

Experience Deploying Truck Parking Information Management Systems

Scott Grenerth

Director of
Engagement

sgrenerth@tsps.io

419.306.7575

October 25, 2022



TSIS

TRUCK SPECIALIZED INFORMATION SERVICES

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



Approx ¼ million
pounds of grain a
year ago



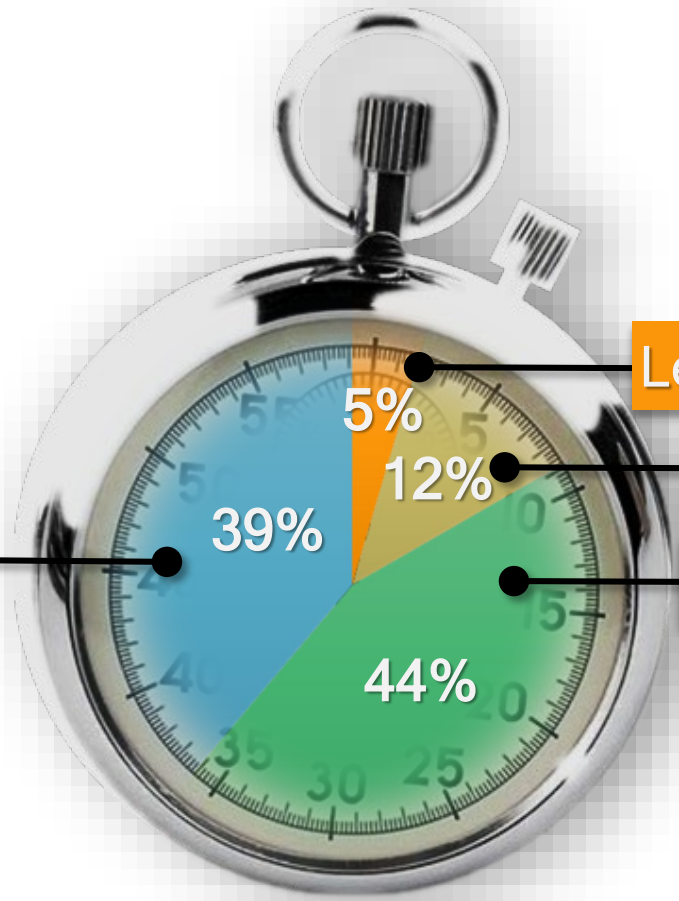
- Truck Parking: Brief Overview
- Action, Big Picture
- Agnostic look at technology
- Funding options
- Questions



Truckers face multiple challenges

How long does it take to park?

Does ELD help?





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.*

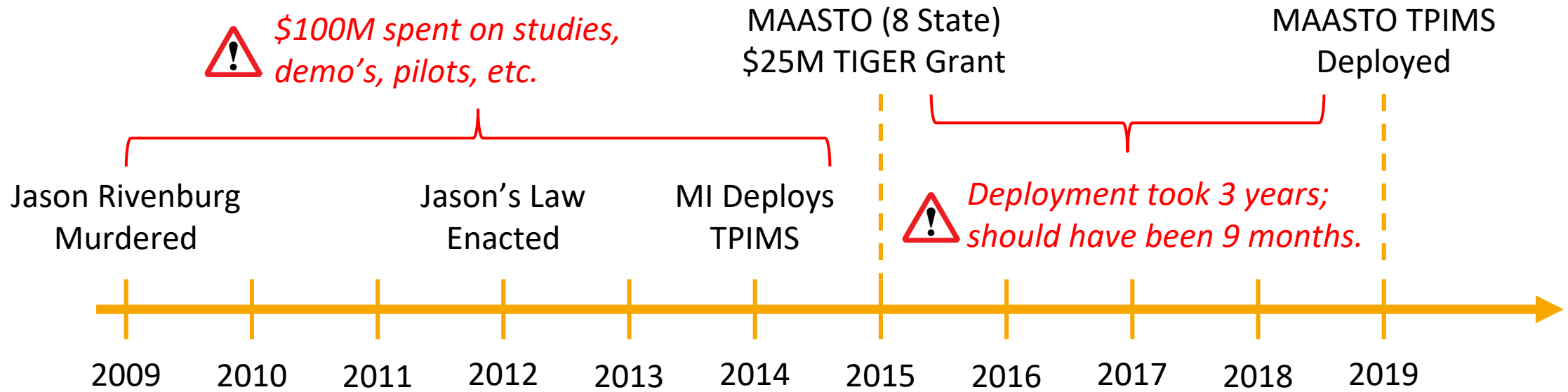
 *ELD has exacerbated the parking problem.*



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

4 Years... MAASTO Deployed



Michael Boeglin Murdered

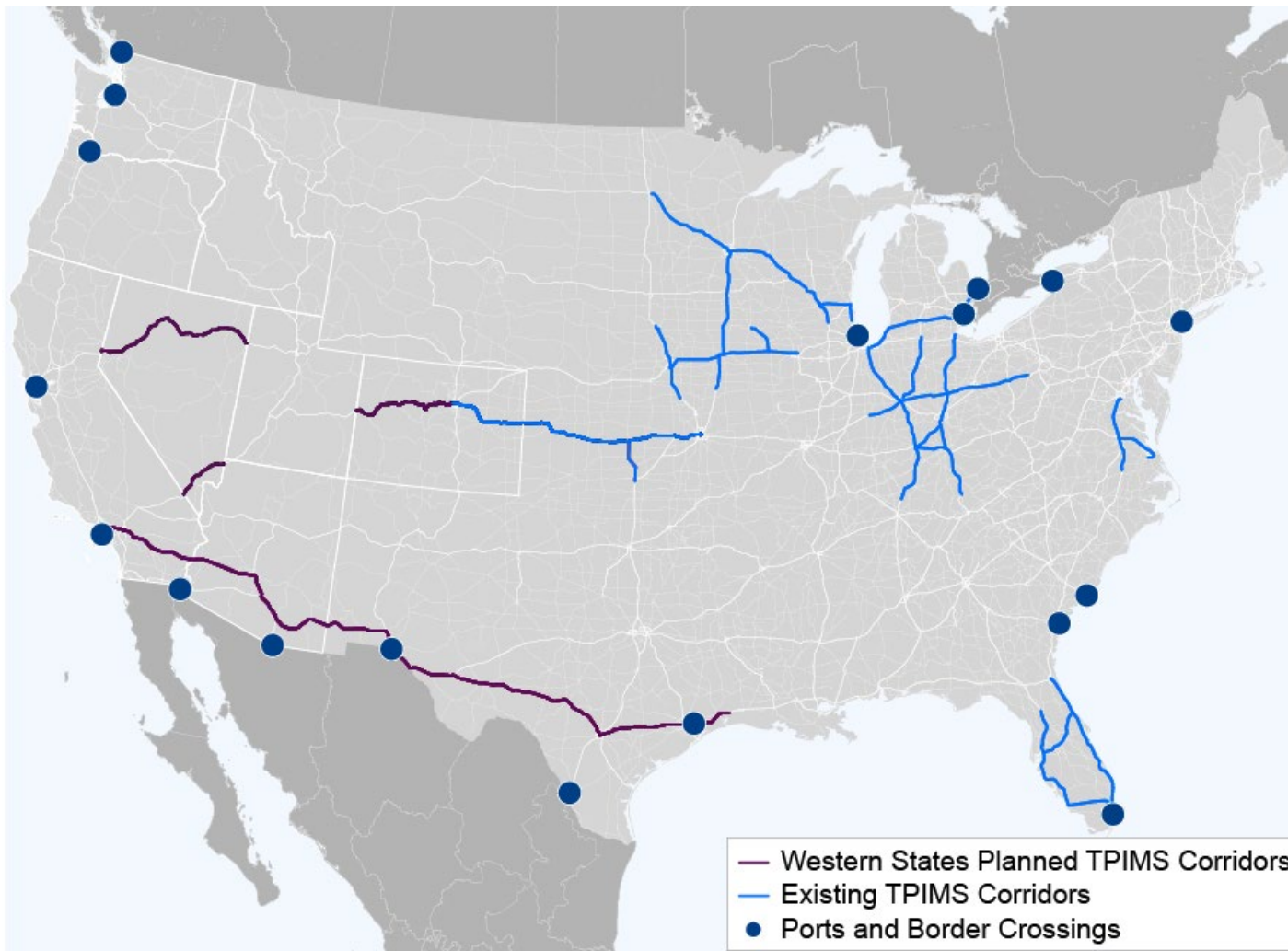


Remains of Michael Boeglin's Truck

A very incomplete network

Fill in the Gaps

Connect a
North American Truck
Parking Network



Complete the Network

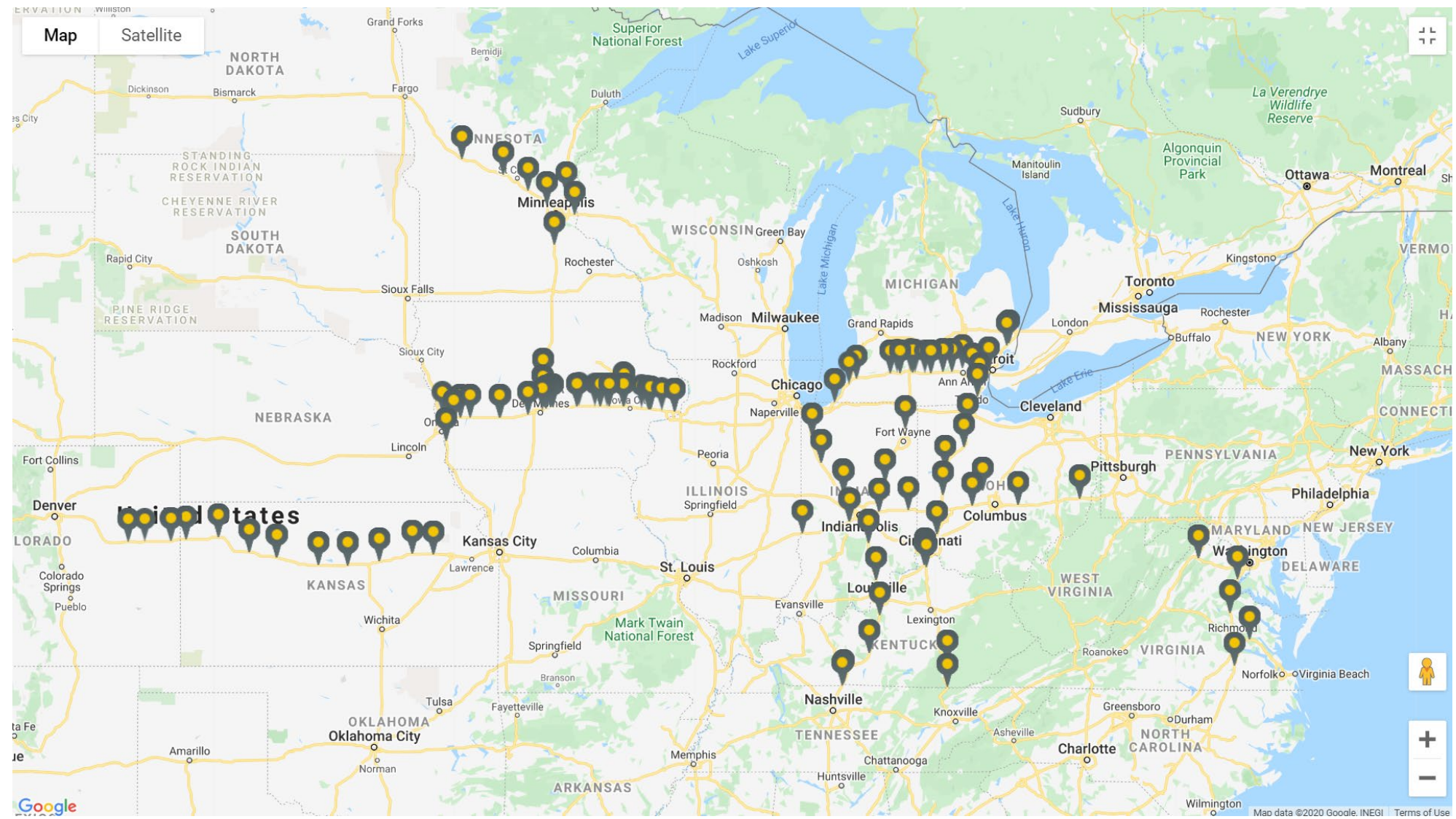
Successfully implement
private truck stops as
part of the network

(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



Truck Specialized Parking Services

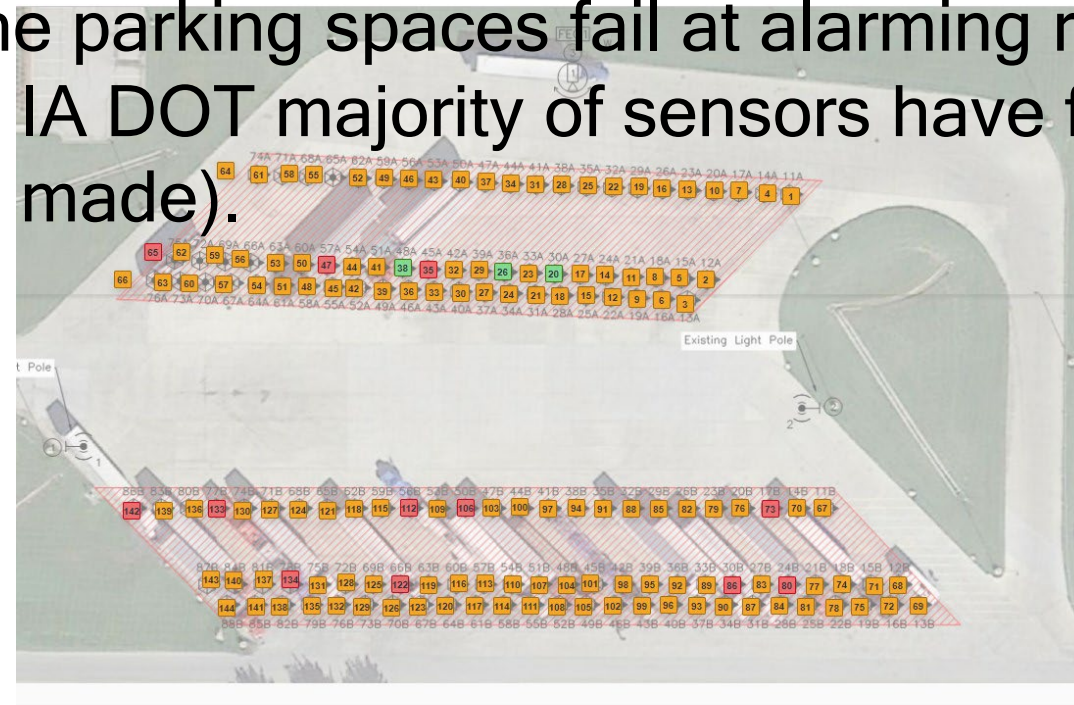
Gathering Information

- **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).



Activated

22

Off

122

Key

- 1 Sensor is Activated
- 1 Sensor is Deactivated
- 1 Sensor is Not Reporting

Options

Upload Underlay

Configure 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

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



What data do you need/want?

- Availability of spaces?
- Vehicle type (FHWA categorization)?
- More?

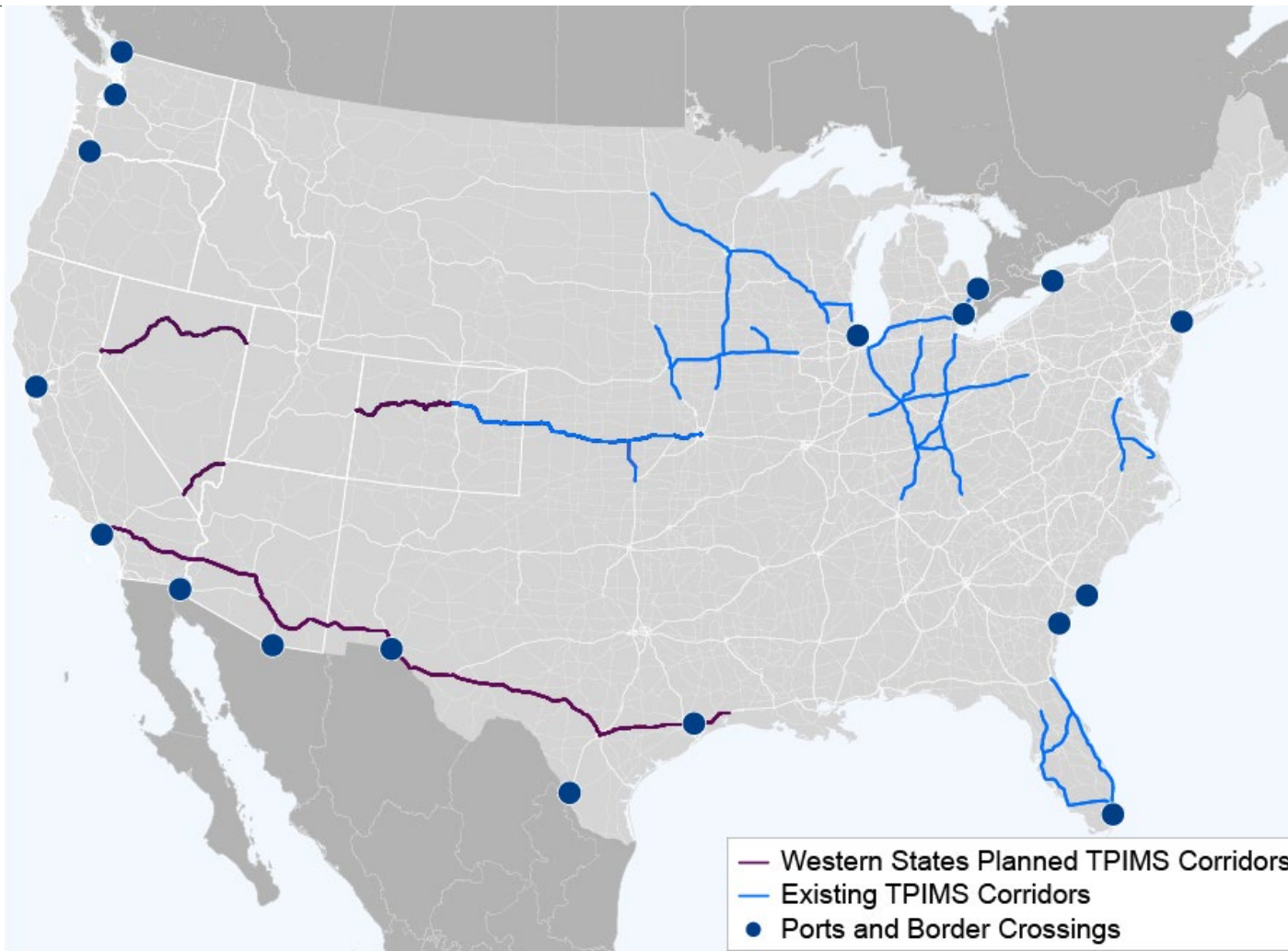


Recommendations

- Talk with other states, learn, act.
- Include private truck stops!!! (Showers, Hot food, Supplies)
- Vendor should have **effective** experience recruiting private truck stops.
- Include sign management, O&M.
 - Can this be from data budget?
- Demonstration opportunities with other states?
- Insist on standards compliance.
- Look at all funding options (FMCSA for technology solutions).

How can you be part of the solution?

A complete North American Truck Parking Network can happen



Complete the Network

Include private truck stops in the network

MI, IA, CO

Increase inventory!
Locate it where truckers need it.

Provide real-time information!
Can bad news be “good news” (no spaces available)?



How can you be part of the solution?

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



Questions

Scott Grenerth

sgrenerth@tsps.io

419.306.7575

