

# **A REQUEST FOR PROPOSAL FOR PROFESSIONAL SERVICES CONTRACT**

## **Department of Highways Professional Services Procurement Bulletin 2019-01 Roadway Safety Plan for the Louisville Metro Area**

This document constitutes a Request for Proposals for a Professional Service Contract from qualified individuals and organizations to furnish the services as described herein for the Commonwealth of Kentucky, Department of Highways.

### **I. PROJECT DESCRIPTION**

KYTC-Louisville Metro Joint Roadway Safety Plan for All Public Roads in the Louisville Metro Area, except Interstate highways.

### **II. PROJECT INFORMATION**

Project Manager – Michael Vaughn, P.E.  
Louisville Metro Liaison – John Callihan, P.E.  
District Office 5 Liaison – Kevin Bailey, P.E.  
State Highway Engineer's Office Liaison – Jason Siwula, P.E.  
User Division – Central Office Division of Traffic Operations  
Approximate Fee – \$450,000 Lump Sum  
Project Funding – Federal Funds (HSIP Funds)

### **III. PURPOSE OF CONTRACT**

Similar to how Kentucky's Strategic Highway Safety Plan serves as a guide for the implementation of statewide safety improvements, a Road Safety Plan for the Louisville Metro area will help both Louisville Metro and the Kentucky Transportation Cabinet identify and prioritize the implementation of safety improvements across the Louisville Metro area. Based on historical crash trends, the Road Safety Plan will identify both proactive and reactive countermeasures along with candidate locations for improvement with the overall goal of increasing the safety for the roadway users of the Louisville Metro area.

### **IV. DBE REQUIREMENT**

The Consultant Team should include a DBE Participation Plan with their Response to the Announcement to help the Department meet FHWA's 11.95% DBE goal. The plan needs to demonstrate how DBE companies will be mentored or used to assist in the area(s) pertaining to this contract. A maximum of 8 points will be considered in the Evaluation Factors for the DBE Participation Plan.

### **V. SCOPE OF WORK**

The selected Consultant shall be responsible for assisting the KYTC – Louisville Metro Team in the development of a Road Safety Plan for all public roads in the Louisville Metro area, except

interstate highways. The mission is to determine the best opportunities to reduce the number of fatal and serious injury crashes within the Louisville Metro area by implementing various safety countermeasures via construction projects on roadway sections selected and prioritized through a data-driven process. The selected Consultant will collect, review, and analyze traffic data to help support project development decisions such as alternative selection and operational improvements. The selected Consultant will also collect, review, and analyze safety data to help support the decision-making process and improve the effectiveness of countermeasures to reduce the number and/or severity of crashes and to more effectively manage the funds available. The primary tasks of this effort are:

#### Task 1 – Data Collection

This task will be used to collect the various data elements, such as crash data (including severity and type for the entire Louisville Metro area), roadway data, and traffic data that will be used to gain an understanding of the existing crash patterns, crash types, contributing factors, and the locations and types of facilities that are experiencing excessive crashes. There may be other informational categories and/or data identified during analysis (Task 2) that the selected Consultant will need to also collect in order to have a more complete understanding of issues. The selected Consultant will collect crash and other safety data for years 2013 to 2017. The Kentucky Strategic Highway Safety Plan (SHSP) shall be reviewed for resources, data, and other information that can be used to assist in the development of the Road Safety Plan. Many data elements may already be collected by KYTC and/or Louisville Metro, but some data elements may have to be field collected by the selected Consultant. It is not anticipated that significant field data collection will be required. However, field reviews of a sampling of facility types may be needed to get an indication of the local issues so they can be adequately documented and understood.

#### Task 2 – Existing Conditions Analysis

This task will be used to analyze the crash, roadway, traffic, and any other data collected in Task 1 to gain a sufficient understanding of the various crash patterns and trends, contributing factors, underlying issues, and risk factors that will allow for identification of a variety of potential safety improvement countermeasures and emphasis areas for the Road Safety Plan. The analysis of data is envisioned to be multifaceted; a high level evaluation of the crash data and then a more detailed analysis. The high level evaluation of the crash data may help to identify potential trends, issues, and facility types that contribute to significant proportions of the severe crashes within the Louisville Metro area, as well as identify possible emphasis areas, countermeasures, and/or strategies for further study. The high level evaluation may include, but is not limited to:

- Identifying trends based on time-based indicators (e.g. time-of-day, day-of-week, or month-of-year), environmental conditions (e.g. weather, lighting), geographic factors (e.g. location), etc.
- Identifying crashes by severity and type for the various roadway types (e.g. multilane divided, two-lane undivided, etc.), as well as the various functional classifications (e.g. arterial, collector, local)
- Identifying trends based on contributing factors, restraint use, alcohol/drug use, etc.

Discussions with Louisville Metro and KYTC District 5 staff may help to identify potential trends, issues, and facility types to investigate during the high level evaluation. The results from the high-level evaluation will most likely shape and guide the more detailed analysis. It is envisioned that the more detailed analysis will have two main elements:

- Network screening/critical location analysis considering crash frequency, severity, and rate; and
- Systemic analysis to identify the risk factors that are frequently associated with severe crashes at intersections and along segments. Systemic risk factors to consider include, but are not limited to: number of lanes, roadside/clear zone rating, intersectional controls, median presence, speed limit, and traffic volume.

#### Task 3 – Countermeasure Recommendations

This task will be used to develop a variety of improvement countermeasures to mitigate potential future crashes using the results of the existing conditions analysis and observations documented. A meeting with the KYTC-Louisville Metro Project Team should be held to advise the Project Team of the issues and possible solutions. This meeting will also give the Project Team an opportunity to help identify potential countermeasures to be considered for recommendation. The final list of recommended countermeasures should link specific countermeasures to crash types and/or risk factors, assess each countermeasure's expected effectiveness, and include high level cost estimates for implementation.

#### Task 4 – Project Identification and Site Prioritization

During the Existing Conditions Analysis (Task 2), a list of sites will be developed through network screening. During Task 4, in conjunction with the KYTC-Louisville Metro Project Team, these locations will be further evaluated and discussed to:

1. Develop an overall final list of prioritized sites from the critical location analysis,
2. Identify and prioritize sites as an outcome of the systemic analysis, and
3. Identify opportunities to improve safety utilizing strategies from the 4 E's of roadway safety improvement when appropriate.

Criteria may include, but not be limited to: detailed crash history, traffic volumes, number of risk factors, pedestrian/bicycle volumes, roadway speeds, number of fatalities and/or injuries, severity of injuries, and proximity to specific land uses. The identification and prioritization of these high priority locations will be documented to discuss existing safety concerns, a suite of potential treatments, potential benefits, and estimated cost to identify funding strategies for years 2020 to 2024.

#### Task 5 – Development of Road Safety Plan

In this task, the Consultant shall prepare a final Road Safety Plan Report that summarizes the work conducted during the project. The final document will draw from the work products submitted throughout the project and will include text, exhibits, maps, diagrams and tables to present the results and conclusions of the study for future project development and implementation. It is speculated that some solutions, primarily the very low cost, systemic type solutions, may be best grouped and presented by countermeasure type with a prioritized list of applicable locations given. Other solutions, such as reactive type projects that may range from relatively low cost to relatively high cost, may be best presented through a prioritized list of specific segment and intersection projects that provide a description of improvements and planning level estimates.

#### Task 6 – Communication Plan

This task involves working with the KYTC-Louisville Metro Project Team to develop a communications plan to communicate safety topics to elected officials, the public, and Louisville Metro and KYTC staff. This may include, but is not limited to preparation of handouts, presentations, pamphlets, etc. for use in public meetings.

## **VI. SPECIAL INSTRUCTIONS**

Instructions for Response to Announcement can be found at:

<http://transportation.ky.gov/ProfessionalServices/Pages/Respond-to-an-Announcement.aspx>

KYTC will allow the following modifications to the standard response format for response to this project advertisement only:

- Page 3: Project Team Organizational Chart, may be expanded, not to exceed one 11" x 17" page or two 8.5" x 11" pages.
- Page 4 (A-E): Relative Experience of Key Project Team Members, may be expanded, not to exceed 10 pages total (A-J).
- Page 6 (A-E) Relative Experience of Proposed Team, may be expanded, not to exceed 10 pages total (A-J).
- Page 7 (A-C) Project Approach, may be expanded, not to exceed 10 pages total (A-J). As standard procedure, the DBE Participation Plan should also be included in this portion of the response.

## **VII. AVAILABLE INFORMATION**

KYTC and/or Louisville Metro will furnish the selected Consultant with any roadway data, traffic data, crash data, and other pertinent information in the possession of KYTC and/or Louisville Metro needed for providing the services desired.

## **VIII. CRASH DATA CONFIDENTIALITY**

Before any crash data will be shared, any of the Consultant's Team Members who will review and analyze crash data will be required to review the Crash Data Extract and Image Service Memorandum of Understanding between the Kentucky Transportation Cabinet and the Kentucky State Police, and sign a Confidentiality Acknowledgement to indicate that the Consultant's Team Members understand their responsibility and accountability of preserving confidential information that may be included within the crash data.

## **IX. PREQUALIFICATION REQUIREMENTS**

All plan and proposal submittals must be reviewed and stamped by a licensed Professional Engineer. To respond to this project, the project team must be prequalified in the following areas by the response due date of this advertisement.

### Transportation Planning

- Highway Planning Services
- Transportation Corridor & Systems Planning
- Road Centerline Data Collection
- Traffic Data Collection
- Pedestrian & Bicycle Facility Planning & Design

### Traffic Engineering

- Traffic Engineering Services

## **X. PROCUREMENT SCHEDULE**

Dates other than the Response Date are tentative and provided for information only.

- Bulletin Posted – July 10, 2018
- Response Date – August 1, 2018 by 4:30 PM ET (Frankfort Time)
- First Selection – August 7, 2018
- Final Selection – August 22, 2018
- Pre-Design Conference – August 29, 2018
- Fee Proposal – September 7, 2018
- Contract Negotiations – September 19, 2018
- Notice to Proceed – October 18, 2018

## **XI. DRAFT PROJECT SCHEDULE**

- Meeting to Discuss Existing Conditions Analysis and Potential Countermeasures for Recommendation – April 2019
- Meeting to Discuss Project Identification/Site Prioritization – June 2019
- Present Draft Road Safety Plan – September 2019
- Present Final Road Safety Plan – November 2019

## **XII. EVALUATION FACTORS**

Consultants will be evaluated by the selection committee based on the following weighted factors:

1. Project approach to accomplish services on schedule. (35 Points)
2. Relative experience of key project team members. (25 points)
3. Relative experience of proposed team on projects of similar type and complexity. (20 points)
4. Available team workload capacity. (10 points)
5. DBE Participation Plan. (8 Points)
6. Knowledge of the locality and familiarity of the general geographic area. (2 points)

## **XIII. SELECTION COMMITTEE MEMBERS**

1. Michael Vaughn, P.E., User Division
2. ~~Nathan Ridgway, P.E.~~, **Dirk Gowin, P.E.**, User Division
3. Mikael Pelfrey, P.E., Secretary's Pool
4. Brent Sweger, P.E., Secretary's Pool
5. Brad Rister, P.E., Governor's Pool