

Project Name
Regional TPIMS

Date of Meeting
April 26-27, 2016



Project #
106 KA-4235-02

Location
April 26
Minneapolis Airport Marriott
2020 American Blvd. East |
Bloomington, MN

April 27
Indianapolis Marriott Downtown
350 W. Maryland St.
Indianapolis, IN

Purpose of Meeting
Stakeholders Input for
Concept of Operations

Time
12:00 – 4:00 pm

Participants (Invited)
Partnership Technical Core Team;
HNTB Project Team; Partnership
Members; Selected Stakeholders

MEETING AGENDA

11:30 – Noon	Registration
Noon – 12:10 pm	Welcome/Workshop Purpose
12:10 – 12:30 pm	Project Overview 1. Overview 2. Project Partners 3. Scope & Schedule
12:30 – 1:00 pm	Discussion: Current Parking Issues in the Region
1:00 – 1:30 pm	Discussion: User Needs, Issues, Opportunities for TPIMS Deployment
1:30 – 2:00 pm	Discussion: Potential Performance Measures
2:00 – 2:30 pm	Discussion: Input and Communication Options and Preferences
2:30 – 3:00 pm	Potential Solutions/Concepts of Operations
3:00 – 3:30 pm	Confirm and Prioritize Input
3:30 – 4:00 pm	Open Discussion/Workshop Close

MAASTO Regional Truck Parking

Truck Parking Information Management Systems (TPIMS)



MAASTO Regional TPIMS at a Glance

- **Funded through a \$25 million federal TIGER grant and state matching funds.**
- **Intended to reduce time searching for parking and to provide safe truck parking alternatives.**
- **Will be deployed in Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Ohio and Wisconsin.**
- **Will monitor truck parking availability and provide real-time information to truck drivers.**
- **Capable of disseminating information through multiple methods, including dynamic signs, smart phone applications and traveler information websites.**
- **In September 2018, will provide its eight partner states with a safer, more efficient and competitive freight system.**

Key Fact: *The MAASTO TPIMS is an innovative solution to critical truck parking issues that affect the region's economic competitiveness and the safety and efficiency of the national freight network.*

Although access to safe and convenient parking areas for trucks is essential for a robust freight transportation network, truck drivers consistently have difficulty finding areas to safely rest. In 2013, the national Jason's Law Truck Parking Survey revealed that 83 percent of drivers routinely took longer than 30 minutes to find parking. 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. This loss of productivity adds six percent or more to labor costs associated with moving goods through the national freight network.

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 (TPIMS). The project is funded through a \$25 million TIGER grant and state funds.

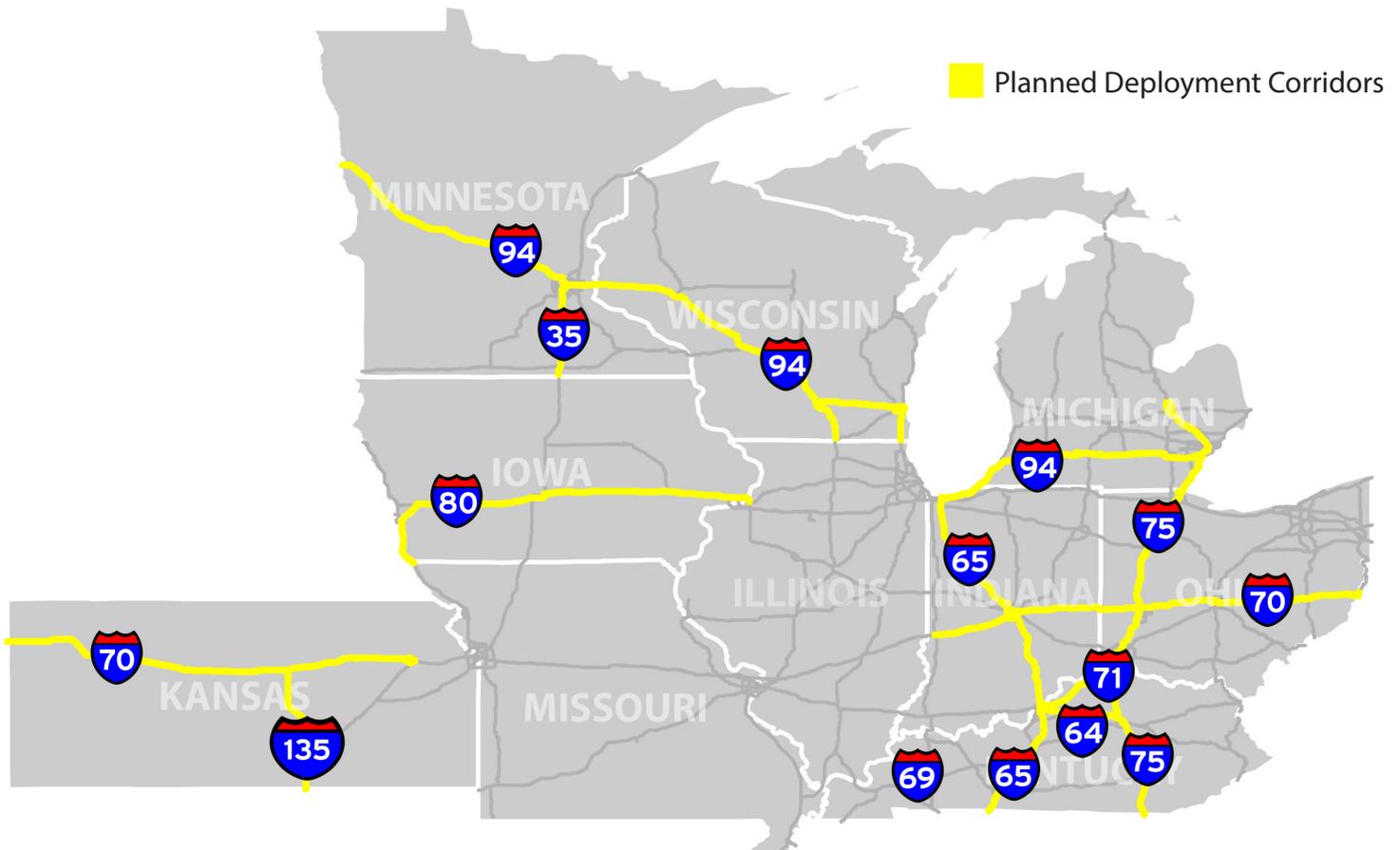
The Regional TPIMS is envisioned to be a network of safe, convenient parking areas with the ability to collect and broadcast real-time parking availability to drivers through a variety of media outlets including dynamic signs, smart phone applications and traveler information websites. This will help 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 five to 20 miles to secure available parking without fearing the unknown or experience lack of availability upon arrival. This will increase drivers' overall productivity and efficiency.



MAASTO TPIMS Project

MAASTO Regional TPIMS Corridors for Deployment



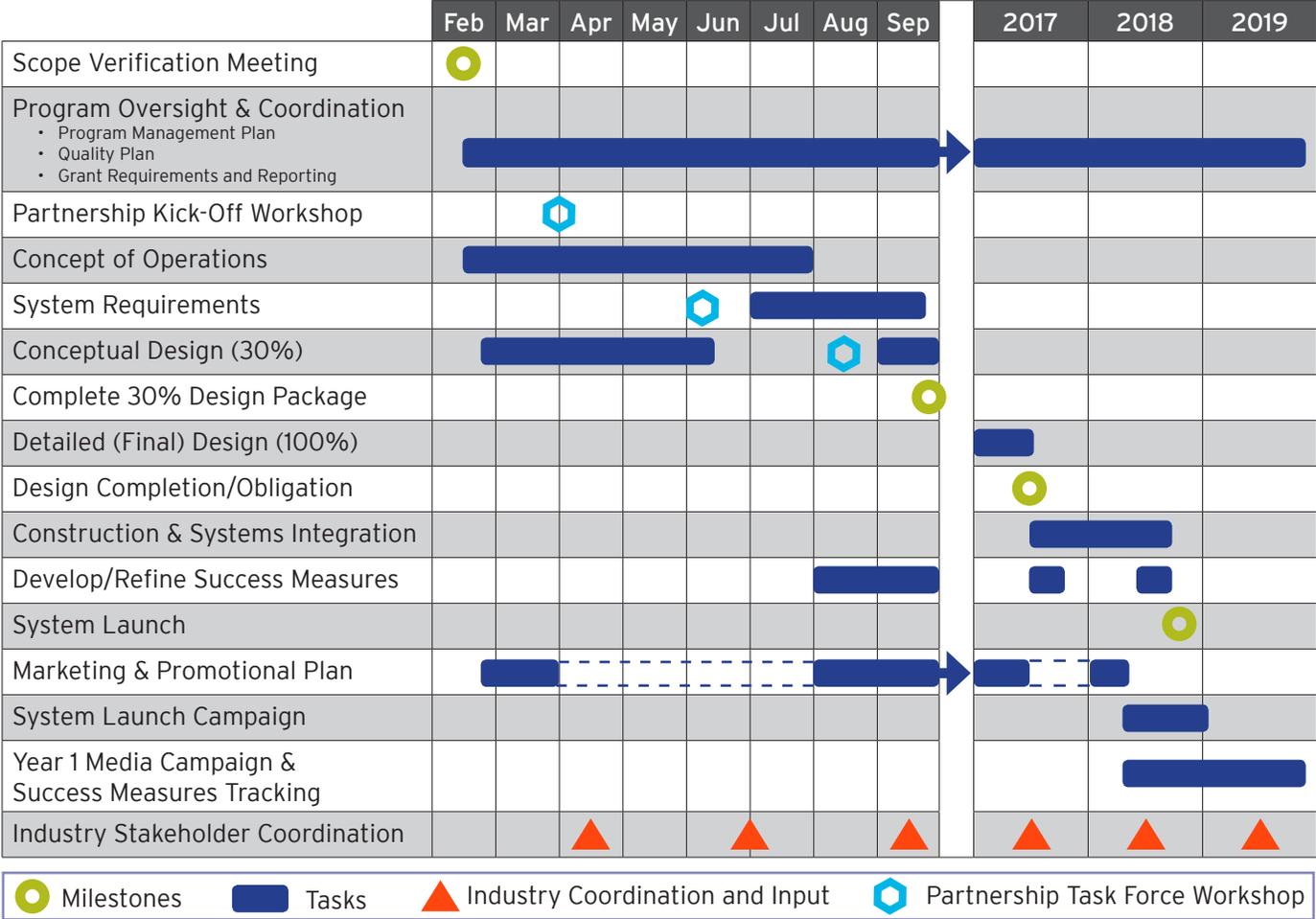
Key Fact: *The MAASTO TPIMS will be a true regional system. End users (e.g. truck drivers) will see a consistent, cohesive system as they cross state lines. However, each state also will have the flexibility to integrate proposed solutions into their existing systems.*

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 emerging vehicle detection and data collection technologies, to monitor the availability of truck parking. It will then provide real-time information through multiple platforms to commercial vehicle operators for over 150 parking sites 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.

The MAASTO region is America's first such regional effort, leveraging efforts already underway in Michigan, Wisconsin and Minnesota. This initiative offers a great opportunity to improve the country's global competitiveness while boosting the region's economic growth through improvements to freight movements to and from both coasts and significant corridors connecting with Canada and Mexico.

Schedule for Developing and Deploying the Regional TPIMS Project



Key Fact: The TIGER grant has an aggressive schedule featuring four major milestones. A 30-percent design package must be delivered by September 30, 2016, with final plans by June 1, 2017. This sets the stage for full funding to be obligated by September 30, 2017. TPIMS will be completed and operational by September 30, 2018.

The Regional TPIMS project is being conducted in two phases: Phase 1 includes conceptual design (30-percent design level); and Phase 2 includes final design (100-percent design level), procurement and deployment oversight of the project. Phase 1 of the project includes the following tasks:

- Systems Engineering:** Develop the TPIMS concept of operations, system and design requirements, design standards and 30-percent design plans.
- Stakeholder Engagement:** Secure industry input regarding system concepts and create consistent project communications and branding.
- Performance Measures:** Develop measures to track the TPIMS project’s progress and effectiveness.
- Grant Oversight:** Oversee compliance with federal TIGER grant requirements.
- Project Management:** Coordinate project team consultation, tasks and quality control/quality assurance activities.
- Future Needs:** Identify future needs for the final design, procurement process and deployment of TPIMS.



MAASTO TPIMS Project

MAASTO TPIMS Project Funding

State	Federal TIGER Grant Award	State Contribution	Total
Indiana	\$4,149,750.50	\$608,580.00	\$4,758,330.50
Iowa	\$3,396,323.36	\$498,086.00	\$3,894,409.36
Kansas	\$3,319,800.40	\$486,864.00	\$3,806,664.40
Kentucky	\$2,780,262.83	\$407,738.00	\$3,188,000.83
Michigan	\$2,741,195.22	\$402,009.00	\$3,143,204.22
Minnesota	\$1,210,326.85	\$177,500.00	\$1,387,826.85
Ohio	\$5,356,717.98	\$785,587.00	\$6,142,304.98
Wisconsin	\$2,045,622.84	\$300,000.00	\$2,345,622.84
Total	\$25,000,000.00	\$3,666,364.00	\$28,666,364.00

Key Fact: *The Regional TPIMS Project represents a sustained, multi-year focus on improving the efficiency, economic competitiveness and safety of the freight network in Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Ohio and Wisconsin.*

Project Funding

The Regional TPIMS Project has a total estimated capital cost of \$28.6 million (in 2015 dollars). The Regional TPIMS is funded through a \$25 million Federal TIGER grant and state matching funds as shown in the table above. The multi-state collaboration will provide cost efficiencies and innovations in design, procurement and deployment of TPIMS across the MAASTO region.

Project Benefits

The Regional TPIMS will generate more than \$403 million in benefits through the life of the project by providing truck drivers with reliable, real-time information to make smarter, more efficient truck parking decisions. Better parking information will mean fewer non-routine maintenance repairs on highway shoulders and ramps due to illegal parking. The system also provides more efficient movement of goods, less fuel consumption and reduced emissions by reducing time truck drivers spend looking for parking.

Project Team

Assisting the MAASTO Partnership in delivering this complex and challenging project is HNTB, a nationally recognized infrastructure solutions firm with more than 60 offices across the U.S., including a presence in each of the eight states of the TPIMS Partnership.



Project Stakeholders

The following organizations will serve as technical advisors throughout preliminary and final design and assist with trucking industry coordination:

- **Mid America Association of State Transportation Officials (MAASTO)**
- **Mid-America Freight Coalition (MAFC)**
- **American Transportation Research Institute (ATRI)**
- **Owner-Operator Independent Drivers Association (OOIDA)**
- **National Association of Truck Stop Operators (NATSO)**