

A REQUEST FOR PROPOSAL FOR PROFESSIONAL SERVICES CONTRACT

Department of Highways Professional Services Procurement Bulletin 2024-10 Statewide Highway Safety Improvement Services

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

I. PROJECT DESCRIPTION

This statewide contract is to provide necessary Highway Safety Improvement Services. Eight (8) consultants will be selected to provide these services on an as-needed basis for two (2) years.

II. PROJECT INFORMATION

Project Manager - Mike Vaughn, P.E.
User Division - Traffic Operations
Approximate Fee - \$2,000,000 per contract (Upset Limit)
Work will be assigned via Letter Agreement, not to exceed \$500,000
Project Funding - Federal Funds
Contract Term - Two (2) Years

III. PURPOSE AND NEED

The Traffic Safety Branch within the Division of Traffic Operations manages the Highway Safety Improvement Program (HSIP). The mission of the HSIP is to help people reach their transportation destinations safely by developing and delivering a data-informed, strategic approach to improving highway safety with a focus on performance. This mission is carried out by investing in safety improvement opportunities aimed at preventing fatal and serious injury crashes along Kentucky highways by implementing various safety countermeasures via construction projects on roadway sections selected and prioritized through a data-driven process. Currently, the workload of Traffic Safety Branch staff exceeds the capacity of the group to develop and deliver projects to letting efficiently; therefore, additional staff and specific expertise is needed to accomplish the mission of the HSIP.

IV. DBE GOAL

The Consultant team shall include a DBE Participation Plan with their Response to Announcement to help the Department meet the 11.95% DBE goal established by FHWA. The plan should demonstrate how DBE companies will be mentored or used to assist in the area(s) pertaining to this contract. An additional page will be allowed in the Project Approach (Section 7) to exhibit this plan. A maximum of eight (8) points will be considered in the Evaluation Factors for

the DBE Participation Plan.

V. SCOPE OF WORK

The selected Consultants will be responsible for working with the Central Office Division of Traffic Operations, Traffic Safety Branch, to provide data analysis, engineering, project management and coordination, and other project development services, as described herein, on an “as-needed” basis for various HSIP projects. In general, these services will be conducted for the study and diagnosis of crash and roadway data to determine and evaluate potential improvement options, the development of abbreviated construction plans and/or proposal documents, writing project specific specifications, creating estimates, and project management and coordination for HSIP projects statewide. While HSIP projects will primarily occur along state-maintained routes, projects may be along any public road, including county roads and city streets. The selected Consultants should possess and demonstrate a comprehensive understanding of safety-related knowledge to ensure that the entire project development process focuses on improving the safety performance of the project and creating a safer transportation system in the general project area. Recent before-after evaluations of Kentucky’s HSIP projects and initiatives continue to show a high rate of return on the investments made through HSIP projects. As a result, the Department desires the HSIP project development process to proceed expeditiously so projects can be let to construction as soon as possible in order to realize the safety benefits of the improvements. Therefore, the selected Consultants should demonstrate their capability to develop and deliver HSIP projects to letting quickly and efficiently and should identify any unique strategies they plan to utilize to ensure rapid project development, well-organized project coordination, and effective project management. The services to be provided may include, but are not limited to, any or all of the following:

1. Road Safety Assessments (RSAs)
2. Survey, Inventory, and Assessment of Roadway Features and Elements
3. Review, Analysis, and Diagnosis of Crash and Roadway Data
4. Study of Transportation Systems Management and Operations (TSMO) opportunities
5. Development of Potential Improvement Options
6. Safety Performance Analysis and Comparison of Improvement Options
7. Specifications, Estimates, Special Notes, and Proposal Development
8. Right of Way Plans, Traffic Control Plans, and Final Roadway Plans
9. Signing, Striping, and Pavement Marking Plans
10. Drainage (Hydraulic Design, Hydrologic Studies, and Drainage Structure Design)
11. Environmental Services
12. Geotechnical Services (Exploration, Testing, Analysis, Design)
13. Structure Design (Earth Retaining Structures, Box Culverts, Minor Bridge Retrofits)
14. Right of Way Services (MAR type acquisitions)
15. Utility Location, Relocation Coordination, and Utility Design

HSIP staff will notify the selected Consultants in writing, or via email, when services are needed on a project-by-project basis. A scoping meeting will be held for each assigned project to determine the services the Consultant will be required to provide. HSIP projects typically originate from one of several HSIP initiatives. The following are the current list of HSIP initiatives that may be assigned to the selected Consultants:

- Roadway Departure Emphasis
- Vision Zero Louisville
- Statewide Competitive Intersections

- Traffic Signal Enhancements
- Pavement Friction Treatments
- Roadway Reconfigurations
- Local Road Safety

On a project-by-project basis, Traffic Safety Branch staff will provide the Consultant with highway safety design concepts and construction strategies aimed at the primary HSIP initiative from which the project originates. During the project development process, the selected Consultant may be required to coordinate with, and involve staff from, the associated District Office and/or Local Public Agency representatives. Therefore, the selected Consultants should demonstrate their project management and project coordination capabilities. NOTE: Central Office Traffic Safety Branch staff will always be the overall project manager of any and all HSIP projects assigned under this statewide contract.

VI. SPECIAL INSTRUCTIONS

Eight (8) consultants will be selected to provide these services for a period of two (2) years with no new work assigned after two years from the Notice to Proceed, although the contract may be extended for time to complete work already assigned. Contracts will have an upset limit of \$2,000,000. Once the upset limit is reached or the two-year term has expired, services may be re-advertised and no additional Letter Agreements will be executed under the contract. Contracts will not be modified to increase the upset limit or extended for time to assign new work. No Letter Agreement shall exceed \$500,000 without written approval from the State Highway Engineer.

The Selection Committee will rank and list the selected Consultants in consecutive order to determine the initial order for which projects will be assigned. Projects will generally be assigned on a rotational basis. The Department reserves the right to select one of the firms outside of the assignment order for a particular project if it is to the benefit of the Department. That firm, if selected out of order, will be skipped in the rotation when their turn comes and the regular order will be followed thereafter. The Division of Traffic Operations reserves the right to group multiple projects together as one offering if it is advantageous to the Department. The Department may also add additional work to an existing Letter Agreement, if needed. A firm will not be offered an additional project until the remaining firms on the list have been offered a project. If a firm declines to accept a project, that firm will not be eligible to accept another project until the remaining firms on the list have been offered a project. If a firm declines a project or does not respond to an invitation to perform services for a project within five (5) business days, documentation shall be provided in the project files and the next firm on the rotating list shall be offered the project.

Instructions for Response to Announcement can be found at:

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

The Department will allow for the following modifications to the standard response format for responses to this advertisement only:

- Section 3: Project Team Organizational Chart, may be expanded not to exceed two 8.5" x 11" (A-B) or one 11" x 17" page.
- Section 4 (A-E): Resumes, may be expanded not to exceed 6 pages total (A-F).
- Section 5 (A-B): Workload / commitments does not have a page limit.
- Section 6 (A-E): Project Experience, may be expanded not to exceed 8 pages total (A-H).

- Section 7 (A-D): Project Approach, as standard procedure, the DBE Participation Plan should also be included in this portion of the response with a total of four pages allowed.

VII. AVAILABLE INFORMATION

The Department will furnish any plans, specifications, reports, or other information in the possession of the Department needed for providing the services desired.

VIII. ROADWAY DESIGN

A determination will be made during the scoping of a project as to the extent of Roadway Design Services that will be needed for each project. When roadway design is required for a project, the roadway design services will include all design engineering and studies required for the development of plans and/or proposal documents. The scope of effort required will vary on a project-by-project basis and will depend on the extent of the safety challenges within a project, the specific safety improvement option(s) selected to implement, and the available project budget. After diagnosing the existing safety challenges, the selected Consultants will be responsible for identifying safety improvement options and documenting why these options are likely to improve safety; evaluating the benefits, costs, and impacts of each safety improvement option; making recommendations as to which safety improvement option or combination of options appear to be best suited for improving safety along the project within the available project budget; and providing concise documentation that summarizes the safety challenges, the safety improvement options, and the Consultant's final recommendations. This will ultimately allow the project team to make informed decisions concerning which improvement(s) to implement.

In general, HSIP projects are developed and let to construction as "Proposal Only" projects. Therefore, if plan & profile sheets, pipe sheets, cross sections, summary sheets, detail sheets, etc. are required, these sheets shall be submitted on 8.5" x 11" size sheets. For certain projects, it may be appropriate to submit 11" x 17" size sheets. The scale of the sheets can be varied depending upon the information that is being conveyed.

IX. SURVEY AND INVENTORY

A determination will be made during the scoping of a project as to the extent of surveying that will be needed for each project. Appropriate survey methods will be determined on a project-by-project basis. Survey work may include any, or all, of the following: reconnaissance, control, planimetric survey, utility location, subsurface utility location according to ASCE standards, terrain survey, establishing property lines, and staking.

A determination will be made during the scoping of a project as to the extent of inventorying that will be needed for each project. Inventory work may include, but not limited to, identifying and documenting the location, geometry, condition, safety, and/or type of any, or all, of the following existing roadway features or elements: curves (and associated superelevation cross slopes), shoulders, roadside slopes, ditches, drainage structures, guardrail, signage, and pavement markings. Because many roadway features are best located by milepoint, the selected Consultants will need to provide a Digital Measuring Instrument (DMI) for certain inventory purposes. The selected Consultants should also have the capability to work with KYTC's Highway Information System (HIS) database and GIS database.

X. TRAFFIC ENGINEERING

A determination will be made during the scoping of a project as to the extent of the Traffic Engineering Services that will be needed for each project. On most projects, Traffic Engineering Services may include highway signing and markings. The selected Consultants will be required to determine the appropriate signing and markings based on the current edition of the MUTCD. Signing may include regulatory, warning, or guidance signing. For some projects, Traffic Engineering Services may include a capacity analysis to determine the traffic capacity effects of an improvement option. Occasionally, Traffic Engineering Services may include traffic modeling to further determine the effects of an improvement option.

XI. CRASH DATA AND/OR SAFETY PERFORMANCE ANALYSIS

A determination will be made during the scoping of a project as to the extent of Crash Data and/or Safety Performance Analysis needed for each project. Most projects will include a review and diagnosis of historical crash data. This may range from compilation of general crash data statistics to filtering and categorization of crash data based on crash types, pavement conditions, lighting conditions, time of day, time of year, etc. The goal is to identify any crash trends that could possibly be mitigated through the implementation of a specific countermeasure or combination of countermeasures.

A Safety Performance Analysis and/or study to determine an approximate return on investment typically will be required for most countermeasures. The selected Consultant should demonstrate familiarity with resources such as the Highway Safety Manual (HSM), Interactive Highway Safety Design Module (IHSDM), and/or the Crash Modification Factors (CMF) Clearinghouse. The goal is to determine the potential safety benefit of the improvement options that are being considered for a specific project. This information coupled with cost and other factors, such as Right-of-Way, Utility, and Environmental impacts, will allow for more informed decision making during the Preliminary Review stage of a project.

XII. TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS (TSMO)

As technologies continue to evolve, and because safety challenges continue to become more complex, especially in urban and suburban areas, there are increasingly more opportunities to implement innovative, hi-tech solutions to improve our transportation challenges. As such, exploring TSMO-related solutions with an emphasis on achieving safe mobility of all users is becoming more important. Therefore, during the scoping of a project, a determination will be made as to the extent of TSMO-related planning services needed for each project. A few examples of possible TSMO-related planning services that may be included are: arterial management, integrated corridor management, roadway reconfiguration (aka roadway rightsizing), travel time analysis, and simulation analysis. At the Preliminary Review Meeting (when decisions are made regarding which improvement options are to be implemented), additional TSMO-related services may be added via supplemental letter agreement. Alternatively, during the Preliminary Review Meeting, the Department may determine to utilize in-house staff and/or a separate Statewide contract to develop and design the TSMO-related strategies.

XIII. DRAINAGE

A determination will be made during the scoping of a project as to the extent of Drainage Design that will be needed for each project. The scope of effort required will vary on a project by project

basis. When drainage is involved in HSIP projects, typically, it only includes culvert and entrance pipe replacements or extensions. However, on occasion, larger drainage structures, such as reinforced concrete box culverts, will need to be extended or replaced. The selected Consultants will be responsible for the development of plans and/or special drainage analyses. Required services may include:

- Performing watershed and/or drainage network analyses
- Developing hydraulic models for watershed and/or drainage networks
- Performing hydraulic analyses for storm sewers, culvert pipe, and/or box culverts
- Analyzing buried structures for structural integrity

XIV. GEOTECHNICAL SERVICES AND STRUCTURE DESIGN

Generally, it is at the Preliminary Review Meeting when a determination will be made as to whether or not a project will require Geotechnical Services and/or Structure Design, and whether these services will be performed by the Consultant or by the Department. If performed by the Consultant, a supplemental letter agreement will be issued to assign the additional work. Geotechnical Services are anticipated to be coring, soils strength, and slope stability analysis. Structure Design is anticipated to be box culvert extensions, earth retaining structures, and minor bridge retrofits.

XV. RIGHT OR WAY

Most HSIP projects have the goal of implementing improvements within existing right of way. When potential improvement options require the acquisition of additional right of way, the selected Consultant shall identify and show the property owner information on the plans, along with the existing right of way, property lines, and proposed right of way. Right of Way summary sheets shall be provided at the Preliminary Review Meeting showing the estimated areas of taking for each improvement option. Generally, it is at the Preliminary Review Meeting when a determination will be made as to whether a project will require Right of Way Services, and whether the services will be performed by the Consultant or by the Department. If performed by the Consultant, a supplemental letter agreement will be issued to assign the additional work. When right of way is needed for an HSIP project, it will generally be minimal; therefore, it is anticipated that most right of way will be acquired using the minor acquisition review (MAR) valuation and acquisition process. However, the selected Consultant may be responsible for any, or all, of the following: appraisals, appraisal reviews, negotiations, relocation assistance, project management, titles and closings, property management, and other related acquisition services. All Right of Way Services performed by the selected Consultant shall adhere to Federal and State regulations and conform to the policies and procedures outlined in the Right of Way Guidance Manual. Appraisers must be selected from the KYTC ROW list of pre-qualified real estate appraisers. A copy of the list can be obtained by contacting Eric Monhollon at Eric.Monhollon@ky.gov. The selected Consultant agrees that, upon request, staff will be available to assist in responding to FHWA or State inquiries or citations. The selected Consultant will be responsible for maintaining all files while performing Right of Way Services. Once Right of Way Services are completed for a project, all files will be turned in and submitted to the District Right of Way Supervisor.

Sub-Providers providing Right of Way Services for any project shall meet the same requirements and level of experience as required of the prime. No subcontract under the letter agreement shall relieve the primary respondent of responsibility for the service. If the respondent uses a Sub-Provider for any, or all, of the work required, the following conditions shall apply under the listed circumstances:

- Respondents planning to subcontract all, or a portion, of the work shall identify the proposed Sub-Providers.
- Subcontracting shall be at the respondent's expense.
- KYTC retains the right to check Sub-Provider's background and determine whether to approve or reject the use of the submitted Sub-Providers.

XVI. UTILITIES

Most HSIP projects have the goal of implementing improvements without impacting existing utilities. The selected Consultant will be responsible for locating the existing utilities to determine if potential improvement options will impact an existing utility, and if so, the feasibility of utility relocation and the associated cost estimate(s). All utilities, including aerial carriers, may need to be field verified by the Consultant. For HSIP projects this will typically be Quality Levels C & D; however, Quality Levels A and/or B may also be needed on a project-by-project basis. Depending on the final improvement options that are selected, the selected Consultant may be required to perform additional Utility Services, such as, but not limited to: Utility Relocation Coordination, assisting the Department with Utility Design Plans, and/or developing the Utility Contact List. Generally, it is at the Preliminary Review Meeting when a determination will be made as to whether a project will require additional Utility Services, and whether the services will be performed by the Consultant or by the Department. If performed by the Consultant, a supplemental letter agreement will be issued to assign the additional work.

XVII. ENVIRONMENTAL SERVICES

Generally, it is at the Preliminary Review Meeting when a determination will be made as to whether Environmental Services will be performed by the Consultant or by the Department. If performed by Consultant, a supplemental letter agreement will be issued to assign the additional work. The required Environmental documentation will be determined based on the improvement options that are selected at the Preliminary Review Meeting. For most HSIP projects it is anticipated that the Environmental Document will be a CE Level 1 or CEMP. If Environmental Services are performed by the Consultant, the selected Consultant may be responsible for any, or all, of the following:

A. Environmental Services

- A.1** Environmental studies required to obtain location approval including Air Quality Analysis, Highway Noise Analysis, Socioeconomic Impact Analysis, Aquatic Ecosystem Analysis, Terrestrial Ecosystem Analysis, Wetland Delineation, Stream Classification, Section 401/404 permitting, Underground Storage Tank and Hazardous Material Investigations, and Cultural Historic/Archaeological Resource Investigations.
- A.2** Mitigation and Remediation as required in any of the aforementioned studies.

B. Document Preparation

- B.1** Technical reports necessary to adequately address specific areas of impact in each of the aforementioned areas.
- B.2** Environmental documentation (CE) necessary for project location approval.
- B.3** Design drawings and data necessary for 401/404 WQC/permit applications.

C. Laboratory Services

Interested Consultants will not be required to comply with the requirement of utilizing a laboratory prequalified with the KYTC and for UST/Hazmat Services. Criteria for identification of acceptable

testing facilities will be discussed with the selected Consultant(s) who will provide KYTC with a proposed list of laboratories for approval.

XVIII. PREQUALIFICATION REQUIREMENTS

To respond to this project, the Consultant must be prequalified in the following areas by the response due date of this advertisement.

ROADWAY DESIGN

- Rural Roadway Design
- Surveying
- Urban Roadway Design

STRUCTURE DESIGN

- Spans under 500 feet

TRAFFIC ENGINEERING

- Traffic Engineering

Environmental & UST Services * (see note below)

- UST & Hazmat Preliminary Site Assessment (Phase 1)
- Hazmat Site Investigation (Phase 2)

Environmental Aquatic & Terrestrial Ecosystems Analysis * (see note below)

- Fisheries*
- Botany*
- Terrestrial Zoology*
- Wetlands*
- Freshwater Macroinvertebrates*
- Water Quality*

Environmental Archaeology & Other Services * (see note below)

- Air Quality Analysis*
- Prehistoric Archaeology*
- Socio-Economic Analysis*
- Highway Noise Analysis*
- Historic Archaeology*
- Cultural-Historic Analysis*

Geotechnical Services * (see note below)

- Geotechnical Engineering*
- Geotechnical Drilling*
- Geotechnical Laboratory Testing*

Intelligent Transportation System * (see note below)

- System Design, Deployment & Integration*
- System Maintenance, Management & Operations*
- Technology / System Evaluation*
- Architecture Development*

Right of Way Services* (see note below)

- Acquisition*

Transportation Planning* (see note below)

- Pedestrian & Bicycle Planning & Design*

Utility Design* (see note below)

- Communication*
- Electrical Level 1*
- Electrical Level 2*
- Gas Level 1*
- Gas Level 2*
- Water & Sewer Level 1*
- Water & Sewer Level 2*
- Petroleum*
- Utility Preconstruction Coordination*
- Utility Construction Inspection*

* Note – These prequalification areas are not required with the initial proposal as it is uncertain to the extent practicable if they are necessary. Should these services become necessary during the delivery of the project in this or future phases, the selected Consultant team must obtain the required qualifications before providing those services or bring on a prequalified subconsultant at that time.

XIX. PROCUREMENT SCHEDULE

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

- Advertisement Date: April 9, 2024
- Response Date: May 1, 2024 by 4:30 PM ET (Frankfort Time)
- First Selection Meeting: May 6, 2024
- Final Selection: May 22, 2024
- Pre-Design Conference: May 29, 2024
- Notice to Proceed: June 19, 2024

XX. PROJECT SCHEDULE

Individual project schedules will be defined by Letter Agreement on a project-by-project basis.

- Assignment of All Projects – Within two (2) years from Notice to Proceed
- Completion of All Services – Within initial contract term or by time extension

XXI. EVALUATION FACTORS

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

1. Project approach and proposed procedures to accomplish the services for the project. (30 Points)
2. Relative experience of proposed team on projects of similar type and complexity. (20 Points)

3. Proposed strategies to manage, coordinate, develop and deliver projects to letting quickly and efficiently. (20 Points)
4. Relative experience of key project team members. (10 Points)
5. Available team workload capacity to comply with project schedule. (10 Points)
6. DBE Participation Plan (8 Points)
7. Knowledge of the locality and familiarity of the general geographic area. (2 Points)

XXII. SELECTION COMMITTEE MEMBERS

1. Mike Vaughn, P.E., User Division
2. Rachael Cash, P.E., User Division
3. Casey Smith, P.E., Secretary's Pool
4. Emily Deason, P.E., Secretary's Pool
5. Marcelyn Mathews, P.E., Governor's Pool