

Truck Parking Shortage: Improving Efficiency and Identifying Opportunities

Introduction

Industrial and residential developments are generating more truck trips and parking demand than local infrastructure can handle. Truck drivers need to rest and stage their trucks. Real-time truck parking space availability is critical for maintaining safety, Hours-of-Service (HOS) compliance, and efficiency. Many truck parking locations have irregularly shaped 'footprints' and lack identifiable delineation for truck parking spaces. As a result, a given location may accommodate 25 trucks but yield space for only 13 or 14, depending on how they are parked. Given this scenario, providing real-time truck parking availability information to approaching trucks on the highway is problematic yet essential.

This study evaluated truck parking conditions in Louisiana to identify short-term operational improvements and long-term policy and planning solutions. The research incorporates a review of national best practices, stakeholder surveys and outreach, Geographic Information Systems (GIS) and spatial regulatory analyses, and an economic impact assessment to assess the development of truck parking and the associated cost of not investing in parking facilities. Findings provide actionable recommendations for state and local government officials and freight stakeholders in Louisiana.

Objective

This study addressed truck parking issues and provides both short- and long-term solutions. The long-term solution is to develop guidance for truck parking ordinances that local jurisdictions are willing to adopt and to help build more truck parking spaces. The short-term solution is to identify what truck parking exists, how it is managed, and where and what Variable Message Signage (VMS) is available to truck drivers in Louisiana.

Scope

The study assessed truck parking challenges in Louisiana, focusing on improving freight efficiency along the I-10 and I-12 corridors. It examined current gaps in supply and demand. It also evaluated the availability of Variable Message Signs (VMS) and related parking information systems. The research team aimed to identify urgent operational gaps and develop long-term policy and planning strategies to address parking shortages statewide. It reviewed national best practices and local zoning regulations to identify regulatory and land use barriers affecting truck parking development.

Methodology

The study employed a mixed-methods approach, including the synthesis of available literature and materials, stakeholder surveys, interviews, and community engagement, which complemented the survey data. Data from surveys, interviews, and community engagement were synthesized into themes, providing valuable insights into the state of truck parking in Louisiana. Researchers also conducted GIS analysis, field-based inventory enumeration (see Figure 1), and an examination of truck stops and rest areas along the I-10 and I-12 corridors (see Figure 2). Economic development impact and no-build analyses were also conducted to evaluate the benefits of developing truck parking facilities in Louisiana and the cost of not investing in them.

Principal Investigators

Bethany Stich, Ph.D.
Faisal Mallum, Ph.D.
504-280-6519

LTRC Contact

Elisabeta Mitran, Ph.D.
225-767-9129

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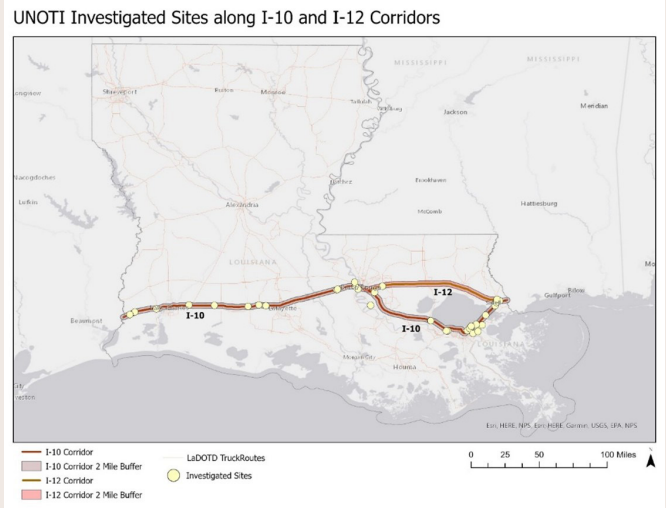


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Figure 1 (left). Images from site visits (field-based inventory enumeration)
 Figure 2 (right). Investigated truck parking sites along I-10/I-12 corridors



Conclusions

- The use of technology in truck parking is valuable but cannot substitute for physical capacity. Although drivers value truck parking apps, they are often inaccurate, with frequent discrepancies between the apps and physical spaces. Therefore, technology should complement rather than replace existing solutions, and its implementation must be carefully managed to meet objectives.
- Creating stakeholder trust is highly valuable in convincing communities to accept the development of truck parking.
- Local zoning permitting, especially in urban areas, is a significant bottleneck for delivering new capacity.
- The economic case for investment in truck parking is strong and supports competitive funding.
- The I-10 and I-12 corridors require targeted corridor-specific intervention, rather than one-size-fits-all statewide actions.
- Louisiana's truck parking challenges are a matter of safety and reliability, not a mere convenience issue. The study suggested that illegal ramp parking increased fatigue risk and Hours-of-Service (HOS) compliance difficulties.

Recommendations

- **Improve the implementation and the use of technology in the freight system.** It is important that Louisiana adopts and accelerates the development of Truck Parking Information Management Systems (TPIMS) that integrate Variable Messaging Signs (VMS), Dynamic Messaging Signs (DMS), and mobile app truck parking applications.
- **State and local government partnership is essential to integrate planning and zoning regulations.** State agencies and MPOs may lead efforts to collaborate with local authorities to expedite permitting for truck parking conversions, including repurposing underused commercial or industrial land for this purpose. Model ordinance language has been developed in this study that can be adjusted and integrated into comprehensive plans and freight or industrial overlay districts.
- **It is essential to position Louisiana to compete for federal funding opportunities, primarily those opening in 2026.** Some of the findings from this research, such as the economic impact analysis, could help these applications.
- **Expansion of truck parking capacity is needed at strategic locations statewide, especially along I-10 and I-12, near major freight centers, interchanges, ports, and urban areas.** This could be accomplished through a corridor program that identifies the best unused land locations based on truck traffic, safety records, current infrastructure, and proximity to logistics hubs. The New Orleans East community could serve as a pilot project, given its high truck parking demand and the community's willingness to support such projects.
- **Create a truck parking incentive mechanism and explore Public-Private Partnership (PPP).** It is essential for the state to create a truck parking incentive program offering tax credits to truck stops that provide free parking, helping to offset parking costs. Additionally, incentives could be offered to private truck stops contingent on their commitment to expanding parking capacity. Building truck parking near existing private facilities will be very efficient. It increases capacity for both the private facility and the overall system while leveraging the amenities already available at private locations, without the state having to build or operate them.
- **Refurbish the abandoned Welcome Center in New Orleans East, which is a city-owned abandoned property following Hurricane Katrina.** This offers a great opportunity for collaboration among the state and local governments and the private sector to add parking capacity in Louisiana.