



# FMCSA Truck Parking Update

Date: December 17, 2024

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U.S. Department of Transportation

**Federal Motor Carrier Safety Administration**

# FMCSA's Truck Parking Goal and Objectives

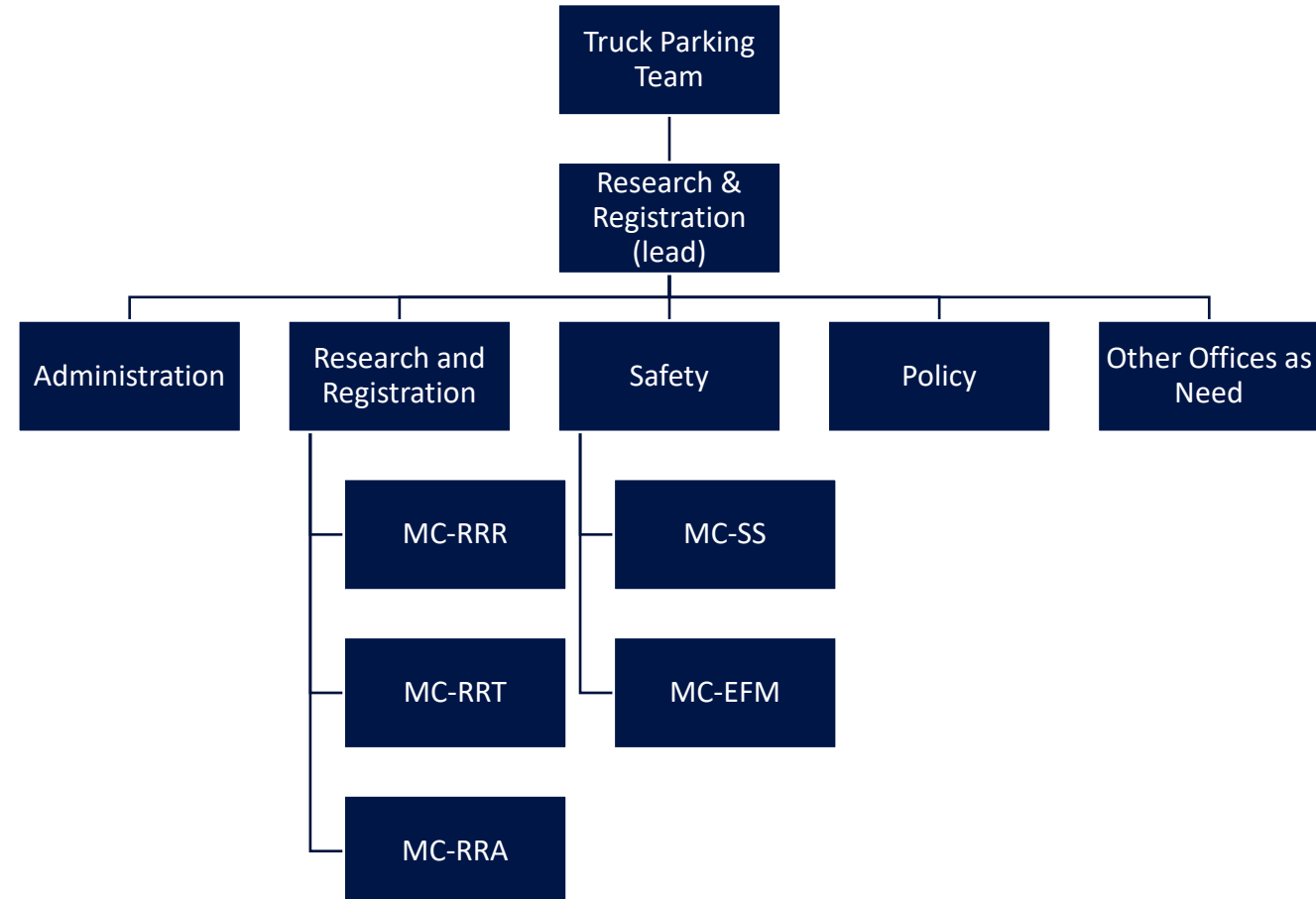
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- **Goal**
  - To improve the safety and security of CMV drivers.
- **Objectives**
  - Complement FHWA and the USDOT Truck Parking Working Group by:
    - Advancing the adoption of technology that helps drivers obtain truck parking availability information.
    - Identifying new methods and data sources for measuring truck parking demand and understanding the costs and benefits of parking solutions.
    - Engaging with industry on new solutions for truck parking information in a connected environment.

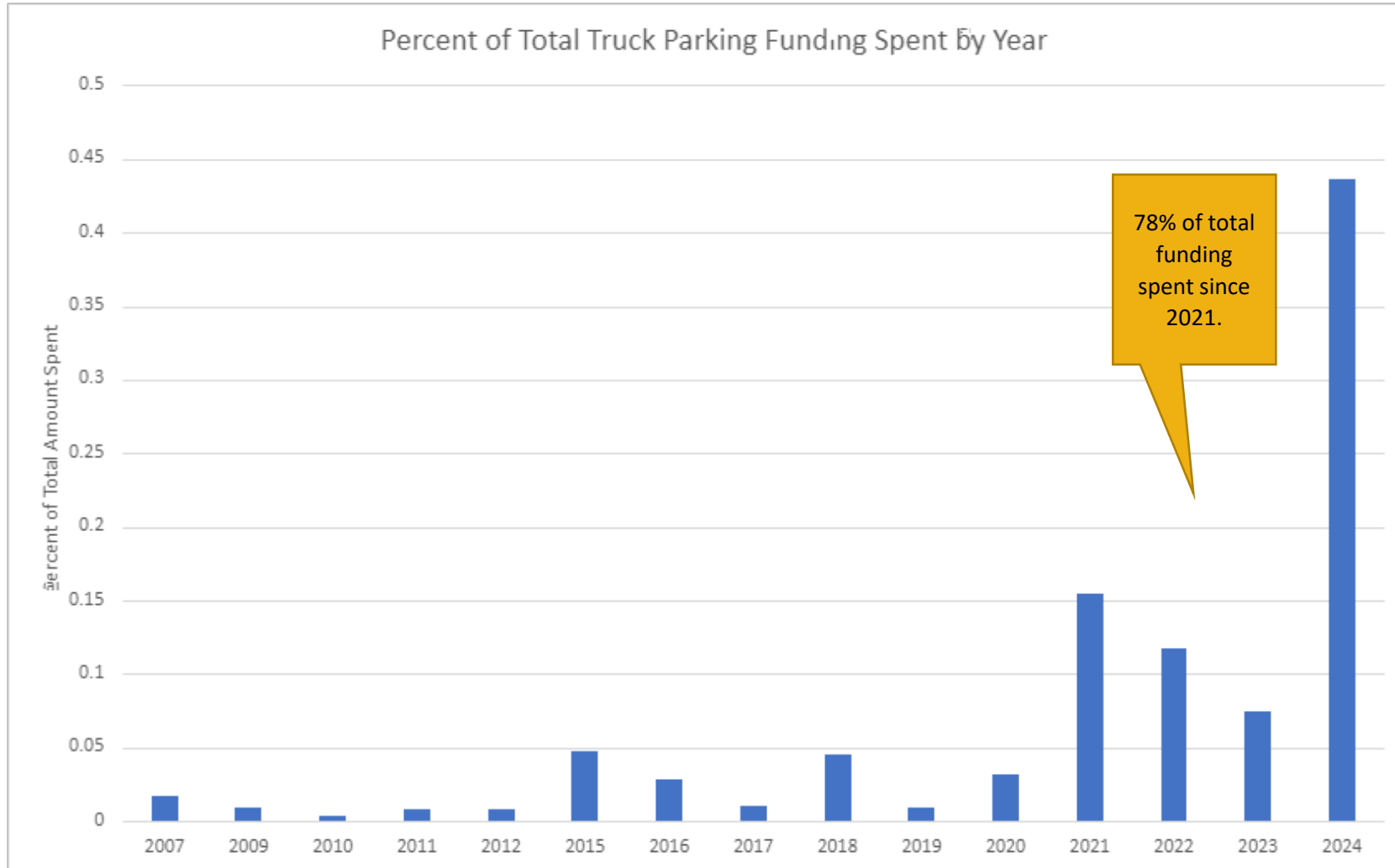
# FMCSA Truck Parking: Truck Parking Team and Action Plan

What is the FMCSA Truck Parking Team?

- Intra-agency, group to align with FHWA led Truck Parking Working Group (TPWG)
- Sharing information on activities, plans, and TPWG updates
- Truck Parking Action Plan
  - Aligns with TPWG
  - Identifies the breadth of FMCSA actions and opportunities on truck parking
  - Establishes short- and long-term steps
  - Includes:
    - Outreach/industry listening, communication, advocacy
    - Grants
    - Technology
    - Research (Data and Analysis)
    - Policy
    - Safety information/data collection



# Truck Parking Funding by USDOT



Note: There may be other projects funded as part of larger efforts not included in the project tally. Tally maintained by Truck Parking Working Group/FHWA.

# FMCSA Funding for Truck Parking

Year	State	Type	Project	Amount
2018	Delaware	HP-ITD	Truck parking Information System	\$347,237
2020	Texas	HP-CMV	Truck Parking App	\$490,000
2021	Connecticut	HP-ITD	Truck Parking Information Management System	\$1,467,559
2021	Indiana	HP-ITD	Truck Parking Information Management System	\$850,000
2021	Washington	HP-ITD	Truck Parking Technology	\$1,999,752
2022	Texas	HP-CMV	Study of Drivers and Parking	\$350,000
2022	Kentucky	HP-ITD	Truck Parking Information Management System Expansion	\$300,000
2022	Montana	HP-ITD	Truck Parking Information Management System	\$1,145,947
2023	Texas	HP-CMV	Study of Drivers and Parking	\$370,000
2023	Delaware	HP-ITD	Truck Parking Information Management System Expansion	\$320,960
2023	Indiana	HP-ITD	Truck Parking Technology	\$2,000,000
2023	Kentucky	HP-ITD	Truck Parking Information Management System Expansion	\$1,270,400
2024	Massachusetts	HP-CMV	Real Time Curb Management for Commercial Vehicles	\$624,000
2024	Indiana	HP-ITD	Truck parking Information Management System	\$2,000,000
2024	South Dakota	HP-ITD	Truck Parking Information Management System	\$912,133

Total \$14.5 M invested in Truck Parking since 2018. FMCSA funding is limited to technology and safety-related projects.

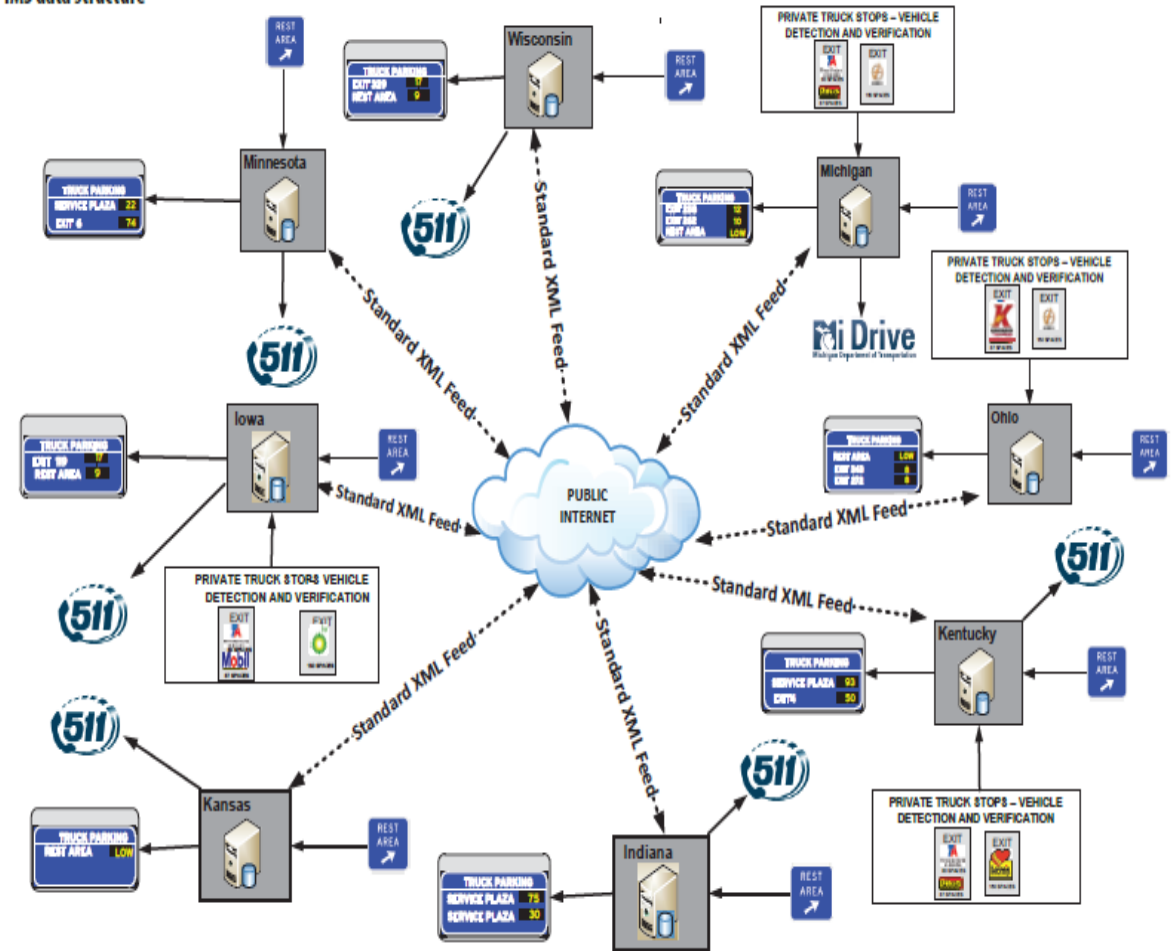
# Truck Parking Information Management (TPIMS) Activities

- Outreach and Education to Improve TPIMS
- Facilitation of Improvement Efforts
- Exploring TPIMS Alternatives (Data Analysis and Mobile Apps)
- Technology and Standards Development



Source: <https://www.truckersnews.com/news/article/15060658/i-94-truck-parking-information-system-expands>

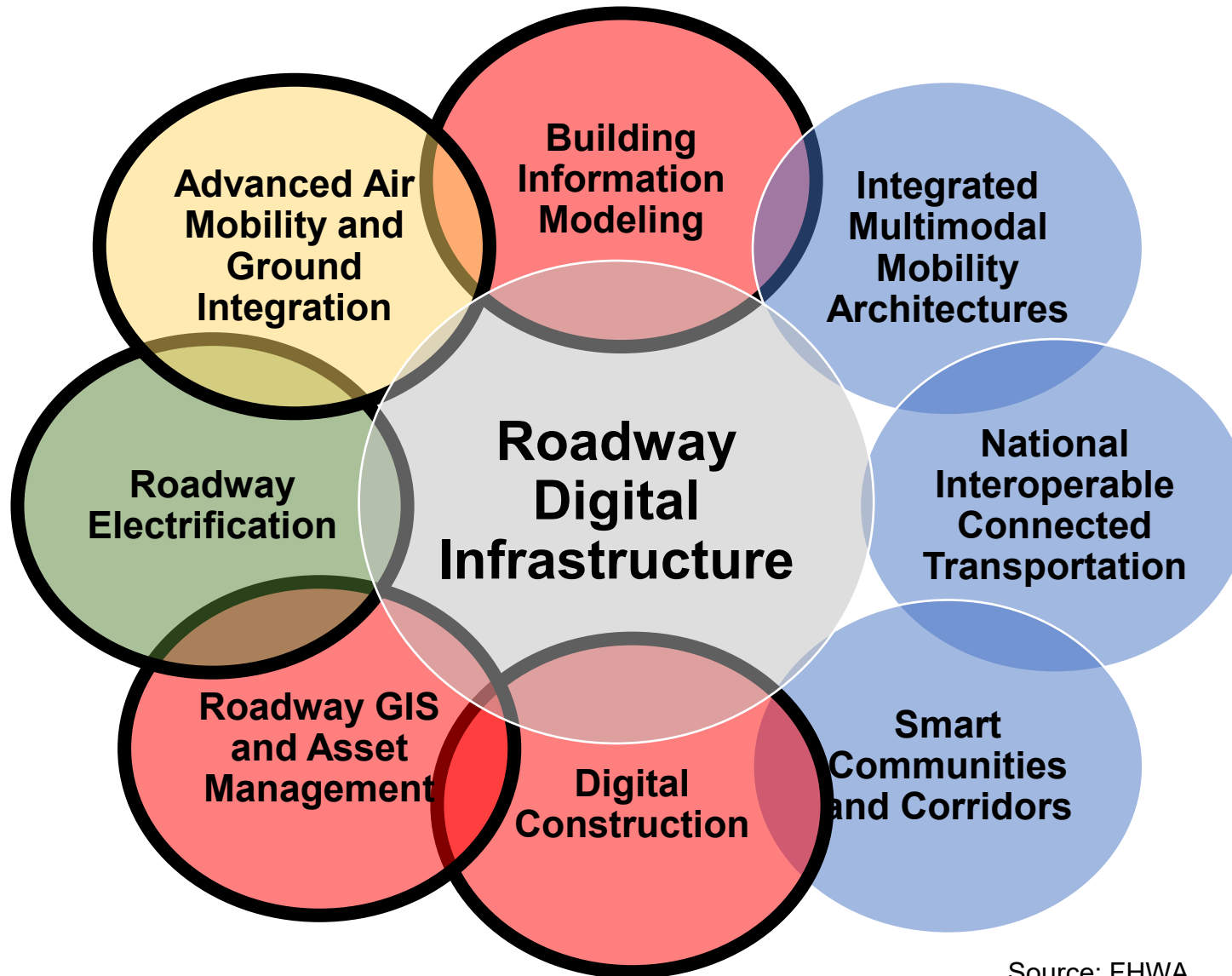
Figure 3: TPIMS data structure



Source: Regional Truck Parking Information Management System (TPIMS), Kansas Department of Transportation, MAASTO, 2015.



# Roadway Digital Infrastructure as a Catalyst for Insights



Source: FHWA



# Information Systems

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- Camera/sensor/laser information systems
- Probe data experiments
- Apps

## Challenges

- Expensive to maintain, expensive to implement
- Technology rapidly changes
- Standards are not set, messaging is not consistent
- Technology sometimes is inaccurate; drivers need accurate information
- Apps may not be what they seem (who is behind the app, what information is being shared).
- Monetization of information and spaces; yet another cost to drivers



# ITS JPO Truck Parking Data Exchange



SET OF  
RECOMMENDED  
STANDARDS FOR  
TECHNOLOGY AND  
DATA FLOW



LISTING OR  
REPOSITORY OF  
OFFICIAL DATA  
FEEDS AND  
INFORMATION  
LINKS TO SUPPORT  
APP DEVELOPERS



CYBER ISSUES  
FRAMING



EXPLORATION OF  
OTHER PARKING  
AVAILABILITY  
OPTIONS



INDUSTRY  
WORKING GROUP

# Recent Truck Parking Related Accomplishments

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## Grant Awards

- Truck Parking Information Systems
- Research on Truck Parking Technology
- Recently awarded \$624K HP-CMV (Univ. of Mass). and \$2.9M (IN and SD) in HP-ITD; 9% of HP-ITD.

## Oversize and Overweight CMVs

- Joint FMCSA FHWA research on OSOW truck parking issues.

## Innovative Technology Deployment (ITD) Program

- Outreach and information sharing to States via the Innovation Technology Deployment Program (ITD) on Truck Parking Information Systems.

## Benefit Cost of Truck Parking Research

- Understanding, quantifying, and visualizing the benefits and costs of truck parking shortages; evaluating the safety impact.

# Recent Truck Parking Related Accomplishments- Continued

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## ITS JPO Truck Parking Data Exchange Project development

- Helping to establish data, messaging, and tech standards for TPIMS to ensure accurate and reliable driver safety information.

## Research on Truck Parking Information Systems Challenges

- To understand the challenges in TPIMS adoption and maintenance.

## Emergency Truck Parking Resources

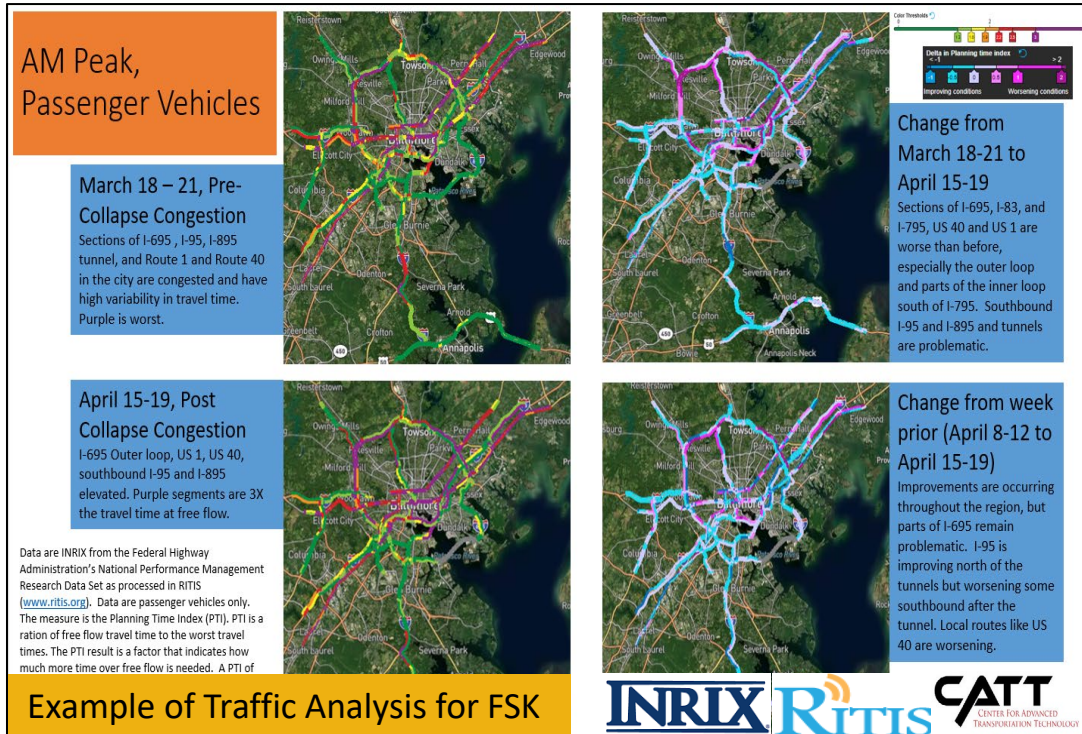
- Supported Maryland DOT during FSK; helped coordinate truck parking options (public and private).
- Working with the Eastern Transportation Coalition, FHWA, and States to advance best practices and ideas for emergency parking solutions.

## Evaluating New Parking Options and Safety/Cybersecurity

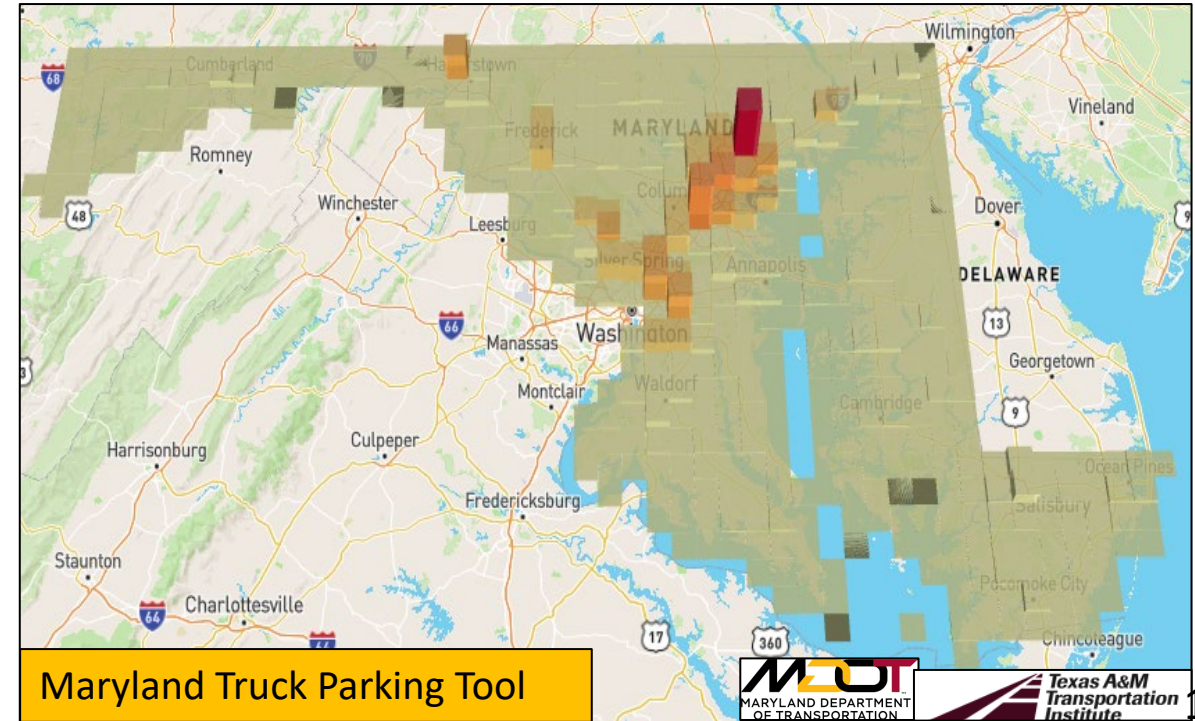
- Exploring new private sector information apps (Truck Parking Club) and impacts on parking, information for drivers, and cybersecurity vulnerabilities.

# Emergency Response Analysis

- Need emergency truck parking
  - Temporary leases
  - State and local auxiliary parking options
- Truck parking data (stopped trips) can help identify priority areas and options
- Data to show truck flows by commodity type would help decision-making



Example of Traffic Analysis for FSK



## Next Steps

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- Truck Parking Information Management Data Exchange with FMCSA, FHWA, ITS JPO
- Truck parking demand dashboard and additional analytics
- Solution oriented analysis of return on investment; costs and benefits
- Completion of safety analysis of oversize and overweight truck parking issues
- Continued partnership with stakeholders



# For More Information

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# Questions for the MCSAC Members

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- Truck parking funding exists, but the ability for eligible recipients to build projects is challenged by federal funding and commercialization requirements. What are some opportunities that might work to improve the use of funding? What public private arrangements might improve the implementation of truck parking capacity and or technology?
- Emerging private sector applications may appear useful but may introduce vulnerabilities for industry in safety and economics. What are the concerns MCSAC has with the emergence of apps, the ownership of these apps, information that is shared, etc.?
- Are MCSAC members aware of any gaps in data that we should explore to help support agency efforts or for broader national purposes? How can we navigate proprietary data concerns where data can help us prioritize investments or improve parking availability information but may also be sensitive?