

#### INDIANA DEPARTMENT OF TRANSPORTATION

# Professional Services Bulletin ON LINE

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JOSEPH E. KERNAN, Governor J. BRYAN NICOL Commissioner

# Professional Services Bulletin - 2004- No. 12

May 7, 2002

This "Professional Services Bulletin" is the official notice of professional services requested by the Indiana Department of Transportation (INDOT). You may submit statements of interest if you have qualifications data currently on file with INDOT's Consulting Services Unit or submit qualifications data with the statement of interest. A statement of interest must include a technical proposal, describing the capabilities and proposed method of completing the requested services.

Statements of interest must comply with the following requirements:

- 1. Submit statement of interest in a single sealed envelope.
- 2. Write the following information in the bottom left hand corner of the envelope containing the statements of interest:
  - a. "PSB 2004 No. 12"
  - b. Name of firm submitting statement of interest
  - c. Item number(s) for which the firm has enclosed the statement(s) of interest.
- 3. INDOT will not accept statements of interest sent collect or be responsible for the consultant's mailing and/or shipping costs.
- 4. For joint ventures, indicate the work and estimated percentage of the total project to be performed by each participant. If selected, all joint venture participants will be required to sign the INDOT consultant contract as wholly responsible parties.
- 5. Only statements of interest received by the Consulting Services Unit prior to:

# 4:00 P.M., Indianapolis time, June 4, 2004,

will be given consideration. Statements of interest received after the deadline will be returned to the consultant unopened.

6. Send statements of interest to:

Jodi Williams, Program Coordinator Consulting Services Unit Indiana Department of Transportation 100 North Senate Avenue, Room N730 Indianapolis, Indiana 46204-2249 The Indiana Department of Transportation will ensure that all certified Disadvantaged Business Enterprises (DBE) will be afforded full opportunity to submit statements of interest and will not discriminate against any consultant on the grounds of race, color, religion, sex, disability, national origin, or ancestry in the selection process.

All consultants selected to provide services shall be required to comply with the following:

## A. INDOT Disadvantaged Business Enterprise Program:

#### 1. General

- a. Notice is hereby given to the consultant or subcontractor that failure to carry out the requirements set forth in 49 CFR, Part 26 shall constitute a breach of contract and, after notification, may result in termination of the contract or such remedy as the state deems appropriate.
- b. The referenced section requires the following policy and disadvantaged business enterprise (DBE) obligation to be included in all subsequent agreements between the consultant and any subcontractor:
  - (1) It is the policy of the Indiana Department of Transportation that disadvantaged business enterprises, as defined in 49 CFR Part 26, shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with federal funds under this contract. Consequently, the DBE requirements of 49 CFR Part 26 will apply to any contract entered into as a result of this "Professional Services Bulletin".
  - (2) The consultant agrees to ensure that disadvantaged business enterprises, as defined in 49 CFR Part 26, have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with federal funds provided under contracts with INDOT. In this regard, the consultant shall take all necessary and reasonable steps, in accordance with 49 CFR Part 26, to ensure that disadvantaged business enterprises have the maximum opportunity to compete for and perform contracts. The consultant shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of federally-assisted contracts.
  - (3) In accordance with the STURAA of 1987, women business enterprises (WBE) have been considered to be socially and economically disadvantaged; therefore the DBE program has been combined.
- c. As part of the consultant's equal opportunity affirmative action program, it is required that the consultant shall take positive affirmative actions and put forth good faith efforts to solicit statements of interest from and to utilize disadvantaged business enterprise subcontractors, vendors or suppliers.

#### 2. Definitions

The following definitions apply to this section:

- a. "Disadvantaged Business Enterprise" or DBE means a for profit small business concern that is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals, and whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.
- b. "Small Business Concern" means a small business concern as defined pursuant to section 3 of the Small Business Act and SBA regulations implementing it (13 CFR Part 121) that also does not exceed the cap on average annual gross receipts specified in 49 CFR Sec. 26.65(b).

- c. "Socially and Economically Disadvantaged Individuals" means (i) any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is any individual who a recipient finds to be a socially and economically disadvantaged individual on a case-by-case basis; or (ii) any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:
  - (1) Black Americans which includes persons having origins in any of the Black racial groups of Africa;
  - (2) 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;
  - (3) Native Americans which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
  - (4) 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, 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;
  - (5) Subcontinent Asian Americans which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
  - (6) Women;
  - (7) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

#### 3. Subcontracts

- a. If the consultant intends to subcontract a portion of the work, the consultant is required to take affirmative actions to seek out and consider disadvantaged business enterprises as potential subcontractors prior to any subcontractual commitment.
- b. The contracts made with potential disadvantaged business enterprise subcontractors and the results thereof shall be documented and made available to INDOT and the Federal Highway Administration when requested.
- c. In those cases where the consultant originally did not intend to subcontract a portion of the work and later circumstances dictate subletting a portion of the contract work, the affirmative action contracts covered under paragraphs 3.a. and 3.b. of this section shall be performed.
- d. No subletting will be approved until the consultant demonstrates compliance with paragraphs 3.a. and 3.b. of this section by submitting Form DBE-2 when subcontracts with non-DBE firms are proposed.

#### 4. Affirmative Actions

The consultant agrees to establish and conduct a program which will enable disadvantaged business enterprises to be considered fairly as subcontractors and suppliers under this contract. In this connection the consultant shall:

- a. Designate a liaison officer who will administer the consultant's disadvantaged business enterprise program.
- b. Ensure that known disadvantaged business enterprises will have an equitable opportunity to compete for subcontracts, so as to facilitate the participation of disadvantaged business enterprises.
- c. Maintain records showing (1) procedures which have been adopted to comply with the policies set forth in this clause, including the establishment of a source list of disadvantaged business enterprises, (2) awards to disadvantaged business enterprises on

- the source list and, (3) specific efforts to identify and award contracts to disadvantaged business enterprises.
- d. Cooperate with the state in any studies and surveys of the consultant's disadvantaged business enterprise procedures and practices that the state may from time to time conduct.
- e. Submit periodic reports of subcontracting to known disadvantaged business enterprises with respect to the records referred to in subparagraph (3) above, in such form and manner and at such times as the state may prescribe.

#### 5. Leases and Rentals

- The consultant shall notify the Indiana Department of Transportation when purchases or rental of equipment (other than leases for hauling) are made with disadvantaged businesses. The information submitted shall include the name of the business, the dollar amount of the transaction, and the type of purchase made or type of equipment rented.
- 6. Your firm will not be considered a disadvantaged business enterprise (DBE) unless it is currently certified by the Indiana Department of Transportation. If you feel your firm qualifies, please contact Civil Rights Division, Room N855 of the Indiana Government Center North, Indianapolis, Indiana 46204, to obtain the proper forms.

# B. Drug-Free Workplace Certification

A certification is required by Executive Order No. 90-5, April 12, 1990, issued by the Governor of Indiana as a requirement on all contracts and grants with the state of Indiana in excess of \$25,000.00. No award of a contract or grant shall be made, and no contract, purchase order or agreement shall be valid unless and until a certification has been fully executed by the consultant and attached to the contract or agreement as part of the contract documents. False certification or violation of the certification may result in sanctions including, but not limited to, suspension of contract payments, termination of the contract or agreement and/or debarment of contracting opportunities with the state for up to three (3) years.

By signing the certification, which will be attached to the consultant contract, the consultant certifies and agrees that it will provide a drug-free workplace by:

- (a) Publishing and providing all employees engaged in the performance of the contract a statement notifying such employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the consultant's workplace and specifying the actions that will be taken against employees for violations of such prohibition;
- (b) Establishing a drug-free awareness program to inform such employees about (1) the dangers of drug abuse in the workplace; (2) the consultant's policy of maintaining a drug-free workplace; (3) any available drug counseling, rehabilitation, and employee assistance programs; and (4) the penalties that may be imposed upon an employee for drug abuse violations occurring in the workplace;
- (c) Notifying such employees in the statement required by subparagraph (a) above that as a condition of continued employment on the contract resulting from this solicitation, the employee will (1) abide by the terms of the statement; and (2) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction;
- (d) Notifying in writing the Indiana Department of Administration within ten (10 days after receiving notice under subdivision (c)(2) above, from an employee or otherwise receiving actual notice of such conviction;
- (e) Within thirty (30) days after receiving notice under subdivision (c)(2) above of a conviction, imposing the following sanctions or remedial measures on any employee who is convicted of drug abuse violations occurring in the workplace: (1) take appropriate personnel action

- against the employee, up to and including termination; or (2) require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state or local health, law enforcement, or other appropriate agency; and
- (f) Making a good faith effort to maintain a drug-free workplace through the implementation of subparagraphs (a) through (e) above.

Before any contract will be made, the consultant must agree to the above terms. A certification agreeing to such will be attached to each consultant contract which must be signed by the consultant.

# C. Facilities Capital Cost of Money (September 1987)

- 1. Facilities capital cost of money will be an allowable cost under the contemplated contract, if the criteria for allowability in subparagraph 31.205-10(a)(2) of the Federal Acquisition Regulation are met. One of the allowability criteria requires the prospective contractor to propose facilities capital cost of money in its offer.
- 2. If the prospective Contractor does not propose this cost, the resulting contract will include the clause Waiver of Facilities Capital Cost of Money.

Selection of consultants by the Indiana Department of Transportation is not based on competitive bidding. Selection will be based upon the list of evaluation factors listed in the Request for Proposal.

Selection will be posted on the INDOT PSB information location.

#### Item #1

# Air Quality Conformity Analysis Transportation Planning Support Study

### Background

On April 15, 2004 the Environment Protection Agency announced the non-conforming areas in Indiana not meeting the new 8 hour ozone standards. Of the areas identified, several are located in rural areas and in previously attainment Metropolitan Planning Organizations (MPOs) with limited resources to conduct conformity analysis. The rural counties not covered by MPOs or a related urban area travel demand model will require air quality conformity analysis. For the newly designated non-attainment MPOs, assistance both in setting up with Mobile 6 emissions model in conjunction with their travel demand models plus developing more refined Mobile 6 inputs would be of benefit. In addition, support in preparing data for the Mobile 6 Emissions model (required for air quality conformity analysis after January 29, 2003) would be beneficial for several MPOs in developing more refined inputs, based upon Indiana (or urban area) specific data. Support is also needed in preparing for the analysis of anticipated PM 2.5 standards. In addition, the air quality conformity analysis consultation process could be benefited by the establishment of a more uniform analysis process (using a common set of planning assumptions and procedures), as well as a common documentation format. This activity would also provide for a review of information to be provided by INDOT and the MPOs to the Indiana Department of Environmental Management relative to the effort for preparation of the upcoming emission budgets for the 8-hour ozone and upcoming PM 2.5 procedures.

# Proposed Scope of Work

The Indiana Department of Transportation (INDOT) is requesting consultant assistance on professional services to carry out the air quality conformity analysis transportation planning support study. Three levels of consultant support activities are envisioned in the Air Quality Conformity Analysis Transportation Planning Support Study.

The first level will provide planning support to INDOT for the conformity analysis requirements for projects located in non-conforming rural areas over the 36 month term of the planning support contract. The consultant will develop and run the conformity analysis for Green and Jackson Counties, and possibly other counties and areas as needed. This will include all activities necessary to demonstrate conformity including fine particulates, PM 2.5.

The second level of planning support will be provided to the new MPOs which have become non-attainment under the eight-hour standards. These MPOs are the Northeastern Indiana Regional Coordinating Council, the Delaware-Muncie Metropolitan Plan Commission, the Madison County Council of Governments and the West Central Indiana Economic Development District. Each of these MPOs either has or is in the process of developing a TransCAD based travel demand model. The consultant modeling effort would provide for the modification of an existing TransCAD based GISDK program interface and speed post-processor. This TransCAD based GISDK program interface and speed post-processor was developed for the Delaware-Muncie Metropolitan Plan Commission's model and has been updated for use with the Evansville Urban Transportation Study's model.

The third level of planning support will be to provide support to MPOs which currently conduct air quality emissions testing using Mobile 5 or Mobile 6 series air quality models. As these MPOs already have developed air quality emissions modeling capability, the provision of consultant modeling effort will be provided as needed on the mobile analysis input datasets. These MPOs include the Evansville Urban Transportation Study, Indianapolis MPO, Kentuckiana Regional Planning and Development

Agency, Northwestern Indiana Regional Planning Commission and the Michiana Area Council of Governments.

A level of effort of \$400,000 is envisioned for planning study. The contract will be a cost plus fixed fee nature with the development of a task specific work order based upon the list of activities shown below. The INDOT Division of Environment, Planning and Engineering will manage the study and assign specific tasks to the consultant. Oversight to the study will be provided by a advisory committee made of air quality consultation stakeholders including MPOs, the Indiana Department of Environmental Management and the Federal Highway Administration. The consultant will use as a starting point the procedures documented in the NHI Course 152071 Estimating Regional Mobile Source Emissions Participants Workbook and modify, as appropriate, these procedures to meet the needs of INDOT and the Indiana MPOs. The study will include the following work activities:

- 1. Develop procedures for air quality analysis in rural areas not covered by a MPO travel demand model that require conformity analysis as a result of the eight-hour standards. Develop procedures based upon potential use of the INDOT Statewide Travel Demand Model in conjunction with spreadsheet models. The consultant will develop and run the conformity analysis for Green and Jackson Counties, and possibly other counties and areas as needed over the 36 term of the contract. Conduct project specific analysis as needed to demonstrate conformity. Develop additional rural air quality conformity analysis activities for all pollutants including PM 2.5 as needed.
- 2. Modify the currently existing TransCAD based GISDK program interface and speed post-processor developed for the Delaware-Muncie Metropolitan Plan Commission's model and updated for use with the Evansville Urban Transportation Study's model for use with the Northeastern Indiana Regional Coordinating Council model, the West Central Indiana Economic Development District model and any additional revisions needed by Delaware-Muncie Metropolitan Plan Commission's model. Investigate the work conducted by the Kentucky Transportation Cabinet on the use of the Highway Economic Reporting System (HERS) speed estimation methodology for potential applications in the TransCAD based GISDK program. Develop additional air quality conformity analysis activities for all pollutants including PM 2.5 as needed.
- 3. Provide on-site technical assistance to newly designated non-conforming MPOs in implementing air quality conformity analysis.
- 4. Develop a base year vehicle registration data (distribution of vehicles by age) Mobile 6 input for each existing and anticipated non-attainment area. This will require working with the Bureau of Motor Vehicle's registration database to develop this data input. This will replace the national default values as warranted.
- 5. Develop a base year vehicle miles of travel (VMT) by hour distribution Mobile 6 input for each existing and anticipated non-attainment area. This will require working with the INDOT's Traffic Statistics Section roadway traffic count database to develop this data input. This will replace the national default values as warranted.
- 6. Develop a base year vehicle miles of travel (VMT) mix distribution Mobile 6 input for each existing and anticipated non-attainment area. This will require working with the INDOT's Traffic Statistics Section roadway traffic classification database and the Bureau of Motor Vehicle's registration database to develop this input. The degree of disaggregation among the 28 vehicle classifications provided for in MOBILE6 are to be a function of the degree of

disaggregation that can be developed from the data available from the Traffic Statistics Section and the Bureau of Motor Vehicles. This data will replace the national default values as warranted. A consultant recommendation is requested as to the desirability of forecasting changes to the base year VMT mix distribution. If the recommendation is to forecast changes to the VMT mix distribution, an appropriate methodology and its application are desired for each nonattainment and anticipated nonattainment area.

Develop a base year vehicle-miles of travel (VMT) by facility type distribution MOBILE6 input for each existing and anticipated non-attainment area. This will require working with the travel demand model for each MPO.

- 7. Develop a base year vehicle miles of travel (VMT) by hour distribution Mobile 6 input for each existing and anticipated non-attainment area. This will require working with the INDOT's Traffic Statistics Section roadway traffic count database to develop this data input. This will replace the national default values as warranted.
- 8. Review of information to be provided by INDOT and the MPOs to the Indiana Department of Environmental Management relative to the effort for preparation of the upcoming emission budgets for the 8-hour standards. Assess the procedures used in the preparation of the emissions inventory relative to the use of HPMS, traffic count and speed data.
- 9. Provide documentation of modeling procedures, training materials and conduct up to four one-day workshops in air quality conformity analysis procedures over the term of the study.
- 10. Develop a checklist review procedure and recommended air quality conformity analysis reporting format to facilitate the air quality conformity consultation process.

Term of Study

36 months from notice to proceed on assigned tasks.

#### PROFESSIONAL SERVICE ISSUES

# Interested consultants should submit ten (10) statements of interest (proposal). It should be limited to 60 pages (30 double sided).

The proposal should clearly identify how the proposed work will achieve the objectives set forth in the proposed scope of work and provide a proposed work plan in sufficient detail to demonstrate how the consultant will accomplish the work within the given budget.

Consultant Selection will be based upon the following list of evaluation factors in order of their importance.

- 1. Proposed method of accomplishing the study objectives
- 2. Special or unique expertise in air quality conformity analysis.
- 3. Familiarity with the air quality analysis procedures used in Indiana
- 4. Ability to complete the work in the time required
- 5. Staff available for this project
- 6. Performance evaluations on similar work, if applicable
- 7. Extent of work which will be subcontracted by the firm and the commitment to subcontract to disadvantaged business enterprises.