

I-95 Corridor Coalition Truck Parking Primer

WHY DOES TRUCK ? PARKING MATTER?

Imagine leaving work at 5 p.m. on a Friday for your normal commute home. You need to stop at the grocery store to pick up a couple things for dinner, and get your child from daycare by 5:30. **No problem.**

A minor accident ahead of you creates a small delay, but you aren't worried. Then you pull into the grocery store and don't see any place to park. Circling once, still nothing. You wait a couple minutes, but nobody leaves. Now time is getting tight. What do you do? Drive to another grocery store. What if traffic is bad? What if the next store is 10 minutes out of your way? Wait for a space. What if someone beats you to it? What if you have to wait a long time and that will make you late to pick up your child? Skip the grocery store. Do you have anything else at home? Can you afford takeout on a tight budget?

Imagine the stress, the anxiety. You planned as best you could, but things just aren't working out

Now, imagine facing this every day.

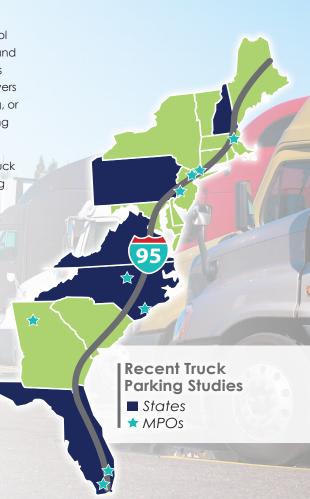
Truck drivers work on tight schedules and low margins. They are often not in control of their own schedules, subject to the whims of warehouse operators, ports, etc. and every minute spent looking for a parking space or stopping before they need to is time they can't spend on the road, making money. If parking is not available, drivers often must choose between parking in unauthorized locations, paying for parking, or continuing to drive after their hours of service (HOS) are up. With electronic logging devices now required, the buffer-time afforded by paper logs is gone.

Truck drivers are the backbone of our economy. With approximately 1.5 million truck drivers on the road on a given day, there simply aren't enough authorized parking spaces in the locations drivers need them the most.

Private truck stop operators are adding capacity throughout the United States. In 2018, more than 4,000 spaces were added by the "Big 3" – Pilot/Flying J, Love's, and TravelCenters of America/TA Petro. However, private operators are businesses that need to make a profit. This means there are places in the country where there isn't enough volume to justify the costs. There are other locations where these businesses would like to open, but they face high land prices, zoning regulations, and community opposition.

Ensuring sufficient, safe truck parking is available to drivers is a safety, infrastructure preservation, and economic development issue. The public sector has a role to play, either by:

- 1. Investing in public rest areas and truck parking sites.
- 2. Partnering with industry stakeholders and local municipalities.
- 3. Educating citizens and decision-makers on the importance of this issue.



NEEDS & INNOVATIVE SOLUTIONS

Trucks need to park for many different reasons.



"Long-Haul"

Challenge: Drivers want to maximize their HOS, but the private and public sector can't build parking everywhere.



"Staging"

Challenge: Need is in or near urban areas with higher land prices, municipal restrictions, and community opposition. Requires a different business model than long-haul parking (shorter stays means less demand for services).



"Emergency"

Challenge: Unpredictable demand for a very large amount of parking.



"Time Off"

Challenge: Independent drivers don't have a "base" to park at. Municipal restrictions can make parking near home difficult and private long-term parking can be expensive (if available).

Innovative solutions are emerging to address each of these needs:

- Utilize existing DOT right of way to add parking capacity:
 - » Inside a half cloverleaf
 - » Re-use closing facilities such as rest areas or weigh stations
- Funding Truck Parking Availability System Sponsorship Program in Florida
- Crowdsourced information:
 - » Dock411 driver amenities at origins/ destinations
 - » ParkMyTruck & TruckerPath parking availability
- New potential partners emerging International Speedway Corporation







The City of Weed, CA approached truck parking as an economic development opportunity. After providing free municipal truck parking adjacent to an existing Pilot Travel Center, additional investment has followed including plans for a new Love's Travel Stop with 97 additional truck parking spaces. The 12 existing business in South Weed (including multiple hotels, food stores, and a Chevron) near the truck parking area generate \$1.8 million in sales tax revenue, 84% of the total revenue for this City of 3,000.

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COSTS & FUNDING EXAMPLES

Capital costs associated with building public parking facilities that include truck parking and related technology can vary widely depending on site size, location, and amenities. These capital costs are relatively well-understood by State DOTs.









Lower Capital Costs

Less well-understood or planned for are on-going **operations** and maintenance (O&M) costs. Initial O&M may be included in grant funding considerations, but long-term O&M costs must be considered. Many states in the I-95 Corridor Coalition use State Highway Fund money to pay for truck parking O&M and costs are often lumped in with other rest area or welcome center O&M need instead of considered separately.

Higher Capital Costs

- Costs below include O&M for the entire site, not just truck parking.
- O&M at public sites ranges from \$13,000-\$30,000 per truck parking space per year. Costs for states in the northern part of the Corridor are typically higher than states further south.
- O&M at privately operated rest area facilities that include truck parking are lower - approximately \$5,000 per truck parking space per year (Note: Drawn from data provided by Corridor Coalition member agencies).

Program	Eligibility/Restrictions	I-95 Corridor Coalition Examples
Grant Programs		
Accelerated Innovation Deployment (AID)	1) Project must be innovative, real-world application ready to initiate within 12 months	FDOT received \$1 million in 2015 for its TPAS
Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)	1) Project must be innovative, real-world application ready to initiate within 12 months	Virginia Port Authority received \$1.5 million in 2017 to develop a reservation system
Better Utilizing Investments to Leverage Development (BUILD)	1) Funding can cover up to 100% of cost in rural areas, 80% in urban areas	
Diesel Emissions Reduction Act (DERA)	Cannot be used to construct truck parking, but can be used for truck stop electrification projects	James Madison University (VA), Chelsea Collaborative (MA), Maine Turnpike Authority (ME), and Georgia Dept. of Natural Resources (GA) have all received money to install truck parking electrification systems
Infrastructure for Rebuilding America (INFRA)	1) Can cover up to 60% of project cost	FDOT received \$10.8 million in 2016 for its TPAS
Innovative Technology Deployment (ITD)	1) State must be certified as Core Compliant under the ITD Program	Delaware received funding for a truck parking ITS project in 2018
	Cannot be used to construct truck parking, but can be used to deploy real-time parking availability information systems	
VW settlement	1) Projects must be eligible for funding under DERA Program	
Formula Funds		
Surface Transportation Block Grants	80/20 match (90/10 on Interstate) Money can be used for truck parking construction	
National Highway Freight Program	 80/20 match (90/10 on Interstate) Money can be used for truck parking construction 	
Highway Safety Improvement Program	1) Need for truck parking must be consistent with the State Strategic Highway Safety Plan	
National Highway Performance Program	1) Project must be located on the National Highway System	
Congestion Mitigation and Air Quality Improvement Program	1) Cannot be used to construct truck parking, but can be used for truck stop electrification projects	
	2) Project must be located in a non-attainment area as defined by U.S. EPA	

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CONTINUING CHALLENGES AND OPPORTUNITIES

Truck parking is a complicated issue. A changing economy and technology advances create both challenges and opportunities for State DOTs, public partners, and industry stakeholders.

Topic: Commercial Motor Vehicle (CMV) Automation

Background: Driverless CMV may be operating commercially within the next 5 years. This technology could dramatically alter supply chains, changing the demand for truck parking throughout the I-95 Corridor and across the country. Initial deployment will likely be limited to specific, pre-mapped highway corridors in states with well-maintained highway infrastructure and limited inclement weather.

Challenge: CMV automation may increase demand for staging parking or transfer lots (between automated and human-driven trucks) near urban areas. These locations may have higher land costs and face more community opposition than rural areas.

Challenge: CMV automation is a private sector-driven initiative with many actors and limited federal guidance. This makes understanding and planning for the potential impacts of implementation difficult.

Opportunity: CMV automation may decrease the demand for parking in rural highway corridors, reducing the need for public sector investment in truck parking in areas that are not attractive to private development.

Opportunity: CMV automation may produce data that can be used to help plan for future truck parking needs (see Improved Data section)

For more information on automated vehicle technology and levels of autonomy, see: https://www.nhtsa.gov/technology-innovation/automated-vehicles-safety

Topic: Reservation Systems

Background: Some private truck parking facilities offer the ability for drivers to reserve a parking space. The number of spaces available and the fleets/drivers who can reserve them varies between facilities.

Challenge: Some reserved parking may only be available to specific fleets or drivers. This creates a system where independent drivers are often at a disadvantage as they are required to pay for reserved parking out-of-pocket (if it is available).

Challenge: Reservations systems at public truck parking facilities are not feasible due to the limited ability to enforce and constraints on commercialization of some highway corridors.

Opportunity: Some companies (such as Nussbaum) are reimbursing drivers for reserved parking, but the majority of drivers – company or independent – are not reimbursed. Shippers/Receivers and the trucking industry could consider reimbursing truck parking costs as a safety and risk reduction initiative.



Topic: Improved Crash Data

Background: Better data would help improve the ability to convince the public and elected officials about the importance and need for truck parking. Electronic logging devices (ELDs), CMV automation (see above), and truck parking availability/information management systems can all play a role.



Challenge: Linking the benefits of providing

truck parking to positive outcomes (fewer fatigue-related crashes, economic efficiency, emergency response and reliability) is difficult. Some data is not collected (such as remaining HOS post-incident) and understanding the factors that contribute to crashes is problematic.

Challenge: Issues with data privacy and ownership (for truck parking availability) may limit the ability of the public sector to obtain/use this information.

Opportunity: Data from ELDs (and automated on-board recording devices) can provide DOTs with better information about travel patterns and parking needs, helping build the case for additional parking.

Opportunity: Automation of both trucks and cars may reduce the overall number of vehicle incidents and help better understand the causes of crashes that do occur. Both outcomes would improve safety for all road users.

For more information, see the

1-95 Corridor Coalition Website,

Truck Parking section at:

https://i95coalition.org/projects/truck-parking/

