

Truck Parking Challenges, Solutions and the Wide-Ranging Impacts

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TSIS

TRUCK SPECIALIZED INFORMATION SERVICES

Over 1 million
accident-free
over-the-road
miles



Approx ¼ million
pounds of grain a
year ago



- Truck Parking: Overview
- Action, Big Picture
- Agnostic look at TPIMS technology
- Funding options
- Questions

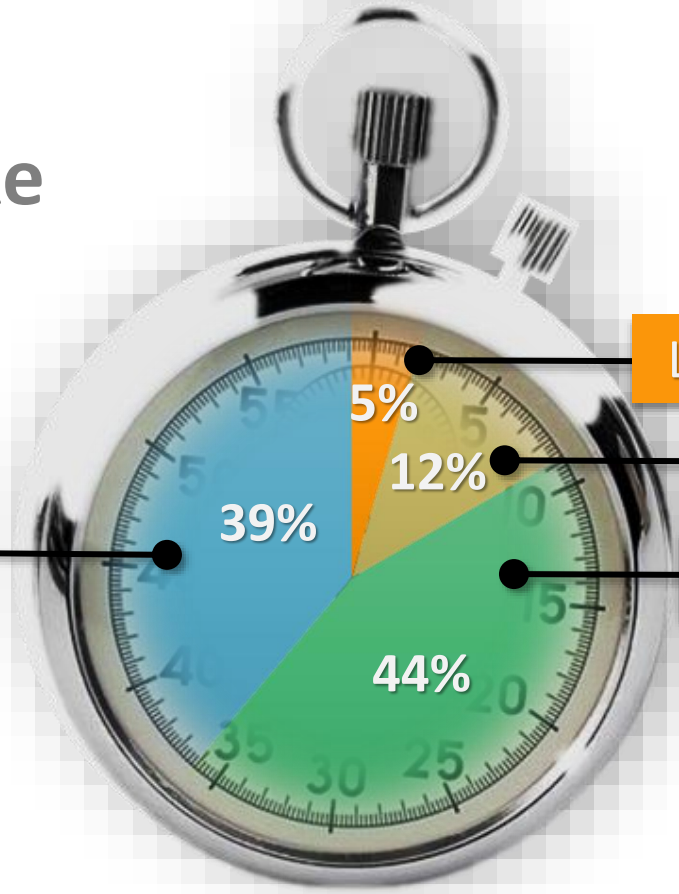


Truckers face multiple challenges

How long does it take to park?

ELD tracking to the second


1 HOUR OR LONGER




Less Than 15 Minutes

Less Than 30 Minutes

Less Than 60 Minutes

 *Sum of all states' DOT inventory, averages less than 10% of existing inventory.*

 *ELD has exacerbated the parking problem.*

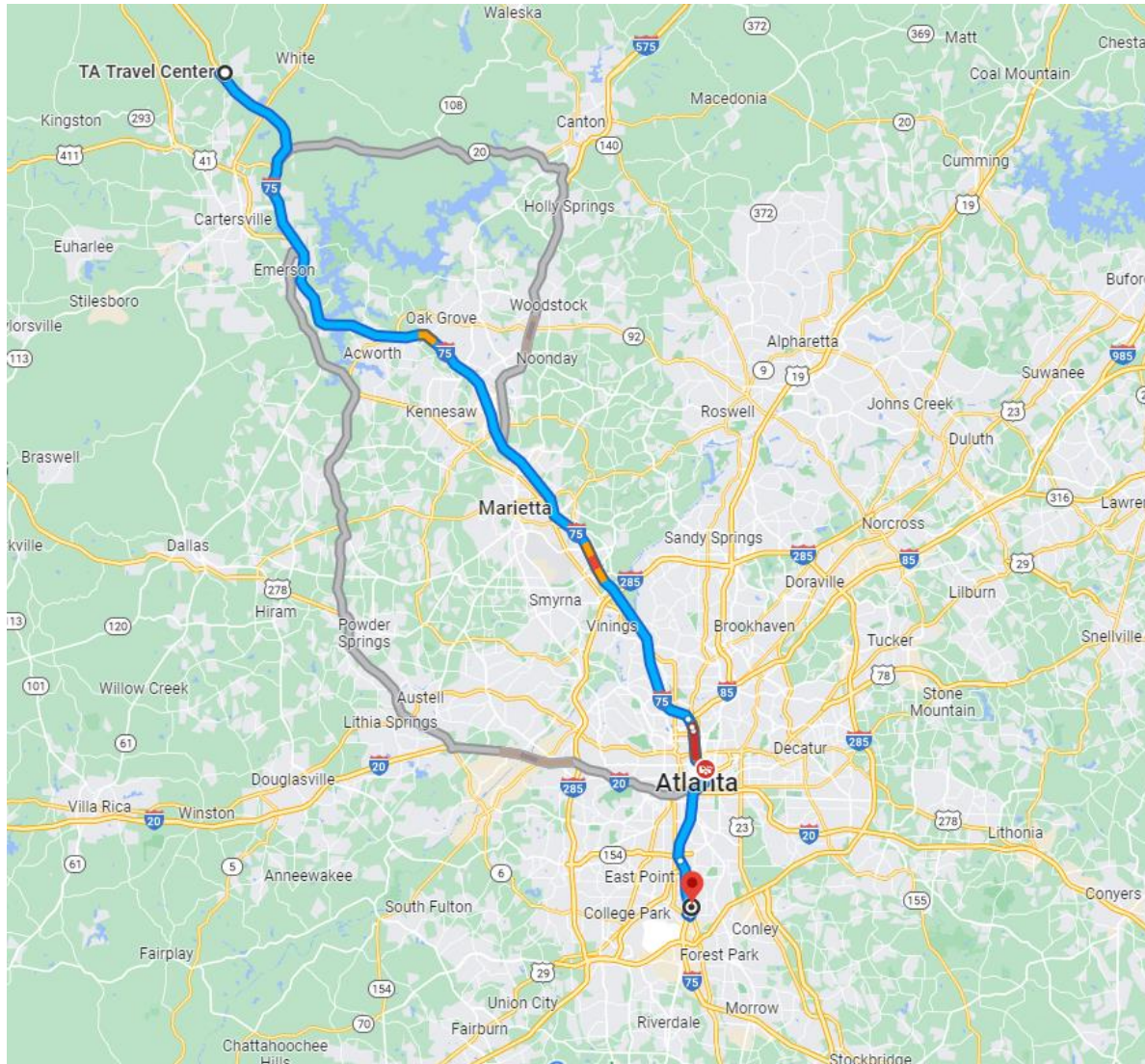


Not in control of time

- Shippers/receivers control loading/unloading times
 - “Plan A” can quickly become plan E or F or worse.
- No crystal ball on the dashboard of the truck

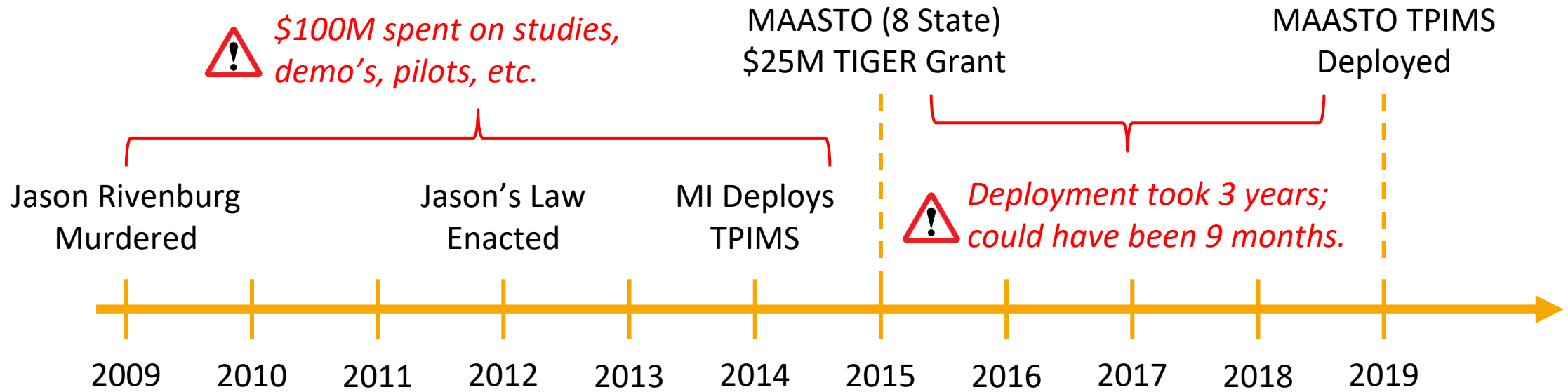
Truck Parking Tax

60 miles, untold amounts of traffic delays



- **Co2 & particulate emissions**
- **Anger, frustration**
- **Lost productivity**

4 Years... MAASTO Deployed



Michael Boeglin Murdered

Remains of Michael Boeglin's Truck



To address this safety, economic and quality of life issue, the Ohio Department of Transportation (ODOT) is requesting \$2.5 million in RAISE Planning Grant funding to conduct a Truck Parking Siting and Design Study that will lead to the development of ten truck parking sites throughout the state in locations that will yield the greatest safety, capacity, and freight network benefits.

Locations to be studied include land owned by the State of Ohio, such as abandoned rest areas, weigh stations and excess land parcels, and sites located adjacent to existing private truck stops.



U.S. Department of Transportation
Federal Highway Administration

Office of the Administrator

1200 New Jersey Ave., SE
 Washington, D.C. 20590

Notice of Enforcement Discretion

Operation of Commercial Food Trucks in Federally Funded Interstate Highway Rest Areas

During the Public Health Emergency (COVID-19)

U.S. Department of Transportation

Federal Highway Administration

As a general matter, Federal law, codified at 23 U.S.C. 111, prohibits commercial activity in Interstate Highway rest areas as a condition of Federal funding. Nevertheless, in administering the Federal-aid highway funding program, the FHWA Administrator is given wide discretion under 23 CFR 1.36 to enforce the requirements of section 111 through compliance actions that the Administrator determines are appropriate under the circumstances.

The Nation is experiencing extraordinary and unprecedented circumstances due to the current COVID-19 national public health emergency, in which States have been forced to close restaurants and other available food service accommodations, including in Interstate Highway rest areas. FHWA recognizes that in those States food trucks may provide vital sustenance for interstate commercial truck drivers and others who are critical to the Nation's continued ability to deliver needed food and relief supplies to the communities impacted by the economic disruptions and healthcare strains caused by COVID-19. FHWA also recognizes that in such circumstances, vending machines may not be adequate to provide the necessary sustenance, and in many cases the vending machines may not be regularly stocked at the present time.

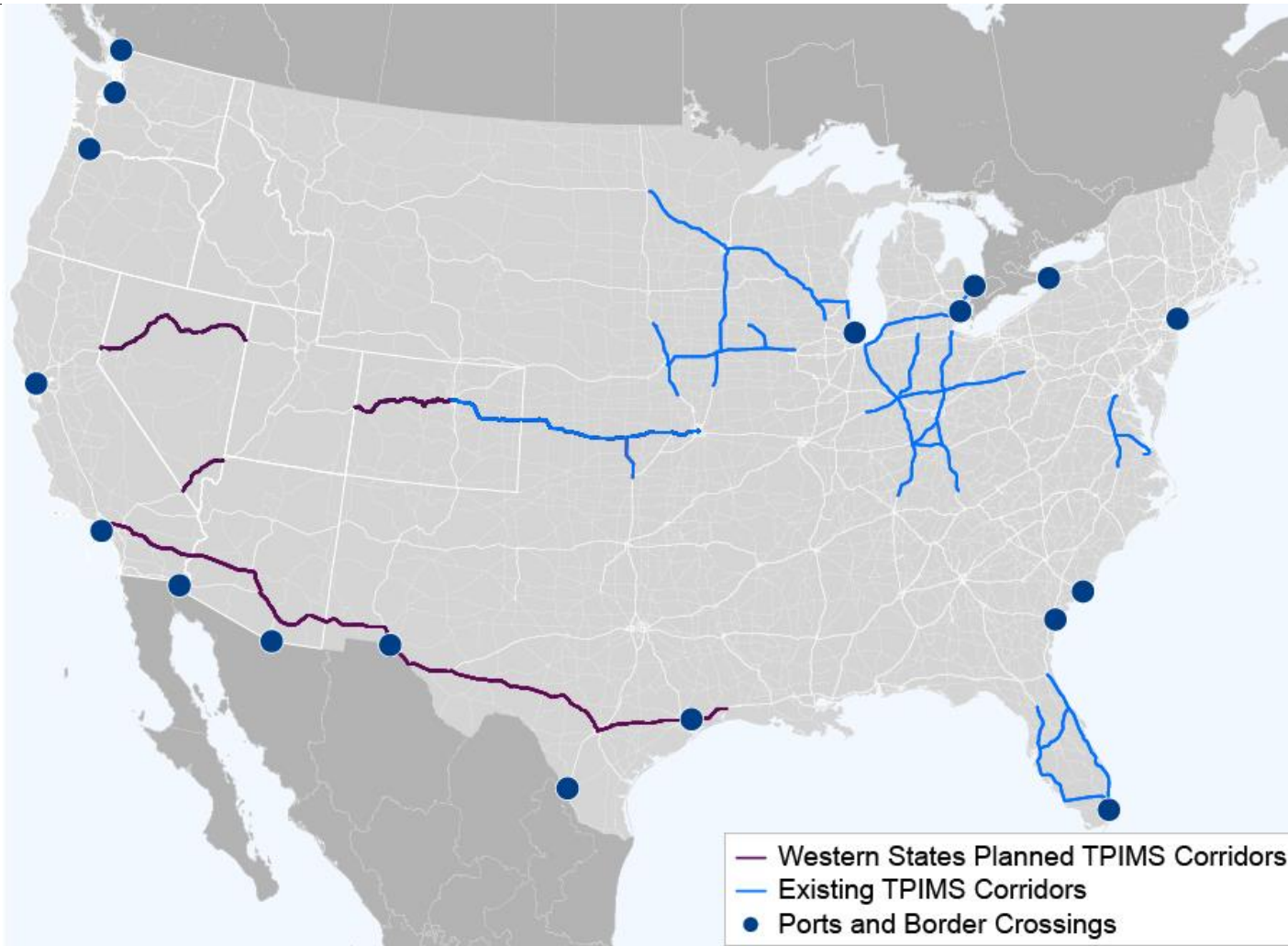
Accordingly, for the duration of the national emergency declared by the President on March 13, 2020, in response to the COVID-19 public health emergency, if a State determines that permitting food trucks to operate and sell food in any designated federally funded Interstate Highway rest areas is necessary to support interstate commercial truck drivers, FHWA will refrain from taking any remedial action under the Federal-aid highway program against that State. States must come back into compliance with the applicable restrictions of section 111 once the presidentially declared emergency ends. Any State that fails to come back into compliance after the end of the declared national emergency will be subject to potential remedial measures. Additionally, in accordance with 23 U.S.C. 156(b), for the limited purpose of permitting food trucks to operate as described in this notice, FHWA grants an exception during the COVID-19 emergency to the requirement to charge fair market value for the sale, use, lease, or lease renewal of any real property acquired with Federal assistance.



A very incomplete network

Fill in the Gaps

Connect a
North American Truck
Parking Network



Complete the Network

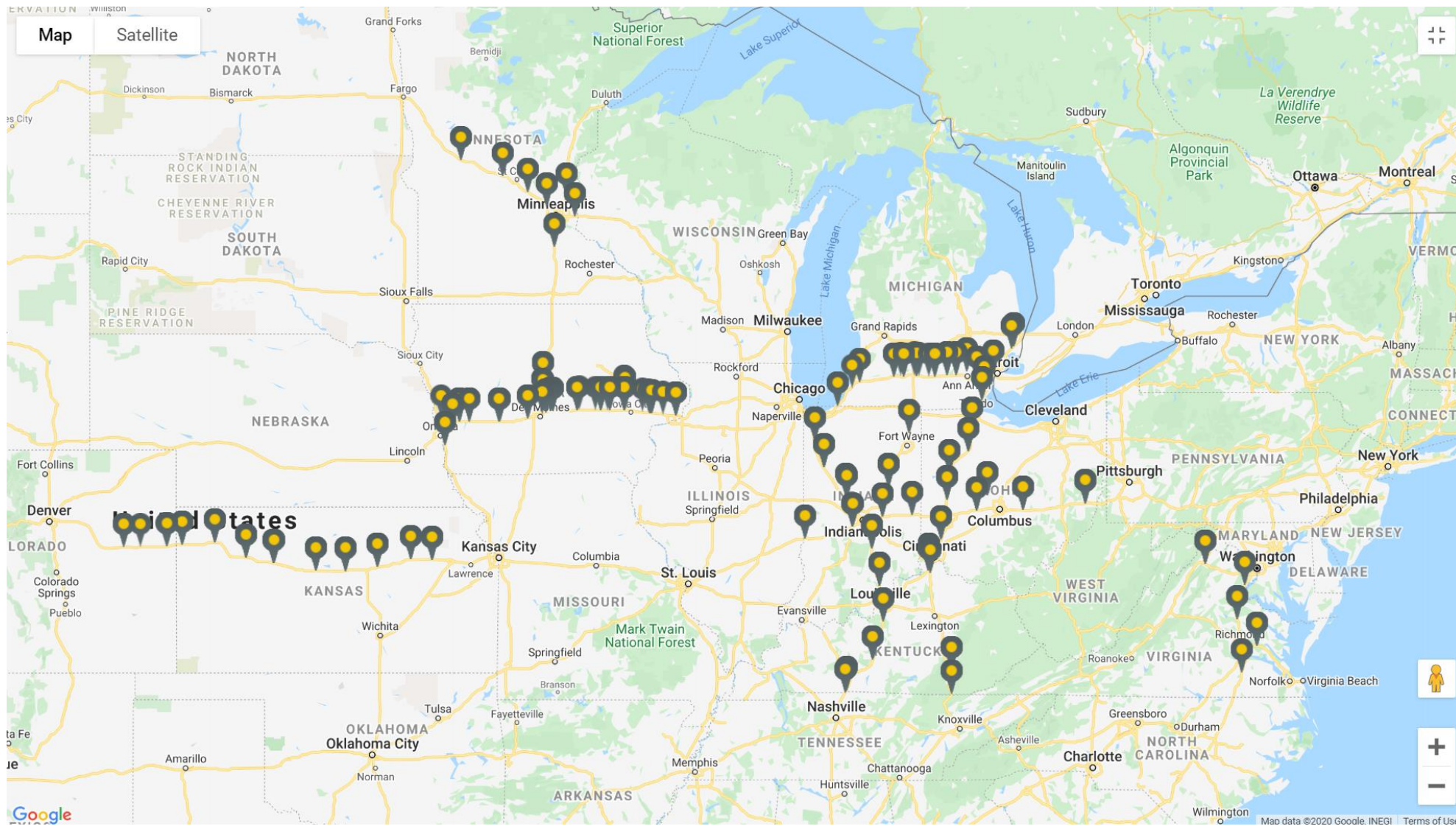
Successfully implement
private truck stops as
part of the network

(such as Michigan, Iowa,
Colorado already have)

Not enough inventory!
At the time and place truckers need it.

Not enough information!
Not real-time to make decisions.

Multi-state, but Gaps



Gathering Information

- **Screenline** –Sensor at entrance/exit to facility.
 - This allows for a counting of every vehicle between the entry exit, including unauthorized parking.



Gathering Information

- Spot specific-** Pucks installed at each space allow for a minimal amount of extra data.
 - Puck in pavement within the parking spaces fail at alarming rate. FDOT, 30 days in 10% had failed. IA DOT majority of sensors have failed (some adjustments can be made).
 - IA DOT replacing them with modern radar-based sensors.



Sensor types

- Magnetometer (puck)
 - Lowest upfront cost
 - Invasive install
 - Short lifespan (dramatically shorter than battery lifespan)
 - Minimal data (metal object above, or not)



Sensor types

- Video Analytics
 - Above ground install (not invasive)
 - Potential for additional data about vehicles
 - Can work well in good weather
 - Weather is not always good



Sensor types

- Modern High Frequency Radar
 - Above ground simple install (not invasive)
 - Accurate in all weather (Rain, Snow, Fog, Smoke, Low Light)
 - Additional data about vehicles (FHWA categories)



Lessons learned from real-world experience

- Talk with other states, learn, then act.
- Include private truck stops in plans!!! (Showers, Hot food, Supplies)
- Ensure private truck stops actually are delivered.
- Insist on standards compliance (API feed, site descriptions).
- Include operations and maintenance.
 - Can this be from data budget?
- Pursue funding with other states to build a network.
- Look at all funding options (FMCSA for technology solutions).




U.S. Department
of Transportation
Federal Highway
Administration

Federal Motor
Carrier Safety
Administration

Memorandum

Subject: **INFORMATION:** Eligibility of Title 23
and Title 49 Federal Funds for Commercial
Motor Vehicle Parking
(Updated)

Date: September 20, 2022

From: Martin C. Knopp 
Federal Highway Administration
Associate Administrator for Operations

In Reply Refer To:
HOFM-1

Tom Keane THOMAS P KEANE Digitally signed by THOMAS P KEANE
Date: 2022.09.16 22:47:43 -04'00'
Federal Motor Carrier Safety Administration
Associate Administrator for Research and
Registration

To: Division Administrators

The purpose of this memorandum is to provide information on funding eligibility for commercial motor vehicle parking projects and to highlight the new requirements for commercial motor vehicle parking assessments as part of State Freight Plans to support safe and efficient movement of freight on the National Highway System and other major roads.

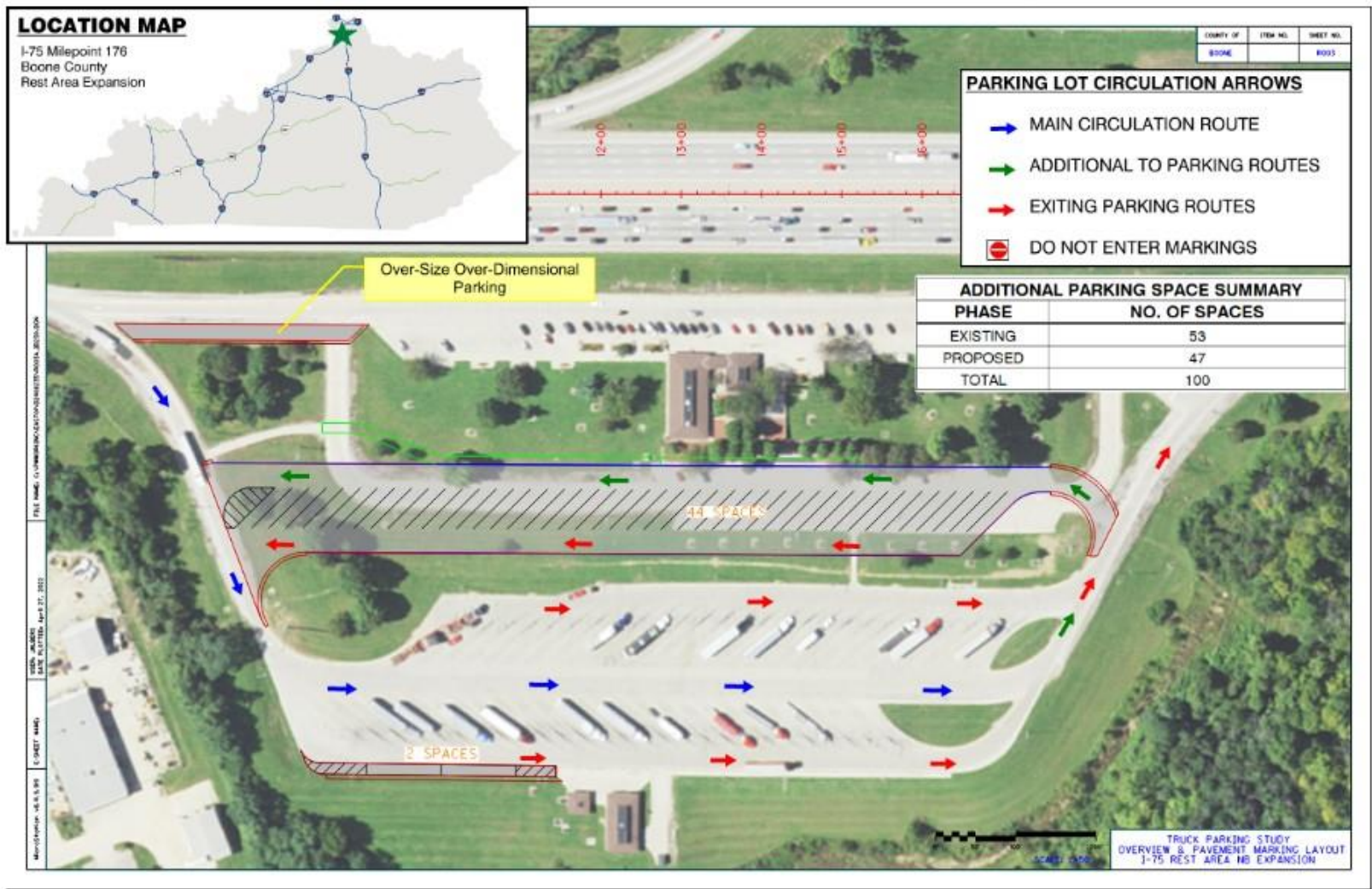
**15 different silos
of funding
available for
truck parking
from FHWA and
FMCSA**



- What assets are available for capacity expansion?
 - Former weigh stations
 - Former rest areas (truck parking only)
 - Former construction staging areas
 - Any P3 opportunities?

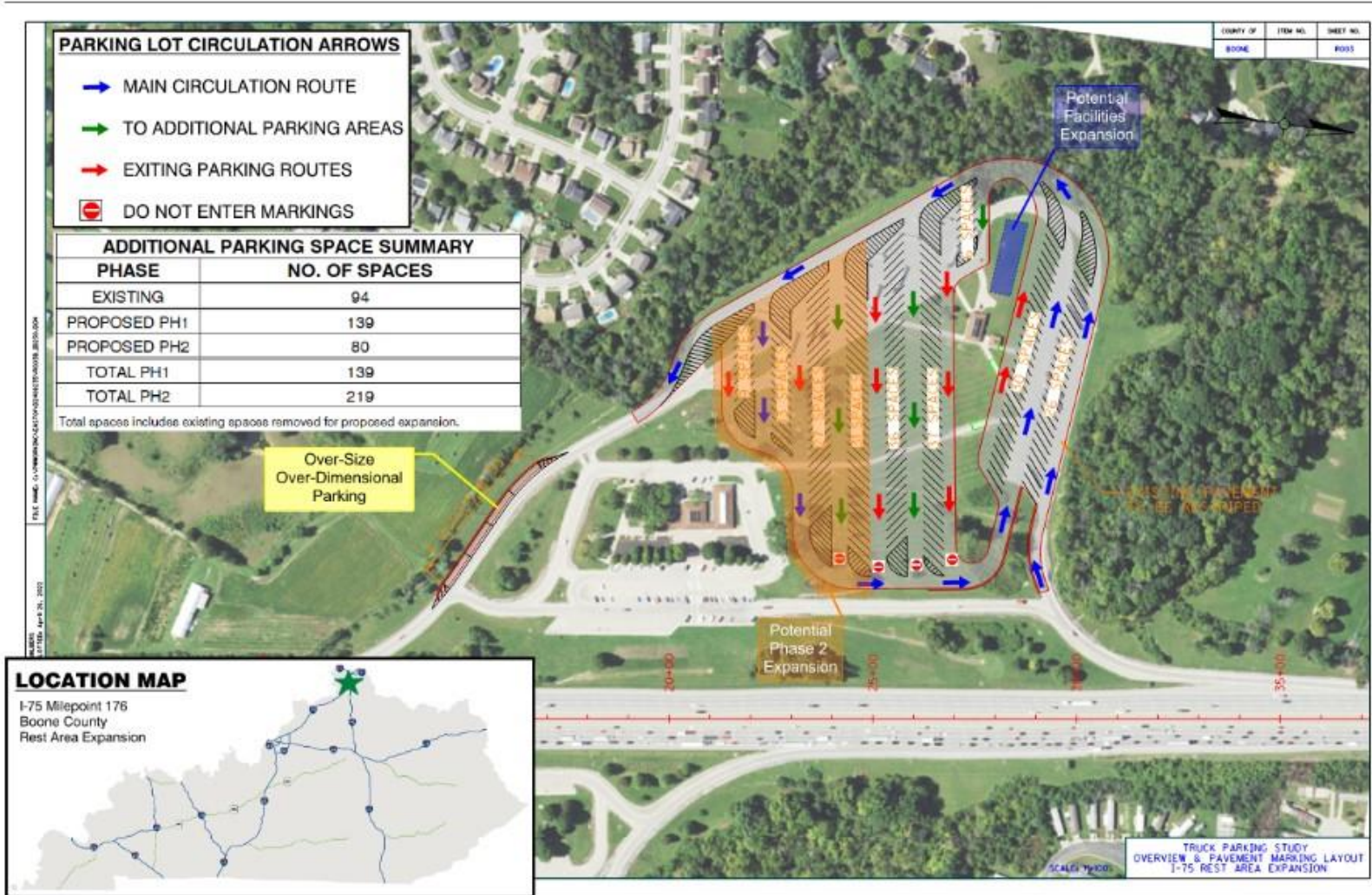
KY Transportation Cabinet

Project Layout Plan - I-75 - Boone County - Milepoint 176 NB Rest Area



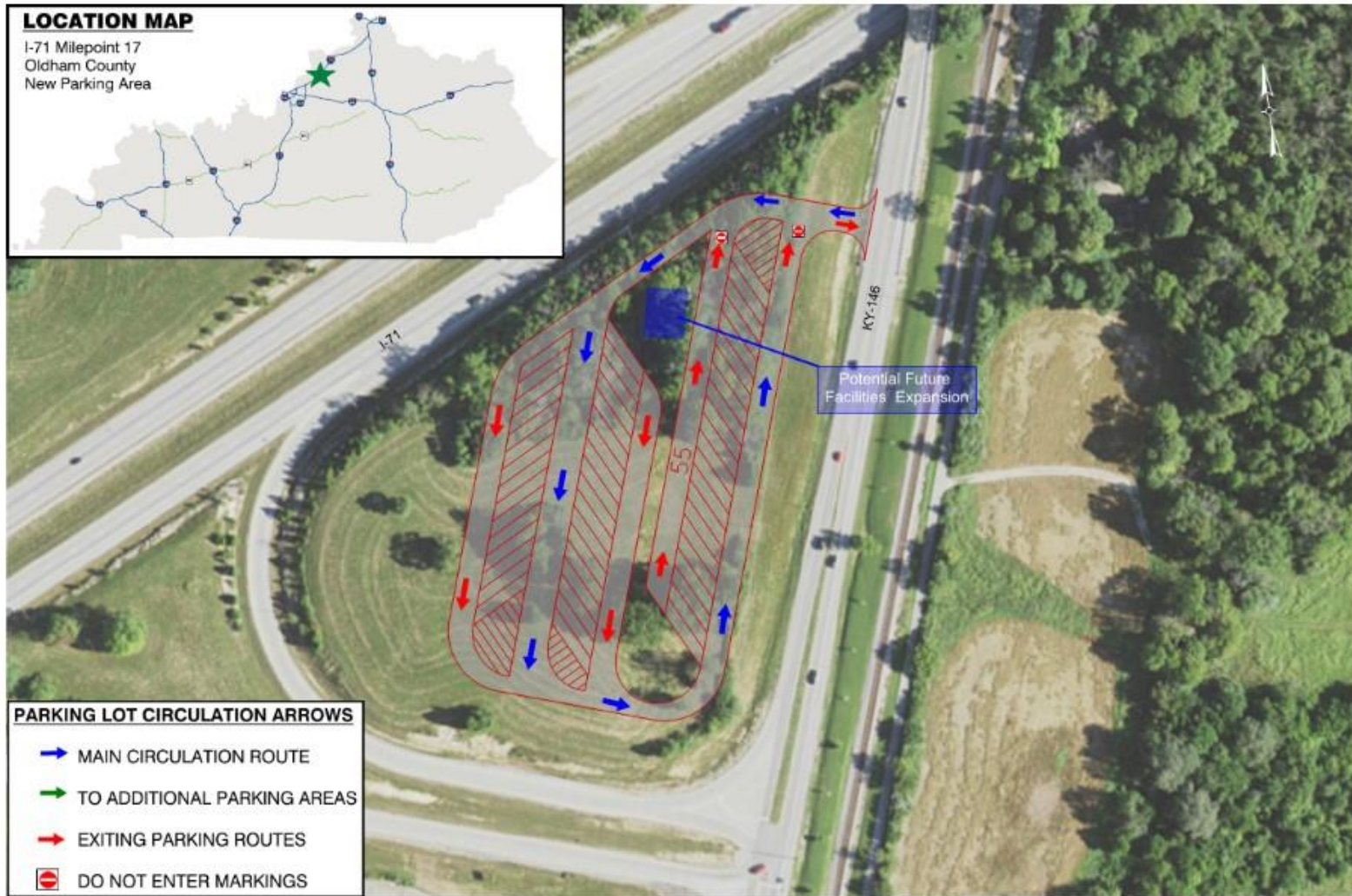
KY Transportation Cabinet

Project Layout Plan - I-75 - Boone County - Milepoint 176 SB Rest Area



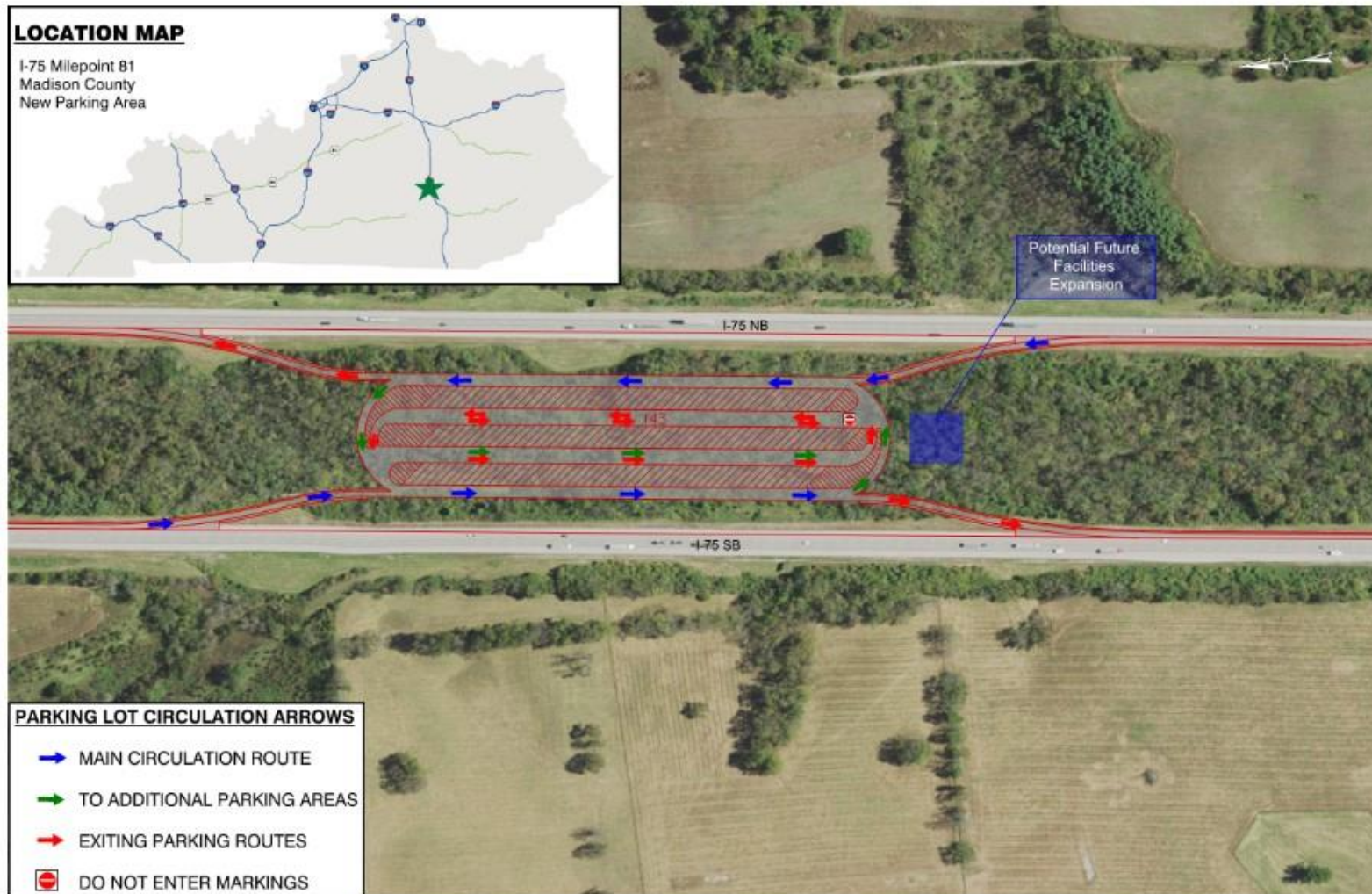
KY Transportation Cabinet

Project Layout Plan - I-71 - Oldham County - Milepoint 17 Infield



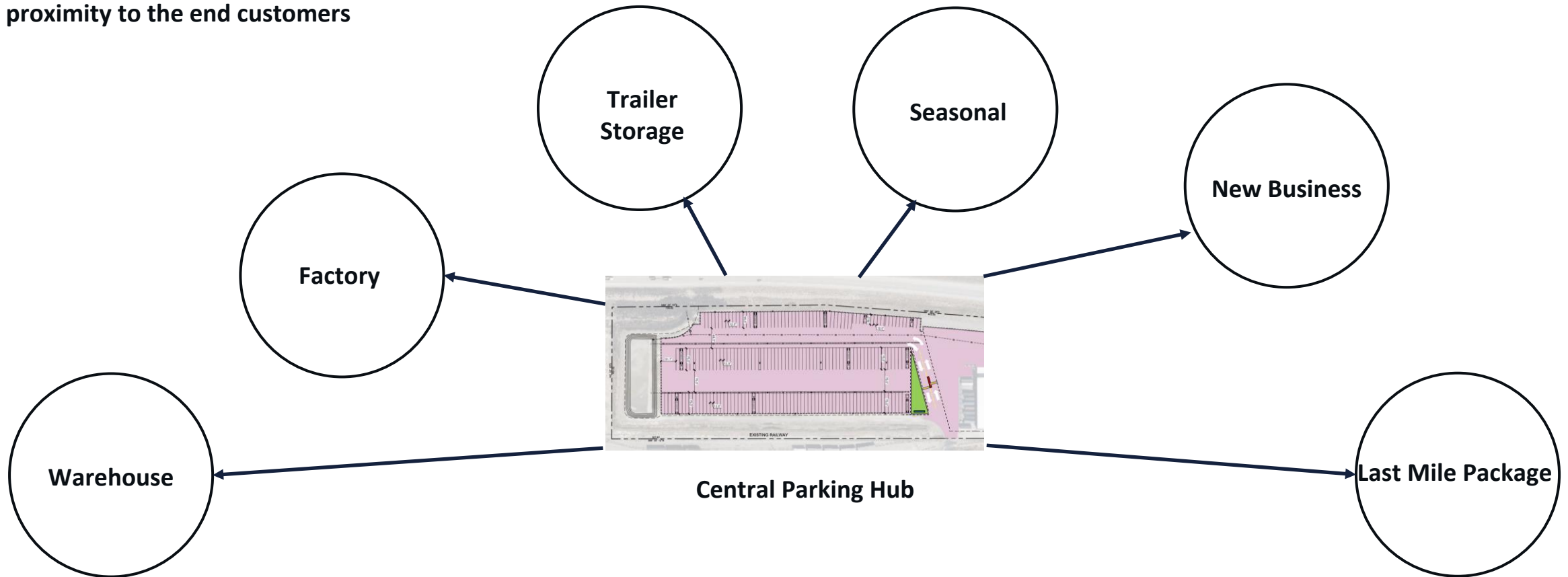
KY Transportation Cabinet

Project Layout Plan - I-75 - Madison County - Milepoint 81 Median



Shared Central Parking Hub

Parking facility only needs to be in proximity to the end customers





There are solutions

- Capacity
 - Find public assets that can be used
 - Partner with private sector
- Real-time information
 - Ensure truckers know where they can go, and were to not waste time looking



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