

TIGER PROPOSAL 2015

Regional Truck Parking Information and Management System (TPIMS)

CONTACT INFORMATION

Chris Herrick, Director of Planning and Development
Kansas Department of Transportation
Dwight D. Eisenhower State Office Building
700 S.W. Harrison Street
Topeka, KS 66603-3745

Phone number: (785) 296-3090

E-mail: chrish@ksdot.org

Grant Request: \$36.6M



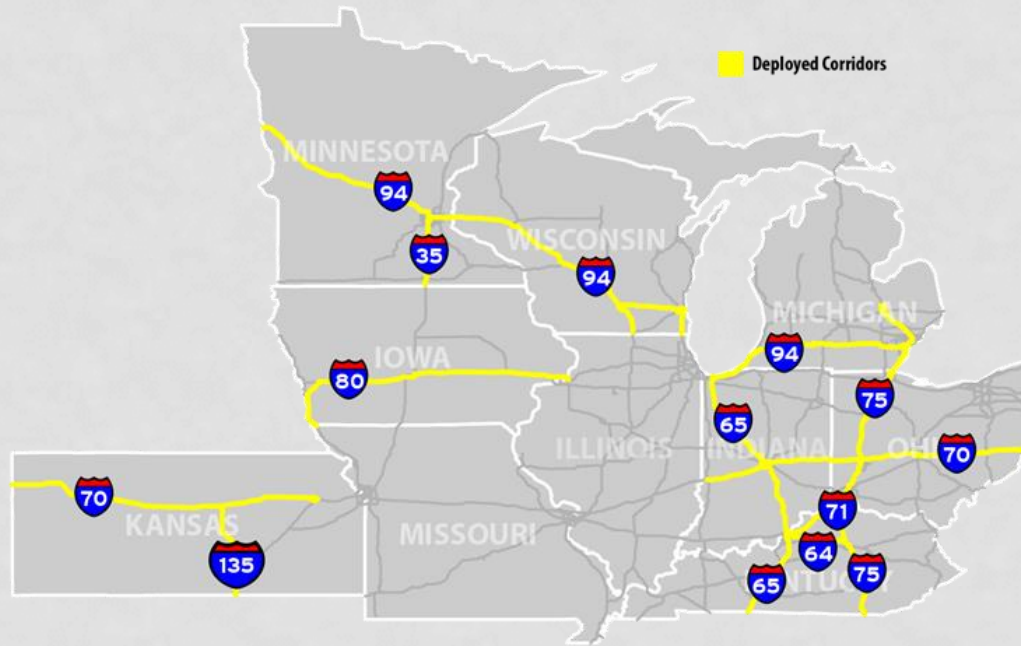
Freight Advisory Council
December 11, 2015

TIGER GRANT

- MAASTO Consortium (8 of 10 States)
 - Missouri and Illinois Opted out
- Applied for TIGER Grant
 - Regional Truck Parking Information and Management Systems
 - Focus on ITS technology to provide real-time data on parking availability at Private and Public truck stops and rest areas.
- Award for \$25 million
 - Request: Just over \$28.5
 - State match 10% of original

EXTENT

TRUCK PARKING INFORMATION DEPLOYMENT CORRIDORS



Corridor	State Deployed Across	Number of Deployed Rest Areas
I-35	Minnesota	3 DOT
I-64	Kentucky	2 DOT, 2 Private
I-65	Indiana, Kentucky	13 DOT, 5 Private
I-70	Ohio, Indiana, Kansas	32 DOT, 21 Private
I-71	Kentucky	1 DOT, 3 Private
I-75	Michigan, Ohio, Kentucky	14 DOT, 23 Private
I-80	Iowa	7 DOT, 10 Private
I-94	Michigan, Indiana, Wisconsin, Minnesota	16 DOT, 11 Private
I-135	Kansas	4 DOT

WHY

- Improve efficiency, economic competitiveness and safety of the national freight network
- Provide safe and reliable access to truck parking
- Reduce overcrowding at rest areas and truck stops
- Decrease unsafe commercial vehicle parking on shoulders and ramps
- Drivers ability to better manage hours of service
- I-35 Cameras



Truck Parking



Camera Images



HIGHLIGHTED BY JASON'S LAW

- MAP-21, Section 1401
- 2009 Tragedy
- Jason Rivenburg, Commercial truck driver
- Had a full load for delivery in South Carolina
- He was tired and sought a spot to pull over and rest
- No rest areas or truck stops available
- Parked at abandoned gas station
- Tragically, he was robbed and murdered

- Projects include a variety of options for increasing opportunities for truck parking.

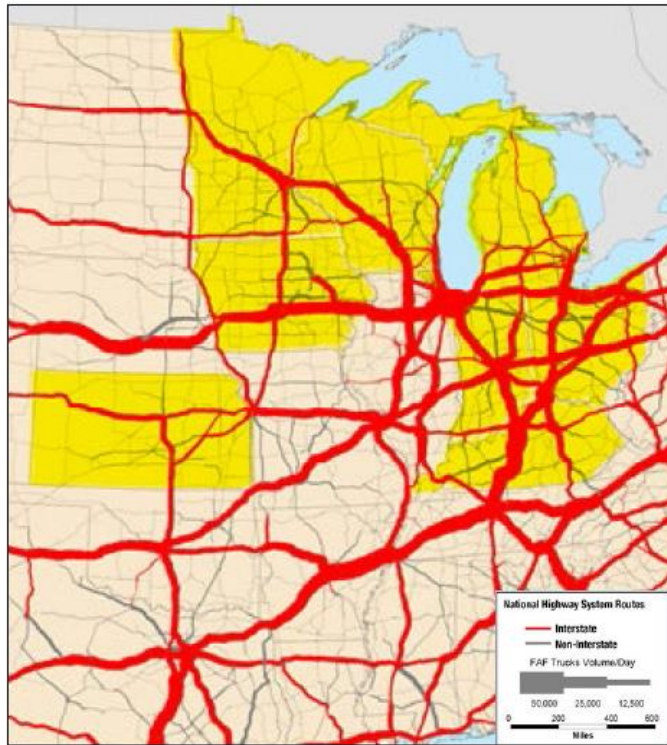
WHY MIDWEST

- Three states are already implementing systems
 - Michigan, Minnesota and Wisconsin
 - Implementing existing shovel ready technologies will provide a B/C ration of greater than **4.0**.
 - Already identified as a significant problem on the Midwest's congested freight corridors.
 - 8 States willing to invest
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- Safety Benefit
 - Travel Time Benefit
 - Environmental Benefit

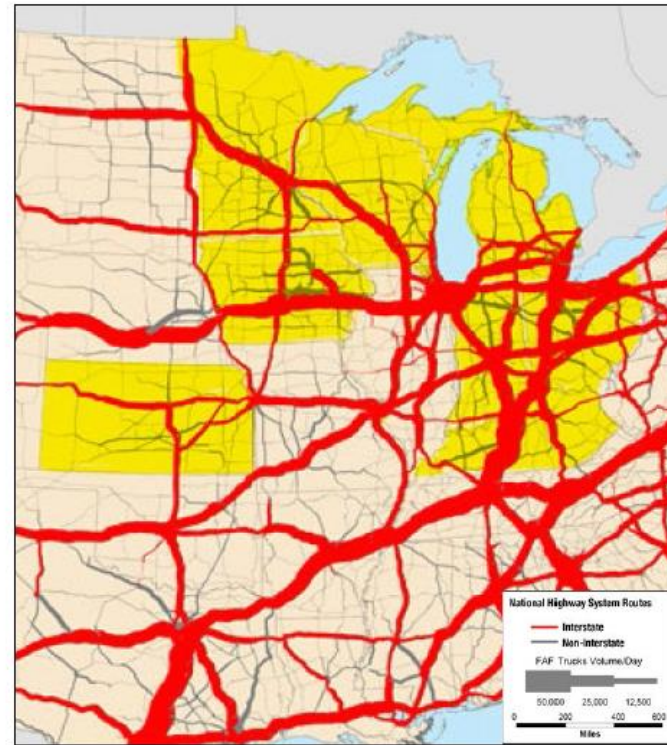


INCREASING TRUCK VOLUME

2011



2040



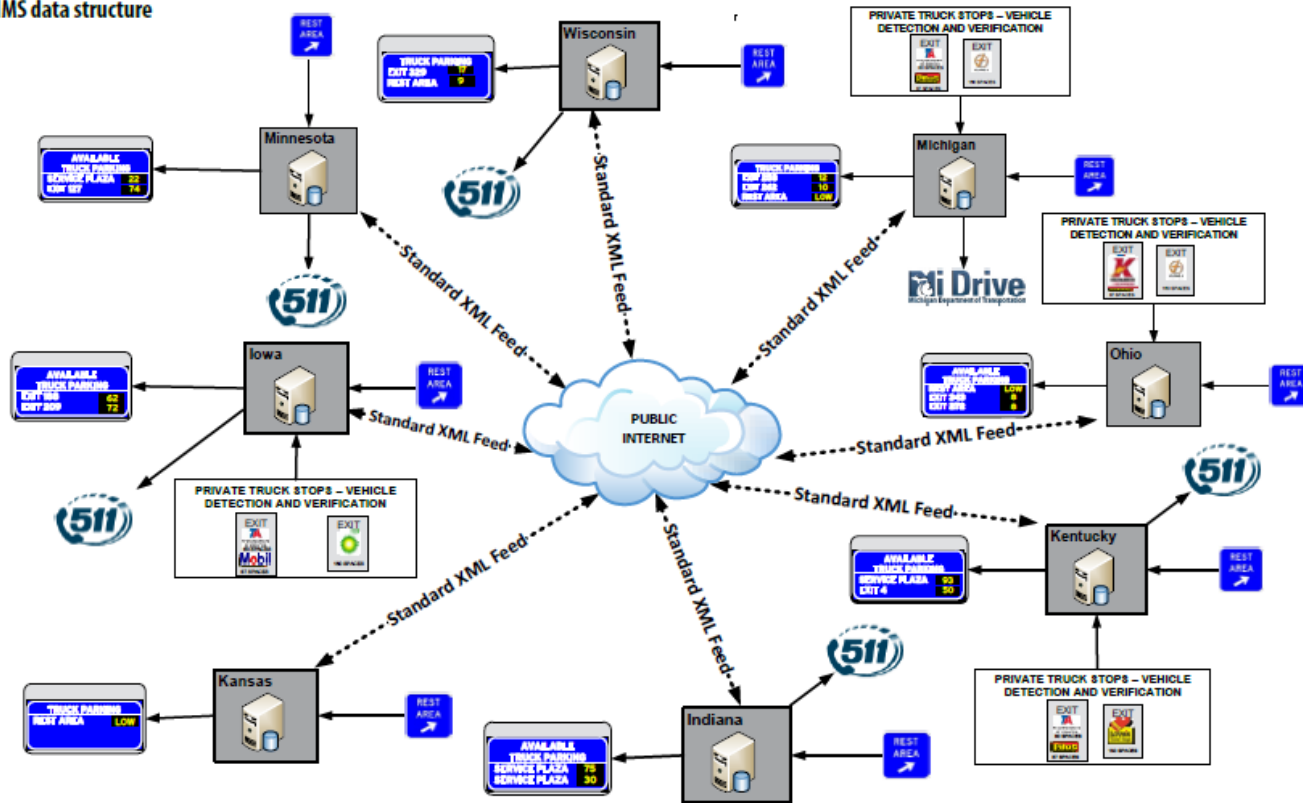
WHAT WILL IT LOOK LIKE

- Each state will design and implement its own system
- Regional integration is a must
- Combination of existing technologies
 - Digital message signs
 - In cab information systems
 - Smart phone application
 - Traveler Website (511)
 - Dedicated Short Range Communication
- CCTV
- Presence detection systems
- Traffic Detectors



ARCHITECTURE

Figure 3: TPIMS data structure



COMMUNICATION AND COOPERATION

- Private Owner Engagement
 - Apprehension mitigation
- Inter-state Data Sharing Agreements
- Technology Accuracy and Integration
 - Traffic count validation
- Kansas DOT Lead State for Overall Project Management



