The Truck Parking Problem

According to the American Transportation Research Institute (ATRI), truck parking is ranked as the second critical issue in the trucking industry by truck drivers in 2018. Several national and state level initiatives have been undertaken in recent years in order to understand the issue and identify potential solutions.

Parking Conditions & Issues

TRUCK STAGING & DRIVING TIMES

DEMAND EXCEEDS SUPPLY

SHOULDER NOT MADE FOR WEIGHT OF TRUCK

EXCESSIVE TIME SPENT SEARCHING

SEARCHING FOR TRUCK PARKING = HIGHER COST OF CONSUMER GOODS

CARGO THEFT

Study Purpose

Florida Department of Transportation (FDOT) commissioned the Statewide Truck Parking Study to build upon existing truck parking studies by using new data and approaches to identify, prioritize, and recommend solutions to address the areas in Florida with the greatest truck parking needs.

Analysis Methodology

COMPILE

and validate truck parking needs - Statewide Stakeholder Outreach Data

PRIORITIZE

Existing Research

IDENTIFY

opportunities and match solutions to needs

APPLY

constraints

RECOMMEND

actionable solutions

Data Analysis Highlights

- Gathered 300+ locations of truck parking supply data
- Investigated 38 Million records from thirteen TPAS sites
- Over 3 Billion truck GPS records analyzed
- Approximately 2.7 Million records of hourly counts from 300+ TTMS sites
- Over 500k stopped trucks observed
- Nearly 55 Million records passing through TTMS sites
- Approximately 10 Million parcels identified in study
Truck Parking Hotspots

LEGEND
- Public Truck Parking
- Private Truck Parking
- High Utilization
- Low Utilization

IDENTIFY
Clusters of Florida’s Truck Parking Needs Statewide

APPLY
Truck Parking Criteria
- Number of Unauthorized Trucks
- Overutilization of Truck Stops and Rest Areas
- Stakeholder Input

PRIORITIZED
List of Truck Parking HotSpots

Example Analysis

DWELL TIME
10.3 HOURS
120% over-utilized and used for HOS compliance/overnight parking.
Truck Parking Solutions Toolbox

<table>
<thead>
<tr>
<th>Type</th>
<th>No.</th>
<th>Potential Solutions</th>
<th>1-2 Years</th>
<th>3-5 Years</th>
<th>5+ Years</th>
<th>FDOT’s Role in Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>C-1</td>
<td>Optimize existing pavement at rest areas and other public truck parking facilities. (Site Redesign)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C-2</td>
<td>Develop new truck parking capacity at existing rest areas and other public truck parking facilities. (Additional ROW and/or new pavement)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>***</td>
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<tr>
<td></td>
<td>C-3</td>
<td>Encourage the use of underutilized truck parking spaces at Motor Carrier Size and Weight (MCSAW) weigh stations, including designating “Safe Zones” with FHP.</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>***</td>
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<tr>
<td></td>
<td>C-4</td>
<td>Develop new public truck parking facilities near high demand private truck parking facilities.</td>
<td>✓</td>
<td></td>
<td>✓</td>
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</tr>
<tr>
<td></td>
<td>C-5</td>
<td>Collocate overnight truck parking with commuter park-and-ride lots in high demand areas; e.g., urban development. (Site redesign may be necessary.)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C-6</td>
<td>Convert existing FDOT Right-of-Way (ROW) near interchanges in high demand areas to truck parking. (Access points at/near ramps will be a major consideration.)</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C-7</td>
<td>Leverage existing Florida P3 legislation to develop new truck parking facilities.</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C-8</td>
<td>Partner with local governments to develop municipal truck-only parking facilities in critical areas.</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>***</td>
</tr>
<tr>
<td>Technology/Communications</td>
<td>T-1</td>
<td>Ensure joint exchange via an application programming interface (API) of Truck Parking Availability System (TPAS) data with private truck parking information providers and interoperability with other public entities; e.g., State DOTs, MPOs, etc.</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>***</td>
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<tr>
<td></td>
<td>T-2</td>
<td>Develop, initiate and maintain an awareness campaign to inform truck drivers of available overnight truck parking statewide.</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>T-3</td>
<td>Monitor Automated, Connected, Electric and Shared-Use (ACES) technology adoption and respective impacts on truck parking.</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>***</td>
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<tr>
<td></td>
<td>T-4</td>
<td>Provide truck electrification (on-board power infrastructure) at public truck parking facilities.</td>
<td>✓</td>
<td></td>
<td>✓</td>
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<tr>
<td>Partnership</td>
<td>PA-1</td>
<td>Establish collaborative program with freight generating facilities to help guarantee truck parking; i.e., a “Friendly Truck Parking Network.”</td>
<td>✓</td>
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<td></td>
<td>PA-2</td>
<td>Establish grant program with FL DEO to provide private truck stop owners resources to develop new truck parking spaces in high-demand areas (FDOT to establish eligibility criteria with FL DEO).</td>
<td>✓</td>
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<tr>
<td></td>
<td>PA-3</td>
<td>Collaborate with the private sector to leverage large venue (stadiums, arenas, regional malls, etc.) parking lots for overnight truck parking.</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Policy</td>
<td>PO-1</td>
<td>Update FDOT Strategic Intermodal System (SIS) and other capacity improvement programs to include truck parking as eligible project types or criteria.</td>
<td>✓</td>
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<td></td>
<td>PO-2</td>
<td>Advocate with other states to USDOT to allow greater flexibility for third-party vendor operations at public rest areas; e.g., leveraging AASHTO.*</td>
<td>✓</td>
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<td></td>
<td>PO-3</td>
<td>Leverage federal grant and technical programs (i.e., the National Highway Freight Program) to fund and develop truck parking solutions, with the support (advocacy) of private industry.</td>
<td>✓</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>PO-4</td>
<td>Provide guidance to Metropolitan Planning Organizations (MPOs) and local municipalities to improve curbside management strategies and offer greater flexibility for freight parking options.</td>
<td>✓</td>
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<tr>
<td></td>
<td>PO-5</td>
<td>Work with MPOs and local municipalities to incorporate secure truck parking requirements at new freight generating facilities (i.e., land use ordinances).</td>
<td>✓</td>
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<td>**</td>
</tr>
</tbody>
</table>

* = Low FDOT involvement (little influence, recommendation to another state agency)
** = Medium FDOT involvement (public-private partnership)
*** = FDOT policy and/or programming update
Public Outreach Quotes

- This is a really terrific and impressive study! - Ken Armstrong, Florida Trucking Association President
- Your ideas are excellent. Please put them into play. It'll improve public safety. Thanks for your efforts. It means a lot! - Survey Response
- We need lots of parking in your state. From all of us CDL drivers we thank you for doing your part so we have safe parking. Thank you State of Florida! - Survey Response
- The progress of the Statewide truck parking study is very encouraging! - Jim Wolfe, FDOT District 6 Secretary

Survey Respondants

Types of Organizations

- 130 Responses

- Other: 8
- Law Enforcement: 2
- Non Profits: 1
- State Agency: 2
- Local Government: 1
- MPO: 2
- Private Industry Assoc.: 1
- Airport: 1
- Carrier: 51
- Fleet Operator: 9
- Distribution Center: 1
- Shipper: 2
- Receiver: 1
- Non Profit: 1
- Distribution Center: 1
- Airport: 1

Types of Facilities Used for Parking

- 78 Responses

- Other: 11
- Big Box Stores (that allow parking): 25
- Vacant Lot: 26
- Hotel/Motel: 5
- Right-of-Way: 3
- Roadside: 7
- Highway On/Off Ramp: 26
- Shopper/Receiving Location: 36
- Private Truck Stop: 66
- Public Weigh Station: 30
- Public Rest Area: 65
- NOTE: Dataset based on survey respondents “checking all that apply.”

Truck Parking Funding Options

Primary Programs (can fund projects)

- Strategic Intermodal System, SIS (FDOT)
- Economic Development Transportation Fund (Enterprise FL)
- National Highway Freight Program, NHFP (USDOT/FHWA)
- Surface Transportation Block Grant, STBG (USDOT/FHWA)
- Nationally Significant Freight and Highway Projects, INFRA (USDOT/FHWA)
- Advanced Transportation & Congestion Management Technology Deployment, ATCMTD (USDOT/FHWA)
- FY 2019 National Infrastructure Investments, BUILD (USDOT/OST)

Secondary Programs (may fund projects)

- Intermodal Development Program (FDOT)
- Transportation Regional Incentive Program (FDOT)
- State Infrastructure Bank (FDOT)
- Strategic Port Initiative Investment Program (FDOT)
- Public-Private Partnerships (FDOT)
- Florida Seaport Transportation & Economic Development Funding Program (FDOT)
- Intermodal Logistics Center Infrastructure Support Program (FDOT)
- Port Security Grant Program (DHS/FEMA)
- Clean Diesel National Grants (EPA)
- Commercial Trucks and Off-Road Applications FOA: Natural Gas, Hydrogen, Biopower, and Electrification Technologies (USDOE)
- Congestion Mitigation & Air Quality Improvement Program (USDOT/FHWA)
- National Highway Performance Program (USDOT/FHWA)
- Emergency Relief Program (USDOT/FHWA)
- Highway Safety Improvement Program (USDOT/FHWA)
- Accelerated Innovation Deployment Demonstration (USDOT/FHWA)
- Innovative Technology Deployment, formerly CVISN (USDOT/FMCSA)
- Grant Anticipation Revenue Vehicles (USDOT/OIDP)
- Railroad Rehabilitation & Improvement Financing (USDOT/FRA)
- Port Infrastructure Development Program (USDOT/MARAD)
- Motor Carrier Safety Assistance Program (USDOT/FMCSA)
- Transportation Infrastructure Finance and Innovation Act Credit Assistance (USDOT/OIDP)
- Private Activity Bonds (USDOT/OIDP)
- Value Capture (USDOT/OIDP)
- Section 129 Loans (USDOT/OIDP)
## Short-Term Recommendations

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Organization</th>
<th>Activities</th>
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</table>
| Continue the Exploration and Development of Existing Truck Parking Projects, Policies, and Planning Initiatives | FDOT District with support from FDOT Central Office | Support on-going truck parking projects  
- **D2** - I-75 and I-95 Rest Areas Expansion Concept  
- **D5** - I-4 Rest Area Expansion at Sanford  
- **D6** - I-95 planned Golden Glades Travel Center  
- **D7** - I-75 Hillsborough Rest Area Redesign and Reconstruction  
- **Turnpike** – Canoe Creek Service Plaza, West Palm Beach Service Plaza, and Tandem Staging Lot at Turkey Lake  
Continue FDOT involvement in District truck parking planning efforts  
- **D1** - Truck Parking Study (2020)  
- Support innovative pilot projects and best practices  
- **D4** - Farmers Market Pilot  
- **D2** - WIM Pilot Project at Yulee WIM Station  
- Electrification and alternative fuel corridor application |

| Identify and Implement Opportunities to Expand Capacity and Increase Utilization at Existing State-Owned Truck Parking Locations | FDOT Central Office and Districts | Update to the FDOT Rest Area Master Plan  
- Develop projects based on Rest Area Master Plan findings  
- Transfer findings and best practices Farmers Market and WIM Pilot project to other locations, as warranted  
- Build on District Truck Parking studies to identify additional opportunities |

| Provide Support to Local Communities to Improve Truck Parking | Districts | Conduct outreach with local communities to share the findings and tools developed by the Statewide Truck Parking Study that are relevant to their jurisdiction  
- Identify what support is needed to overcome the challenges that truck parking policies and projects encounter at a local level |

| Continue the Development of TPAS | FDOT Central Office | Promote the use of TPAS information in private sector applications  
- Discuss integration of private truck stop data into TPAS  
- Coordinate expansion into neighboring states and system interoperability |

| Designate a Truck Parking Champion | FDOT Central Office | Develop a communication plan that includes a website, brochures, and resource documents to communicate the findings and tools developed in this study  
- The communication plan should include an awareness campaign to promote under-utilized truck parking locations  
- Advocate and advance policy recommendations within FDOT while the truck parking program is established  
- Formalize FDOT’s existing truck parking efforts into a defined program that is focused on truck parking with defined funding |

| Establish a Truck Parking Improvement Program (TPIP) | FDOT Central Office with support from Districts | Pre TPIP Development: Establish the goals and objectives of the TPIP and identify metrics to assess the progress of the TPIP  
- Pre TPIP Development: Leverage the Statewide Truck Parking Study data, findings, final report, and brochure to request $10 million in annual funding for truck parking and the formal establishment of the TPIP  
- Apportion dedicated funding for truck parking projects either through legislative request or by leveraging NHFP funds  
- Identify Operations and maintenance funding source for truck parking  
- Develop procedure similar to FDOT Rest Area Program and Park and Ride Program  
- Pre TPIP Development: Truck parking activities should be documented on the TPIP website and continue their implementation and development while formal funding and TPIP is established  
- Post-TPIP Development: Inform stakeholders about the TPIP  
- Post-TPIP Development: Develop and implement an annual call for truck parking projects that establishes a formal process and selection criteria for the District and local governments to submit projects or planning studies for funding |

| Develop Public-Private Partnerships Models for Rural and Urban Areas | FDOT Central Office | Explore impediments to P3 agreements for truck parking and the opportunity to partner with DEO to enter into a P3  
- Develop P3 models for urban and rural areas |
Contact Information

Rickey Fitzgerald
Manager, Freight & Multimodal Operations
Florida Department of Transportation
605 Suwannee Street, MS 25
Tallahassee, FL 32399
850.414.4702
rickey.fitzgerald@dot.state.fl.us