A Roadmap for Complex Regional Transportation Projects

MAASTO TPIMS Project

78% of drivers report it takes them more than 30 minutes to find parking

THE PROBLEM
Long-haul truck drivers struggle to find safe parking.
Time searching reduces freight productivity. Fatigue and unauthorized parking puts truck drivers and other motorists at risk.

THE SOLUTION
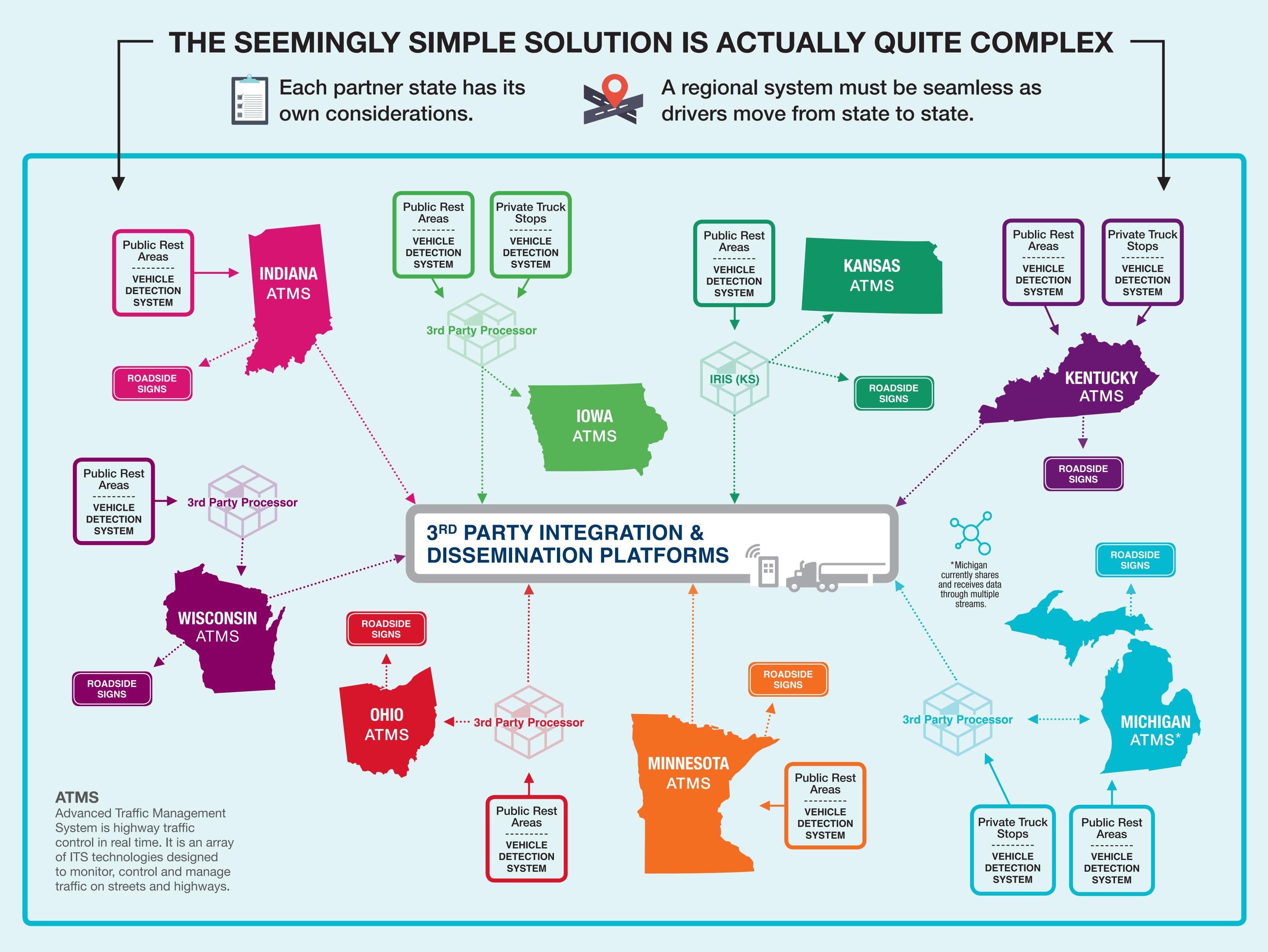### Monitor parking availability and deliver it real time to drivers.
Eight members of the Mid America Association of State Transportation Officials came together in 2016 to create a user-focused parking availability information service.
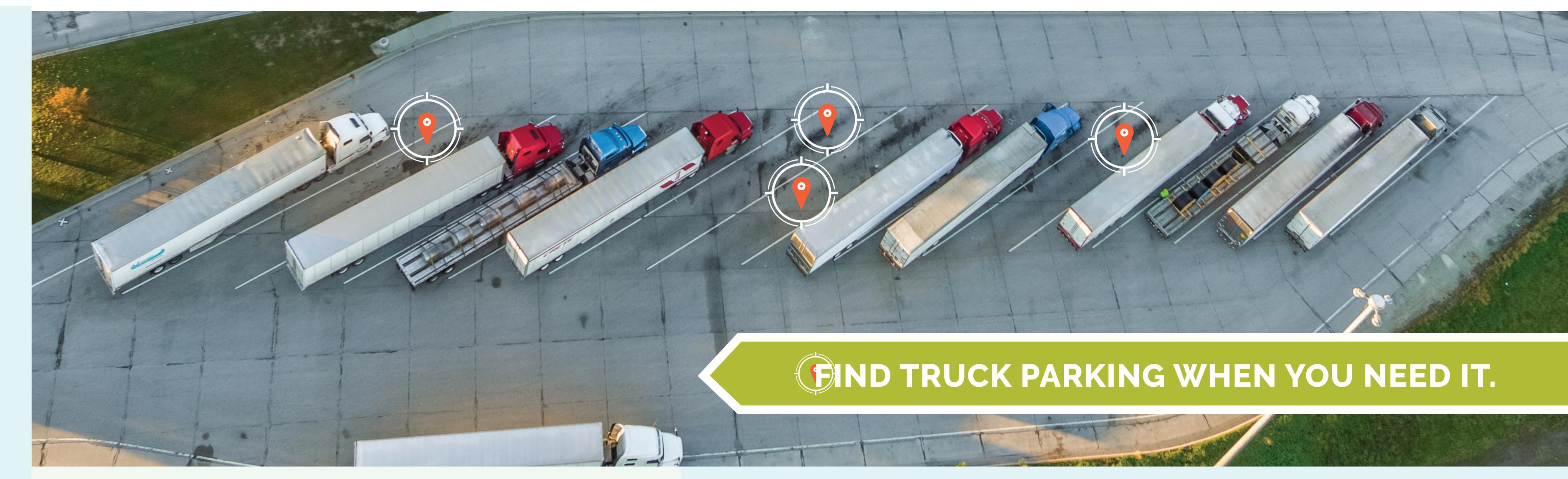
8 States, 1 System
A regional technology initiative requires reconciling different, sometimes conflicting, agency technical preferences and requirements, including procurement, data collection, maintenance and data sharing.

THE SEEMINGLY SIMPLE SOLUTION IS ACTUALLY QUITE COMPLEX

Each partner state has its own considerations.

A regional system must be seamless as drivers move from state to state.

INDIANA ATMS — Public Rest Areas VEHICLE DETECTION SYSTEM / Private Truck Stops VEHICLE DETECTION SYSTEM / 3rd Party Processor / ROADSIDE SIGNS

KANSAS ATMS — Public Rest Areas VEHICLE DETECTION SYSTEM / IRIS (KS) / ROADSIDE SIGNS

KENTUCKY ATMS — Public Rest Areas VEHICLE DETECTION SYSTEM / Private Truck Stops VEHICLE DETECTION SYSTEM / ROADSIDE SIGNS

IOWA ATMS

WISCONSIN ATMS — Public Rest Areas VEHICLE DETECTION SYSTEM / 3rd Party Processor / ROADSIDE SIGNS

3RD PARTY INTEGRATION & DISSEMINATION PLATFORMS

*Michigan currently shares and receives data through multiple streams.

OHIO ATMS — ROADSIDE SIGNS / 3rd Party Processor

MINNESOTA ATMS — ROADSIDE SIGNS / Public Rest Areas VEHICLE DETECTION SYSTEM / Public Rest Areas VEHICLE DETECTION SYSTEM

MICHIGAN ATMS* — ROADSIDE SIGNS / 3rd Party Processor / Private Truck Stops VEHICLE DETECTION SYSTEM / Public Rest Areas VEHICLE DETECTION SYSTEM

ATMS
Advanced Traffic Management System is highway traffic control in real time. It is an array of ITS technologies designed to monitor, control and manage traffic on streets and highways.

1. Vehicle detection systems measure available parking
2. Parking data then goes to states and 3rd party processors
3. Data is delivered to drivers through:
   + Dynamic message signs   + Navigation applications and systems   + 5-1-1 websites

The Technology
Deployed along the region's high-volume freight corridors using existing ITS infrastructure and emerging vehicle-detection and data-collection technologies.

Monitored lots selected based on factors such as trucking volume, parking demand and capacity for improvements.

SYSTEMS USED TO MONITOR PARKING AVAILABILITY VARY BY STATE:
+ In-ground sensors (magnetometer)
+ Gates
+ Camera/video

STATES OPTED TO SHARE FREE, REAL-TIME DATA FEEDS THROUGH:
+ Dynamic messaging signs
+ Navigation apps and in-cab navigation systems
+ 5-1-1 travel websites

FIND TRUCK PARKING WHEN YOU NEED IT.

Dynamic messaging signs let drivers know how many parking spots are available in real time.

OPEN SPACES — REST AREAS: 7 MILES, 34 MILES, 78 MILES

Keys to Project Success
- **Focus on outcomes**
- **Communicate early & often**
- **Link goals & performance**
- **Define roles clearly**

Anticipated Results
- Fewer fatigue-related accidents
- More efficient, profitable freight flows
- Stronger freight networks

LEARN MORE
TPIMS provides important lessons for developing complex, multi-jurisdictional technology projects, while integrating individual agency needs.

READ THE FULL WHITE PAPER » TrucksParkHere.com

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