

Request for Information No. 1 Truck Parking Availability Detection Technology

**Issued by: MAASTO TPIMS Partnership
Task Force**

**Regarding: Truck Parking Information
Management System**

RFI Issuance Date: 08/15/2016

RFI Closing Date: 09/12/2016



1. PURPOSE OF THE RFI

The Mid America Association of State Transportation Officials (MAASTO) Regional Truck Parking Information Management System (TPIMS) Partnership Task Force is seeking information to assist it in development of the Regional Truck Parking Information Management System (TPIMS), an eight-state, federally funded initiative to provide real-time information related to truck parking availability.

The purpose of this Request for Information (RFI) is to generate responsive information that may help participating states in the MAASTO TPIMS Partnership Task Force and the Federal Highway Administration confirm and/or refine certain assumptions in connection with planning for and structuring the MAASTO TPIMS Project.

This RFI does not constitute an RFQ, an RFP, or any other solicitation document. Responding to this RFI is not a pre-requisite to participating in a future procurement process of any of the participating states. By responding to this RFI, Respondents can provide valuable input and help shape the framework for the development of the MAASTO TPIMS Project. Information provided in response to this RFI may be publicly disclosed and will not be considered protected or proprietary to the provider.

2. PROJECT OVERVIEW

Access to safe and convenient parking areas for trucks is essential for a robust freight transportation network, yet truck drivers consistently have difficulty finding areas to safely rest. Drivers who have not located parking before reaching their hours of service limits are often forced to park illegally or unsafely, often on the shoulders of highways, on off-ramps or at

abandoned facilities. In response to these concerns, the State of Kansas in partnership with Indiana, Iowa, Kentucky, Michigan, Minnesota, Ohio and Wisconsin are developing a multi-state Regional Truck Parking Information and Management System. The project is funded through a \$25 million Federal TIGER grant and additional state funds.

The MAASTO Regional TPIMS project is America's first such regional effort, leveraging efforts already underway in Michigan, Wisconsin and Minnesota. The Regional TPIMS is envisioned to be a network of safe, convenient parking areas with the ability to collect and broadcast real-time parking availability to drivers through a variety of media outlets including dynamic roadside signs, smart phone applications, in-cab systems, and traveler information websites. This will help drivers proactively plan their routes and make safer, smarter parking decisions. With implementation of the Regional TPIMS in 2018, truck drivers will have the ability to weigh the value of driving an extra distance to secure available parking without fearing the unknown or experiencing a lack of availability upon arrival. This will increase drivers' overall productivity and efficiency.

The MAASTO Partnership will deploy the regional TPIMS throughout the eight-state region on high-volume freight corridors including: I-35, I-64, I-65, I-70, I-71, I-75, I-80, I-94 and I-135. These routes are among some of the most important corridors in the MAASTO region with truck volumes on many of these routes already exceeding 25,000 trucks per day and expected to grow. These high truck volumes create congestion at parking sites, making it difficult for truck traffic to easily locate safe, convenient parking during peak rest hours. That will change when the Regional TPIMS Project is completed.

The system will use existing intelligent transportation systems (ITS) infrastructure and capabilities, along with vehicle detection and data collection technologies, to monitor the availability of truck parking at public and private truck parking sites. It will then provide real-time information through multiple platforms to commercial vehicle operators for over 150 parking facilities across the MAASTO region. Since over-the-road truck drivers typically travel at least 500 miles in a day, they will benefit most from this seamless system unbound by state lines and capable of future expansion to additional freight corridors and states.

3. TPIMS PROCUREMENT, DELIVERY AND SCHEDULE

Each of the participating states is responsible for procuring and delivering its portion of the TPIMS project; however, the Kansas Department of Transportation (KDOT) is serving as Lead Agency and will be administering the project through the Federal TIGER Grant process on behalf of the MAASTO TPIMS Partnership Task Force. More information on the schedule and procurement/delivery method of the individual states is available at the project website (<http://trucksparkhere.com/>) The Federal TIGER Grant process requires that each state deliver its portion of the project by Fall 2018.

4. INFORMATION REQUESTED

Through this RFI, the MAASTO TPIMS Partnership Task Force is interested in soliciting views and suggestions from interested parties regarding the MAASTO TPIMS Project. The Partnership asks that parties responding to this RFI submit their perspectives on issues and questions for which they are qualified, with a preference for broad-based perspectives and insights on the full range of questions. Respondents are not required to respond to each question or information request. Respondents are requested to include the information identified below. Please provide numbered responses to match the questions and information requests identified in this RFI.

A. General Information

- A1. Identify a single point of contact for the Respondent, along with full contact information.
- A2. Provide a brief (no more than two pages) summary of the Respondent's organization and any previous experience with similar projects.

B. Truck Parking Availability Detection Technology

Each state in the Partnership Task Force will select a truck parking availability detection methodology. Two methodologies for estimating truck parking availability will be used across the eight participating MAASTO TPIMS states:

- Entrance and Exit Counts – detection technology counts trucks entering and exiting the truck parking area to estimate the number of available spaces.
- Space Occupancy Counts – detection technology monitors each space in the truck parking area to determine occupancy of spaces.

The MAASTO TPIMS Partnership Task Force is interested in information about detection technologies that can be used to implement either of these detection methodologies. If your organization has a product or technology that you feel should be considered for the MAASTO TPIMS Project, please provide the following information:

- B1. Explain how the technology works and how it would be used to implement either of the two detection methodologies.
- B2. Describe required routine maintenance for the detection technology.
- B3. Describe the manufacturing and delivery time required for the detection technology.
- B4. Discuss the expected useful lifecycle of the detection technology.
- B5. Provide information on expected costs for the equipment and associated support equipment.
- B6. Describe how and where the technology has been demonstrated and tested to provide truck detection and/or classification. Describe any experience integrating with Advanced Travel Management System (ATMS) Software packages used by public highway agencies.

- B7. Provide a reference and contact information that can confirm the successful operation of the detection technology. (Provide name, organization, phone number and email address).
- B8. Provide documentation or supporting information on the accuracy of your detection technology for counting and classifying (if applicable) commercial vehicles. Please specify how accuracy of detection was measured.
- B9. If applying to entrance and exit count methodology, explain how your detection technology addresses slow moving vehicles with short headways.
- B10. If applying space occupancy count methodology, explain how your detection technology addresses vehicles parked in spaces for long periods of time (e.g., 5 hours or longer).
- B11. If your detection technology employs vehicle classification, explain how vehicles are classified (length, axle count, weight, etc.).
- B12. Provide documentation or supporting information on typical installations, such as: structure or pole mounting requirements, disruption of the pavement surface, required cabinet space, non-hardened components requiring protection, and cabling.
- B13. Does your detection technology fall under Federal Buy America requirements? If so, does it meet those requirements?
- B14. Are you aware of any patent or intellectual property infringement claims involving your detection technology? If so, please explain.

5. CONFIDENTIALITY

Respondents are advised that any responses to the RFI may be made available to each state within the MAASTO TPIMS Partnership Task Force, stakeholders and the public in general. In addition, portions of RFI responses may be published publicly in newsletter articles, social media sites, websites or other public-facing media channels for purposes of informing stakeholders about market interest and ideas for the MAASTO TPIMS Project.

6. GENERAL INFORMATION

A. Guidelines for Responses

Page limits: Respondents are requested to limit responses to this RFI to a maximum of 10 pages.

Content: The MAASTO TPIMS Partnership Task Force is requesting the specific information identified in this RFI, but is not requesting proposals, detailed plans, marketing materials, or proprietary information from Respondents.

Delivery: Responses to this RFI are due by 4:00 p.m. central time on September 12, 2016. Respondents are requested to submit an electronic version of the written response (in Adobe PDF format) to the Point of Contact identified in section 6(D).

B. Questions from Respondents

Questions regarding this RFI and/or the status of the MAASTO TPIMS Project should be submitted electronically through the Project's email address at: procurement@trucksparkhere.com. All questions may be made publically available under the FAQ section of the website procurement page at <http://trucksparkhere.com/procurement/>. When submitting questions, Respondents are requested to identify the RFI No. and contact identified in 6(D).

C. Changes and Additional Project Information

Changes to this RFI will be posted as addenda to the RFI on the MAASTO TPIMS Project Website (<http://trucksparkhere.com/>). Respondents are encouraged to monitor the website on a regular basis for updates, questions and responses, addenda, and additional information.

D. Point of Contact

All responses must be addressed to the following point of contact:

Davonna C. Moore
Assistant Bureau Chief-Transportation Planning and MAASTO TPIMS Project Manager
Kansas Department of Transportation
procurement@trucksparkhere.com