



6

environmental considerations

This chapter provides an overview of INDOT's environmental programs and an analysis of the Environmental Justice populations within the state.

ENVIRONMENTAL PROGRAMS

INDOT is committed to sustainable and environmentally sound policies that meet the needs of current generations without impairing the ability of future generations to meet their own needs. INDOT has established numerous environmental programs to specifically meet this commitment. This commitment links to the LRTP's goals, objectives, and planning factors. INDOT's commitment to sustainable and environmentally sound policies helps meet the LRTP's Environmental Responsibility goal, as well as the Governor's focus on improving the quality of life in Indiana. Several of INDOT's environmental programs are discussed below.

Hoosier Roadside Heritage Program

In the late nineties, INDOT began an innovative program aimed at beautifying Indiana's roadways, saving taxpayer dollars, lessening the effects of erosion and improving safety. The Hoosier Roadside Heritage Program was developed in cooperation with the Federal Highway Administration, the Department of Natural Resources, and the Department of Environmental Management.

The primary goal of the Roadside Heritage Program is promoting and incorporating native plants and wildflowers into Indiana's roadside landscape. Additional information on the Hoosier Roadside Heritage Program can be found at <https://www.in.gov/indot/2583.htm>.





Recycling and Waste Diversion

Each year INDOT recovers a great deal of waste materials for reuse produced during construction and maintenance activities. This is, by far, INDOT's largest waste stream, averaging more than 1 million tons of reclaimed concrete, asphalt and steel annually. INDOT recycling activities also target special and universal wastes produced at department facilities, construction projects and along Indiana roadways.

INDOT operates hundreds of vehicles throughout the state and maintains thousands of miles of state roadways. As part of department and roadway maintenance, scrap tires and scrap tires pieces are recovered and disposed of according to State regulations. In 2013 INDOT initiated a program with local vendors where whole waste tires

removed from INDOT vehicles are sold for retreading purposes generating a revenue stream for the department. Additional information on INDOT's recycling and waste diversion efforts is located at <https://www.in.gov/indot/2586.htm>.

Adopt-A-Highway Program

INDOT's Adopt-A-Highway program helps significantly reduce the roadside trash problem. This improves the look of Indiana's communities and helps uncover our state's natural heritage.

INDOT's Adopt-A-Highway program coordinates with community groups that provide highway trash and litter pick-up in local communities. More than 1,000 groups are already making this program a success across Indiana. The Adopt-A-Highway program helps recover Indiana's natural heritage, but it can't be done without your help. Additional information on INDOT's Adopt-A-Highway program is located at <https://www.in.gov/indot/2598.htm>.

Indiana Stellar Communities Program

Launched in 2011, the Stellar Communities Program is a multi-agency partnership between the Indiana Housing



and Community Development Authority, Indiana Office of Community and Rural Affairs, and INDOT, designed to recognize Indiana's smaller communities that have identified comprehensive community and economic development projects and activities as well as next steps and key partnerships.

Through annual designation the Stellar Communities Designation Program provides resources for transformative quality of place community improvements by:

- Utilizing previous planning efforts.
- Leveraging existing assets.
- Fostering regional investments.
- Stimulating continued growth for long-term relevance.

Additional information on the Indiana Stellar Communities Program can be found at <http://www.in.gov/ocra/stellar.htm>.

Alternative Fuel Vehicles

INDOT is challenging traditional ways of thinking in transportation planning, materials and programs in favor

of inventive ideas and innovative solutions. One of these innovative solutions is the use of alternative fuel vehicles.

Launched in June 2011, INDOT's alternative fuel vehicle program now involves 634 vehicles, including 32 compressed natural gas (CNG) trucks

which can run on CNG, gasoline or diesel fuel, 19 CNG-powered dump trucks, and 583 small and full-size pickup trucks and vans that have been converted to run on propane or gasoline. To support the propane-powered vehicles, INDOT installed 115 propane fueling sites at its facilities across the state as part of the largest statewide alternative fuel network. Fourteen CNG fueling stations are publicly available in Indiana. INDOT's alternative fuel fleet reduced fuel costs by more than \$1.17 million in FY 2013 and more than \$2.75 million since the program's inception. In addition, there are three interstates in Indiana; I-80, I-275, and I-94 that have been designated alternative fuel corridors by FHWA.



Historic Bridge Marketing Program

When an Indiana historic bridge is planned for bypassing or replacement, the bridge is offered to any group or individual that may want to take ownership of the bridge and manage or relocate it to another site. INDOT and the Federal Highway Administration are currently working to market these historic structures for preservation in-place and for relocation (storage or to a new site). Additional information on INDOT's Historic Bridge Marketing Program, including an inventory of bridges is available at <http://www.in.gov/indot/2532.htm>.

The Indiana Byway Program

The Indiana Byway Program is designed to preserve, protect, enhance and recognize transportation corridors of unique character. These corridors are notable examples of our nation's beauty, history, culture and recreational experience. Some byway routes are designated nationally while others are state designated byways.



Indiana currently has three nationally designated byways and five state designated byways. Additional information on these byways and the Indiana Byway Programs can be found at <http://www.in.gov/indot/2827.htm>.

Storm Water

INDOT is deeply involved in the treatment and management of storm water runoff. Runoff controls are essential to preventing polluted runoff from roads, highways, and bridges from reaching surface waters. Runoff control measures can effectively limit the entry of pollutants into surface waters and protect their quality, fish habitats, and public health. INDOT controls runoff by utilizing best management practices in agency operations, and in road and facility construction and maintenance. These efforts keep pollution out of storm water runoff during construction, and during everyday operations on roadways, rest areas, and maintenance facilities. Additional information on INDOT's storm water programs can be found at: <https://www.in.gov/indot/2892.htm>.

Environmental Justice

In accordance with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, Federal agencies must identify and address disproportionately high and adverse human health or environmental effects of proposed projects on minority and low-income populations. Three underlying principles guide compliance with Environmental Justice requirements:

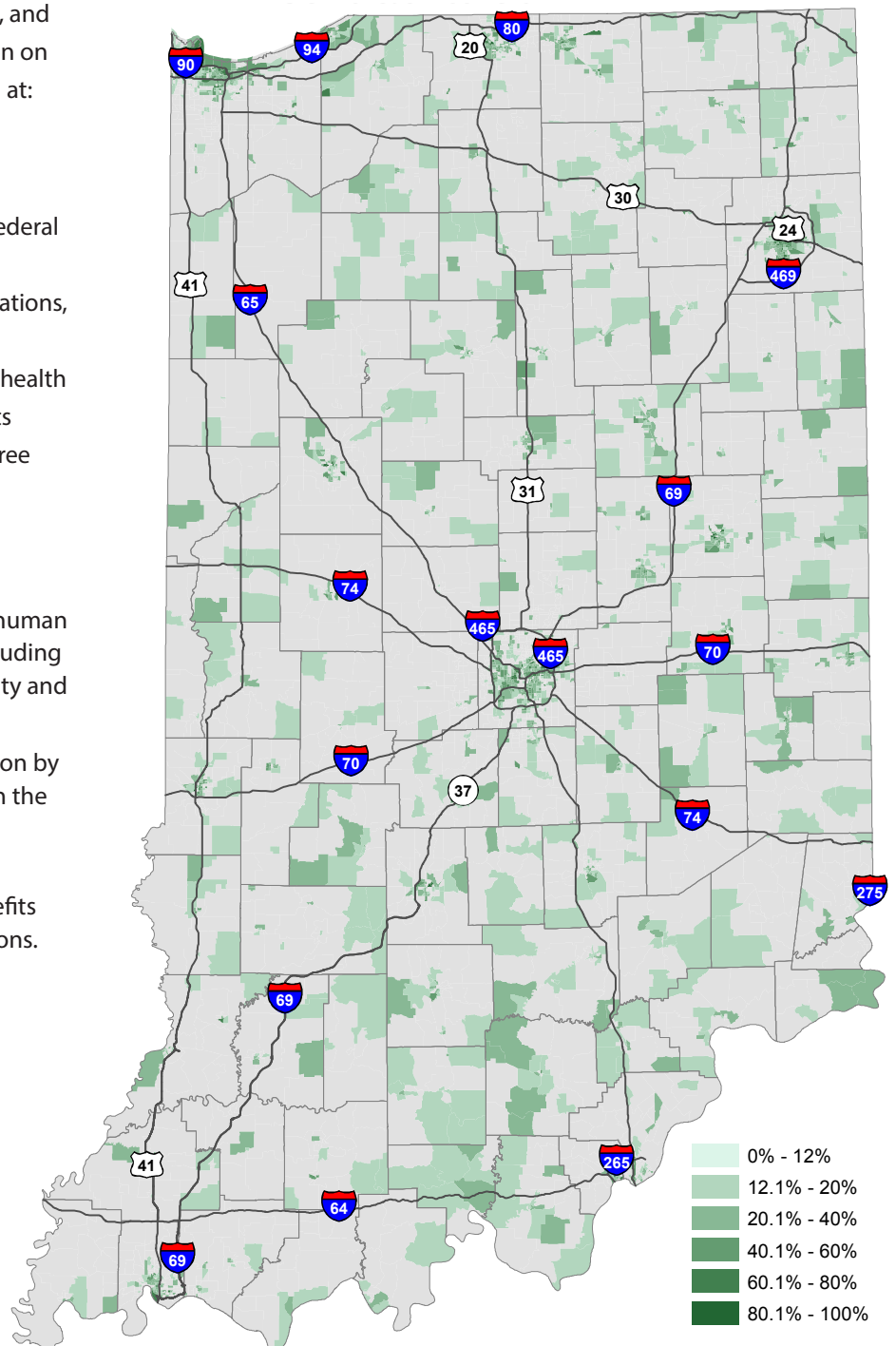
- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects on minority and low-income populations.
- Ensure meaningful and fair participation by all potentially affected communities in the decision-making process.
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

INDOT's Environmental Justice Policies/Objectives

To ensure that the Environmental Justice populations identified above are involved in the transportation planning process and not disproportionately or adversely impacted by transportation projects, INDOT has established the following Environmental Justice objectives.

- Improve the environmental and public health and safety in transportation of people and goods, and the development of transportation systems and services.
- Harmonize transportation policies and investments with environmental concerns, reflecting an appropriate consideration of economic and social interests.
- Consider the interest, issues, and contributions of affected communities, disclose appropriate information, and give communities an opportunity to be involved in the decision-making.

Percent Low Income by U.S. Census Block Group (2015)



- INDOT has made special efforts to evaluate and improve the planning and program process to ensure compliance with environmental justice regulations. These efforts led to the development of a Public Involvement Procedures Manual containing special outreach methods to increase minority and low-income population participation.

INDOT is implementing a new Environmental Justice policy that builds on these objectives and should be followed in the transportation planning process along with INDOT's other relevant policies: Title VI of the Civil Rights Act, American with Disabilities Act (ADA), National Environmental Policy Act (NEPA), and public involvement.

In addition, MPOs throughout Indiana are addressing Environmental Justice issues and have developed policies and objectives consistent with INDOT's. During a workshop held on May 15, 2018 with representatives from the MPOs in Indiana, many of them discussed best practices for involving Environmental Justice populations in the transportation planning process, including holding meetings at popular minority community venues, providing activities for children, holding meetings at non-traditional times, connecting with already-established community groups or social service agencies, and reaching out to minority business owners as a means to make connections to smaller groups. INDOT will continue to follow the objectives listed above and to work with the MPOs to ensure Environmental Justice populations throughout the state are representative in the transportation planning process and that they are not disproportionately or adversely impacted by transportation projects.

Environmental Justice Areas

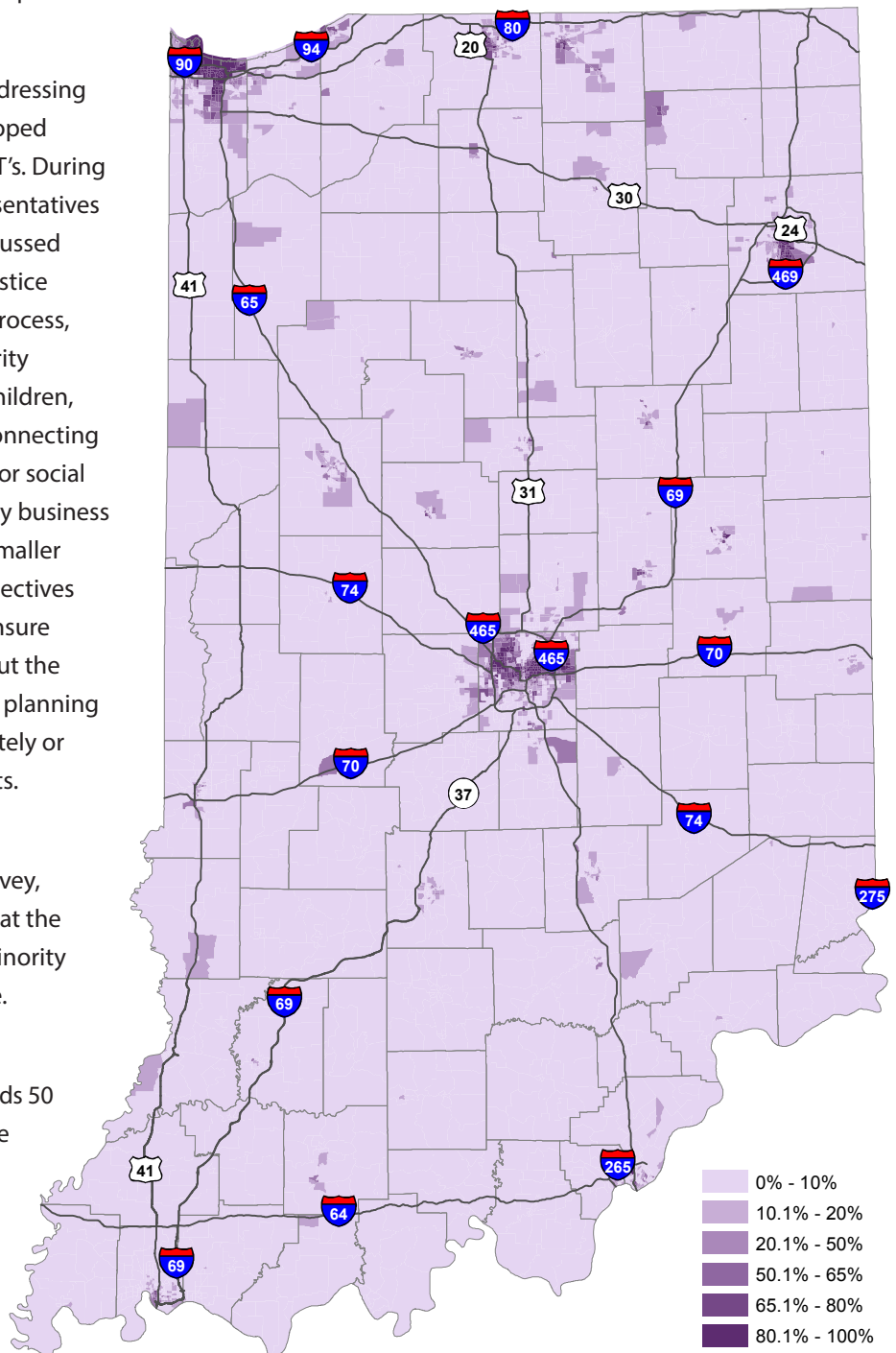
US Census Bureau, American Community Survey, 2011-2015, Five-Year Estimate data collected at the block group level was collected to identify minority and low-income populations within the State.

A minority population is defined as "either the minority population of the affected area exceeds 50 percent, or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or another appropriate unit of geographic analysis." For this analysis, instead of using the hard

threshold of 50 percent, INDOT decided to use a relative threshold of 20 percent, one percent higher than the minority population of Indiana to ensure that no affected populations were overlooked. The map below shows the percent minority by block group. The highest four ranges of percents are above the 20 percent threshold.

The Office of Management and Budget (OMB) has designated the US Census Bureau's annual poverty measure as the official metric for program planning

Percent Minority by U.S. Census Block Group (2015)



and analysis by all Executive Branch Federal agencies (Statistical Policy Directive No. 14). The US Department of Transportation (USDOT) and the FHWA define low-income as a person whose median household income is at or below the Department of Health and Human Services poverty guidelines. For this high level statewide analysis, the ACS estimate on population below poverty was used to identify low-income populations. The Census Bureau defines poverty areas as an area where at least 20 percent of residents were below the poverty level. However, for this analysis, instead of using the hard threshold of 20 percent, INDOT decided to use a relative threshold of 12 percent, one percent higher than the low-income population of Indiana. The map on page 6 shows the percent low-income by block group. The highest four ranges of percents are above the 20 percent threshold.

While these are the parameters for identifying Environmental Justice populations that INDOT has identified for the LRTP, INDOT's existing project-level guidance will be followed when identifying Environmental Justice populations and evaluating potential impacts for individual projects.

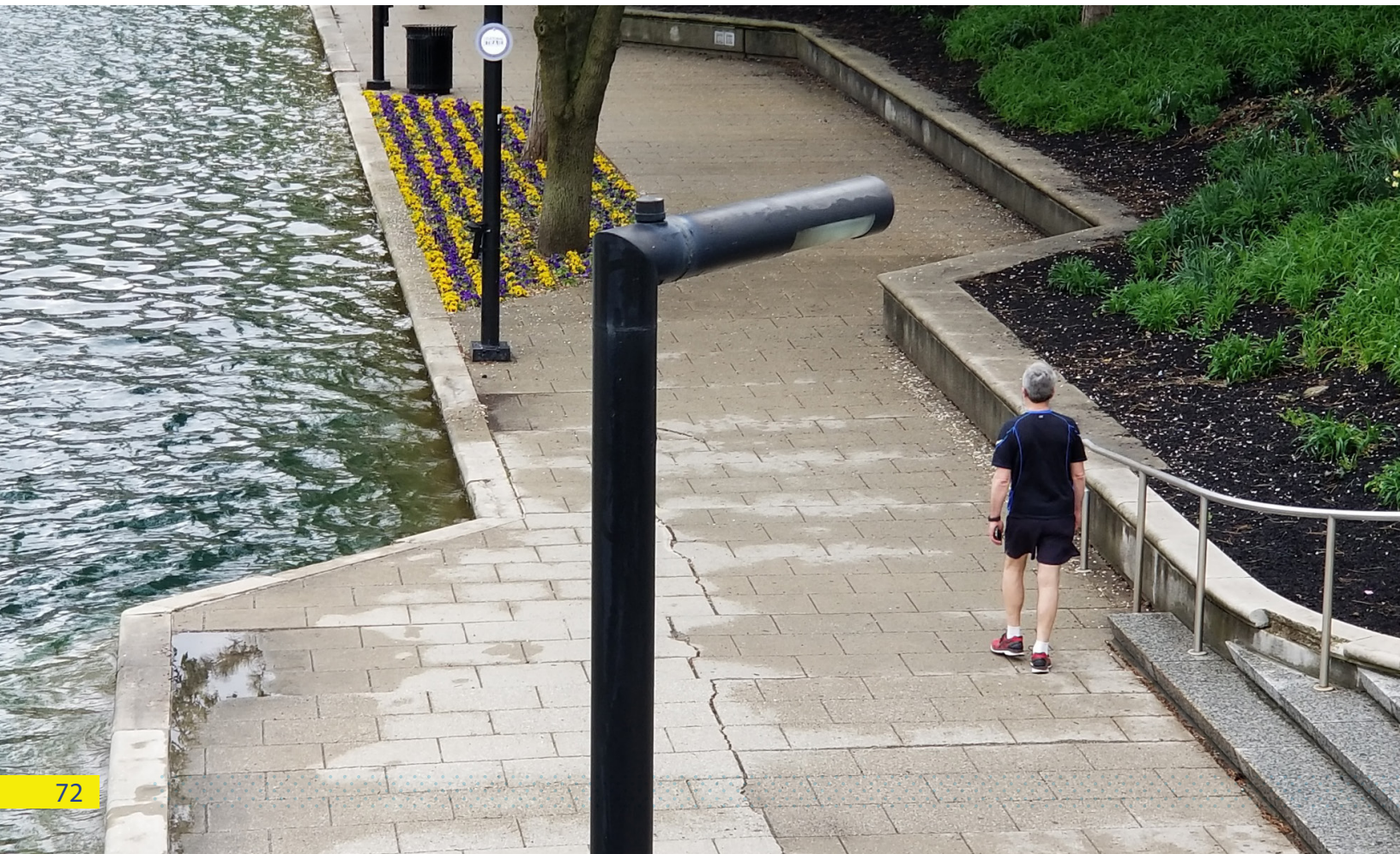
Beyond Environmental Justice

Whether they fit the definition of an Environmental Justice

population, all groups and individuals have the right to access and participate in the transportation decision-making process as protected by Title VI of the Civil Rights Act. In addition, Executive Order 13166, enacted in 2000, also requires improved access to services for persons with Limited English Proficiency (LEP).

Data was collected at the block group level on LEP households and compared to the percent of LEP households in Indiana to determine if the percent of LEP households in individual block groups was meaningfully greater than the state. Approximately two percent of households in Indiana are LEP households, so any block groups with greater than five percent or 2.5 times higher than the state average are considered meaningfully greater. This meets the USDOT guidance on translation of vital documents (<https://www.govinfo.gov/content/pkg/FR-2005-12-14/html/05-23972.htm>).

Like low-income populations, those block groups with a high percentage of LEP households are wide spread throughout the state with some concentration in northern Indiana (Elkhart, LaGrange, and Noble Counties) and the Indianapolis metro area. Spanish is the most commonly spoken language in Indiana, after English, with almost five percent of the population speaking Spanish. Of the Spanish



speakers, approximately one percent are considered LEP.

As transportation improvements move through the planning process, an analysis should be completed that includes not only Environmental Justice populations and LEP households, but other traditionally underserved populations. These include senior populations, persons with disabilities, and others protected by Title VI of the Civil Rights Act and Americans with Disabilities Act of 1990. This analysis should be tailored to the project and its area of concern.

Major Corridor Analysis

INDOT has identified 25 major corridors as shown in Chapter 5. These major corridors represent a variety of improvements to the Indiana transportation network that will be completed over the next 30 years. These improvements include new bridges, interstate expansion, new roadways, and commuter rail expansion.

The 25 major corridors are spread throughout the state and the associated projects will impact the daily life of many Hoosiers, including Environmental Justice populations. This section provides a brief discussion of those major corridors that are most likely to impact Environmental Justice populations based on the Environmental Justice areas identified earlier in this chapter. Please note that this is a high-level analysis and does not supersede INDOT's existing project-level guidance for identifying Environmental Justice

populations and evaluating potential impacts for individual projects.

Of the 21 major corridors, 15 of them, or 71 percent, are within block groups that have a minority population of 20 percent or higher. Nineteen, or 90 percent, of the major corridors are within block groups that have a low-income population of 12 percent or higher. Seventeen of the major corridors are in block groups that have both a minority population of 20 percent or higher and a low-income population of 12 percent or higher. Of these seventeen corridors, 12 are also in block groups where five percent or more of the population have limited English proficiency (LEP).

As the projects on these major corridors move forward, impacts to Environmental Justice populations will be evaluated. Potential impacts could include community cohesion, noise, air quality, property values, travel time, access to opportunities, and mobility options. Public outreach that provides opportunities for meaningful participation in the decision-making process will be a key part of these projects. These project teams will need to provide accessible, transparent information, as well as resources; provide accessible and culturally appropriate opportunities; and identify enhanced activities, additional resources, or engagement opportunities.

