MoDOT

105 West Capitol Avenue
P.O. Box 270
Jefferson City, Missouri 65102

Missouri Department of Transportation
Patrick K. McKenna, Director

1.888.ASK MODOT (275.6636)

June 5, 2024

Dear Consultant:

The Missouri Highways and Transportation Commission is requesting the services of a consulting engineering firm to perform the described professional services for the project included on the attached list.

If your firm would like to be considered for these consulting services, you may express your interest by responding to the appropriate office, which is indicated on the attachments. Limit your letter of interest to no more than three pages. This letter should include a statement to indicate your firm's understanding of the project. It should also include any other information which might help us in the selection process, including key personnel you would assign to the project and the backgrounds of those individuals, and any sub-consultants you would propose to use, and an indication of your firm's approach to promoting and developing a diverse workforce. MoDOT is committed to reflecting the diversity of the communities we serve and we expect our partners to do the same. We will utilize the consultant information already on file so we will not need a lengthy submittal of other general company information. In addition to your three page letter of interest, please attach one page with detailed information on similar projects that your key personnel have worked on. Indicate the role your key personnel played in the projects and include reference contact information.

DBE firms must be certified by the Missouri Department of Transportation in order to be counted as participation towards an established DBE Goal. We encourage DBE firms to submit letters of interest as prime consultants for any projects they feel can be managed by their firm. We also encourage both DBE firms and non-DBE firms to consider joining MoDOT's Mentor/Protégé program whenever possible as part of a MoDOT project.

MoDOT will evaluate firms based on: Project Understanding & Innovation, Past Performance, Qualifications of Personnel Assigned, General Experience of Firm, Familiarity/Capability, Accessibility of Firm & Staff. Firm's not providing a response on approach to workforce diversity will be considered non-responsive to this solicitation. Firm's that are not current on all of the required prequalification categories found in MoDOT's Approved Consultant Prequalification List at the date of the solicitation expiration will be considered non-responsive.

We request all letters be received by 3:00 pm, June 21, 2024 at the appropriate office.

Sincerely,

Kenny Voss, P.E.
State Design Engineer

Attachment

DISTRICT OFFICES

KC District
Chris Redline, P.E. – District Engineer
Missouri Department of Transportation
600 NE Colbern Road
Lee's Summit, MO 64086

Contact
K. Mark Sommerhauser, Project Manager
#816-607-2243
karsten.sommerhauser@modot.mo.gov
Email responses are encouraged

KC District

Various Routes, Various Counties	
Job No:	JKU0001
Location:	KC Scout Traffic Management Center – KC District Office
Proposed Improvement:	Freeway Advanced Traffic Management System (ATMS) software
Length:	3 year contract (two possible one-year renewal options)
Approximate Cost:	$2,450,000
DBE Goal (if applicable)	0%
Consultant Services Required:	This ATMS software support contract will implement and maintain a bi-state (both KDOT and MoDOT) freeway management system that controls Intelligent Transportation System (ITS) devices along some rural corridors along with the key urban core of the Kansas City metropolitan area. The following is an overview of the major freeway management functions that the consultant's ATMS software will need to support: 1) Web-based user interface, supporting Chromium-based browsers. 2) Center to Center device and incident management, with single sign-on user authentication. 3) Standards-based support of the latest NTCIP for dynamic message sign (DMS) boards, CCTV cameras, and freeway detectors. 4) Base mapping supporting shape files and OpenStreetMap or a similar mapping alternative. 5) CCTV camera management, preferably with Axis and WTI camera experience. 6) DMS management of both color and amber displays, preferably with Daktronics and Ledstar experience. 7) Detector device management, including support for both radar and loops. 8) Experience utilizing probe data for real time speed segmentation on freeways. 9) AVL integration experience, preferably with GeoTab and HAAS. 10) Integrated weather alert mapping through the National Weather Service. 11) Experience with providing external data to other system including the following: a. MoDOT Traveler Information Map b. MoDOT TMS system c. Waze

	d. University research/data systems such as Mizzou-Titan e. Various social media platforms 12) Experience importing data from other systems such as: a. 911 computer aided dispatch (CAD) systems b. TrafficVision c. Waze 13) Alert notifications for severe weather watches and warnings by county. 14) System reporting that provides individual incident summaries, active construction work zones, DMS board message history, and device communications along with the ability to export reports into Word, PDF, and CSV files. 15) Archived data management that allows access and reporting on historic traffic and incident data. 16) Incident management systems that include the following capabilities: a. Record the location of event, type, impact, and number of lanes affected. b. Recommend DMS board messages based on the number of lanes closed. c. Record when emergency responders were present at the event including when notified, en route, on scene, and departed. d. Record the type of vehicles involved in an event. e. Automatically send out event notifications to web, email, and third parties based on event type. f. Generate history of all actions taken by operators on an event for quality control audits. g. Support graphical lane configuration of roadway layout at the location of the event. h. Support activating the closest camera when an incident is first placed on the map. i. Support attribute tagging of events (for instance wet pavement, fatality, etc.) in order to support future data analysis. j. Generate data sets that can be used in quarterly TMC performance reports. 17) System mapping functions including: a. Mapping of all state routes. b. Lane by lane visibility utilizing shape files for all major routes. c. Incident mapping d. Congestion mapping e. Weather mapping f. AVL mapping g. Device mapping h. Mapping of response plans 18) CCTV camera specific device functions including:

	a. Pan/Tilt/Zoom functionality and support of camera presets. b. Ability to be vendor agnostic as long the camera is NTCIP compliant. c. Experience supporting multiple video streams, including the utilization of multi-casting and/or providing video streams of varying quality. d. Ability to organize camera groups on the ATMS workstation screen. e. Ability to organize camera tours. f. Experience with the Genetec SecurityCenter system, including support Federation connections. 19) Dynamic message sign board specific device functions including: a. Tiered priority messaging b. Scheduling capabilities c. Travel time messaging d. Weather alert messaging e. Ability to program color DMS boards along with older amber boards. f. Ability to automatically post queue warning messages. g. Logic for posting and controlling two phased messages. 20) Video distribution capabilities a. Ability to manage both unicast and multicast video streams. b. Experience working with and providing video streams to third party applications such as TrafficVision, Genetec, and public websites. 21) Experience operating real time regional specific traffic management website. 22) Video Wall a. Ability to manage multiple individual wall mounted video screens inside the Traffic Management Center without the use of an independent third party video wall controller. b. Ability to push both video streams and desktop applications to any of the Traffic Management Center wall mounted video screens. 23) Work order management system requirements: a. Ability to report device outages or issues with just one click on the operator's ATMS map. b. Easily create and manage maintenance work orders through the system. c. Ability to configure categories and data fields that might not be applicable to daily ITS maintenance functions. d. Ability to run reports on specific ITS devices or locations. e. Ability to change or edit previously entered

	information. f. Ability to back up one page at a time without reverting back to an original default page. g. Ability to sort by various categories. h. Ability to add attachments to the work orders. i. Ability to easily edit sites names and locations. j. Ability for Admin users to activate or hide specific information fields. k. Configurable email notifications as work orders are updated and eventually closed out. l. Ability to run historical maintenance reports on devices and/or locations. m. Ability to enter information in a Notes field without a minimum number of characters. 24) Robust IS/IT support for the hardware and software that will operate the ATMS software. Consultant capabilities should include: a. A 24/7/365 helpdesk that can coordinate with Scout IS personnel onsite, but that can also perform simple system restarts and reboots as needed, especially during overnights and weekends. b. Knowledgeable of Cisco firewall hardware and software. c. Knowledgeable of Cisco network equipment (switches and routers) and their software, including but not limited to the following: • Switch and route configuration • Troubleshooting and repair of issues • Provide documentation and support to Scout personnel d. Capable of working with Netapp storage solutions, providing the following: • Server software configuration • Troubleshooting and repair of issue • Provide documentation and support to Scout personnel e. Knowledge of scheduling updates within a 24/7, 365 days a year Traffic Management Center. f. Knowledge of Solarwinds and its various software modules, including, but not limited to the following: • Netflow module for Orion SLX • Network performance monitor • Orion IP address manager • Orion NCM v7 • Server and application monitor • SQL data base monitor g. Knowledge of various backup solutions
Other Comments:	A presentation and an ATMS software demonstration will be conducted with the short listed firms. Both the presentation

	and the software demo will be performed remotely using TEAMS. The consultant short list will be posted to web around June 25th. The tentative dates for consultant presentation and demos will be July 8th and 9th. Tentative date for consultant selection will be July 12, 2024.

Rating Criteria w/Weighted Values

Project Understanding & Innovation	25 Points Max
Past Performance	25 Points Max
Qualifications of Personnel Assigned	20 Points Max
General Experience of Firm	10 Points Max
Familiarity/Capability	10 Points Max
Accessibility of Firm & Staff	10 Points Max
	100 Points Max Total