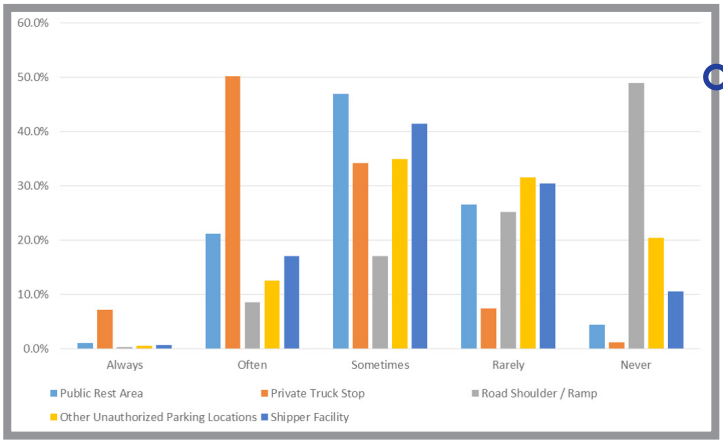
MAASTO TPIMS Project

Phase 1: 30% Design Complete

The 30% design milestone, completed on September 30, 2016, was a significant turning point for the Truck Parking Information Management System (TPIMS) project team. The elements that make up 30% design, described below, provide the required baseline standards for guiding TPIMS Partnership states as they make state-specific system design and construction decisions.



Baseline User Survey: Analyzed feedback from more than 2,600 owner-operated truck drivers, members of trucking associations and truck firm employees regarding parking needs and preferences; will be used as a baseline for comparison by future surveys planned after system launch.

Concept of Operations: Describes generally how the proposed system will collect and disseminate real-time truck parking availability information.

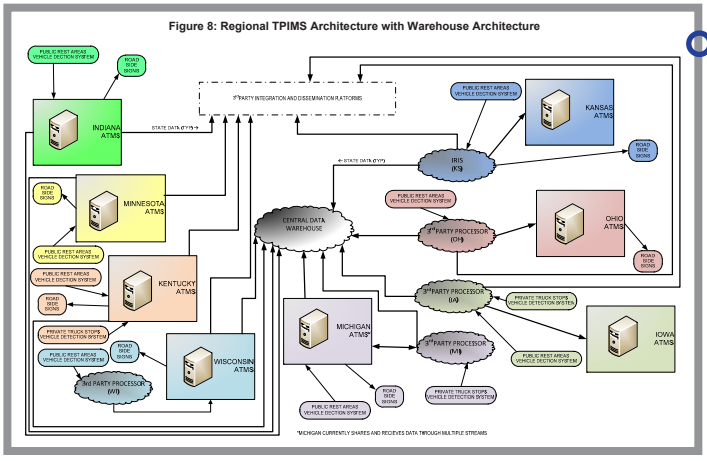
Element	Type	Description
siteId	string	Unique fixed-length identifier including state, route number, route type, reference post, side of road and unique location number or name abbreviation. See more detailed description in appendix.
timeStamp	string	Provides the date and time that the site record was last updated. See more detailed data and time representation description in appendix.
timeStampStatic	String	Provides the date and time that the site static record was last updated. See more detailed data and time representation description in appendix.
reportedAvailable	string	Number of available spots shared through the data feed. The number is capped at the total number of parking spots at the site and "Low" is reported if the low threshold is reached.
trend	string	Optional. Reports whether the site is emptying, steady or filling. Accepted values: **"CLEARING"** / **"STEADY"** / **"FILLING"** / **null**. See more detailed description in appendix.
open	boolean	Will report open unless the parking site is closed to parking for maintenance or another situation. Possible values: **true** / **false** / **null**

Data Feed: Summarizes the standard JSON data feed that each state will provide for their truck parking sites.

Detection Technology Evaluation: Assesses viable truck detection technologies for estimating truck parking space availability to help states choose their preferred detection technology.

Environmental Clearances: Determined that no environmental constraints prevented the use of selected parking sites or implementation of proposed technology.

Final Tech Memo: Summarizes all elements making up 30% design.



ITS Architecture Conformance: Describes how the TPIMS system relates to individual states' relevant ITS architectures so that they or their metropolitan planning organizations (MPOs) can update their ITS architecture.

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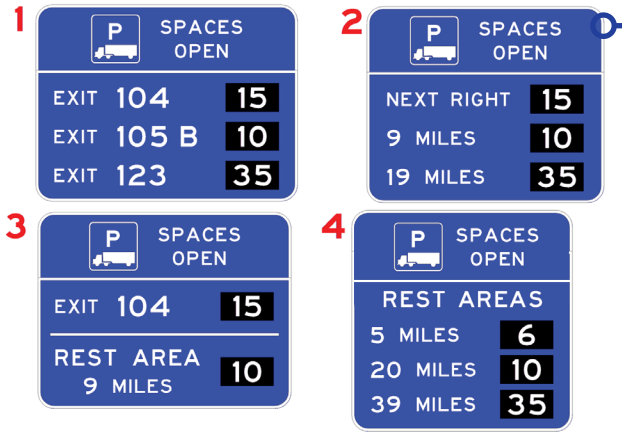
Marketing Communications Plan: Outlines the marketing and communication strategies and tactics to be used to maximize use of the TPIMS system.

Online Site Map Database: Provides an online visualization of the exact locations of TPIMS sites and their major attributes.

Refined Engineer's Opinion of Costs: Identifies likely system costs, taking into account the capital costs associated with deploying equipment at each site, sign (if applicable) along system software and integration efforts.

RFI Summary Memo: Summarizes responses from vendors who responded to three requests for information (RFI) having to do with detection technology, procurement and private industry participation and data sharing methods.

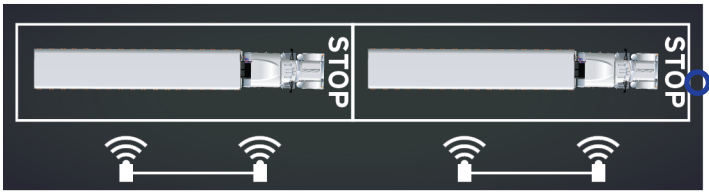


Sign Memo & Locations: Ensure consistency among all dynamic message signs placed on TPIMS corridors and how they should comply with Manual on Uniform Traffic Control Devices (MUTCD) standards and desirable minimum and maximum distances between signs and truck parking areas.

Statewide Block Diagrams: Shows how various system components should interact as data moves from individual sites to a state operation center, then on to distribution channels: dynamic message signs (DMS), traveler information sites and applications, or third party applications.

System Requirements: Provides the minimum requirements to be met by site technology and system operations along designated corridors.

Traceability Matrices: Serves as checklists to help partner states ensure they are meeting the minimum requirements as they design and operate the system.



Typical Site Layouts & Block Diagrams: Provides detail at a conceptual level about where equipment will be placed on every individual TPIMS truck parking site.

User Needs and Performance Measures: Summarizes the system's performance measures and how they will be documented in terms of meeting project goals and user needs.

For More Information

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