Posting Date: February 3, 2014

Request for Proposals Notification

Title: City of Terre Haute ITS Railroad Monitoring System for Emergency Services (Des # N/A) in Crawfordsvile District

Response Due Date & Time: February 28, 2014 at 4:00 pm

This Request for Proposals (RFP) is official notification of needed professional services. This RFP is being issued to solicit a letter of Interest (LOI) and other documents from firms qualified to perform engineering work on federal aid projects. A submittal does not guarantee the firm will be contracted to perform any services but only serves notice the firm desires to be considered.

Contact for Questions:

Larry Robbins, P.E. - Assistant City Engineer
17 Harding Avenue, Room 200
Terre Haute, IN 47807
(812) 244-4994
larry.robbins@terrehaute.in.gov

Submittal requirements:

1. Letter of Interest – 3 Copies (required content and instructions follow)

2. One (1) signed Affirmative Action Certification and associated required documents for all items if the DBE goal is greater than 0%.

Submit To:

Larry Robbins, P.E. - Assistant City Engineer
17 Harding Avenue, Room 200
Terre Haute, IN 47807
(812) 244-4994
larry.robbins@terrehaute.in.gov

Selection Procedures:

Consultants will be selected for work further described herein, based on the evaluation of the Letter of Interest (LOI) and other required documents. The Consultant Selection Rating Form used to evaluate and score the submittals is included for your reference. Final selection ranking will be determined by:

☉ The weighted score totals with the highest score being the top ranked firm

☐ Rank totals with the lowest rank total being the top ranked firm

Requirements for Letters of Interest (LOI)

A. General instructions for preparing and submitting a Letter of Interest (LOI).

1. Provide the information, as stated in Item B below, in the same order listed and signed by an officer of the firm. Signed and scanned documents, or electronically applied signatures are acceptable. Do not send additional forms, resumes, brochures, or other material unless otherwise noted in the item description.

2. LOI's shall be limited to twelve (12) 8 ½" x 11" pages that include Identification, Qualifications, Key Staff, and Project Approach.

3. LOI's must be received no later than the "Response Due Date and Time"; as shown in the RFP header above. Responses received after this deadline will not be considered. Submittals must include all required attachments to be considered for selection.

B. Letter of Interest Content

1. Identification, Qualifications and Key Staff
   a. Provide the firm name, address of the responsible office from which the work will be performed and the name and email address of the contact person authorized to negotiate for the associated work.

   b. List all proposed sub consultants, their DBE status, and the percentage of work to be performed by the prime consultant and each sub consultant. (See Affirmative Action Certification requirements below.) A listing of certified DBE's eligible to be considered for selection as prime consultants or sub-consultants for this RFP can be found at the "Prequalified Consultants" link on the Indiana Department of Transportation (INDOT) Consultants Webpage. (http://www.in.gov/indot/2732.htm).

   c. List the Project Manager and other key staff members, including key sub consultant staff, and the percent of time the project manager will be committed for the contract, if selected. Include project engineers for important disciplines and staff members responsible for the work. Address the experience of the key staff members on similar projects and the staff

qualifications relative to the required item qualifications.

d. Describe the capacity of consultant staff and their ability to perform the work in a timely manner relative to present workload.

2. Project Approach

a. Provide a description of your project approach relative to the advertised services. For project specific items confirm the firm has visited the project site. For all items address your firm's technical understanding of the project or services, cost containment practices, innovative ideas and any other relevant information concerning your firm's qualifications for the project.

Requirements for Affirmative Action Certification

A completed Affirmative Action Certification form is required for all items that identify a DBE goal greater than 0%. The consultant must identify the DBE firms with which it intends to subcontract, include the contract participation percentage of each DBE and list what the DBE will be subcontracted to perform on the Affirmative Action Certification Form. **Copies of DBE certifications, as issued by INDOT, for each firm listed are to be included as additional pages after the form.**

If the consultant does not meet the DBE goal, they must provide evidence of a good faith effort to achieve the DBE goal; said evidence must be provided in additional documentation. Please review the DBE program based on set goals and complete the DBE Affirmative Action Certification form as applicable. What constitutes as a good faith effort is explained in detail within the DBE program information referred to above. If no goal is set, no Affirmative Action Certification form is required. Indiana Department of Transportation's (INDOT) DBE Program Information is available at the Indiana Department of Transportation's website.

A listing of certified DBE's eligible to be considered for selection as prime consultants or sub-consultants for this RFP can be found at the "Prequalified Consultants" link on the Indiana Department of Transportation (INDOT) Consultants Webpage.
(http://www.in.gov/indot/2732.htm).

DBE subcontracting goals apply to all prime submitting consultants, regardless of the prime's status of DBE.

Work item details:

Local Public Agency: City of Terre Haute

Project Location: Various locations around the city

Project Description: See attached description

INDOT Des #: TBD

Phases Included: PE/CE

Estimated Construction Amount: $500,000

Funding: Federal Funding Involved

Term of Contract: Until Project Completion

DBE goal: 5%

Required Prequalification Categories:

- ☐ 5.2 Environmental Document Preparation - CE
- ☐ 6.1 Topographical Survey Data Collection
- ☐ 8.1 Non-Complex Roadway Design
- ☐ 9.1 Level 1 Bridge Design
- ☐ 11.1 Right of Way Plan Development
- ☐ 12.1 Project Management for Aquisition Services
- ☐ 12.2 Title Search
- ☐ 12.4 Appraisal
- ☐ 12.5 Appraisal Review
- ☐ 13.1 Construction Inspection
- ☑ Additional Categories Listed Below:

10.5, 10.6

STATEMENT OF WORK

ITS RAILROAD MONITORING SYSTEM FOR EMERGENCY SERVICES

I. BACKGROUND

The City of Terre Haute, IN ("Grantee"), in collaboration with the Vigo County Board of Commissioners and the West Central Indiana Economic Development District – the designated Metropolitan Planning Organization for the Terre Haute – Vigo County Metropolitan Planning Area, recently completed a Federal Railroad Administration (FRA) funded comprehensive planning study to develop and validate the purpose and need to program and plan a series of practicable projects, with independent utility, to mitigate the current and projected adverse effects of rail traffic in the Terre Haute Urbanized Area over the next 20 years. The planning process, which was carried out in the context of the National Environmental Policy Act (NEPA) and culminated in the publication and adoption of the *Terre Haute Urbanized Area Railroad Corridor Study*, resulted in the identification of five (5) major improvement projects totaling $53.5 million to be targeted for funding and advancement to construction over the next 20 years. Development and installation of an Intelligent Transportation System (ITS) project to monitor movements of the 50 trains per day (forecast to grow to 87 trains per day by 2031) that traverse the Terre Haute Urbanized Area and to make this information available to E911 dispatchers and First Responders, was identified as the first project of independent utility to be advanced.

This project involves design and installation of a new system to monitor train traffic that crisscrosses the City of Terre Haute. The system will use a series of detectors (eye-safe lasers, radar, etc.) mounted on existing poles, in existing public right-of-way, to detect the presence of trains at 15 critical crossings in the city and to collect information about the direction, speed and length of detected trains ("Project"). Collected data will then be sent via the City's existing Supervisory Control and Data Acquisition (SCADA) system to a server located in the E911 Center where it will be processed using custom software. The positions, directions and lengths of trains, represented as train icons, will then be displayed on a web-based geographical information system (GIS) map to give dispatchers in the E911 Center and First Responders (fire, police, EMS, etc.) with mobile Internet access information about the location of trains and their projected paths of travel. Users will be able mouse over a crossing icon on the train's projected path to produce a callout with an estimated time to closure (countdown timer) and the amount of time until the crossing is expected to reopen. Dispatchers and First Responders will then use this information to make informed dispatch and routing decisions, and, therefore, reduce emergency response time by avoiding blocked or potentially blocked crossings where time lost waiting for a crossing to clear could contribute to injury or death.

This $527,778 ($475,000 Federal/$52,778 Grantee) project will be funded through a non-competitive grant agreement between the Federal Railroad Administration (FRA) and the City of Terre Haute. The statutory authority for this grant is the *Fiscal Year 2009 Department of Transportation Appropriations Act for the Rail Line Relocation and Rehabilitation Program*, which directed $475,000 to Terre Haute. The City will provide the requisite 10% program match of $52,778.

II. GENERAL OBJECTIVE

The primary purpose of the Project is to improve public safety and security by providing First Responders access to real time information about train movements in and around the City of Terre Haute. E911 Dispatchers and First Responders can then use this information to make informed routing decisions, and, therefore, reduce emergency response time by avoiding blocked or potentially blocked crossings where time lost waiting for a crossing to clear could contribute to injury or death. The system could eventually be expanded to provide motorists similar information via strategically placed message boards, which would help reduce congestion and improve air quality.

III. SCOPE OF ACTIVITIES

a. Geographical and Physical Boundaries

City of Terre Haute, Vigo County, Indiana

b. Description of Work

The Project will follow the Systems Engineering Process endorsed by USDOT and most of its agencies for ITS projects. A consultant pre-qualified by the Indiana Department of Transportation (INDOT) will be selected, using the competitive INDOT Local Public Agency (LPA) Consultant Selection Procedure, to complete the following major tasks.

1.0 Design

1.1. Concept of Operations: This task involves development of the overall concept of operations for the system and a document describing the characteristics of the proposed system from the viewpoint of the end users of the system. It is used to communicate the quantitative and qualitative system characteristics to all stakeholders.

1.2. Functional Requirements: This task involves development and definition of the technical details for the field equipment and the website features. Functional requirements provide the basis for component design and system testing during construction. The requirements also provide definition for the characteristics brought out in the Concept of Operations.

1.3. Planning, Specifications & Engineering (PS&E) Design: As a minimum, this task will include:

Development of documentation suitable for bidding and procurement purposes for the field equipment and integration of the equipment with Grantee's existing Supervisory Control and Data Acquisition (SCADA) system, website and GIS base maps.

Development and procurement of two prototype train monitoring field units. The first will be constructed and field tested to confirm that the Grantee's needs are being met. The second prototype will incorporate "mid course" corrections to finalize the design. These prototypes will be kept in service permanently. The initial prototype will be upgraded to reflect the functionality of the final design.

With input from end users who will help define and test features, development and integration of the associated website. The website will be developed in conjunction with the field prototypes to confirm that the integration is complete.

System testing per the Functional Requirements defined in Task 1.2. The first level of testing will involve bench testing of the units prior to installation. The second level of testing will be system testing once the equipment is installed and operational.

2.0 Construction: The construction task will include support the City will need to build the prototypes, provide system testing to evaluate the prototypes and then to construct the finished system. Because the actual construction of this system amounts to a modest effort of mounting train sensors and communication equipment on available structures where possible (and installing simple pole structures where existing structures are not available), the contracting of this work will be accomplished as a pass through subcontract in the design consultant's contract. As part of the construction task, the consultant will also provide engineering services to coordinate the utility power connections if existing service points cannot be adapted. Website hosting, website development and a modest computer/monitor for the 911 Center will also be provided by the Consultant's system integrator.

3.0 Documentation: The documentation task will include the following:
3.1. An Operations Manual defining how to operate and maintain the system.
3.2. Training documentation built upon or incorporated within the Operations Manual
3.3. Equipment manuals provide by the manufacturers of the various sub components.

c. Deliverables

The deliverables associated with this Cooperative Agreement are listed below. The Grantee will achieve these deliverables to be authorized for funding of Project components and for the Project to be considered complete.

#	Deliverable Name	Related Task
1	Design Plans and Specifications	1.0
2	Prototype Field Equipment	1.0
3	Website and Communications Systems Integration	1.0
4	Equipment and System Test Records	1.0
5	Procured , Installed, Tested and Interfaced Equipment	2.0
6	Operations Manual, Training Documentation and Equipment Manuals	3.0

IV. PROJECT SCHEDULE

The period of performance for all work will be approximately 12 months, from August 1, 2013 to July 31, 2013.

V. PROJECT ESTIMATE/BUDGET

The total estimated cost of the Project is $527,778, for which the FRA grant will contribute 90% of the total cost, not to exceed $475,000. Any additional expense required beyond that provided in this grant to complete the Project shall be borne by the Grantee.

a. Project Cost Details

		Project Cost by Task		
Task #	Major Task Name			Total Cost
1.0	Design			
2.0	Construction			
3.0	Documentation			
	TOTAL	**475,000**	**52,778**	**527,778**

The Grantee will be expected to track costs by task and subtask line items when submitting reimbursement requests.

b. Project Cost Breakdown – OMB Cost Classifications

Project Cost by OMB Classification			
Cost Classification	FRA Share	Grantee Share	Total Cost
Administrative and Legal Expenses	0	0	0
Land, Structure, Rights-of-Way, Appraisal, etc.	0	0	0
Relocation Expenses and Payments	0	0	0
Architectural and Engineering Fees	$184,500	$20,500	$205,000

Project Inspection Fees	0	0	0
Site Work	0	0	0
Demolition and Removal	0	0	0
Construction	$274,750	$30,475	$305,278
Equipment	0	0	0
Miscellaneous	$15,750	$1,750	$17,500
Contingencies	0	0	0
TOTAL	**$475,000**	**$52,725**	**527,778**

c. Project Estimate Contributions

Project Cost by Funding Source		
Funding Source	**Project Contribution Amount**	**Percentage of Total Project Cost**
Federal Contribution	$475,000	90%
Non-Federal Contribution	$52,778	10%
TOTAL	**527,778**	**100%**

VI. PROJECT COORDINATION

This project is included in the *Terre Haute Urbanized Area Railroad Corridor Study*, which was adopted by the MPO's Transportation Policy Committee on May 15th, 2012. By virtue of its adoption, the study has become a subset of the Terre Haute – Vigo County Long Range Transportation Plan.

In their review of the *Terre Haute Urbanized Area Railroad Corridor Study*, the Federal Highway Administration concurred that the study's *purpose and need* and *alternatives analysis* established a sound basis for advancing this project.

The public, stakeholders and resource agencies (i.e. FRA, FHWA, US EPA, Indiana Department of Transportation, etc.) were afforded several opportunities to comment on this project during the *Terre Haute Urbanized Area Railroad Corridor Study* and no adverse comments were received.

VII. PROJECT MANAGEMENT

The City of Terre Haute's Engineer will have management responsibility for all aspects of this project and will be responsible for collecting and submitting documentation necessary to fulfill FRA reporting and reimbursement requirements. The Terre Haute City Controller will be responsible for submitting

reimbursement requests through FRA's e*Invoicing* system and will be the *Authorized Certifying Official*. Under its existing metropolitan transportation planning agreement with the City of Terre Haute, the Metropolitan Planning Organization will monitor and track this project through its established *Local Public Agency Quarterly Project Tracking Program.*

LPA Consultant Selection Rating Sheet

Sample:

RFP Selection Rating for _____ Des. No. _____

(City, County, Town, etc.) - or - (Local Public Agency)

Consultant Name: _____ Services Description: _____

Evaluation Criteria to be Rated by Scorers

Category	Scoring Criteria	Scale	Score	Weight	Weighted Score
Past Performance	**Performance evaluation score averages from historical performance data.**				
	Quality score for similar work from performance database.			6	
	Schedule score from performance database.			3	
	Responsiveness score from performance database.			1	
Capacity of Team to do Work	**Evaluation of the team's personnel and equipment to perform the project on time.**				
	Availability of more than adequate capacity that results in **added value**.	1		20	
	Adequate capacity to meet the schedule.	0			
	Insufficient available capacity to meet the schedule.	-1			
Team's Demonstrated Qualifications	**Technical expertise: Unique Resources that yield a relevant added value or efficiency to the deliverable.**				
	Demonstrated outstanding expertise and resources identified for required services for value added benefit.	2		15	
	Demonstrated high level of expertise and resources identified for required services for value added benefit.	1			
	Expertise and resources at appropriate level.	0			
	Insufficient expertise and/or resources.	-3			
Project Manager	**Predicted ability to manage the project, based on: experience in size, complexity, type, subs, documentation skills.**				
	Demonstrated outstanding experience in similar type and complexity.	2		20	
	Demonstrated high level of experience in similar type and complexity.	1			
	Experience in similar type and complexity shown in resume.	0			
	Experience in different type or lower complexity.	-1			
	Insufficient experience.	-3			
Approach to Project	**Project Understanding and Innovation that provides cost and/or time savings.**				
	High level of understanding and viable innovative ideas proposed.	2		15	
	High level of understanding of the project.	1			
	Basic understanding of the project.	0			
	Lack of project understanding.	-3			
Location	**Location of assigned staff office relative to project.**				
	Within 50 mi.	1		5	
	51 to 150 mi.	0			
	151 to 500 mi.	-1			
	Greater than 500 mi.	-2			
				Weighted Sub-Total:	

It is the responsibility of scorers to make every effort to identify the firm most capable of producing the highest quality deliverables in a timely and cost effective manner without regard to personal preference.

I certify that I do not have any conflicts of interest associated with this consultant as defined in 49CFR18.36.

I have thoroughly reviewed the letter of interest for this consultant and certify that the above scores represent my best judgment of this firm's abilities.

Signature: _____

Print Name: _____

Title: _____

Date: _____

(Form Rev. 3-30-10)

Project_____

AFFIRMATIVE ACTION CERTIFICATION FOR DBE

I hereby certify that my company intends to affirmatively seek out and consider Disadvantaged Business Enterprises (DBEs) certified in the State of Indiana to participate as part of this proposal. I acknowledge that this certification is to be made an integral part of this proposal. I understand and agree that the submission of a blank certification may cause the proposal to be rejected. I certify that I have consulted the following DBE website to confirm that the firms listed below are currently certified DBEs:
https://financial.gmis.in.gov/psc/guest/EMPLOYEE/ERP/c/SOI_APPS_MWBE.SOI_DBE_CERT.GBL?&
I certify that I have contacted the certified DBEs listed below, and if my company becomes the CONSULTANT, these DBEs have tentatively agreed to perform the services as indicated.
I understand that neither my company nor I will be penalized for DBE utilization that exceeds the goal.
After contract award, any change to the firms listed in this Affirmative Action Certification to be applied toward the DBE goal must have prior approval by INDOT's Economic Opportunity Division.

SUBCONSULTANTS

DBE SUBCONSULTANTS TO BE APPLIED TOWARD GOAL

Certified DBE Name	Service Planned	Estimated percentage to be paid to DBE*

DBE SUBCONSULTANTS TO BE USED BEYOND GOAL

Certified DBE Name	Service Planned	Estimated percentage to be paid to DBE*

Estimated Total Percentage Credited toward DBE Goal:_____

Estimated Percentage of Voluntary DBE Work Anticipated over DBE Goal:_____

Name of Company:_____

By:_____ **Date:**_____

*It is understood that these individual firm percentages and dollar amounts are estimates only and that amounts paid may be greater or less as a result of negotiation of the contract scope of work. My firm will use good faith efforts to meet the overall DBE goal through the use of these or other certified and approved DBE firms.