not based on a headcount of MBE/WBEs. White women-owned firms comprise a large share of total MBE/WBE availability for USI contracts and procurements.

Figure DD-1.
Availability of firms for USI contracts, July 2006–June 2009,
by race/ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) |
|-----------------------------------|---|
| African American-owned | 1.8 % |
| Asian-Pacific American-owned | 0.5 |
| Subcontinent Asian American-owned | 1.0 |
| Hispanic American-owned | 0.8 |
| Native American-owned | 0.5 |
| Total MBE | 4.7 % |
| WBE (white women-owned) | 7.4 |
| Total MBE/WBE | 12.0 % |
| Majority-owned | 88.0 |
| Total | 100.0 % |

Note: See Figure CC-1 in Appendix CC.

Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from 2009/2010 Availability Survey.

The study team found that MBE/WBE availability is highest for USI support services contracts (37%) and lowest for goods contracts (9%). The tables in Appendix CC present MBE/WBE availability for different subsets of USI contracts and subcontracts.

B. Utilization of MBE/WBEs on USI Contracts and Subcontracts

To determine MBE/WBE utilization on USI contracts, BBC examined more than 1,500 contracts and subcontracts totaling \$117 million for the three-year study period.³ Figure DD-2 examines USI’s utilization of each MBE/WBE group (top half of the figure) and USI’s utilization of only those firms certified as MBE/WBEs (bottom half of the figure). MBE/WBE firms received 9.3 percent of USI contract and subcontract dollars during the study period. WBEs accounted for most of the overall MBE/WBE utilization.

³ BBC began by considering more than \$179 million in USI contracts and procurements. However, many of those dollars were not analyzed as part of the study because they represented procurements that are not typically included in a disparity study. For more detail about the dollars that the study team included in the disparity study, see Chapter 3 and Appendix C.

Figure DD-2.
Utilization of MBE/WBEs and certified MBE/WBEs for USI contracts,
July 2006–June 2009

| Race, ethnicity and gender | Utilization % |
|-----------------------------------|----------------|
| MBE/WBEs | |
| African American-owned | 0.7 % |
| Asian-Pacific American-owned | 0.0 |
| Subcontinent Asian American-owned | 0.2 |
| Hispanic American-owned | 1.4 |
| Native American-owned | 0.6 |
| Total MBE | 2.9 % |
| WBE (white women-owned) | 6.4 |
| Total MBE/WBE | 9.3 % |
| Majority-owned | 90.7 |
| Total | 100.0 % |
| Certified MBE/WBEs | |
| African American-owned | 0.0 % |
| Asian-Pacific American-owned | 0.0 |
| Subcontinent Asian American-owned | 0.0 |
| Hispanic American-owned | 0.0 |
| Native American-owned | 0.0 |
| Total MBE certified | 0.0 % |
| WBE (white women-owned) | 3.3 |
| Total MBE/WBE certified | 3.3 % |
| Non-certified | 96.7 |
| Total | 100.0 % |

Note: See Figure CC-1 in Appendix CC.

Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from data on USI contracts.

When examining USI contract dollars by industry, MBE/WBE utilization was 11.0 percent for construction, 8.0 percent for professional services, 3.8 percent for goods and 27.4 percent for support services. For more detail about MBE/WBE utilization by study industry, see Chapter 14 and Figures CC-2 through CC-5 of Appendix CC.

C. Disparity Analysis

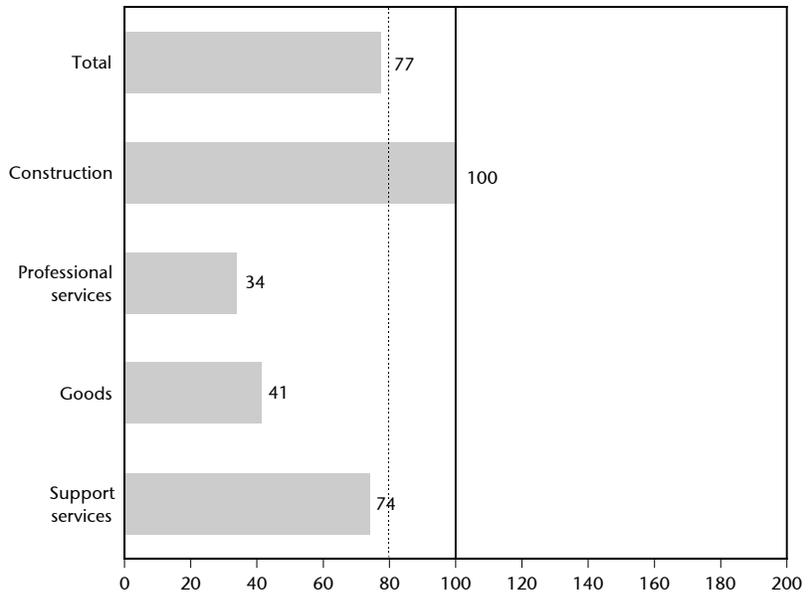
BBC compared actual utilization of MBE/WBEs on USI contracts (as a percentage of total dollars) to the percentage of dollars that those firms might be expected to receive based on the availability analysis. To help compare results between groups and across sets of contracts, BBC calculated disparity indices by dividing the utilization percentage by availability and then multiplying by 100.⁴ A disparity index of 100 indicates “parity” — that is, for a particular set of contracts, an MBE/WBE group received 100 percent of the dollars that it would be expected to receive based on availability.

Results by industry. Figure DD-3 presents overall MBE/WBE disparity indices for USI contracts by study industry. The results in Figure DD-3 include data from USI prime contracts and subcontracts. Overall, MBE/WBEs considered together were substantially underutilized on USI contracts (disparity index of 77).⁵ MBE/WBEs showed substantial disparities for every study industry except construction (disparity index of 100).

Figure DD-3.
Disparity indices for
MBE/WBE utilization on USI
contracts, July 2006–June
2009, by study industry

Note:
 See Figures CC-1 through CC-5 in
 Appendix CC.

Source:
 BBC Research & Consulting from data on
 USI contracts.



⁴ For example, if utilization of WBEs for a set of USI contracts was 2 percent and availability was 10 percent, the disparity index would be 20 (i.e., 2% divided by 10%, then multiplied by 100).

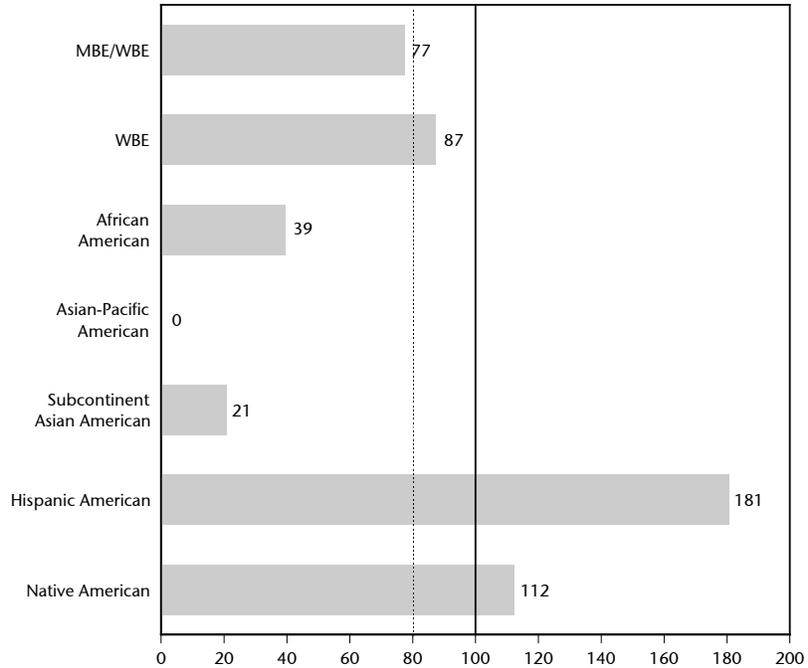
⁵ BBC’s use of the word “substantial” in describing certain disparity indices reflects the opinion of some courts that a disparity index of less than 80 reflects a substantial disparity.

Results by MBE/WBE. Figure DD-4 presents disparity indices by MBE/WBE group. The results in Figure DD-4 include data from USI prime contracts and subcontracts. Three MBE/WBE groups did not show substantial disparities — WBEs (disparity index of 87) and Hispanic American- (disparity index of 181) and Native American-owned firms (disparity index of 112).

Figure DD-4.
Disparity indices for utilization on USI contracts, July 2006–June 2009, by MBE/WBE group

Note:
 See Figures CC-1 in Appendix CC.

Source:
 BBC Research & Consulting from data on USI contracts.



Prime contracts and subcontracts. Figure DD-5 shows overall MBE/WBE disparity results for prime contracts and subcontracts. MBE/WBEs were not substantially underutilized on USI prime contracts (disparity index of 90). In contrast, MBE/WBEs received approximately one-half of the USI subcontract dollars that they would be expected to receive based on their availability for that work (disparity index of 51).

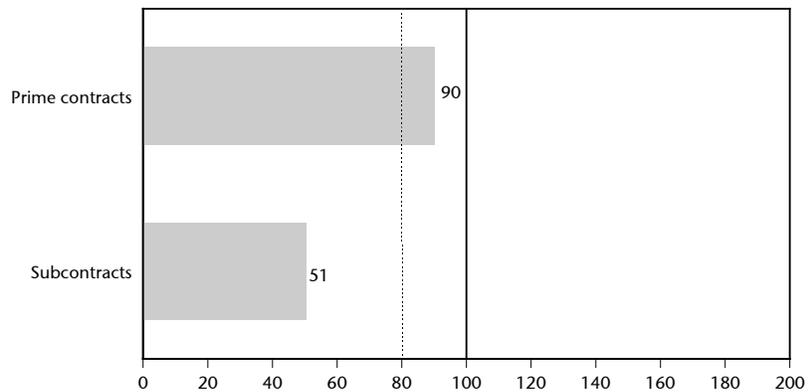
Disparity results for USI subcontracts are very different from those for Indiana Department of Administration (IDOA) and Indiana Department of Transportation (INDOT) subcontracts. IDOA and INDOT often applied MBE/WBE and DBE goals to their contracts during the study period. As discussed in Chapter 7 for IDOA and Chapter 8 for INDOT, overall, MBE/WBEs were not underutilized on IDOA and INDOT subcontracts. The difference in results may be due in part to the absence of MBE/WBE contract goals on USI contracts during the study period.⁶

⁶ Although the University of Southern Indiana sets subcontracting goals on some of its contracts, there are no consequences for prime contractors who fail to meet those goals or fail to fulfill good faith efforts.

Figure DD-5.
Disparity indices for
MBE/WBE utilization on USI
prime contracts and
subcontracts, July 2006–
June 2009

Note:
 See Figure CC-6 and CC-11 in Appendix CC.

Source:
 BBC Research & Consulting from data on
 USI contracts.



Comparison of disparity results between USI/INDOT and SEI contracts. The disparity study examined MBE/WBE utilization and availability for IDOA, INDOT and seven state colleges and universities (state educational institutions or “SEIs”).

- IDOA and INDOT applied MBE/WBE contract goals to certain state-funded contracts. For federally-funded construction and professional services contracts, which represent most of INDOT’s contracting, INDOT applied Disadvantaged Business Enterprise (DBE) goals.
- SEIs did not apply MBE/WBE contract goals to their contracts or there were no consequences if prime contractors did not meet the goals (or fulfill good faith efforts).

BBC analyzed MBE/WBE disparities for IDOA and INDOT combined (the “state”) and for all SEIs combined. Although disparity results for MBE/WBEs did not differ between state contracts (disparity index of 70) and SEI contracts (disparity index of 71) when considering prime contracts and subcontracts together, disparity results differed considerably when only considering subcontracts. There were no disparities for minority- and women-owned firms on state subcontracts (disparity index of 180), but MBE/WBEs were substantially underutilized on SEI subcontracts (disparity index of 68). These results indicate that the use of MBE/WBE/DBE goals may expand opportunities for minority- and women-owned firms through work as subcontractors. For more details about these combined analyses, see Chapter 6.⁷

⁷ State contracts included contracts awarded by the Indiana Stadium and Convention Building Authority (ISCBA). During the study period, ISCBA awarded contract dollars in connection with two large construction projects — building Lucas Oil Stadium and the Indiana Convention Center — using an MBE/WBE contracting program. In addition to the analyses presented here, the study team examined MBE/WBE disparity indices for state and SEI contracts after removing contract dollars awarded by ISCBA. Without ISCBA, the disparity index for MBE/WBEs was 66 for state prime contracts and subcontracts considered together and 171 for state subcontracts.

D. Marketplace Conditions for MBE/WBEs

BBC examined whether certain barriers exist for minority- and women-owned firms in the Indiana marketplace as a whole. Barriers in the marketplace may help explain some of the disparities that BBC observed for certain MBE/WBE groups in USI's construction, professional services, goods and support services procurements. BBC examined potential barriers in the Indiana marketplace in four primary areas:

1. Entry and advancement;
2. Business ownership;
3. Access to capital, bonding and insurance; and
4. Success of businesses.

Chapter 4 and Appendices E – H and Appendix J of the full report provide detailed information about marketplace conditions in Indiana.

Entry and advancement. BBC's analyses indicated that certain minority groups and women are underrepresented in the construction, professional services, goods and support services industries in Indiana, compared to non-Hispanic whites and men, even after accounting for factors such as education. Results indicated that:

- African Americans and women exhibited relatively low representation in the Indiana construction industry compared to their representation in the entire Indiana workforce. In addition, there appeared to be barriers to advancement for minorities and women.
- There was relatively low representation of African Americans, Hispanic Americans and women in the Indiana professional services industry. Among all professional services workers, there was particularly low representation of African Americans and women in engineering- and architecture-related lines of work.
- African Americans and women exhibited relatively low representation in the Indiana goods industry compared to their representation in the entire Indiana workforce. Among goods workers, African Americans and women were also less likely than non-Hispanic whites and males to advance to supervisory and managerial positions.
- Two groups showed lower representation in the support services industry compared to their representation in all Indiana industries considered together — Asian Americans and women. Minorities and women were far less likely to advance to supervisory or managerial positions.

- During in-depth interviews and public forums that BBC held as part of the disparity study, some individuals reported stereotypical attitudes on the part of customers and buyers in Indiana as a contributor to unfavorable work environments for minorities and women. Other interviewees reported instances of racial slurs or sexist comments. Some interviewees indicated that they have not experienced difficulties associated with entry and advancement, or that certain factors — such as stereotypical attitudes — have worked to their advantage.

Business ownership. Quantitative analyses of the Indiana construction, professional services, goods and support services industries revealed statistically significant disparities in business ownership for some racial/ethnic/gender groups after accounting for various neutral factors such as age and education.

- Compared to similarly-situated non-Hispanic whites and men, there were disparities in business ownership rates for African Americans, Hispanic Americans and women working in the Indiana construction industry.
- Asian Americans and women exhibited substantial disparities in business ownership rates in the professional services industry.
- White women own goods businesses at less than two-thirds the rate of similarly-situated white men in Indiana.
- African Americans exhibited a substantial disparity in business ownership rates in the support services industry compared to similarly-situated non-Hispanic whites.

Access to capital, bonding and insurance. If race/ethnicity or gender discrimination exists in capital, bonding and insurance markets, minorities and women may have difficulty starting or expanding a business. BBC examined whether MBE/WBEs' access to capital — both from their homes and businesses — is comparable to that of majority-owned firms. In addition, BBC examined information about whether minorities and women face barriers in obtaining bonding and insurance.

- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Indiana were more likely to have their applications denied. In addition, African Americans and Hispanic Americans were approved for business loans at rates that were much lower than that of similarly-situated non-Hispanic whites.
- Several interviewees reported that business credit is difficult to obtain and indicated that race and gender discrimination affected access to business credit. There was also some information that indicated difficulties for small businesses — particularly MBE/WBEs — in obtaining bonding and insurance in Indiana. Other interviewees indicated that they have not experienced difficulties associated with access to capital, bonding or insurance.

Success of businesses. BBC completed analyses that assessed whether the success of minority- and women-owned businesses differ from that of majority-owned businesses in the Indiana marketplace. The study team examined business success primarily in terms of business closures, contractions and expansions, and in terms of business receipts and earnings.

- Between 1997 and 2001, African American- and Hispanic American-owned firms in Indiana closed at higher rates than all firms considered together.⁸
- African-American-owned firms were less likely than other firms to expand. However, Hispanic American- and Native American-owned firms were more likely to expand than other firms.
- African American-, Hispanic American- and Native American-owned firms in Indiana were less likely than all firms considered together to experience contraction between 1997 and 2001. Asian American-owned firms were as likely as all Indiana firms considered together to experience contraction.
- African American-, Hispanic American-, Native American- and women-owned firms in Indiana earned substantially less in gross revenue than all firms considered together. The study team also developed regression models of business owner earnings in the East North Central region, which includes Indiana, based on 2000 U.S. Census data.⁹ The models examined the impact of race/ethnicity/gender on business owner earnings after statistically controlling for neutral factors. The study team identified statistically significant disparities in business earnings for female business owners in construction, professional services, goods and support services. There were also statistically significant disparities for African American construction business owners.
- Data from telephone interviews that BBC conducted as part of the availability analysis indicated that, across all subindustries except professional services, a larger share of majority-owned firms than of MBE/WBEs reported gross revenues of \$5 million or more.
- Several interviewees described difficulties that may affect business success for MBE/WBEs in the study industries. Interviewees discussed participation as prime- and subcontractors; unfair denial of bid opportunities and contract awards; and the existence of a “good ol’ boy” network.” Other interviewees indicated experiencing no difficulties in these areas.

⁸ These were the most recent business closure, contractions and expansion data available for Indiana at the time of the disparity study.

⁹ This was the most current Census data source available at the time of this study.

E. Options for Improving MBE/WBEs' Access to USI Contracting Opportunities

After reviewing contracting practices and business assistance programs that USI currently has in place, BBC suggests several steps that USI might consider to further encourage the future participation of small businesses — including MBE/WBEs — in its contracting and procurement. Some of those suggestions may require changes to existing state and administrative code. When implementing any program focusing on minority- and women-owned firms, the State of Indiana and USI must ensure that it is in compliance with U.S. Supreme Court, federal and state court decisions regarding such programs.¹⁰ For more detail, see Chapter 2 and Appendix B.

Increase competitive opportunities for small contracts. USI might consider increasing the number of small contracts that it awards by segmenting large contracts into multiple, smaller contract elements. Encouraging bid opportunities on small contracts might increase the likelihood of small businesses — including MBE/WBEs — to compete for them. BBC's analyses indicated that USI showed higher MBE/WBE utilization on small contracts than on all contracts (see Chapter 14).

Insurance and bonding requirements. USI might consider reviewing its insurance and bonding requirements to ensure that they do not act as barriers to smaller and newer firms. BBC's analyses of the Indiana marketplace indicated that certain MBE/WBE groups may face barriers in obtaining insurance and bonding and that those barriers may lead to reduced participation in state contracting (see Chapter 4).

Finance, bonding and insurance assistance. BBC's analyses identified disparities in access to capital, bonding and insurance for certain MBE/WBE groups. USI might consider exploring ways to better connect its contractors and consultants with programs offered by local public and private organizations related to those business areas.

Technical assistance and mentoring. USI might consider partnering with local organizations to offer further technical assistance and training to small businesses, including MBE/WBEs. For example, some agencies in other states host a construction management school that staff members from a local construction firm teach. USI might consider partnering with a large construction firm or other organizations to host similar construction management or general business management courses.

Outreach and advocacy, including notification of bid opportunities. USI participates in many outreach and advocacy events that include information about marketing, the MBE/WBE certification process, doing business with the State of Indiana and available bid opportunities. USI might consider broadening its outreach and advocacy efforts to include more partnerships with local trade organizations and other public agencies.

¹⁰ *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995). See Appendix B for more detail about related case law.

Expand MBE/WBE outreach and assistance measures, and data collection, to include uncertified firms. USI might consider expanding the measures that it uses to encourage the participation of MBE/WBE-certified firms to include minority- and women-owned firms that are not currently certified. BBC's analyses indicate that a large portion of USI's MBE/WBE utilization occurred with firms that were not certified. Further cultivating relationships with those firms could help encourage MBE/WBE participation in USI contracting. In addition, USI might consider monitoring utilization of all minority- and women-owned firms as prime contractors and subcontractors, not just certified MBE/WBEs.

APPENDIX EE.
Vincennes University Disparity Tables

Figure EE-1.
Agency: Vincennes University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,175 | \$50,389 | \$50,389 | | | | |
| (2) MBE/WBE | 155 | \$3,389 | \$3,389 | 6.7 | 20.9 | -14.1 | 32.2 |
| (3) WBE | 136 | \$3,109 | \$3,109 | 6.2 | 10.6 | -4.5 | 58.0 |
| (4) MBE | 19 | \$280 | \$280 | 0.6 | 10.2 | -9.7 | 5.4 |
| (5) African American-owned | 11 | \$171 | \$171 | 0.3 | 3.0 | -2.6 | 11.5 |
| (6) Total Asian American-owned | 2 | \$26 | \$26 | 0.1 | 1.4 | -1.3 | 3.7 |
| (7) Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.0 | 0.6 | -0.6 | 6.5 |
| (8) Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.0 | 0.8 | -0.8 | 1.6 |
| (9) Hispanic American-owned | 1 | \$12 | \$12 | 0.0 | 2.0 | -2.0 | 1.2 |
| (10) Native American-owned | 5 | \$71 | \$71 | 0.1 | 3.8 | -3.6 | 3.8 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 71 | \$1,007 | \$1,007 | 2.0 | | | |
| (13) Certified woman-owned | 60 | \$824 | \$824 | 1.6 | | | |
| (14) Certified minority-owned | 11 | \$183 | \$183 | 0.4 | | | |
| (15) Certified African American-owned | 9 | \$158 | \$158 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-2.
Agency: Vincennes University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 434 | \$31,620 | \$31,620 | | | | |
| (2) MBE/WBE | 36 | \$1,871 | \$1,871 | 5.9 | 17.8 | -11.9 | 33.2 |
| (3) WBE | 34 | \$1,831 | \$1,831 | 5.8 | 8.2 | -2.4 | 70.4 |
| (4) MBE | 2 | \$39 | \$39 | 0.1 | 9.6 | -9.5 | 1.3 |
| (5) African American-owned | 1 | \$27 | \$27 | 0.1 | 2.6 | -2.5 | 3.3 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.8 | -0.8 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (9) Hispanic American-owned | 1 | \$12 | \$12 | 0.0 | 0.2 | -0.1 | 22.9 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 5.8 | -5.8 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 2 | \$155 | \$155 | 0.5 | | | |
| (13) Certified woman-owned | 1 | \$127 | \$127 | 0.4 | | | |
| (14) Certified minority-owned | 1 | \$27 | \$27 | 0.1 | | | |
| (15) Certified African American-owned | 1 | \$27 | \$27 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-3.
Agency: Vincennes University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 248 | \$6,758 | \$6,758 | | | | |
| (2) MBE/WBE | 55 | \$569 | \$569 | 8.4 | 23.6 | -15.2 | 35.7 |
| (3) WBE | 53 | \$532 | \$532 | 7.9 | 14.2 | -6.3 | 55.4 |
| (4) MBE | 2 | \$38 | \$38 | 0.6 | 9.4 | -8.9 | 5.9 |
| (5) African American-owned | 1 | \$19 | \$19 | 0.3 | 2.6 | -2.3 | 10.5 |
| (6) Total Asian American-owned | 1 | \$19 | \$19 | 0.3 | 4.9 | -4.6 | 5.8 |
| (7) Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.3 | 2.6 | -2.3 | 11.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 2.3 | -2.3 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.6 | -1.6 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 37 | \$357 | \$357 | 5.3 | | | |
| (13) Certified woman-owned | 35 | \$319 | \$319 | 4.7 | | | |
| (14) Certified minority-owned | 2 | \$38 | \$38 | 0.6 | | | |
| (15) Certified African American-owned | 1 | \$19 | \$19 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-4.
Agency: Vincennes University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 457 | \$11,403 | \$11,403 | | | | |
| (2) MBE/WBE | 63 | \$941 | \$941 | 8.2 | 26.9 | -18.7 | 30.7 |
| (3) WBE | 48 | \$737 | \$737 | 6.5 | 14.4 | -7.9 | 45.0 |
| (4) MBE | 15 | \$203 | \$203 | 1.8 | 12.5 | -10.8 | 14.2 |
| (5) African American-owned | 9 | \$126 | \$126 | 1.1 | 4.0 | -2.9 | 27.5 |
| (6) Total Asian American-owned | 1 | \$6 | \$6 | 0.1 | 1.0 | -1.0 | 5.6 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (8) Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.1 | 0.4 | -0.3 | 15.7 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 7.3 | -7.3 | 0.0 |
| (10) Native American-owned | 5 | \$71 | \$71 | 0.6 | 0.2 | 0.4 | 200+ |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 32 | \$496 | \$496 | 4.3 | | | |
| (13) Certified woman-owned | 24 | \$377 | \$377 | 3.3 | | | |
| (14) Certified minority-owned | 8 | \$118 | \$118 | 1.0 | | | |
| (15) Certified African American-owned | 7 | \$112 | \$112 | 1.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-5.
Agency: Vincennes University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts and Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 36 | \$609 | \$609 | | | | |
| (2) MBE/WBE | 1 | \$9 | \$9 | 1.5 | 36.3 | -34.9 | 4.0 |
| (3) WBE | 1 | \$9 | \$9 | 1.5 | 25.9 | -24.5 | 5.6 |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 10.4 | -10.4 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 5.7 | -5.7 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 2.4 | -2.4 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-6.
Agency: Vincennes University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,136 | \$46,953 | \$46,953 | | | | |
| (2) MBE/WBE | 145 | \$2,236 | \$2,236 | 4.8 | 21.1 | -16.4 | 22.5 |
| (3) WBE | 126 | \$1,956 | \$1,956 | 4.2 | 10.5 | -6.3 | 39.7 |
| (4) MBE | 19 | \$280 | \$280 | 0.6 | 10.7 | -10.1 | 5.6 |
| (5) African American-owned | 11 | \$171 | \$171 | 0.4 | 3.1 | -2.7 | 11.9 |
| (6) Total Asian American-owned | 2 | \$26 | \$26 | 0.1 | 1.4 | -1.3 | 4.0 |
| (7) Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.0 | 0.6 | -0.6 | 6.9 |
| (8) Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.0 | 0.8 | -0.8 | 1.7 |
| (9) Hispanic American-owned | 1 | \$12 | \$12 | 0.0 | 2.1 | -2.1 | 1.2 |
| (10) Native American-owned | 5 | \$71 | \$71 | 0.2 | 4.0 | -3.8 | 3.8 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 70 | \$880 | \$880 | 1.9 | | | |
| (13) Certified woman-owned | 59 | \$696 | \$696 | 1.5 | | | |
| (14) Certified minority-owned | 11 | \$183 | \$183 | 0.4 | | | |
| (15) Certified African American-owned | 9 | \$158 | \$158 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-7.
Agency: Vincennes University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 396 | \$28,206 | \$28,206 | | | | |
| (2) MBE/WBE | 26 | \$717 | \$717 | 2.5 | 17.9 | -15.4 | 14.2 |
| (3) WBE | 24 | \$678 | \$678 | 2.4 | 7.7 | -5.3 | 31.3 |
| (4) MBE | 2 | \$39 | \$39 | 0.1 | 10.2 | -10.1 | 1.4 |
| (5) African American-owned | 1 | \$27 | \$27 | 0.1 | 2.8 | -2.7 | 3.5 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.1 | -0.1 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (9) Hispanic American-owned | 1 | \$12 | \$12 | 0.0 | 0.1 | -0.1 | 37.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 6.4 | -6.4 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 1 | \$27 | \$27 | 0.1 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 1 | \$27 | \$27 | 0.1 | | | |
| (15) Certified African American-owned | 1 | \$27 | \$27 | 0.1 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-8.
Agency: Vincennes University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 247 | \$6,735 | \$6,735 | | | | |
| (2) MBE/WBE | 55 | \$569 | \$569 | 8.5 | 23.6 | -15.2 | 35.8 |
| (3) WBE | 53 | \$532 | \$532 | 7.9 | 14.2 | -6.3 | 55.5 |
| (4) MBE | 2 | \$38 | \$38 | 0.6 | 9.4 | -8.8 | 6.0 |
| (5) African American-owned | 1 | \$19 | \$19 | 0.3 | 2.6 | -2.4 | 10.5 |
| (6) Total Asian American-owned | 1 | \$19 | \$19 | 0.3 | 4.9 | -4.6 | 5.9 |
| (7) Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.3 | 2.6 | -2.3 | 11.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 2.3 | -2.3 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.6 | -1.6 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 37 | \$357 | \$357 | 5.3 | | | |
| (13) Certified woman-owned | 35 | \$319 | \$319 | 4.7 | | | |
| (14) Certified minority-owned | 2 | \$38 | \$38 | 0.6 | | | |
| (15) Certified African American-owned | 1 | \$19 | \$19 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.3 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-9.
Agency: Vincennes University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 457 | \$11,403 | \$11,403 | | | | |
| (2) MBE/WBE | 63 | \$941 | \$941 | 8.2 | 26.9 | -18.7 | 30.7 |
| (3) WBE | 48 | \$737 | \$737 | 6.5 | 14.4 | -7.9 | 45.0 |
| (4) MBE | 15 | \$203 | \$203 | 1.8 | 12.5 | -10.8 | 14.2 |
| (5) African American-owned | 9 | \$126 | \$126 | 1.1 | 4.0 | -2.9 | 27.5 |
| (6) Total Asian American-owned | 1 | \$6 | \$6 | 0.1 | 1.0 | -1.0 | 5.6 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.7 | -0.7 | 0.0 |
| (8) Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.1 | 0.4 | -0.3 | 15.7 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 7.3 | -7.3 | 0.0 |
| (10) Native American-owned | 5 | \$71 | \$71 | 0.6 | 0.2 | 0.4 | 200+ |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 32 | \$496 | \$496 | 4.3 | | | |
| (13) Certified woman-owned | 24 | \$377 | \$377 | 3.3 | | | |
| (14) Certified minority-owned | 8 | \$118 | \$118 | 1.0 | | | |
| (15) Certified African American-owned | 7 | \$112 | \$112 | 1.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-10.
Agency: Vincennes University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 36 | \$609 | \$609 | | | | |
| (2) MBE/WBE | 1 | \$9 | \$9 | 1.5 | 36.3 | -34.9 | 4.0 |
| (3) WBE | 1 | \$9 | \$9 | 1.5 | 25.9 | -24.5 | 5.6 |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 10.4 | -10.4 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 5.7 | -5.7 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 2.4 | -2.4 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-11.
Agency: Vincennes University
Funding: All
Type: All
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 39 | \$3,437 | \$3,437 | | | | |
| (2) MBE/WBE | 10 | \$1,153 | \$1,153 | 33.6 | 17.2 | 16.4 | 195.4 |
| (3) WBE | 10 | \$1,153 | \$1,153 | 33.6 | 12.7 | 20.9 | 200+ |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 4.5 | -4.5 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 1.5 | -1.5 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 1 | \$127 | \$127 | 3.7 | | | |
| (13) Certified woman-owned | 1 | \$127 | \$127 | 3.7 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-12.
Agency: Vincennes University
Funding: All
Type: Construction
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 38 | \$3,414 | \$3,414 | | | | |
| (2) MBE/WBE | 10 | \$1,153 | \$1,153 | 33.8 | 17.2 | 16.6 | 196.8 |
| (3) WBE | 10 | \$1,153 | \$1,153 | 33.8 | 12.7 | 21.1 | 200+ |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 4.4 | -4.4 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 1.5 | -1.5 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.5 | -0.5 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.9 | -0.9 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 1 | \$127 | \$127 | 3.7 | | | |
| (13) Certified woman-owned | 1 | \$127 | \$127 | 3.7 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-13.
Agency: Vincennes University
Funding: All
Type: Professional services
Region: Indiana
Role: Subcontracts

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1 | \$22 | \$22 | | | | |
| (2) MBE/WBE | 0 | \$0 | \$0 | 0.0 | 18.8 | -18.8 | 0.0 |
| (3) WBE | 0 | \$0 | \$0 | 0.0 | 6.3 | -6.3 | 0.0 |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 12.5 | -12.5 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 6.3 | -6.3 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 6.3 | -6.3 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 6.3 | -6.3 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-16.
Agency: Vincennes University
Funding: All
Type: All
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 1,106 | \$21,291 | \$21,291 | | | | |
| (2) MBE/WBE | 144 | \$1,965 | \$1,965 | 9.2 | 23.8 | -14.6 | 38.7 |
| (3) WBE | 125 | \$1,684 | \$1,684 | 7.9 | 14.9 | -7.0 | 53.2 |
| (4) MBE | 19 | \$280 | \$280 | 1.3 | 9.0 | -7.7 | 14.7 |
| (5) African American-owned | 11 | \$171 | \$171 | 0.8 | 3.5 | -2.7 | 22.7 |
| (6) Total Asian American-owned | 2 | \$26 | \$26 | 0.1 | 1.4 | -1.3 | 8.5 |
| (7) Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.1 | 0.7 | -0.6 | 12.8 |
| (8) Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.0 | 0.7 | -0.7 | 4.2 |
| (9) Hispanic American-owned | 1 | \$12 | \$12 | 0.1 | 2.3 | -2.2 | 2.5 |
| (10) Native American-owned | 5 | \$71 | \$71 | 0.3 | 1.7 | -1.4 | 19.3 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 70 | \$880 | \$880 | 4.1 | | | |
| (13) Certified woman-owned | 59 | \$696 | \$696 | 3.3 | | | |
| (14) Certified minority-owned | 11 | \$183 | \$183 | 0.9 | | | |
| (15) Certified African American-owned | 9 | \$158 | \$158 | 0.7 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.1 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-17.
Agency: Vincennes University
Funding: All
Type: Construction
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 381 | \$8,145 | \$8,145 | | | | |
| (2) MBE/WBE | 25 | \$446 | \$446 | 5.5 | 21.9 | -16.4 | 25.0 |
| (3) WBE | 23 | \$406 | \$406 | 5.0 | 14.7 | -9.7 | 33.9 |
| (4) MBE | 2 | \$39 | \$39 | 0.5 | 7.2 | -6.7 | 6.8 |
| (5) African American-owned | 1 | \$27 | \$27 | 0.3 | 2.2 | -1.9 | 15.2 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.6 | -0.6 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.3 | -0.3 | 0.0 |
| (9) Hispanic American-owned | 1 | \$12 | \$12 | 0.1 | 0.2 | -0.1 | 65.5 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 4.1 | -4.1 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 1 | \$27 | \$27 | 0.3 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 1 | \$27 | \$27 | 0.3 | | | |
| (15) Certified African American-owned | 1 | \$27 | \$27 | 0.3 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-18.
Agency: Vincennes University
Funding: All
Type: Professional services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 243 | \$4,916 | \$4,916 | | | | |
| (2) MBE/WBE | 55 | \$569 | \$569 | 11.6 | 23.4 | -11.9 | 49.4 |
| (3) WBE | 53 | \$532 | \$532 | 10.8 | 14.8 | -4.0 | 73.1 |
| (4) MBE | 2 | \$38 | \$38 | 0.8 | 8.6 | -7.9 | 8.9 |
| (5) African American-owned | 1 | \$19 | \$19 | 0.4 | 3.0 | -2.7 | 12.3 |
| (6) Total Asian American-owned | 1 | \$19 | \$19 | 0.4 | 3.9 | -3.5 | 10.0 |
| (7) Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.4 | 2.2 | -1.8 | 18.2 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.8 | -1.8 | 0.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 1.5 | -1.5 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 37 | \$357 | \$357 | 7.3 | | | |
| (13) Certified woman-owned | 35 | \$319 | \$319 | 6.5 | | | |
| (14) Certified minority-owned | 2 | \$38 | \$38 | 0.8 | | | |
| (15) Certified African American-owned | 1 | \$19 | \$19 | 0.4 | | | |
| (16) Certified Asian-Pacific American-owned | 1 | \$19 | \$19 | 0.4 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-19.
Agency: Vincennes University
Funding: All
Type: Goods
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 446 | \$7,620 | \$7,620 | | | | |
| (2) MBE/WBE | 63 | \$941 | \$941 | 12.3 | 25.2 | -12.8 | 49.0 |
| (3) WBE | 48 | \$737 | \$737 | 9.7 | 14.2 | -4.5 | 68.3 |
| (4) MBE | 15 | \$203 | \$203 | 2.7 | 11.0 | -8.3 | 24.2 |
| (5) African American-owned | 9 | \$126 | \$126 | 1.6 | 5.1 | -3.5 | 32.2 |
| (6) Total Asian American-owned | 1 | \$6 | \$6 | 0.1 | 0.7 | -0.6 | 11.6 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 0.2 | -0.2 | 0.0 |
| (8) Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.1 | 0.5 | -0.5 | 15.7 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 4.9 | -4.9 | 0.0 |
| (10) Native American-owned | 5 | \$71 | \$71 | 0.9 | 0.3 | 0.7 | 200+ |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 32 | \$496 | \$496 | 6.5 | | | |
| (13) Certified woman-owned | 24 | \$377 | \$377 | 5.0 | | | |
| (14) Certified minority-owned | 8 | \$118 | \$118 | 1.6 | | | |
| (15) Certified African American-owned | 7 | \$112 | \$112 | 1.5 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 1 | \$6 | \$6 | 0.1 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

Figure EE-20.
Agency: Vincennes University
Funding: All
Type: Support services
Region: Indiana
Role: Prime contracts

Contracts of \$150,000 or less

| Firm Type | (a) Number of contracts (subcontracts) | (b) Total dollars (thousands) | (c) Total dollars after Unknown MBE allocation (thousands)* | (d) Actual utilization (column c / column c, row1) % | (e) Utilization benchmark (availability) % | (f) Difference (column d - column e) % | (g) Disparity index (d / e) x 100 |
|--|---|-------------------------------------|---|--|--|--|---|
| (1) All firms | 36 | \$609 | \$609 | | | | |
| (2) MBE/WBE | 1 | \$9 | \$9 | 1.5 | 36.3 | -34.9 | 4.0 |
| (3) WBE | 1 | \$9 | \$9 | 1.5 | 25.9 | -24.5 | 5.6 |
| (4) MBE | 0 | \$0 | \$0 | 0.0 | 10.4 | -10.4 | 0.0 |
| (5) African American-owned | 0 | \$0 | \$0 | 0.0 | 5.7 | -5.7 | 0.0 |
| (6) Total Asian American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (7) Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | 1.0 | -1.0 | 0.0 |
| (8) Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | 0.0 | 0.0 | 100.0 |
| (9) Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | 2.4 | -2.4 | 0.0 |
| (10) Native American-owned | 0 | \$0 | \$0 | 0.0 | 1.4 | -1.4 | 0.0 |
| (11) Unknown MBE | 0 | \$0 | | | | | |
| (12) Certified | 0 | \$0 | \$0 | 0.0 | | | |
| (13) Certified woman-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (14) Certified minority-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (15) Certified African American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (16) Certified Asian-Pacific American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (17) Certified Subcontinent Asian American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (18) Certified Hispanic American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (19) Certified Native American-owned | 0 | \$0 | \$0 | 0.0 | | | |
| (20) Unknown Certified-MBE | 0 | \$0 | | | | | |
| (21) Unknown Certified | 0 | \$0 | | | | | |

Note 1: Spreadsheet rounds numbers to nearest thousand dollars or tenth of one percent. WBE is white women-owned firms.

Note 2: Unknown MBE, Unknown Certified-MBE, and Unknown Certified dollars were allocated to subgroups proportional to the known total dollars of those subgroups. For example, if total dollars of African American-owned firms (column b, row 5) accounted for 25 percent of total MBE dollars (column b, row 4), then 25 percent of column b, row 11 would be added to column b, row 5 and the sum would be shown in column c, row 5.

Note 3: "Certified" is defined as "DBE Certified" for INDOT contracts and "MBE/WBE Certified" for other state and SEI contracts.

Source: BBC Research & Consulting Disparity Analysis.

APPENDIX FF.

VU Summary Report

The State of Indiana commissioned BBC Research & Consulting (BBC) to conduct a disparity study as part of a periodic evaluation of its Minority and Women's Business Enterprises (MBE/WBE) Program. BBC analyzed participation of minority- and women-owned firms — regardless of whether they were certified as such with the State of Indiana — in contracts and subcontracts the Vincennes University (VU) awarded between July 1, 2006 and June 30, 2009 (fiscal years 2007 through 2009).¹ The study team then compared MBE/WBE utilization to what those firms would be expected to receive based on their availability for specific types of VU work.

VU's summary report is organized in five parts:

- A. Availability of MBE/WBEs for VU contracts and subcontracts²;
- B. Utilization of MBE/WBEs on VU contracts and subcontracts;
- C. Disparity analyses and results;
- D. Marketplace conditions for MBE/WBEs; and
- E. Options for improving MBE/WBEs' access to VU contracting opportunities.

A. Availability of MBE/WBEs for VU Contracts and Subcontracts

In the disparity analysis, the study team compared the percentage of VU contract dollars going to each racial/ethnic/gender group (MBE/WBE utilization) to the percentage of dollars that each group would be expected to receive based on availability for specific types, sizes and locations of VU prime contracts and subcontracts (MBE/WBE availability).

BBC collected information about potentially available firms by contacting Indiana businesses in the local construction, professional services, goods and support services industries. More than 9,000 firms completed telephone interviews, allowing the study team to build a database of firms available for specific types of VU work. BBC conducted a sophisticated analysis of the number of MBEs and WBEs available for each VU contract and subcontract and dollar-weighted the results when determining overall availability for VU work. Chapter 5 and Appendix D of the full report explain the availability analysis in detail.

¹ BBC defines WBEs as white women-owned firms. The rationale for doing so is presented in Chapter 5 of the full disparity study report.

² BBC uses the words "contract" and "procurement" interchangeably throughout the report.

Figure FF-1 presents the availability of MBE/WBE firms for VU procurements by racial/ethnic/gender group. As shown in Figure FF-1, MBE/WBE firms might be expected to receive about 21 percent of VU contract dollars given their availability for specific types, sizes and locations of VU prime contracts and subcontracts during the study period. This “availability benchmark” reflects dollar-weighted availability — it is not based on a headcount of MBE/WBEs. White women-owned firms comprise a large share of total MBE/WBE availability for VU contracts and procurements.

Figure FF-1.
Availability of firms for VU contracts, July 2006–June 2009,
by race/ethnicity and gender

| Race, ethnicity and gender | Utilization benchmark (availability %) |
|-----------------------------------|---|
| African American-owned | 3.0 % |
| Asian-Pacific American-owned | 0.6 |
| Subcontinent Asian American-owned | 0.8 |
| Hispanic American-owned | 2.0 |
| Native American-owned | 3.8 |
| Total MBE | 10.2 % |
| WBE (white women-owned) | 10.6 |
| Total MBE/WBE | 20.9 % |
| Majority-owned | 79.1 |
| Total | 100.0 % |

Note: See Figure EE-1 in Appendix EE.

Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from 2009/2010 Availability Survey.

The study team found that MBE/WBE availability is highest for VU support services contracts (36%) and lowest for construction contracts (18%). The tables in Appendix EE present MBE/WBE availability for different subsets of VU contracts and subcontracts.

B. Utilization of MBE/WBEs on VU Contracts and Subcontracts

To determine MBE/WBE utilization on VU contracts, BBC examined more than 1,100 contracts and subcontracts totaling \$50 million for the three-year study period. Figure FF-2 examines VU’s utilization of each MBE/WBE group (top half of the figure) and VU’s utilization of only those firms certified as MBE/WBEs (bottom half of the figure). MBE/WBE firms received 6.7 percent of VU contract and subcontract dollars during the study period. WBEs accounted for most of the overall MBE/WBE utilization.

Figure FF-2.
Utilization of MBE/WBEs and certified MBE/WBEs for VU contracts,
July 2006–June 2009

| Race, ethnicity and gender | Utilization % |
|-----------------------------------|----------------|
| MBE/WBEs | |
| African American-owned | 0.3 % |
| Asian-Pacific American-owned | 0.0 |
| Subcontinent Asian American-owned | 0.0 |
| Hispanic American-owned | 0.0 |
| Native American-owned | 0.1 |
| Total MBE | 0.6 % |
| WBE (white women-owned) | 6.2 |
| Total MBE/WBE | 6.7 % |
| Majority-owned | 93.3 |
| Total | 100.0 % |
| Certified MBE/WBEs | |
| African American-owned | 0.3 % |
| Asian-Pacific American-owned | 0.0 |
| Subcontinent Asian American-owned | 0.0 |
| Hispanic American-owned | 0.0 |
| Native American-owned | 0.0 |
| Total MBE certified | 0.4 % |
| WBE (white women-owned) | 1.6 |
| Total MBE/WBE certified | 2.0 % |
| Non-certified | 98.0 |
| Total | 100.0 % |

Note: See Figure EE-1 in Appendix EE.

Numbers may not sum perfectly due to rounding.

Source: BBC Research & Consulting from data on VU contracts.

When examining VU contract dollars by industry, MBE/WBE utilization was 5.9 percent for construction, 8.4 percent for professional services, 8.2 percent for goods and 1.5 percent for support services. For more detail about MBE/WBE utilization by study industry, see Chapter 15 and Figures EE-2 through EE-5 of Appendix EE.

C. Disparity Analysis

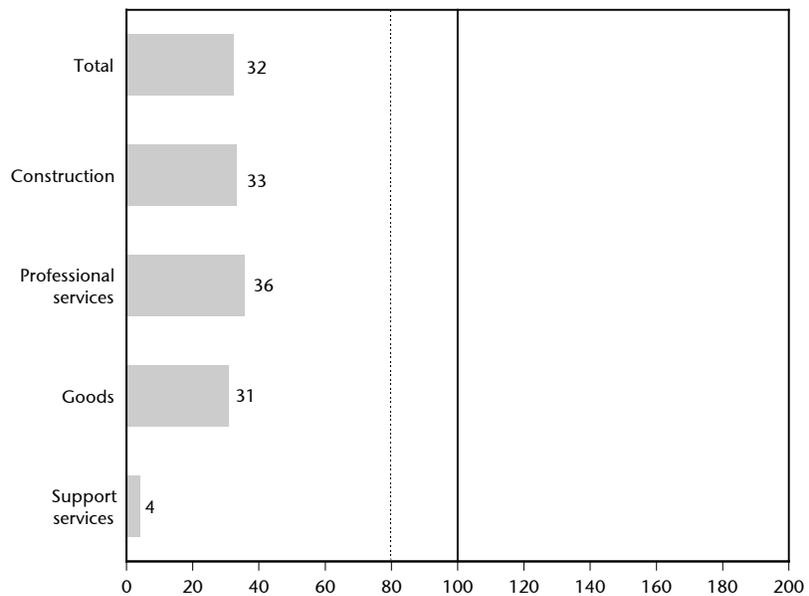
BBC compared actual utilization of MBE/WBEs on VU contracts (as a percentage of total dollars) to the percentage of dollars that those firms might be expected to receive based on the availability analysis. To help compare results between groups and across sets of contracts, BBC calculated disparity indices by dividing the utilization percentage by availability and then multiplying by 100.³ A disparity index of 100 indicates “parity” — that is, for a particular set of contracts, an MBE/WBE group received 100 percent of the dollars that it would be expected to receive based on availability.

Results by industry. Figure FF-3 presents overall MBE/WBE disparity indices for VU contracts by study industry. The results in Figure FF-3 include data from VU prime contracts and subcontracts. Overall, MBE/WBEs considered together were substantially underutilized on VU contracts (disparity index of 32).⁴ MBE/WBEs showed substantial disparities for every study industry.

Figure FF-3.
Disparity indices for
MBE/WBE utilization on VU
contracts, July 2006–June
2009, by study industry

Note:
See Figures EE-1 through EE-5 in
Appendix EE.

Source:
BBC Research & Consulting from data on
VU contracts.



³ For example, if utilization of WBEs for a set of VU contracts was 2 percent and availability was 10 percent, the disparity index would be 20 (i.e., 2% divided by 10%, then multiplied by 100).

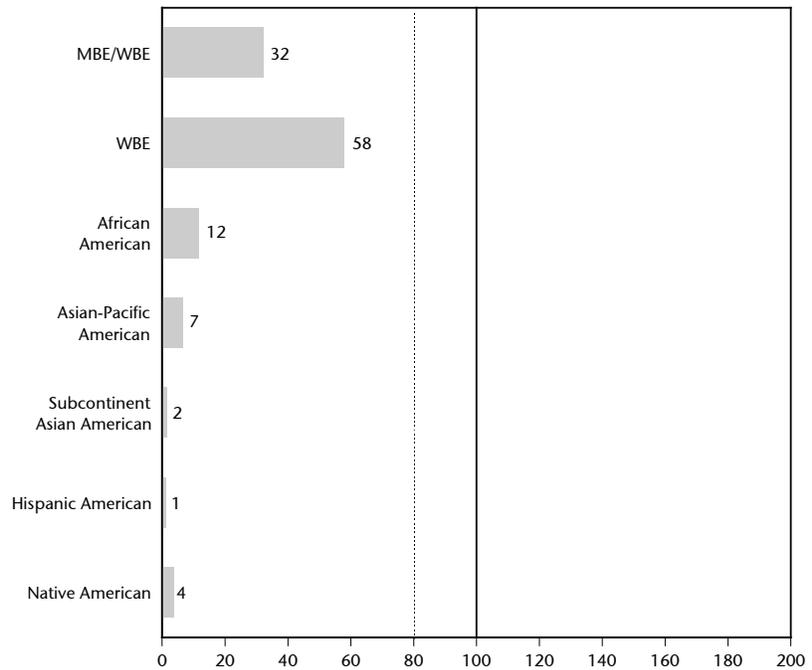
⁴ BBC’s use of the word “substantial” in describing certain disparity indices reflects the opinion of some courts that a disparity index of less than 80 reflects a substantial disparity.

Results by MBE/WBE. Figure FF-4 presents disparity indices by MBE/WBE group. The results in Figure FF-4 include data from VU prime contracts and subcontracts. Every MBE/WBE group showed substantial disparities for VU contracts and subcontracts during the study period.

Figure FF-4.
Disparity indices for utilization on IDOA contracts, July 2006–June 2009, by MBE/WBE group

Note:
 See Figures EE-1 in Appendix EE.

Source:
 BBC Research & Consulting from data on VU contracts.

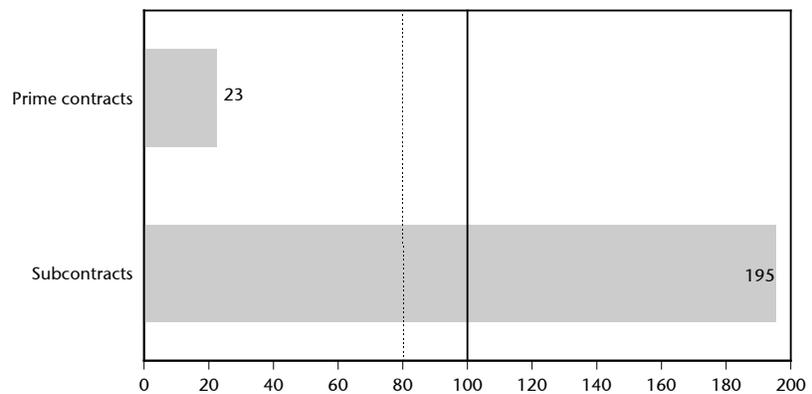


Prime contracts and subcontracts. Figure FF-5 shows overall MBE/WBE disparity results for prime contracts and subcontracts. MBE/WBEs were substantially underutilized on VU prime contracts (disparity index of 23). In contrast, MBE/WBE utilization exceeded availability for VU subcontracts (disparity index of 195).

Figure FF-5.
Disparity indices for MBE/WBE utilization on VU prime contracts and subcontracts, July 2006–June 2009

Note:
 See Figure EE-6 and EE-11 in Appendix EE.

Source:
 BBC Research & Consulting from data on VU contracts.



Comparison of disparity results between VU/INDOT and SEI contracts. The disparity study examined MBE/WBE utilization and availability for IDOA, INDOT and seven state colleges and universities (state educational institutions or “SEIs”).

- IDOA and INDOT applied MBE/WBE contract goals to certain state-funded contracts. For federally-funded construction and professional services contracts, which represent most of INDOT’s contracting, INDOT applied Disadvantaged Business Enterprise (DBE) goals.
- SEIs did not apply MBE/WBE contract goals to their contracts or there were no consequences if prime contractors did not meet the goals (or fulfill good faith efforts).

BBC analyzed MBE/WBE disparities for IDOA and INDOT combined (the “state”) and for all SEIs combined. Although disparity results for MBE/WBEs did not differ between state contracts (disparity index of 70) and SEI contracts (disparity index of 71) when considering prime contracts and subcontracts together, disparity results differed considerably when only considering subcontracts. There were no disparities for minority- and women-owned firms on state subcontracts (disparity index of 180), but MBE/WBEs were substantially underutilized on SEI subcontracts (disparity index of 68). These results indicate that the use of MBE/WBE/DBE goals may expand opportunities for minority- and women-owned firms through work as subcontractors. For more details about these combined analyses, see Chapter 6.⁵

D. Marketplace Conditions for MBE/WBEs

BBC examined whether certain barriers exist for minority- and women-owned firms in the Indiana marketplace as a whole. Barriers in the marketplace may help explain some of the disparities that BBC observed for certain MBE/WBE groups in VU’s construction, professional services, goods and support services procurements. BBC examined potential barriers in the Indiana marketplace in four primary areas:

1. Entry and advancement;
2. Business ownership;
3. Access to capital, bonding and insurance; and
4. Success of businesses.

Chapter 4 and Appendices E – H and Appendix J of the full report provide detailed information about marketplace conditions in Indiana.

⁵ State contracts included contracts awarded by the Indiana Stadium and Convention Building Authority (ISCBA). During the study period, ISCBA awarded contract dollars in connection with two large construction projects — building Lucas Oil Stadium and the Indiana Convention Center — using an MBE/WBE contracting program. In addition to the analyses presented here, the study team examined MBE/WBE disparity indices for state and SEI contracts after removing contract dollars awarded by ISCBA. Without ISCBA, the disparity index for MBE/WBEs was 66 for state prime contracts and subcontracts considered together and 171 for state subcontracts.

Entry and advancement. BBC's analyses indicated that certain minority groups and women are underrepresented in the construction, professional services, goods and support services industries in Indiana, compared to non-Hispanic whites and men, even after accounting for factors such as education. Results indicated that:

- African Americans and women exhibited relatively low representation in the Indiana construction industry compared to their representation in the entire Indiana workforce. In addition, there appeared to be barriers to advancement for minorities and women.
- There was relatively low representation of African Americans, Hispanic Americans and women in the Indiana professional services industry. Among all professional services workers, there was particularly low representation of African Americans and women in engineering- and architecture-related lines of work.
- African Americans and women exhibited relatively low representation in the Indiana goods industry compared to their representation in the entire Indiana workforce. Among goods workers, African Americans and women were also less likely than non-Hispanic whites and males to advance to supervisory and managerial positions.
- Two groups showed lower representation in the support services industry compared to their representation in all Indiana industries considered together — Asian Americans and women. Minorities and women were far less likely to advance to supervisory or managerial positions.
- During in-depth interviews and public forums that BBC held as part of the disparity study, some individuals reported stereotypical attitudes on the part of customers and buyers in Indiana as a contributor to unfavorable work environments for minorities and women. Other interviewees reported instances of racial slurs or sexist comments. Some interviewees indicated that they have not experienced difficulties associated with entry and advancement, or that certain factors — such as stereotypical attitudes — have worked to their advantage.

Business ownership. Quantitative analyses of the Indiana construction, professional services, goods and support services industries revealed statistically significant disparities in business ownership for some racial/ethnic/gender groups after accounting for various neutral factors such as age and education.

- Compared to similarly-situated non-Hispanic whites and men, there were disparities in business ownership rates for African Americans, Hispanic Americans and women working in the Indiana construction industry.
- Asian Americans and women exhibited substantial disparities in business ownership rates in the professional services industry.
- White women own goods businesses at less than two-thirds the rate of similarly-situated white men in Indiana.

- African Americans exhibited a substantial disparity in business ownership rates in the support services industry compared to similarly-situated non-Hispanic whites.

Access to capital, bonding and insurance. If race/ethnicity or gender discrimination exists in capital, bonding and insurance markets, minorities and women may have difficulty starting or expanding a business. BBC examined whether MBE/WBEs' access to capital — both from their homes and businesses — is comparable to that of majority-owned firms. In addition, BBC examined information about whether minorities and women face barriers in obtaining bonding and insurance.

- African Americans, Hispanic Americans and Native Americans applying for home mortgages in Indiana were more likely to have their applications denied. In addition, African Americans and Hispanic Americans were approved for business loans at rates that were much lower than that of similarly-situated non-Hispanic whites.
- Several interviewees reported that business credit is difficult to obtain and indicated that race and gender discrimination affected access to business credit. There was also some information that indicated difficulties for small businesses — particularly MBE/WBEs — in obtaining bonding and insurance in Indiana. Other interviewees indicated that they have not experienced difficulties associated with access to capital, bonding or insurance.

Success of businesses. BBC completed analyses that assessed whether the success of minority- and women-owned businesses differ from that of majority-owned businesses in the Indiana marketplace. The study team examined business success primarily in terms of business closures, contractions and expansions, and in terms of business receipts and earnings.

- Between 1997 and 2001, African American- and Hispanic American-owned firms in Indiana closed at higher rates than all firms considered together.⁶
- African-American-owned firms were less likely than other firms to expand. However, Hispanic American- and Native American-owned firms were more likely to expand than other firms.
- African American-, Hispanic American- and Native American-owned firms in Indiana were less likely than all firms considered together to experience contraction between 1997 and 2001. Asian American-owned firms were as likely as all Indiana firms considered together to experience contraction.
- African American-, Hispanic American-, Native American- and women-owned firms in Indiana earned substantially less in gross revenue than all firms considered together. The study team also developed regression models of business owner earnings in the East North Central region, which includes Indiana, based on 2000 U.S. Census data.⁷ The models examined the impact of race/ethnicity/gender on business owner earnings after

⁶ These were the most recent business closure, contractions and expansion data available for Indiana at the time of the disparity study.

⁷ This was the most current Census data source available at the time of this study.

statistically controlling for neutral factors. The study team identified statistically significant disparities in business earnings for female business owners in construction, professional services, goods and support services. There were also statistically significant disparities for African American construction business owners.

- Data from telephone interviews that BBC conducted as part of the availability analysis indicated that, across all subindustries except professional services, a larger share of majority-owned firms than of MBE/WBEs reported gross revenues of \$5 million or more.
- Several interviewees described difficulties that may affect business success for MBE/WBEs in the study industries. Interviewees discussed participation as prime- and subcontractors; unfair denial of bid opportunities and contract awards; and the existence of a “good ol’ boy” network.” Other interviewees indicated experiencing no difficulties in these areas.

E. Options for Improving MBE/WBEs’ Access to VU Contracting Opportunities

After reviewing contracting practices and business assistance programs that VU currently has in place, BBC suggests several steps that VU might consider to further encourage the future participation of small businesses — including MBE/WBEs — in its contracting and procurement. Some of those suggestions may require changes to existing state and administrative code. When implementing any program focusing on minority- and women-owned firms, the State of Indiana and VU must ensure that it is in compliance with U.S. Supreme Court, federal and state court decisions regarding such programs.⁸ For more detail, see Chapter 2 and Appendix B.

Increase competitive opportunities for small contracts. VU might consider increasing the number of small contracts that it awards by segmenting large contracts into multiple, smaller contract elements. Encouraging bid opportunities on small contracts might increase the likelihood of small businesses — including MBE/WBEs — to compete for them. BBC’s analyses indicated that VU showed higher MBE/WBE utilization on small contracts than on all contracts (see Chapter 15).

Insurance and bonding requirements. VU might consider reviewing its insurance and bonding requirements to ensure that they do not act as barriers to smaller and newer firms. BBC’s analyses of the Indiana marketplace indicated that certain MBE/WBE groups may face barriers in obtaining insurance and bonding and that those barriers may lead to reduced participation in state contracting (see Chapter 4).

Finance, bonding and insurance assistance. BBC’s analyses identified disparities in access to capital, bonding and insurance for certain MBE/WBE groups. VU might consider exploring ways to better connect its contractors and consultants with programs offered by local public and private organizations related to those business areas.

⁸ *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989); *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995). See Appendix B for more detail about related case law.

Technical assistance and mentoring. VU might consider partnering with local organizations to offer further technical assistance and training to small businesses, including MBE/WBEs. For example, some agencies in other states host a construction management school that staff members from a local construction firm teach. VU might consider partnering with a large construction firm or other organizations to host similar construction management or general business management courses.

Outreach and advocacy, including notification of bid opportunities. VU participates in many outreach and advocacy events that include information about marketing, the MBE/WBE certification process, doing business with the State of Indiana and available bid opportunities. VU might consider broadening its outreach and advocacy efforts to include more partnerships with local trade organizations and other public agencies.

Expand MBE/WBE outreach and assistance measures, and data collection, to include uncertified firms. VU might consider expanding the measures that it uses to encourage the participation of MBE/WBE-certified firms to include minority- and women-owned firms that are not currently certified. BBC's analyses indicate that a large portion of VU's MBE/WBE utilization occurred with firms that were not certified. Further cultivating relationships with those firms could help encourage MBE/WBE participation in VU contracting. In addition, VU might consider monitoring utilization of all minority- and women-owned firms as prime contractors and subcontractors, not just certified MBE/WBEs.