MISSISSIPPI TRUCK PARKING STUDY

Project Report

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Introduction

The State of Mississippi primarily transports freight via trucks travelling along its 162 thousand lane miles of public road¹. The Federal Hours of Service (HOS) regulations mandate that commercial motor vehicle (CMV) drivers transporting freight (identified as property-carrying drivers) must comply with the rules and regulations for maximum driving hours, regular HOS breaks, and off-duty periods. Easy access to safe, legal parking is a prerequisite for compliance with these regulations, which have been summarized in Table 1.

Table 1: Federal HOS Break Mandates for Truck Drivers

Bre	ak Type	Description
	10-hour Rest Break	Long-haul truck drivers are allowed to drive for a maximum of 11 hours after having at least 10 consecutive hours off duty.
0	30-Minute Driving Break	Drivers must take a 30-minute break to be off-duty after driving for eight (8) cumulative hours without a 30-minute interruption.
<u>e</u> ,	14-Hour Driving Limit	Drivers may not drive beyond the 14th consecutive hour after coming on duty, following 10 consecutive hours off duty.
	60/70-Hour Limit	Drivers cannot drive more than 60/70 of hours on duty in 7/8 consecutive days. They may restart this 7/8 day period after taking at least 34 consecutive hours off duty.
	Sleeper Berth Provision	Drivers are permitted to split their 10-hour off-duty period, with one (1) off-duty period of at least two (2) hours and another involving at least seven (7) consecutive hours in their sleeper berth.
	Adverse Driving Conditions	When adverse driving conditions are encountered, drivers are permitted to extend the 11-hour maximum driving limit and 14-hour driving window by up to 2 hours.

Source: FMCSA, 2023

¹ MDOT. (2020). MULTIPLAN 2045: Mississippi's Long-Range Transportation Infrastructure Plan. Retrieved from <u>https://mdot.ms.gov/documents/Intermodal%20Planning/Reports/Multimodal/MBI%20Multimodal%20Final%20R</u> <u>eport.pdf</u>

In addition to meeting regulatory requirements for HOS breaks, truck drivers need to park in various situations or circumstances, including:

- To stop and have meals or pick up supplies during their shifts
- Overnight when driving schedule spans multiple days
- For conducting maintenance checks, carrying out vehicle inspections, or addressing minor repairs
- During delivery and pickup activities such as for paperwork, interacting with personnel at shipping/receiving docks, and handling cargo loading or unloading
- Staging for pickup/delivery windows at factories and warehouses
- During adverse weather conditions, such as heavy rain, snowstorms, or fog
- For regulatory compliance checks such as at weigh stations

Commercial truck parking availability is a major concern for the trucking industry in Mississippi and across the US.² The American Transportation Research Institute (ATRI) annual report titled

"Critical Issues in the Trucking Industry" states that inadequate truck parking has been a top industry issue for over a decade.³ When drivers cannot find authorized parking spaces, it leads to unauthorized parking at locations such as highway ramps and local roads which create potential safety, road maintenance, and congestion problems. In 2019, over 273 million tons of freight were transported by truck in Mississippi, equivalent to an average of approximately 14 million truckloads or 36 thousand truckloads per day. By 2045, truckloads are projected to increase 47% to more than 400 million tons in one year. As truckloads increase, so will the demand for parking.



Example of truck parked on city street in unauthorized location.

According to the most recent Jason's Law⁴ survey results Mississippi had the fewest available combined public and private parking spaces compared to other Southeastern states, which

² <u>https://ops.fhwa.dot.gov/Freight/infrastructure/truck_parking/docs/Truck_Parking_Development_Handbook.pdf</u>

³ <u>https://truckingresearch.org/wp-content/uploads/2023/10/ATRI-Top-Industry-Issues-2023.pdf</u>

⁴ Jason's Law, named after Jason Rivenburg, a truck driver who was tragically killed due to a lack of safe and secure truck parking, is a federal law in the United States aimed at addressing the critical need for adequate and safe truck parking facilities. Enacted as part of the Moving Ahead for Progress in the 21st Century Act (MAP-21) in 2012, Jason's Law focuses on improving the availability of suitable parking spaces for commercial motor vehicles, especially trucks, across the nation. The law is particularly significant for addressing the safety and well-being of truck drivers and the efficiency of freight transportation.

have been summarized in Table 2⁵.

State	Public		Private		Total		% Private	
State	Facilities	Spaces	Facilities	Spaces	Facilities	Spaces	Facilities	Spaces
Georgia	47	1,701	265	12,017	312	13,718	85	88
Louisiana	21	329	254	11,782	275	12,111	92	97
Florida	77	2,529	160	6573	237	9,102	68	72
Alabama	26	633	201	7,456	227	8,089	89	92
Tennessee	42	710	152	6,969	194	7,679	78	91
Arkansas	16	194	143	6,277	159	6,471	90	97
Mississippi	64	716	160	5424	324	6,140	49	88

Table 2: Truck Parking Facilities and Spaces in MS and Neighboring States, 2020

Source: Jason's Law Truck Parking Survey Results, 2020

The goal of this truck parking study is to identify and provide recommendations for addressing truck parking challenges on Mississippi's Tier I Highway Freight Network (shown in Figure 1). It incorporates past studies, a survey of representatives in the trucking industry, and an analysis of existing conditions that are used to formulate recommendations for potential improvements. These recommendations are also informed by strategies used in peer states which have been assessed for applicability. See Appendix A – Materials Review Technical Documentation for a summary of the review of studies and reports related to truck parking that was conducted to provide background for this report.

While this study focuses solely on Tier I state freight corridors, it is important to note that local roads are accountable for their own regulations and enforcement. It is the duty of individual communities to address any adverse effects of unauthorized truck parking on both residents and the trucking industry when unauthorized truck parking takes place on local roads. A collaborative effort between local authorities and residential communities can be a useful approach to effectively managing and regulating unauthorized truck parking at the local level.

⁵ <u>https://ops.fhwa.dot.gov/Freight/infrastructure/truck_parking/coalition/2020/mtg/jasons_law_results.pdf</u>

Figure 1: Mississippi Highway Freight Network



Source: MDOT, 2023

Mississippi Truck Parking Study

Introduction

Stakeholder Outreach

Stakeholder outreach was a crucial part of the truck parking study. The outreach activities described herein provided opportunities for input and feedback gathering from trucking industry professionals to support the development of recommendations and strategies for meeting truck parking needs in Mississippi. Outreach involved coordination with the Mississippi Freight Advisory Committee (MS-FAC) and other truck freight stakeholders at various stages throughout the study, as described below.

Mississippi Freight Advisory Committee

The Mississippi Freight Advisory Committee (MS-FAC) is a diverse partnership of knowledgeable freight stakeholders who advise the state on freight-related priorities, serving as a forum for discussion, coordinating regional priorities, promoting information sharing, and participating in the development of the State Freight Plan, with a focus on facilitating safe and efficient freight movement, reducing congestion, maintaining infrastructure, enhancing economic benefits, ensuring safety and security, and promoting environmental protection.

Progress on the Truck Parking Study was presented to the MS-FAC three times over the course of the project. At the first meeting, the committee reviewed the study's scope and provided feedback on goals, issues, and trends. The committee later convened to review initial public input and data analysis findings and provided input on needs and strategies. Committee members provided confirmation of the direction of the study. A final MS-FAC meeting was held on June 13, 2024, to review the final recommendations and strategies included in this report. Feedback from the committee affirmed the approaches contained herein.

Industry Interviews

An interview guide was developed to gain industry insights from leadership within the Mississippi Department of Agriculture & Commerce (MDAC), Mississippi Trucking Association (MTA), and Owner-Operator Independent Drivers Association (OOIDA). The interview focused on the importance of truck parking for the transportation industry in the state of Mississippi, highlighting its current issues and needs such as safety hazards, driver fatigue, and impacts on businesses. The types of truck parking needed, such as rest break parking, staging at freight facilities, and local delivery parking, were also inquired about. The interview outlined the regulations and policies at federal, state, and local levels that impacted truck parking, as well as potential barriers to implementing solutions. Strategies such as public-private partnerships and innovative ideas to address the truck parking shortage were discussed. The interview concluded by asking for input on critical aspects of a truck parking study, suggestions for improving truck parking, and identifying specific industry stakeholders to involve in discussions and decision-making. The full interview guide can be found in Appendix B – Industry Interview Guide.

Interview Findings

During the industry interviews representatives of MDAC, MTA, and OOIDA all expressed concern about the various types of truck parking and mentioned industry-specific concerns. The MTA shared that an on-going issue in the trucking industry is driver availability, as more community colleges in the state have begun offering Commercial Driver's License (CDL) training. OOIDA emphasized the impact of the lack of truck parking on driver productivity, and the prevalence of predatory towing practices that affect truckers was introduced by a representative of MTA.

Additionally, the MDAC representatives pointed out the need for safe and readily available parking options, particularly during peak seasons when the Mississippi Delta in the northwest region of the state experiences high agricultural production. Representatives of the associations also discussed the potential impact of parking-related regulations and policies on the industry, and the need for collaboration and prioritization of key legislative issues.

In addressing the truck parking shortage, these interviewees also noted the need for publicprivate partnerships, particularly with the Department of Agriculture and private agriculture transport companies. However, there are still barriers and roadblocks that need to be overcome, such as the limited availability of safe parking options and conflicts between drivers and shippers regarding preferred pick-up and delivery times.

In order to address these issues effectively, interviews identified the need for a comprehensive study on truck parking that takes into consideration the critical concerns of the industry and various stakeholders. They also suggested specific companies and individuals to reach out to for input.

Survey

In order to gain a more nuanced understanding of truck parking challenges in Mississippi, a web-based survey for industry representatives was also developed which included a diverse range of questions and opportunities to provide feedback anonymously. The survey was launched February 1st, and closed February 23rd, 2024. It was distributed by email by the independent drivers' association OOIDA, MDAC, and MTA. OOIDA also distributed the survey via newsletter to all of their members. The following describes the contents of the survey and a summary of the results follows. A complete report on the survey results is included in Appendix C - Driver Survey Summary.

Survey Content

The web-based truck freight industry survey consisted of multiple choice, ranking, open ended, and mapping questions hosted online through Esri Survey 123. The survey started with questions about the industry roles of the respondents, such as truck drivers, dispatchers, fleet managers, and/or other professionals followed by a question about the size of the companies represented by respondents (with categories ranging from less than 20 drivers to over 1000). To further investigate the factors that influence parking decisions, participants were next asked

to rank the importance of various truck stop features, such as security, wi-fi, restrooms, showers, fuel, and food. Next was an inquiry about the most common parking challenges faced by truckers, such as stage parking for narrow appointment windows and complying with HOS regulations. Additionally, respondents were asked what time of day tends to present the greatest challenge for parking, as well as the frequency and preferences for different parking facilities.

The survey then delved into the methods used to locate truck parking and the preferred unauthorized locations as alternatives to typical/approved facilities. To provide a visual representation of the parking issues faced by truck drivers, a map with location selection capabilities was included to give respondents the opportunity to precisely indicate where they have encountered truck parking issues in the state. The final question gave respondents the chance to express any additional concerns or suggestions regarding the issue of truck parking in Mississippi. These questions not only helped to gather valuable data but also gave a voice to those experiencing parking challenges firsthand.

Survey Results

A total of 552 individuals participated in the survey, with the majority of respondents identifying as Truck Drivers, followed by Fleet Managers and Dispatchers. A substantial percentage of respondents (92%) confirmed that they operate within the state of Mississippi. The sizes of the companies that respondents work for varied, with a significant portion indicating that they employ less than 20 drivers.





In terms of Hours of Service (HOS) stops, survey respondents frequently encountered difficulties with the 8+ hour rest compliance HOS stop during overnight hours (Figure 2). This challenge was most commonly attributed to either a lack of available facilities or facilities that

were completely full. The top parking preference among respondents was a privately-owned location with amenities, while the primary concern was security. When locating parking facilities, respondents typically rely on their familiarity with the area, followed by signage, and then the use of parking-related applications before any other methods of finding parking.

When authorized parking was not available, respondents indicated that shopping centers, interstate ramps, and grass fields or vacant lots were the most commonly used alternatives. Other options, such as abandoned business properties and side streets, were also selected. Many respondents reported frequently being required to park in unauthorized locations, regardless of the potential consequences, while others expressed that they did not park in an unauthorized location and instead proceeded with operating their vehicle regardless of their fatigue levels or potential violation of HOS compliance limits. This was done to evade fines, license penalties, the risk of being subject to theft or vehicle towing, or because drivers were hauling hazardous materials.

When asked if they had any additional comments regarded truck parking, respondents had a lot to say. Many comments agreed that parking supply is a problem within the state and that providing more stops and increasing the size of existing areas would go a long way to help ameliorate the issue. Suggestions were made to outlaw paid parking lots due to the HOS break requirements, and to pull back on issuing citations in situations where drivers have no reasonable alternatives. Commenters also noted that port traffic and trucks from Mexico and Canada have been increasing traffic along the entirety of the I-20, I-22, I-55 and I-59. There were requests for more parking near urban areas, and for better safety measures, particularly in the areas around Jackson.

Stakeholder Forum

A virtual stakeholder forum was held on April 19th, 2024, with representatives of private sector industries, shippers/receivers, truck stop operators, trucking associations, independent drivers, and economic development entities. The forum offered a platform for stakeholders to discuss the truck parking challenges, opportunities, and potential mitigation strategies uncovered during this study and to provide direction and feedback where applicable.

The meeting covered several key areas including truck parking supply, demand, unauthorized parking, facility utilization, and potential mitigation strategies. Notable observations included the predominance of private facilities in truck parking, marked challenges faced by small truck stop owners, and the impact of electronic logging devices (ELD) on parking demand. Focus was also placed on security concerns, future projections, and strategies such as the introduction of a Truck Parking Availability System (TPAS), rest area reconfigurations, and leveraging weigh stations for additional parking space.

Participants provided diverse perspectives: from drivers emphasizing the need for real-time parking information to shippers expressing the impact of parking availability on timely service performance. Discussions also extended to the potential impact of federal grant programs.

Overall, the forum allowed for a robust exchange of ideas and provided a deeper understanding of the challenges facing industry stakeholders in Mississippi.

Web Announcements

Information about the study was also posted to the MDOT website to increase awareness of truck parking needs and inform the public about progress on the study. Released content included regular updates on each phase of the study as it moved forward, including results and summaries of the analysis.

Truck Parking Study

This section of the report provides a detailed review of the analyses included in the truck parking study. First is an inventory of supply, analysis of demand, an overview of utilization rates and estimated forecasts of future demand. This is followed by analyses of gaps between supply and demand, truck-related crashes in the state, trends in unauthorized parking, and a discussion of the impacts of these factors.

Truck Parking Supply

The following is a summary of the methods used in collecting, processing, analyzing, and validating the statewide supply of truck parking on Tier I freight highways within the State. The availability and characteristics of truck parking facilities vary significantly across the State, ranging from formal truck parking lots with a capacity of hundreds of spaces to seldom-used small, unsurfaced lots. Data on dedicated truck parking establishments was collected from the sources shown in Table 3 below. Information on location and ownership (public/private); number of truck parking spaces; availability of restrooms and other key amenities such as Wi-Fi; attributes such as paved or gravel and existence and type of striping; restrictions (such as length of stay); and existing technology (such as a truck parking availability system and alternative fuels) was collected for each truck parking location.

Source	Description
MAP-21 Jason's Law Surveys and Assessments	A survey regularly conducted by the National Highway System (NHS) to assess each State's capacity to provide adequate facilities for truck drivers.
TruckMaster® Fuel Finder™	An online database of truck fuel stops in Mississippi.
DC Book Company Truck Stops & Services	An online directory of truck and RV-oriented services.

Table 3: Sources for Truck Parking Supply Inventory

The supply and demand analysis was focused on truck parking locations within five (5) miles of Mississippi's Tier I freight highway network, consisting of Interstates 10, 20, 22, 55, 59, 69, 110, 220, 269 and portions of US Highways 45, 49, 78, and 98 as shown in Figure 3. The inventory of

truck parking facilities identified 144 truck parking locations, with a total of 4,840 parking spaces, spread out across the state. A wide variety of locations offer truck parking, including gas stations, hospitality stations, parking areas, rest areas and welcome centers. Table 4, Table 5, and Figure 3 show the truck parking inventory.

Туре	Number of Parking Locations	Number of Truck Parking Spaces	
Public Parking Locations			
Rest Area	13	185	
Parking Area	4	60	
Welcome Center	7	95	
Total Public	24	340	
Private Parking Locations			
Gas Station	28	371	
Truck Stop/Gas Station	92	4,129	
Total Private	120	4,500	
Grand Total	144	4,840	

Table 4: Truck Parking Inventory on Mississippi's Tier I Freight Network, 2023

Source: HNTB Analysis, 2023; MDOT, 2023; TruckMaster® Fuel Finder™, 2023; DC Book Company Truck Stops & Services, 2023

Table 5: Truck Parking Inventory by Highway on Mississippi's Tier I Freight Network, 2023

Highway	Number of Truck Parking Locations	Public Truck Parking Spaces	Private Truck Parking Spaces	Total Truck Parking Spaces
I-20	31	62	1,475	1,537
I-55	34	112	786	898
I-10	14	66	583	649
I-22	19	14	569	583
I-59	19	78	392	470
US Hwy 49	11	8	293	301
US Hwy 45	10	0	230	230
US Hwy 98	4	0	85	85
US Hwy 78	1	0	75	75
I-269	1	0	12	12
I-69	0	0	0	0
I-220	0	0	0	0
Total	144	340	4,500	4,840

Source: HNTB Analysis, 2023; MDOT, 2023; TruckMaster® Fuel Finder™, 2023; DC Book Company Truck Stops & Services, 2023

Figure 3: Truck Parking Locations on Mississippi's Tier I Freight Network, 2023



Source: HNTB Analysis, 2023; MDOT, 2023; TruckMaster® Fuel Finder™, 2023; DC Book Company Truck Stops & Services, 2023

Parking Demand

Truck parking demand depends on factors such as location, time of day, road, and weather conditions, and most importantly the volume of trucks on the road. Nationally, in areas with substantial truck volume, the demand for truck parking significantly rises. This reflects a critical relationship between the volume of truck traffic and the need for adequate parking facilities.⁶

To determine truck parking demand in Mississippi, GPS data from the American Transportation Research Institute (ATRI), a non-profit research institute in the trucking industry, was used to count and track truck movement within the state over time. ATRI's GPS data is collected from wireless onboard communication systems used by the trucking industry and offers a snapshot of truck movement. The data contains the location, date, and time stamps for individual trucks as they move. Data is collected at frequent intervals, ranging from a single second to a minute between timestamps.

ATRI GPS data was provided for four two-week periods during the months of February, May, August, and October of 2023 to provide a significant sample for the analysis. A total of 170,989,597 observations spanning 24 hours a day over the eight total weeks of data were included. The data was processed in RStudio, an integrated development environment used for statistical analysis and graphics. The data was sorted according to date and time and then grouped based on whether each truck's latitude and longitude showed movement of less than 5 meters between timestamps. If a truck moved less than 5 meters for 15 minutes or more, it was considered to be parked, otherwise it was excluded from the analysis.

ATRI's GPS data collection is limited and captures only a sample of all trucks travelling within the State. Thus, expansion factors based on the ratio of trucks included in the ATRI data to total truck volume in MDOT Average Annual Daily Truck Traffic (AADTT) counts were developed. The expansion factors were used to calibrate the parked truck counts derived from ATRI data.

Based on this analysis, demand for truck parking on Mississippi's Tier I freight network appears to be concentrated at major interchanges as shown in Figure 4. Cities with the highest density of parked trucks were Gulfport, Jackson, Meridian, and Tupelo.

In addition to identifying parked trucks, the peak hour for parking at each truck parking location was identified and a peak hour range identified for the entire state. The busiest times of day for truck parking were the overnight hours with demand peaking at 9 PM, as shown in Figure 5.

⁶

https://ops.fhwa.dot.gov/freight/infrastructure/truck_parking/jasons_law/truckparkingsurvey/ch4.htm#:~:text=Th e%20demand%20for%20long%2Dterm%20parking%20at%20any,truck%20transportation%20that%20drive%20par king%20demand%20are:.



Figure 4: Truck Parking Demand and Truck Parking Inventory on Mississippi's Tier I Freight Network, 2023

Source: HNTB Analysis, 2023



Figure 5: Average Parked Trucks per Hour on Mississippi's Tier I Freight Network

Source: ATRI, 2023; HNTB Analysis, 2023

Utilization Rates

The estimated utilization rate for each truck parking location included in this analysis is calculated based on the ratio of parked trucks at the peak hour to the number of available truck parking stalls. Utilization was grouped based on whether it was low (25 to 50% full), medium (51 to 75% full), high (75 to 100% full), or over capacity (greater than 100% full). No locations had less than 25% utilization.

When a facility is at 100% utilization it is at full capacity, thus locations were considered over capacity when the number of parked trucks exceeded the number of available stalls. Truck parking locations were considered to be slightly over capacity when peak-hour utilization reached 101-125% and extremely over capacity when utilization exceeded 125%.

Some sites experienced parking challenges at the peak hour while other locations do not reach full capacity. Of the 144 sites, 64% are not over 100% capacity at the peak hour as shown in Table 6 and illustrated in Figure 6.

Utilization Summary	Parking Locations	%	Percent at Ca	ent at Capacity	
50% or less	25	17%	Net Over		
51-75%	37	26%	Capacity	64%	
76-100%	30	21%	Capacity		
Over Capacity	25	17%	Over	260/	
Extremely Over Capacity	27	19%	Capacity	50%	
Total	144	100%		100%	

Table 6: Utilization at Authorized Parking Locations on Mississippi's Tier I Freight Network

Source: HNTB Analysis, 2024

Figure 6: Truck Parking Utilization on Mississippi's Tier I Freight Network, 2023



Source: HNTB Analysis, 2024

Forecast Future Truck Parking Demand and Utilization Rates

To understand future demand, the latest forecast of truck traffic from the Mississippi Travel Demand Model (TDM) was used to determine a compound annual growth rate (CAGR) which could be applied to the current truck parking demand estimates at authorized truck parking locations to project future forecasts of demand for horizon study year 2045 and interim planning years.

Not included in this forecast are other factors that could affect future demand such as emerging technologies that increase, decrease, or change the way that truck traffic travels, such as autonomous trucks. Autonomous trucks are unlikely to significantly reduce the need for truck parking until they can operate without the need for human supervision or intervention.

Authorized Truck Parking Demand and Utilization Rates

Based on this model and additional analysis, total demand for truck parking is expected to increase about 21% leading to a total of around 800 more parked trucks by 2045 at authorized locations. At unauthorized locations total demand is expected to grow by about 33% or around 630 trucks in the same time period. Figure 7 through Figure 10 below show these estimates. The 4,840 total available truck parking spaces are shown as a green line in Figure 7 for comparison to the number of parked trucks.



Figure 7: Forecast of Parked Trucks at Authorized and Unauthorized Locations on Mississippi's Tier I Freight Network, 2023

Figure 8: Forecast of Utilization Rates at Authorized Parking Locations on Mississippi's Tier I Freight Network, 2023 and 2045



Unauthorized Truck Parking Demand and Utilization Rates

Unauthorized truck parking locations were identified based on interchanges and on and off ramps on the Tier I freight network that were likely candidates for unauthorized parking to occur. The resulting locations were divided into four levels of use based on the number of trucks parked at each: no unauthorized parking, low unauthorized parking (1 to 5 trucks), medium unauthorized parking (6 to 15 trucks), and high unauthorized parking (16 or more trucks). Based on the future forecast model described above the number of high use locations for unauthorized parking is expected to increase 300% (from 5 to 20 locations) by 2045 if conditions remain the same.



Figure 9: Number of Unauthorized Parking Locations on Mississippi's Tier I Freight Network at Each Level of Use, 2023





Needs & Impacts

The analysis of supply and demand lays the foundation for developing an understanding of Mississippi's truck parking needs and their potential impacts. Included in this section are a gap analysis, crash analysis, and a discussion of the potential implications of truck parking shortages.

Truck Parking Gap Analysis

The following is a description of the gap between truck parking supply and demand in Mississippi. The gap refers to the difference between the number of designated spaces (supply) and utilization (demand). The gaps were determined for Mississippi's Tier I freight network and are used to identify the places where the need for truck parking investments may be higher than in other areas.

For the purpose of the gap analysis, demand includes truck parking at unauthorized locations as described in the following section. By examining the total number of parked trucks at unauthorized locations in combination with demand at the authorized locations, a comprehensive truck parking analysis can identify site-specific latent demand (demand that is as yet unrealized because of a lack of capacity), guiding the development of strategies to address the unmet needs and alleviate pressures on truck parking infrastructure.

County-Level Gaps in Total Truck Parking

The truck parking supply inventory collected data on the types of parking facilities, their amenities, size, and restrictions, focusing on locations on Mississippi's Tier I freight network. As detailed above, the inventory identified 144 truck parking locations with 4,840 parking spaces spread out across 64 counties in Mississippi, including gas stations, hospitality stations, rest areas, and welcome centers. After identifying the locations of truck parking facilities, truck parking demand was calculated for the peak hour based on ATRI GPS data on truck movement in the state as described above. Based on the difference between supply and peak-hour demand, truck parking gaps on Mississippi's Tier I freight were identified as described below.

At the county level, truck parking gaps were calculated by combining the total number of trucks parked at both authorized and unauthorized locations compared to the available truck parking supply in each county. As shown in Figure 11 the highest gaps are seen along east-west corridors I-10 and I-20 and at several points along I-55 and I-22 in the northern part of the state. Table 7 lists the counties with truck parking gaps, the total count of parked trucks in the county, the number of authorized truck parking spaces, and the gap and gap level for each. Counties with no gap are excluded from the table. In addition, the right-hand column shows the total shortage of parking spaces at locations where a deficit was noted, excluding sites where there was either no gap or there was a parking surplus. This can be a useful tool for

understanding the total need for truck parking, regardless of nearby available spaces that are accounted for in the gap analysis.

County	Parked Trucks	Truck Parking Spaces	Gap Gap Level		Sum of Shortages*	
Lauderdale	695	574	-121	High	-201	
Warren	234	115	-119	High	-123	
Hancock	123	20	-103	High	-103	
Pearl River	194	97	-97	High	-103	
Jackson	284	188	-96	High	-134	
Copiah	124	40	-84	High	-84	
DeSoto	201	120	-81	High	-148	
Scott	245	186	-59	High	-89	
Forrest	223	166	-57	High	-91	
Madison	87	33	-54	High	-54	
Panola	170	118	-52	High	-59	
Itawamba	85	39	-46	Medium	-56	
Harrison	493	453	-40	Medium	-116	
Newton	91	60	-31	Medium	-40	
Clarke	30	7	-23	Medium	-23	
Pike	128	110	-18	Medium	-53	
Stone	47	32	-15	Medium	-17	
Holmes	93	79	-14	Medium	-36	
Union	154	140	-14	Medium	-39	
Yazoo	12	0	-12	Medium	-12	
Perry	41	30	-11	Medium	-11	
Lamar	24	16	-8	Low	-10	
Hinds	286	278	-8	Low	-114	
Carroll	44	37	-7	Low	-22	
Jasper	47	40	-7	Low	-21	
Benton	42	35	-7	Low	-7	
Marshall	171	167	-4	Low	-66	
Kemper	19	15	-4	Low	-4	
Lowndes	3	0	-3	Low	-3	
Noxubee	13	10	-3	Low	-3	

Table 7: Truck Parking Gaps by County on Mississippi's Tier I Freight Network, 2023

*The sum of shortages includes only locations with truck parking shortages and excludes locations where there is no gap or there is a surplus. This includes unauthorized parked trucks.

Note: Totals may not equal 100% due to rounding.

As a supplement to this analysis, Appendix D – Top 4 Private and Public Truck Parking Gap Locations includes additional information on the public and private truck parking locations on Mississippi's Tier I freight network that have the highest gaps in truck parking. Six of the eight (four private and two public) locations are along east-west corridors I-10 and I-20. The remaining two locations are on I-59 and I-55 in the southern half of the state. These are described in detail in the appendix. Figure 11: Truck Parking Gaps by County on Mississippi's Tier I Freight Network, 2023



Source: HNTB Analysis, 2024

Mississippi Truck Parking Study

Corridor-Level Gaps in Total Truck Parking

Corridor-level gaps were also calculated to include both authorized and unauthorized parked trucks. Analysis at the corridor level highlights specific areas where the parking infrastructure is under stress and helps to prioritize interventions in those locations. By corridor, the combined number of parked trucks at authorized and unauthorized locations show that there is a shortage of parking on the majority of the Tier I freight network highways. Negative numbers in Table 8 represent parking shortfalls and positive numbers represent surpluses (i.e. no gap). The total gap in truck parking spaces on the Tier I freight network is around 950 in 2023.

	Truck Parking			Parkeo	C - 17	
Highway	Public Spaces	Private Spaces	Total	Authorized	Unauthorized	Gap 2023
I-20	62	1,475	1,537	1,331	457	-251
I-55	112	789	901	669	464	-232
I-10	66	580	646	598	281	-233
I-22	14	569	583	399	197	-13
I-59	78	392	470	399	276	-205
US Hwy 49 (Jackson to Hattiesburg)	0	184	184	116	11	57
US Hwy 49 (Hattiesburg to Gulfport)	8	109	117	111	25	-19
US Hwy 45	0	230	230	179	65	-14
US Hwy 98	0	85	85	59	29	-3
US Hwy 78	0	75	75	24	44	7
I-269	0	12	12	6	45	-39
I-69	0	0	0	0	6	-6
I-220	0	0	0	0	4	-4
Total	340	4,500	4,840	3,891	1,904	-955

Table 8: Truck Parking Gaps by Corridor on Mississippi's Tier I Freight Network, 2023

Note: Totals may not equal 100% due to rounding.

It is important to note that I-269 was completed in 2017, and as a new highway, it may initially show higher increases in truck traffic than what is realistically anticipated. The introduction of a new highway often prompts a redistribution of traffic across the transportation network, as drivers take advantage of the improved connectivity, which can lead to elevated traffic levels which drop over time to reach a level closer to the rest of the network. To account for this, an aggressive average growth estimate from the base year through 2045 was applied to I-269 to account for future development along the corridor and the progressive construction of the I-69 corridor in other states.

Based on the truck parking forecast model, the total combined number of trucks parking on Mississippi's Tier I freight network is expected to reach around 7,200 by 2045, if trends continue (Table 9). This is close to 2,400 more trucks than there are available parking spaces on the network's major corridors as shown below. The right-hand column displays the total shortage of parking spaces at locations where a deficit was noted, excluding sites where there was either no gap or there was a surplus of truck parking.

Highway	Parked Trucks						Truck	Gap	*Sum of
	2023	2025	2030	2035	2040	2045	Parking Spaces	2045	Shortages 2045
I-20	1,788	1,832	1,908	1,987	2,070	2,156	1,537	-619	-861
I-55	1,133	1,160	1,207	1,256	1,308	1,361	901	-460	-659
I-10	879	895	922	951	980	1010	646	-364	-441
I-22	596	611	635	661	689	717	583	-134	-269
I-59	675	694	729	765	802	842	470	-372	-434
US Hwy 49 (Jackson to Hattiesburg)	127	130	136	141	147	153	184	31	-14
US Hwy 49 (Hattiesburg to Gulfport)	136	138	143	148	153	159	117	-42	-50
US Hwy 45	244	250	259	268	278	288	230	-58	-106
US Hwy 98	88	91	95	100	105	110	85	-25	-57
US Hwy 78	68	69	72	74	77	79	75	-4	-51
I-269	51	60	93	142	219	337	12	-325	-325
I-69	6	7	9	11	13	17	0	-17	-17
I-220	4	4	4	4	4	4	0	-4	-4
Grand Total	5,795	5,942	6,212	6,509	6,844	7,232	4,840	-2,392	-3,289

Table 9: Truck Parking Demand Forecast by Corridor on Mississippi's Tier I Freight Network

*The sum of shortages includes only locations with truck parking shortages and excludes locations where there is no gap or there is a surplus. This includes unauthorized parked trucks.

Note: Totals may not equal 100% due to rounding.





Gap Analysis Conclusion

By comparing the corridors with significant parking gaps to the counties experiencing high gaps, we can identify potential investment locations that align with the most pressing needs based on the overlap between the two levels of analysis. For example, as shown in Figure 12 Interstates 10, 20, 22, 55, and 59 have the highest gaps and as shown in Figure 11 and Table 7 the highest county-level gaps are in Lauderdale, Warren, and Hancock County. The overlap between the two analyses points toward potential investment such as on I-10 through Hancock County and I-20 through Lauderdale and Warren Counties.

Unauthorized Parking Analysis

Trucks park in unauthorized areas for various reasons including inadequate supply of authorized parking spaces, difficulties in navigating to or from authorized parking locations, emergency situations, and personal preferences. In this context, unauthorized areas include any location that is not formally designated for truck parking, such as highway shoulders and ramps, closed rest areas, Department of Public Safety (DPS) facilities such as weigh stations (open or closed), as well as in urban locations, or local street shoulders. The public opinion poll released as a part of this study showed that the most common reasons that drivers feel the need to stop in unauthorized areas are when it is difficult to find parking because authorized areas are full. Examples of unauthorized parking at and along entrance and exit ramps to a DPS facility as well as along entrance and exits ramps to an authorized parking location are shown in Figure 13.



Figure 13: Unauthorized Parking at DPS Facilities on Mississippi's Tier I Freight Network

Source: MDOT, 2023; HNTB Analysis, 2024

Impacts of Unauthorized Parking

When trucks are parked in unauthorized locations it can have detrimental effects on infrastructure condition as well as on public safety. Trucks parked on the side of the road or on ramps can limit the space available for other vehicles, resulting in traffic jams and delays, particularly in urban areas and on highway shoulders. Trucks parked in a variety of unauthorized locations also pose safety hazards to other drivers and pedestrians by obstructing visibility, increasing accident risks, and impeding the access of emergency vehicles to certain areas. Because unauthorized locations are not typically designed to withstand the wear and tear of heavy trucks, the weight can cause damage to road shoulders, ramps, and rest areas not designed to support their load, leading to infrastructure decay and necessitating costly repairs.

From a legal standpoint, parking in unauthorized locations violates traffic and parking regulations, potentially resulting in fines and legal repercussions for the drivers and their companies. In addition, unregulated parking can contribute to environmental issues, such as improper waste disposal and increased emissions, particularly in areas not designated for long-term or overnight parking. These potential impacts make the issue a top priority when considering truck parking needs in the state.

Besides the potential impacts of unauthorized parking on traffic, safety, and infrastructure, when drivers are forced to park in unauthorized areas, they are at risk of becoming victims of predatory towing and facing excessive fees that can greatly affect their livelihood. Predatory towing, which involves unlawful practices such as overcharging and damaging property which can lead to delays in freight delivery as well as harm to truck drivers themselves caused by potential delays in vehicle and cargo release and excessive fees for equipment and labor.

Although the reasons for unauthorized parking are varied, concentrations of trucks parking along a specific ramp or highway at unauthorized locations can signal issues such as a shortage of designated truck parking spaces, popular or frequently traveled trucking routes, logistics and delivery hotspots, a lack of information on available authorized parking spaces, or poorly designed authorized parking locations that make it difficult for truck drivers to enter and exit them. This unauthorized truck parking analysis uses the parked trucks analysis of ATRI data described above to identify concentrations of parked trucks at unauthorized locations along the Tier I freight network to develop an understanding of where there may be need for improvement. ATRI data showing parked trucks was mapped and sites on the Tier I freight network where there were concentrations of parked trucks were identified. Unauthorized parking sites included interchanges, ramps, DPS facilities, and entrance and exit ramps to rest areas and other public parking locations.

A heatmap showing concentrations of unauthorized parking on the Tier I freight network can be seen in Figure 14. As shown, the highest concentrations of unauthorized parking occurred along I-22 in the northern part of the state, at several points on I-20 running east-west through the middle of the state, at the intersection of US 49 and I-59, and along I-10 in the southernmost region.



Figure 14: Unauthorized Parking Heatmap on Mississippi's Tier I Freight Network, 2023

Source: HNTB Analysis, 2024

Truck Crash Analysis

According to the 2023 FHWA Truck Parking Crashes Forum, between 2018 and 2020, there were a total of 673 fatal truck-related crashes involving parked or working vehicles⁷. Specifically, in 2020, there were 255 fatal truck crashes, in 2019, there were 202, and in 2018, there were 216 such crashes. According to the analysis presented in the forum, a substantial portion of fatal crashes of parked large trucks occurred during early morning hours, and predominantly on the shoulder, meaning that they may have been drivers just finishing an overnight break in an unauthorized location. Crashes involving parked trucks resulted in higher severity compared to crashes with trucks in general, likely due to the higher speed differential between a moving and a stationary vehicle. This overview emphasizes the need to address unauthorized truck parking, as it is interlinked with the occurrence of serious crash events.

Analyzing trends in truck-related crashes on the Tier I freight network can help to identify highrisk areas in Mississippi by illustrating correlations between inadequate parking facilities and the locations of crashes. High numbers of truck-related crashes in an area can indicate safety challenges, parking needs, regulatory concerns, and the need for targeted interventions, all potentially related to truck parking availability.

Crash data was provided by MDOT including information on the type and severity of each truckinvolved crash, the date and time of the incident, and details about road and environmental conditions. Without specific details on driver fatigue or the reason for the truck being parked (e.g. for an HOS break), the data is inadequate for determining whether any incident was directly related to the availability of parking, however, like in the national data, instances where a truck was stopped on a shoulder or other unauthorized location can serve as examples of where parking constraints may have been involved.

Commercial vehicle crash data for calendar year 2022 provided by MDOT included a total of 1,914 incidents. Of those, a total of 1,347 were on the Tier I freight network. Only 17 of those were related to a parked truck that was not stopped because of a mechanical issue or stopped in traffic. Most of the parked truck crashes correlate with areas where there are gaps in truck parking availability, as shown in Figure 15.

The places where gaps in truck parking correlate with parked truck crashes may be locations where there is increased safety risk related to parking constraints. Targeted interventions and infrastructure improvements may need to be prioritized at these locations to enhance safety and mitigate future risks.

⁷ <u>https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/2023-</u> 04/Art%20Forum%202023%20Truck%20Parking%20Crashes%20508.pdf



Figure 15: Crashes Involving a Parked Truck on Mississippi's Tier I Freight Network and Truck Parking Gaps by County, 2023

Source: MDOT, 2022; HNTB Analysis, 2024

Truck Parking Impacts

The potential impacts of inadequate truck parking range from safety and security of truck drivers and other motorists to impacts on the national economy, the environment, and the country's multimodal transportation network. Inadequate truck parking can lead to driver fatigue, accidents, theft, and vandalism, impacting safety and security for truckers and the public. There are also significant potential economic impacts, leading to operational delays, potential driver shortages, increased transportation costs, and heightened risks of cargo theft. These and other impacts are described below.

Safety

One of the main safety concerns related to inadequate truck parking is driver fatigue. When drivers are unable to find a suitable place to rest, they are forced to exceed their driving time, which can lead to accidents on the road. A study by the Federal Motor Carrier Safety Administration (FMCSA) found that driver fatigue was a contributing factor in 13% of serious truck accidents⁸.

In addition to extending driving time, the lack of designated parking spaces also often results in trucks being parked in unsafe locations, putting not only the drivers but the public at risk. Unfortunately, the shortage of truck parking is a common issue, with many drivers reporting that they often struggle to find safe spots to park and take mandatory breaks. This has led to truckers parking illegally in hazardous locations such as off exit ramps, in vacant lots, or on the shoulder of a road. This not only increases the risk of accidents but also makes drivers vulnerable to vehicle damage, property theft, and even crime, particularly for female drivers⁹.

The FHWA included in its recently published truck parking development handbook a discussion of the need to combat human trafficking through better rest area design and awareness, in addition to more standard matters such as noteworthy safety practices for ingress/egress and internal layout of spaces¹⁰. States and Metropolitan Planning Organizations (MPO) have also been making efforts to focus on the safety aspects of truck parking shortages.

Security

Truck parking availability has a potential impact on security, not only for the trucking industry but also for the broader community. One such aspect of the security impact is the prevention of theft and vandalism of commercial trucks. Trucks are frequent targets for thieves, especially when parked in poorly lit, unsupervised, or remote areas due to the valuable goods they carry. Secure parking spaces, with surveillance cameras, security personnel, and proper lighting, decrease the risk of theft and vandalism. In addition to this, secure parking also ensures the

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 ⁸ <u>https://truckparkingclub.com/news/how-a-national-shortage-of-truck-parking-impacts-more-than-just-truckers/</u>
⁹ <u>https://www.pfleet.com/blog/how-a-shortage-of-semi-truck-parking-impacts-</u>

drivers#:~:text=According%20to%20a%20survey%20in%202020%2C%2098%25%20of,property%20theft%20and%20predatory%20behavior%20against%20female%20drivers.

https://ops.fhwa.dot.gov/freight/infrastructure/truck_parking/docs/Truck_Parking_Development_Handbook.pdf
safety and security of truck drivers. As they are at risk of becoming victims of violent crimes, such as robbery or assault, especially when parked in isolated areas, secure parking provides a safer environment for rest. In cases of health emergencies, secure parking locations equipped with surveillance and personnel can offer quicker assistance and report incidents.

Cargo integrity and timeliness is another crucial factor impacted by secure truck parking. By preventing unauthorized access and potential delays due to theft or vandalism, secure parking helps in maintaining the integrity of the cargo and avoiding disruptions in the supply chain. Parking in secure areas may also lead to lower insurance premiums for trucking companies, as the risk of theft, vandalism, and accidents is lower.¹¹

Economic Impacts

The scarcity of truck parking facilities potentially impacts the economy because of its effect on the trucking industry, shippers, and supply chains. As described above, this shortage can lead to driver fatigue, operational delays and can also cause potential driver shortages if the lack of parking and regulatory compliance challenges affect the desirability of those jobs. In addition, supply chains may face inventory and production delays. When parking is not secure there is also increased risk of cargo theft, along with heightened transportation costs that can compound truck parking shortage impacts.

Maintenance and Preservation Costs

Truck parking also has a potential impact on maintenance and preservation costs when trucks parked in unauthorized locations accelerate surface deterioration, leading to increased maintenance expenses. Unauthorized parking strains existing infrastructure, necessitating more frequent maintenance and repair efforts; it causes environmental degradation and soil erosion, contributing to preservation costs; and it raises safety concerns, prompting additional maintenance and repair outlays to ensure road safety. Overall, the shortage of truck parking heightens all of these costs, demanding additional resources for maintaining road infrastructure.

Environmental Costs

The shortage of truck parking also has a potential impact on the environment because it contributes to soil erosion if trucks park in unpaved areas, air pollution through idling trucks, and waste accumulation when waste is disposed of improperly due to a lack of available disposal facilities. Addressing this shortage is crucial not only for industry efficiency but also to mitigate these environmental impacts and preserve surrounding ecosystems.

Oversize/Overweight (OS/OW) Loads

When designated parking for OS/OW loads is limited, drivers may face challenges finding suitable areas to comply with regulations for secure and safe parking of these specialized loads.

¹¹ <u>https://discounttruckparking.com/2023/01/11/truck-parking-</u>

importance/#:~:text=Properly%20secured%20truck%20parking%20can%20play%20a%20critical,from%20theft%2C %20vandalism%2C%20and%20other%20forms%20of%20damage

This can lead to safety concerns and potential non-compliance with regulations as well as impacts like those caused by parking shortages overall such as supply chain disruptions and increased operational costs caused by drivers needing to travel farther to find suitable parking, leading to additional fuel consumption and potential scheduling conflicts. In addition, OS/OW loads often require specific infrastructure accommodations and when suitable parking is lacking, these loads may inadvertently strain existing infrastructure or lead to unauthorized parking, exacerbating wear and tear on roads not designed for such heavy loads.

Trucking Workforce

As well as the above impact, truck parking shortages can impact the trucking industry workforce in various ways. These include driver fatigue due to extended search times, elevated stress and frustration, reduced rest and downtime, challenges in recruitment and retention, and reduced operational efficiency.

Multimodal/Intermodal Impacts

Truck parking shortages may also lead to impacts on multimodal/intermodal transportation. They can result in increased congestion and delays at intermodal facilities as trucks wait for access, potentially disrupting overall intermodal transport efficiency. They can also lead to increased reliance on other transportation modes, such as rail or maritime, to accommodate freight movement, potentially shifting the balance of multimodal transport networks. Inadequate truck parking can disrupt the fluidity of the intermodal supply chain or exacerbate last-mile delivery challenges, potentially leading to delays in cargo transfers, affecting overall supply chain reliability, and impacting the efficiency and reliability of final freight delivery within the intermodal supply chain.

Recommendations & Strategies

Strategies for addressing truck parking shortages typically address a range of approaches that include expanding public truck parking facilities, developing new private truck parking capacity, enabling truck parking availability communications, addressing policy issues that restrict truck parking development and collaborating with shippers and developers to help meet truck parking needs. The recommendations herein include actionable strategies toward addressing Mississippi's truck parking challenges such as shortages, over- or under- utilization and unauthorized parking. Table 10 lists the recommendations and strategies that will be further explored.

Recommendation	Strategy
Public Facilities	Modernization and Expansion of Existing Safety Rest Areas
	DPS Facility Parking
Enable Private Sector	High-Demand Locations Facilitation
	Land Use Outreach and Education
Truck Parking Availability System (TPAS)	Increase Existing Facility Utilization
Policy	Expanded Truck Parking Guidelines at Public Facilities
	Commercial/Industrial On-Site Parking

Table 10: Recommendations and Strategies for Truck Parking in Mississippi

Public Facilities

On the state's Tier I freight network there are 24 public facilities with a total of 340 truck parking spaces. The strategies for investment in public facilities include modifications to existing facilities and collaboration with the DPS to permit truck parking on existing weigh station facilities. These strategies should take into account the context of specific truck parking facility locations on the Tier I freight network, including facility ownership and level of demand for truck parking at each site.

Accounting for ownership is important because public parking facilities are owned and operated by various agencies including MDOT, DPS, State Tourism Departments, Municipalities or Counties, each with their own advantages or constraints when it comes to regulatory decisions, funding, and making physical changes to the facilities. These differences have a direct impact on the facility's ability to improve and expand. For example, agencies like MDOT may have access to funding for expansion and improvement projects through state and federal transportation programs that are not available to other agencies. In contrast, local governments may face budget constraints and competing priorities that hinder their ability to invest in expansion projects.

Expansion of Existing Public Facilities

The first strategy for addressing truck parking shortages at the level of public facilities involves expansion of existing public parking facilities such as rest stops and welcome centers. Expansion, in this context, refers to increasing parking capacity by restriping parking lots to maximize space utilization and accommodate a larger number of vehicles or by enlarging the overall parking area if land is available. Using these methods to increase truck parking should be a consideration especially during scheduled maintenance updates.

Restriping

Restriping is low impact; in that it requires no new construction or additions to the paved footprint. Instead, it relies on markings to reallocate the existing parking lot space. This means that it is a low cost and less time-consuming measure that can be implemented relatively quickly with minimal disruption. Restriping is an appropriate intervention when combined with other strategies and should be a standard facility maintenance consideration.

A conservative estimate is that restriping can create at least 20% more parking spaces. There are twenty-four (24) public parking facilities on Mississippi's Tier I freight network with a combined total of 340 truck parking spaces. If 15 (60%) of the public rest areas were restriped it could result in the creation of at least 41 new public truck parking spaces based on the conservative estimate. An example of this is shown below.

The Hancock County Welcome Center provides a good backdrop for illustrating restriping benefits. The current truck parking configuration, as shown in Figure 16, has 20 available spaces. Restriping the existing parking facility could increase capacity by 20% by adding 4 new truck parking spaces, as illustrated in Figure 17.



Figure 16: The Existing Parking Configuration at the Hancock County Welcome Center

Figure 17: Example of a Restriping Strategy at the Hancock County Welcome Center



Repurposing

Repurposing of the green space or other areas of a public parking facility is a higher cost and higher impact strategy than restriping that can significantly increase truck parking density. Typically, redesigning a facility's layout can increase the amount of available truck parking by at least 50%. Based on that estimate, if 2 public rest areas in Mississippi were repurposed it could result in the creation of at least 17 new truck parking spaces.

An example repurposing is illustrated using the Hancock County Welcome Center as shown in Figure 18. In the example, the existing right-of-way remains unchanged, but a picnic area / greenspace is repurposed to support truck parking demand. The opportunity at this rest area is significant and could increase capacity from 20 to 50 (150% growth) with the addition of 30 new truck parking spaces.

Implementation of expansion strategies will require an assessment of current facilities, analysis of locations with the highest demand to determine prioritization, and engagement with stakeholders to gather input on needs and priorities. Developing a comprehensive prioritization matrix will allow the state to use a phased approach to the implementation strategy, ensuring that initial improvements have maximum impact with available funding. As improvements are made, regular monitoring and feedback will be valuable in evaluating the impact of the modernization and expansion projects, considering user satisfaction, safety improvements, and the overall effectiveness of the investments. Public facility policy should also be evaluated to determine if an increase in truck parking density will require other amenity changes.

Figure 18: Example of Repurposed Greenspace for Truck Parking at the Hancock County Welcome Center



Renewing

In some cases, public facilities such as rest areas, picnic areas, and maintenance yards may also be closed due to under use, aging facilities, criminal activity, or limited funding. These properties could be valuable alternative options for increasing truck parking capacity through conversion to lower cost, truck-only parking facilities. All of these possibilities will require feasibility study including added operating and maintenance costs before they are pursued.

DPS Facility Parking

Regulations permitting trucks to park at existing Mississippi DPS CTED (Commercial Transportation Enforcement Division) facilities such as weigh stations can help alleviate truck parking shortages by effectively increasing the total parking capacity available to truck drivers, thereby reducing the strain on traditional parking facilities. Although weigh stations typically lack the amenities that truck drivers seek for overnight or longer HOS breaks, they can provide a solution for drivers when traditional parking areas are full, helping to address immediate parking shortages.



Mississippi's Tier I freight network has a total of twenty (20) weigh stations, 19 of which are active (Figure 19). Many of the weigh stations are striped and can accommodate up to 21 parked trucks, leaving plenty of space for maneuvering in and out of the facility. In states where

parking is allowed at weigh stations, 2 to 3 of the spaces are typically reserved for operations, which would leave 18 or 19 spaces open to the public at each facility if this standard were applied to Mississippi's weigh stations. If the 19 active weigh stations in Mississippi allowed trucks to park in only 50% of the available spaces, then there would be 171 new truck parking spaces in the state.

In addition, inactive closed weigh stations can also be converted for use as an alternative parking location when other nearby facilities are full or when there are no other parking options. Mississippi DPS has one weigh stations that is not active and could be converted to provide truck parking. Based on the above-mentioned configuration of 21 truck parking spaces per facility, the two inactive weigh stations could provide Mississippi an additional 21 truck parking spaces.

DPS facilities do not currently allow truck parking. To make weigh station capacity available for truck parking, DPS policy will have to be addressed. Truck parking may also impact DPS budgets in terms of maintenance or the cost of development of existing ROW into truck parking spaces.

Ultimately, weigh stations are not typically designed to function as comprehensive rest stops or long-term parking facilities for truck drivers and their lack of amenities makes them a less desirable option for drivers seeking comfortable and well-equipped parking locations. However, weigh stations may be acceptable parking locations in situations when regular rest stops and parking facilities are at full capacity.

Figure 19: Mississippi DPS Facilities on the Tier I Freight Network



Source: MDOT, 2024; HNTB Analysis, 2024

Enable Private Sector

The private sector is an important partner in truck freight movement across the state. Private truck parking owners are limited in how they can contribute to resolving truck parking shortages, however, in that they are faced with cost constraints, land availability challenges, regulatory hurdles, demand fluctuations, competitive pressures, and infrastructure costs, all impacting their capacity to address truck parking shortages within the market. Although MDOT cannot influence many of these factors there are some strategies that could be beneficial that are within the agency's sphere of influence. Recommendations related to supporting the private sector in high demand locations include new facility development and existing facility parking expansion as described below.

Build New Facilities

New truck parking facilities can make a significant impact on unauthorized truck parking in Mississippi if they are located in areas with high demand and do not have adequate truck parking capacity. MDOT can influence this development by sharing current and future capacity gap details provided in this report. The previously illustrated Figure 11 identifies eleven highpriority counties in Mississippi where demand for truck parking exceeds the existing truck parking capacity. Those counties are DeSoto, Panola, Lauderdale, Jackson, Madison, Scott, Warren, Copiah, Forrest, Pearl River, and Hancock. The previously illustrated

Figure 12 identifies Tier 1 freight corridors where truck parking challenges are expected in 2045. In collaboration with other efforts to expand truck parking capacity in the state, MDOT can identify sites in these counties and on these corridors which are well suited for truck parking, work with city and county governments to zone sites for truck parking and collaborate with private industry to identify potential investors.

A large national private truck stop operator with a facility on I-20 in Mississippi participated in the MDOT Truck Parking Forum and communicated that several factors can influence new facility development decisions.

- Communities that welcome the economic activity of truck parking developments.
- Projects with minimal zoning, permitting and regulatory hurdles.
- Public grants that incentivize truck parking developments.

Development of new truck parking facilities in areas where there is a capacity gap could significantly impact truck parking availability in Mississippi. Four new (5 acre) truck parking facilities located in different parts of the state could each accommodate 150 parked trucks.

Expand Existing Facilities

In some high demand locations, the best investment decisions may be to expand the capacity of existing truck parking facilities. Truck stop operators may be able to increase truck parking capacity with minimal impact on other facility amenities such as fuel, restrooms, food or retail

services. Truck parking capacity expansion could be implemented by developing an adjacent property parcel or increasing truck parking capacity on an existing site.

Parcel expansion requires that adjacent property be available with a willing property owner. Some existing facilities will have already secured expansion property but have not made the decision to expand, possibly for demand reasons but there could also be zoning, permitting or other regulatory issues. In another scenario, capacity can be increased on an existing property footprint by paving a dirt lot or reconfiguring existing truck parking spaces. Both can be costeffective solutions to increasing truck parking capacity. Working with facility owners, MDOT may be able to assist with regulatory hurdles or identifying grant opportunities that could incentivize capacity development.

Another truck stop participant in the MDOT Truck Parking Forum was an independent truck stop operator located in Toomsuba, Mississippi on I-20 immediately west of the Alabama boarder. Figure 20 illustrates a capacity expansion opportunity for both parcel development and paving for the truck stop shown. This is an area where truck parking demand exceeds capacity and often results in unauthorized truck parking along interstate ramps. Paving and striping the areas currently used for truck parking could significantly increase the usable space and increase truck parking capacity. At the Stakeholder Forum the independent truck stop operator indicated that adjacent parcels could also be developed for truck parking.

In the case of the independent truck stop operator in Figure 20, because the truck parking lot is across the street from the truck stop amenities, it is essential that a safe and convenient pedestrian pathway be established so truck drivers can park and access the truck parking amenities. Lighting, signage and the possibility of a physical barrier should all be taken into account and may require a study at the local level.

There may also be environmental considerations to account for in the case of unpaved lots. For example, measures may be required to address issues such as mud, drainage, and overall suitability for heavy-duty vehicles. Similarly, for paved lots, factors such as load-bearing capacity and drainage should be assessed.



Figure 20: Example of an Over Capacity Private Truck Stop with Off-Site Overflow Parking in Toomsuba, MS

Land Use Outreach and Education

Land use decisions are often made locally without considering national supply chain needs, which means that local areas can find themselves unprepared for increased truck parking demand. Coordination with State and Federal levels can help inform local land use planning. Additionally, incorporating truck parking strategies into local transportation plans can help to pave the way for future local investments.

Truck Parking Availability Communications

One of the challenges in meeting truck parking needs is assuring that parking availability information is accessible to truck drivers. Without knowledge of available parking spaces at specific locations, drivers may inadvertently miss the chance to park at facilities with open spaces. Often drivers opt to head to well-known, heavily used locations without certainty about available spaces, where they may find these spots already filled to capacity upon arrival. The lack of information about available parking spaces can contribute to increased congestion at popular larger truck stops and rest areas, as drivers gravitate towards these locations, assuming that because they are larger, they are more likely to have available parking. Smaller or less popular or less well-known facilities may then end up under-utilized as a result as well.

There are several examples in the utilization analysis of areas where there are under-utilized truck parking facilities directly neighboring over-capacity facilities along Mississippi's Tier I freight network that could be due to a lack of information. The example below (Figure 21) shows a corridor through Tupelo, Mississippi, where US Highway 45 meets I-22. The map shows several locations that are at or over capacity within several miles of facilities that have truck parking spaces available. If drivers were able to access real time information about the availability at each of these locations, they may have made alternative parking decisions. Using TPAS (Truck Parking Availability Systems) to provide real-time parking availability information to truck drivers can allow drivers to make informed decisions about where to stop for parking, reducing the likelihood of heading to locations that are already full.



Figure 21: Tupelo, MS – Authorized Truck Parking Locations with Utilization Disparities on Mississippi's Tier I Freight Network

TPAS (Truck Parking Availability Systems)

TPAS utilizes electronic message boards, mobile applications, websites, and Intelligent Transportation Systems (ITS) integrations to disseminate real-time information about available parking at upcoming rest areas or truck stops, allowing drivers to make informed decisions as they approach these facilities. In 2019, the Intelligent Transportation Systems (ITS) Joint Program Office released a briefing on implementing TPAS for commercial vehicles showing that these systems have a favorable cost-benefit ratio, improve driver safety and compliance, and can benefit from connected vehicle technologies.¹² An illustration of how TPAS works is shown in Figure 22.

¹² <u>https://www.itskrs.its.dot.gov/briefings/executive-briefing/commercial-vehicle-operations-truck-parking-information-systems</u>



One of the other advantages of TPAS is that it can be integrated with existing intelligent transportation system (ITS) infrastructure, such as electronic message boards, variable message signs, and roadside beacons, to disseminate parking availability information, making initial investments even more impactful. The Mississippi Statewide Freight Plan includes a recommendation that MDOT consider TPAS along all interstates.¹³ This would align the state with initiatives in nearby states such as the I-10 TPAS initiative, an initiative to use TPAS to monitor and disseminate information on about 550 truck parking spaces at 37 public rest areas along I-10 in California, Arizona, New Mexico, and Texas. TPAS is also used in Florida where there are another 25 TPAS integrated truck parking facilities on the I-10 corridor.

Although the entire network would benefit from TPAS integration, the corridors where it would have the highest impact are called out in Figure 23 as starting points for planning implementation. I-10 has several over capacity facilities very near under-utilized locations, making it a good candidate for a positive impact if TPAS is implemented and thus integrating it with the I-10 TPAS Corridor initiative. I-20 and I-55 also have many locations where over-capacity facilities are right near under-capacity facilities, demonstrating that real-time parking information would be valuable. Figure 23 illustrates these corridors with the 2023 peak hour utilization at authorized parking facilities and the truck parking gap by corridor to show where the two factors converge and may point toward a priority corridor.

¹³

https://mdot.ms.gov/documents/Planning/Plan/MS%20Freight%20Plan/MS%20Statewide%20Freight%20Plan%20 2022.pdf#:~:text=Mississippi's%20truck%20parking%20needs.%20Based%20on%20the,truck%20parking%20availa bility%20system%20(TPAS)%20along%20Interstates.

Figure 23: Truck Parking Assessment of Mississippi's Tier I Freight Network, 2023



Source: HNTB Analysis, 2024

TPAS as a Multi-Agency Effort

A TPAS solution can benefit not only the truck driver with a safe place to park but can also be a multi-agency partnership. For example, Jackson MPO is updating the Central Mississippi ITS Architectural Plan which includes adding commercial vehicle parking as an ITS service package. Leveraging information from this truck parking study can enhance coordination between both parties towards future projects to address TPAS and commercial vehicle parking requirements. MDOT Information Systems can also help identify opportunities for TPAS inclusion in Traffic Management Center (TMC) operations.

Other agencies would include the Mississippi Department of Public Safety (DPS) and the Mississippi Department of Environmental Quality (MDEQ). MDEQ should benefit by reducing truck CO₂ emissions. And by reducing unauthorized truck parking, DPS will reduce public safety hazards.

In addition, a TPAS solution in Mississippi can build upon nationwide efforts such as the I-10 Coalition or Mid America Association of State Transportation Officials (MAASTO). Both support deployment of truck parking availability systems which are interoperable and disseminate information to the commercial vehicle operators and third-party information providers.

Grant Funding

Grant funding for TPAS and other truck parking projects can come from a variety of state and federal funding sources depending on which phase of the project is being funded and for how long. Although the cost of a TPAS may be much lower than other capacity projects, like the construction of a new truck parking facility, the funding must still come from a combination of sources and programs.

State DOTs have successfully funded the initial deployment of TPAS including capital expenditures and construction activities utilizing a range of federal formula and grant funding programs. The National Highway Freight Program (NHFP) is a dedicated formula funding program that states can allocate to freight projects, including TPAS, that are identified in a state freight plan. Jason's Law, first enacted in the Moving Ahead for Progress in the 21st Century Act (Map-21), established truck parking as a national priority and allowed truck parking projects to be considered for funding using a wide range of federal programs. Table 13 provides a list of federal formula and discretionary/ competitive grant programs that can be used to fund the planning, design, and construction of truck parking projects. Additional information on each of these programs can be found in the *FHWA Eliqibility of Title 23 and Title 49 Federal Funds for Commercial Motor Vehicle Parking Memorandum* (September 20, 2022).

Table 11: Truck Parking Federal Funding Sources

Formula Funding Programs	Grant Programs
Surface Transportation Block Grant (STBG)	Infrastructure for Rebuilding America (INFRA)
National Highway Freight Program (NHFP)	Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
Highway Safety Improvement Program (HSIP)	Rural Surface Transportation Grants
National Highway Performance Program (NHPP)	National Infrastructure Project Assistance (MEGA)
Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT)	Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT)
Carbon Reduction Program (CRP)	Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD)
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Reduction of Truck Emissions at Port Facilities
	FMCSA High Priority Innovative Technology Deployment (HP-ITD)

While funding for initial capital and construction expenditures can be funded through a variety of programs and methods, funding for the ongoing maintenance and operations of a TPAS may require multi-year funding commitments by the state through their Traffic Operations or Maintenance divisions as most federal funding programs do not fund maintenance once the project is complete.

Policy

Expanded Truck Parking Guidelines at Public Facilities

At certain times, especially during overnight hours when automobile traffic is typically lighter at rest areas, DOTs can consider allowing trucks to utilize some of the space reserved for cars. Trucks are often found informally using this space at many rest stops, indicating that this type of parking configuration is likely feasible. Permitting trucks to utilize these spaces can maximize the use of available land. Another consideration is to expand parking duration limits to help accommodate Hours of Service regulations.

Commercial/Industrial On-Site Parking

In industrial zoned areas it is common to find vacant lots, or developed sites with excess space which could be used for truck parking. MDOT can promote or encourage this type of activity by engaging property owners, local agencies, economic development agencies, industrial development agencies, and chambers of commerce in high need areas.

Next Steps

This analysis of truck parking on Mississippi's Tier I freight network not only showcases the pivotal role of safe and accessible truck parking in ensuring adherence to Federal Hours of Service (HOS) regulations for commercial motor vehicle (CMV) drivers but also underscores the escalating need for strategic coordination and regulation in tandem with the state's heavy reliance on trucks for freight transport across its extensive public road network. This study serves as a foundation for addressing the widening disparity between truck parking supply and demand, especially in the context of various influential factors such as economic dynamics, technological advancements, and environmental considerations, all of which are adding pressure to Mississippi's already limited truck parking resources.

To effectively overcome truck parking shortages, the study proposes a range of strategic interventions, including the modernization and expansion of existing public parking areas, the creation of new truck parking facilities, facilitation of private sector solutions, and the implementation of TPAS. To successfully achieve the goals of the study, it will be necessary to develop potential actions, roles, and timelines for implementation, to foster partnerships and collaboration with pertinent agencies and stakeholders to drive these crucial initiatives. With these concerted efforts, Mississippi can proactively address the pressing truck parking challenges and bolster its transportation infrastructure to support the state's economic vitality and continued growth.

Appendices

Appendix A – Materials Review Technical Documentation

A review of studies and reports related to truck parking was conducted to provide background for this report. This includes an examination of the Federal Highway Administration's (FHWA) Study of Commercial Truck Parking Facilities, as well as subsequent national and industry-led investigations into truck parking demands and challenges. The material review also includes insights from the Truck Parking Development Handbook, critical findings from Jason's Law surveys, data from the National Coalition on Truck Parking, and key information from the 2022 Mississippi Statewide Freight Plan. Additionally, the material review looks at specific regulations and predatory practices within the towing and recovery industry, emphasizing their implications for trucking operations. The following describes the materials reviewed.

Truck Parking Development Handbook

The Truck Parking Development Handbook, published by the Federal Highway Administration (FHWA), is a comprehensive resource for individuals involved in the planning and land use of truck parking facilities. The handbook provides essential information on the fundamentals of truck parking, the necessity for drivers to have appropriate parking options, as well as the relevant regulations. Moreover, it offers useful tools for estimating parking demand and conducting thorough benefit-cost analyses. This includes guidance on the design and location of truck parking areas, along with strategies for promoting driver safety, community welfare, mobility, and economic competitiveness.

According to the handbook, truck parking has a direct impact on the efficiency and safety of trucking operations, which in turn affects the movement of the country's freight. The most effective approach towards addressing this issue is to first understand the industries and infrastructure that attract truck traffic, thereby determining the demand for parking. A valuable resource in the estimation of this demand is the FHWA Truck Parking Demand Estimation Tool, which is also described in the handbook. This tool utilizes employment and industry data to determine the peak number of trucks that require parking.

In addition, the handbook emphasizes the critical need to carefully consider the dimensions and design of truck parking facilities. Factors such as stall dimensions and slot density should be given top priority to ensure efficient use and maximum safety. Furthermore, sufficient restroom facilities must also be provided, taking into account the expected number of visitors.

MAP-21 Jason's Law Surveys and Assessments

According to Section 1401 (c) of the Moving Ahead for Progress in the 21st Century (MAP-21) Act, commonly known as "Jason's Law," it is the responsibility of the United States Department of Transportation (USDOT) to evaluate the capacity of each state to provide adequate parking and rest facilities for commercial motor vehicles. This assessment must take into account the volume of commercial motor vehicle traffic in each state and establish measurable metrics to determine the sufficiency of available parking facilities. The initial Jason's Law report was published in 2015, with subsequent periodic updates mandated by the USDOT.

The most recent Jason's Law survey published in 2020 revealed a considerable shortage of truck parking facilities, specifically pointing out that 18% of public truck parking lots in Mississippi were consistently over capacity, with a concerning number of unauthorized truck parking instances observed throughout the state. Such incidents primarily occur on ramps and highway shoulders, mostly between 7PM and 9AM, and are often the result of limited parking spaces or unfavorable weather conditions. Unauthorized parking may also take place when commercial vehicles are awaiting deliveries. In terms of the existing truck driver shortage, Mississippi falls within the medium to high range.





Additionally, there has been a significant decrease of almost 50% in the number of public truck parking spaces in Mississippi between 2014 and 2019. The state ranks relatively high in terms of truck parking spaces per 100 miles of the National Highway System (NHS) and per 100K daily Truck-Vehicle Miles Traveled (TVMT).



Figure 25: Jason's Law Survey Results, 2020: Truck Parking Spaces by State 2014 and 2019

Reports from the National Coalition on Truck Parking

In response to enduring deficiencies in the availability of truck parking in the United States, the United States Department of Transportation (USDOT) and various stakeholder organizations came together to establish the National Coalition on Truck Parking in 2015. The Coalition is comprised of representatives from stakeholder groups in the public sector, transportation organizations, freight and commerce industries, and other similar groups. It consists of four working groups, namely:

- Parking Capacity
- Technology and Data
- Funding, Finance, and Regulations
- State, Regional, and Local Government Coordination

The working groups convene annually and generate reports addressing the status of truck parking in the United States. One report that has been recently published by the Coalition and is pertinent to this study is titled "Truck Parking Availability Detection and Information Dissemination". According to the report, a number of states have made use of the Truck Parking Information Management System (TPIMS) to provide real-time parking information to truck drivers and optimize the availability of parking spots. TPIMS employs technology and sensors to gather data and translate it into availability information, which is then disseminated to drivers through various media channels. The development of TPIMS can be financed through grants from the Federal Highway Administration (FHWA) and serves as a beneficial tool in addressing issues related to truck parking supply.

Mississippi Statewide Freight Plan

The 2022 Mississippi Statewide Freight Plan addresses the changing economic trends that affect the movement of goods within the state. It is consistent with federal regulations and guidelines for transportation and economic development initiatives. The plan evaluates the state and performance of the freight network, takes into account challenges and trends, and presents strategies to fulfill freight demands while adhering to the requirements of the FAST Act and the Infrastructure Investment and Jobs Act (IIJA). The plan's objectives align with the state's longterm transportation plan and national freight policy goals, with a focus on safety, maintenance, accessibility, economic development, resiliency, and partnership.

Reference materials relevant to this study included in the Statewide Freight Plan are freight transportation data and analysis for highways, railroads, ports, airports, and pipelines in Mississippi; usage categorization, Intelligent Transportation System (ITS) locations, annual truck traffic and travel time reliability maps; and information on commodity flows, economic impacts, emerging trends, and network needs and opportunities. The plan also includes lists and maps of top bottlenecks and truck crashes, as well as data on daily truck parking utilization and economic costs of truck-involved crashes.

MULTIPLAN 2045: Mississippi's Unified Long-Range Transportation Infrastructure Plan

The Mississippi Unified Long-Range Transportation Infrastructure Plan (MULTIPLAN) for the state of Mississippi comprehensively outlines numerous areas of importance, particularly regarding the conditions of truck parking within the state. As stated by the plan, the transportation system in Mississippi is faced with various challenges, including a noticeable quantity of poor-condition bridges and a fatality rate exceeding the national average. The significance of truck and rail freight within Mississippi's transportation framework is evident, as state roads account for 90% of truck freight travel.

Additionally, it is predicted that the state's population will experience steady growth, with a notable portion of residents aged 65 or older by the year 2045. This poses further difficulties for

the transportation system, including those pertaining to truck freight. The corresponding demand for freight transport is closely intertwined with the state's economy, as anticipated total freight volume is set to escalate by 62% in 2045, subsequently leading to heightened demands for appropriate truck parking facilities.





Mississippi Truck Size & Weight Limit Laws

The State of Mississippi enforces regulations regarding the weight and load of vehicles operating on highways. These limitations include specific restrictions on the weight allowed on both single and tandem axles, with a maximum of 20,000 pounds and 34,000 pounds respectively. These limitations are determined through a calculation of weight per inch of tire width, with a tolerance of 500 pounds. Furthermore, the overall weight of a group of axles must not exceed predetermined values, which are determined based on the distance between the axles.

It is important to note that there are varying maximum load allowances for vehicles traveling on black line highways versus red line highways. On black line highways, the maximum load varies based on the distance between the extreme axles of the group, while on red line highways, it is determined by the distance between the extreme axles and the number of consecutive axles in the group. In addition, special consideration is given to combinations of vehicles, particularly those with driving axles. In certain situations, motor vehicles registered with the State Tax Commission that measure more than 29 feet between extreme axles may be authorized to use designated highways, though they are still subject to restrictions based on their actual dimensions. Overall, these limitations on wheel and axle loads are implemented to ensure the safety and efficiency of highway travel within the State of Mississippi.

Predatory Towing

Predatory towing occurs when a towing company engages in unlawful actions, such as overcharging, seizing assets illegally, damaging property, or withholding the release of a truck, trailer, or cargo. Some towing companies also enter into profit-sharing agreements with landowners, implementing booting practices on stationary trucks and demanding exorbitant fees for their removal. This unethical practice often causes tensions between the towing and trucking industries.

The act of parking in unauthorized locations is typically a last resort for drivers, though in certain situations it may be unavoidable due to the lack of authorized parking options, or the need for a driver to stop before their scheduled appointment or required break time. However, in such cases, these drivers are at risk of falling victim to predatory towing practices, which can result in extreme fees that can greatly impact their livelihood. A review of materials discussing predatory towing found that many states have implemented laws aimed at protecting drivers from these practices.

Extensive research on predatory towing, including its causes, frequency, and potential solutions, was conducted by the American Transportation Research Institute (ATRI)¹⁴. It was discovered that excessive billing and unjustified charges were the most prevalent forms of predatory towing, with predatory billing being involved in nearly 30% of all crash-related tows. The identified predatory practices reported by surveyed motor carriers were ranked in order of

¹⁴ <u>https://www.promiles.com/wp-content/uploads/2023/10/ATRI-Top-Industry-Issues-2023.pdf</u>

their impact, with excessive rates for equipment and labor being the most common and detrimental, followed by unwarranted additional charges and excessive storage fees. Delays in releasing vehicles and cargo were also identified as major concerns.

Regulations and countermeasures for towing vary by location, and most are implemented by local governments. Recently, several states, such as Maryland, Arizona, and Colorado, have passed statewide laws aimed at protecting motor carriers from predatory towing practices. These laws have been highly regarded by the trucking industry. However, not all states have been successful in regulating towing practices, as the government agencies responsible for oversight may differ within each state, making it challenging for carriers to understand and assert their rights. In order to provide clarity on towing regulations, ATRI has developed a document summarizing towing laws in all states. Mississippi does not currently have any regulations in place and has one of the highest rates of reported predatory towing practices in the country.

In examining best practices adopted by other states, California stands out for its stringent laws governing towing practices. The California Vehicle Code provides clear guidelines on towing and storage fees, mandates that towing companies obtain authorization from property owners before towing and requires them to notify vehicle owners within a designated time frame after towing. Similarly, in Illinois, the Illinois Commerce Commission regulates commercial towing and enforces laws that protect consumers by requiring tow companies to have valid reasons for towing and to provide detailed invoices. Texas also has comprehensive laws outlining the permissible reasons for vehicle towing, requires signage informing individuals of towing policies, and allows vehicle owners to challenge wrongful towing through hearings. Lastly, Virginia's laws focus on ensuring transparency and fairness in towing practices by requiring clear signage, prohibiting "patrol towing" (towing without specific complaints or authorization), and allowing vehicle owners to pay by multiple methods. These practices serve as potential examples for the state of Mississippi to consider implementing to protect its trucking industry.

The adoption of new laws aimed at limiting predatory towing practices could have a significant impact on parking practices in both municipalities and private property. These laws would not only restrict towing companies from towing vehicles without proper authorization, but also require fair and transparent enforcement of parking regulations for both municipalities and private property owners. With these guidelines in place, vehicle owners would have more protection against being towed without just cause. They would also have access to appropriate remedies in the event that their vehicle was wrongfully towed.

Material Review Conclusions

The material review highlights several trends and pertinent pieces of information related to this truck parking study. The documents reviewed highlight the importance of understanding truck parking demand, designing facilities and passing regulations that meet the needs of the trucking industry, and providing real-time information on parking to drivers. In addition, Jason's Law surveys confirm the shortage of truck parking and identify some of the main reasons for its

occurrence. Mississippi, among many other states, has been significantly affected by this issue, as evident in their 2022 Statewide Freight Plan which addresses the changes in the economy and the resulting impact on how goods are transported within the state. With the state's population expected to continue growing, it is crucial to have adequate parking facilities to meet the increasing demand for freight transportation.

Appendix B – Industry Interview Guide

Current Situation, Issues, and Needs

The transport industry is essential to the state of Mississippi's economy, as it facilitates the efficient movement of products to markets and processing operations. A key factor in maintaining the efficiency, compliance, and safety of this industry is the availability of truck parking, which includes loading areas for farms and agricultural processing facilities, local parking for delivery of goods, and truck stops and rest areas for drivers to take mandatory breaks.

Without proper truck parking, serious safety hazards can arise, including illegal and unsafe parking practices such as parking on highway shoulders or in unauthorized areas. Such practices not only endanger the lives of drivers but also put other members of the traveling public at risk. In addition, truck parking areas with amenities such as restrooms and food not only promote the well-being of drivers but also contribute to their job satisfaction. Impeded by a lack of suitable parking spaces, drivers may face challenges in finding appropriate places to rest during mandatory breaks. As a result, this can lead to driver fatigue and delays in operations, ultimately disrupting supply chains and incurring additional costs for businesses. A lack of sufficient truck parking facilities also affects the overall efficiency and productivity of the industry, ultimately resulting in decreased profitability and hindering the distribution of products.

1. How does your role interact with the transportation industry in this state?

2. What type(s) of truck parking is the transportation industry most concerned with?

a. This may include the need for staging at or near major freight facilities, parking for resident drivers during their time off, sleep and rest break parking to meet hours of service regulations, last mile/local delivery/curb space management, or emergency parking during natural disasters and emergency response activities.

3. Does a lack of truck parking impact business in the state? If so, how?

- a. Businesses may experience issues that arise from a lack of truck parking, impacting their ability to serve their customers and clients, including non-competitive transportation pricing, added costs to carriers in the form of citations or fines, additional accessorial charges from carriers due to increased costs/expenses, etc.
- a. What do you consider the greatest need for addressing truck parking in Mississippi?
- b. Our goal is to understand what companies feel is the greatest issue or need related to truck parking in their region. They may be able to point towards specific problem areas or zoning restrictions that are particularly impactful to their operations.

4. How do truck parling needs change throughout the year? Do the locations for truck parking demand change depending on seasons?

a. Mississippi has a significant investment in agriculture and the transportation demands in the agriculture industry are seasonal. What impact does this have on truck parking?

Regulation and Policy

Federal, state, and local governments in Mississippi may implement various regulations and policy controls to accommodate, regulate, or prohibit truck parking. Federal regulations that affect truck parking in Mississippi include Hours of Service (HOS) Regulations that dictate the maximum allowable driving hours and mandatory rest breaks for commercial truck drivers. These regulations indirectly impact truck parking as drivers need designated areas to comply with required rest periods. Federal safety regulations also establish standards for commercial vehicles, including requirements for proper parking. These regulations may cover aspects such as parking distances from certain areas or restrictions on parking in certain zones for safety or emergency access reasons.

Statewide regulation can come from permitting and licensing for operating truck parking facilities. This helps ensure adherence to certain standards, such as adequate lighting, security measures, or environmental regulations and design and development standards for new truck parking facilities, including requirements related to parking space dimensions, maneuverability, safety features, and site accessibility. State government agencies can also enforce regulations related to truck parking, including violations of parking restrictions or illegal parking practices. Penalties can range from fines to the impounding of vehicles for non-compliance.

At the local level, local governments often regulate land use through zoning ordinances. These ordinances may specify areas where truck parking is allowed or prohibited, such as industrial zones, commercial areas, or designated truck parking facilities. State and local governments can also establish regulations that govern the availability and duration of truck parking. These regulations may include restrictions on overnight parking, maximum allowable parking times, or limitations on parking during certain hours in residential areas.

5. Have parking-related regulations or policy controls impacted the trucking industry in MS?

- a. Land use controls, zoning ordinances and/or restrictions, building codes, minimum parking, and loading zone requirements, or policies and priorities outlined in a comprehensive transportation plan can be utilized by local governments to control where and how trucks park in a community.
- 6. Do state and local governments communicate or coordinate with the trucking industry on issues related to the truck parking policies they have implemented or may consider implementing in the future?
 - a. In some cases, these controls can be prohibitive and restrictive to truck parking, negatively impacting the trucking and freight industry. We would like to understand better whether transportation service providers and their suppliers are included in these discussions and their overall feelings towards these policy-focused strategies.
- 7. Are there any specific regions or areas in Mississippi where the shortage of truck parking is particularly severe? If so, please specify.

Solutions and Strategies

8. Has the trucking industry identified or implemented any specific strategies to address the truck parking shortage or any other truck parking-related issues?

9. What truck parking solutions or strategies would benefit the trucking industry?

a. Strategies may include expanding, upgrading, or re-purposing existing, underutilized, or closed parking facilities for truck parking; leveraging alternative uses of existing ROW or real estate to accommodate truck parking; developing new truck-only parking facilities; or leveraging technology to improve truck parking utilization and availability.

10. What public-private partnership opportunities should be pursued to address truck parking in Mississippi? Would businesses be interested in partnering with the public sector to implement these strategies?

- a. Strategies may include P3 truck parking facilities, private parking adjacent facilities, long-term lease agreements, staging lots, off-hours/overnight parking at existing facilities, etc.
- 11. Are there any specific recommendations or suggestions you would like to make to improve the current state of truck parking in Mississippi? Please provide details of any innovative ideas or approaches that you believe could be effective.

Barriers and Roadblocks

- 12. What barriers must be overcome to implement effective strategies and solutions to address truck parking in the state? Do you have any suggestions on ways to overcome or mitigate these barriers?
 - a. Barriers may differ for each type of truck parking issue and among companies. Barriers and obstacles for the private sector may include liability and insurance, competition, cost considerations, or operational restraints, such as space availability
 - b. This may be an opportunity to discuss potential incentives like grant opportunities, tax incentives, land acquisition, etc., that may make these P3 strategies more appealing to the private sector.

Discussion Recap and Final Thoughts

- 13. What are the critical items you want to be addressed in the truck parking study?
- 14. Are there specific carriers or trucking companies we should reach out to for this effort?
- 15. Are there any industry associations or stakeholders that you believe should be involved in discussions and decision-making related to truck parking policies and solutions in Mississippi? If yes, please specify.

Appendix C – Driver Survey Summary

In order to gain a more nuanced understanding of truck parking challenges in Mississippi, a web-based survey for industry representatives was developed which included a diverse range of questions and opportunities to provide feedback anonymously. The survey was developed throughout January of 2024, launched February 1st, and closed February 23rd. It was distributed by email by the Owner-Operator Independent Drivers Association's (OOIDA), One Voice For Truckers Everywhere, the MS Department of Agriculture & Commerce (MDAC), and MS Trucking Association (MTA). OOIDA also distributed the survey via newsletter to all of their members. The following described the contents of the survey, and a summary of the results follows. Detailed survey responses and screenshots of the survey are included at the end of this summary.

Survey Content

The web-based truck freight industry survey consisted of multiple choice, ranking, open ended, and mapping questions hosted online through Esri Survey 123. The survey started with questions about the industry roles of the respondents, such as truck drivers, dispatchers, fleet managers, and/or other professionals followed by a question about the size of the companies represented by respondents (with categories ranging from less than 20 drivers to over 1000). To further investigate the factors that influence parking decisions, participants were next asked to rank the importance of various truck stop features, such as security, wi-fi, restrooms, showers, fuel, and food. Next was an inquiry about the most common parking challenges faced by truckers, such as stage parking for narrow appointment windows and complying with the Federal Motor Carrier Safety Administration's (FMCSA) Hours of Service (HOS) regulations. Additionally, responders were asked what time of day tends to present the greatest challenge for parking, as well as the frequency and preferences for different parking facilities.

The survey then delved into the methods used to locate truck parking and the preferred unauthorized locations as alternatives to typical/approved facilities. To provide a visual representation of the parking issues faced by truck drivers, a map with location selection capabilities was included to give responders the opportunity to precisely indicate where they have encountered truck parking issues. The final question gave respondents the chance to express any additional concerns or suggestions regarding the issue of truck parking in Mississippi. These inquiries and features not only helped to gather valuable data but also gave a voice to those experiencing parking challenges firsthand.

Summary of Survey Results

A total of 552 individuals participated in the survey, with the majority of respondents identifying as Truck Drivers, followed by Fleet Managers and Dispatchers. A substantial percentage of respondents (92%) confirmed that they operate within the state of Mississippi. The sizes of companies varied, with a significant portion indicating that they employ less than 20 drivers. In terms of HOS stops, survey respondents frequently encountered difficulties with the 8+ hour rest compliance HOS stop during overnight hours. This challenge was most

commonly attributed to either a lack of available facilities or those that are completely full. The top parking preference among respondents was a privately-owned location with amenities, while the primary concern was security. When locating parking facilities, respondents typically rely on their familiarity with the area, followed by signage and the use of parking-related applications.

When authorized parking was not available, respondents indicated that shopping centers, interstate ramps, and grass fields or vacant lots were the most commonly used alternatives. Other options, such as abandoned business properties and side streets, were also identified. Many respondents reported frequently being required to park in unauthorized locations, regardless of the potential consequences, while others expressed that they proceeded with operating their vehicle regardless of their fatigue levels or potential violation of HOS compliance limits. This was done to evade fines, license penalties, the risk of being subject to theft or vehicle towing, or because drivers were hauling hazardous materials.

When asked if they had any additional comments regarded truck parking, respondents had a lot to say. Many comments agreed that parking supply is a problem within the state and that providing more stops and increasing the size of existing areas would go a long way to help ameliorate the issue. Suggestions were made to outlaw paid parking lots due to the HOS break requirements, and to pull back on issues citations in situations where drivers have no reasonable alternatives. Commenters also noted that port traffic and trucks from Mexico and Canada have been increasing along the entirety of the I-20, I-22, I-55 and I-59. There were requests for more parking near urban areas, and for better safety measures, particularly in the areas around Jackson.

Detailed Survey Results

The survey received 552 responses from members of the trucking industry. 83% of respondents identified as Truck Drivers, 5% as Fleet Managers, 1% as Dispatchers and 11% classified themselves under Other, a category that included Owner/Operators, upper administration within trucking companies and retired drivers. When asked whether they drove within the state of Mississippi, 92% of respondents said yes. Most respondents (47%) belonged to companies who employed less than 20 drivers. The remaining 53% were distributed across the three other size categories of between 20 and 99 drivers (17%), between 100 and 999 drivers (25%) and more than 1,000 drivers (11%). Overall, the information gathered through this survey came primarily from those with a high level of experiential knowledge of the day-to-day operations of the truck freight industry and with experience specific to the State of Mississippi.

The first question following the demographic information was question 4 regarding driver preferences for truck stop amenities. According to the respondents, Security, fuel, and restrooms were the top ranked issues. (Figure 27)



In question 5 respondents were then asked to rank the listed truck parking challenges in order of 1 to 5, where 1 was the most frequent issue they encountered. The 8+ hour rest requirement for HOS compliance was the top ranked challenge according to 58% of respondents. Obtaining stage parking while waiting on an appointment (23%) was the next most highly ranked challenge, followed by finding off-duty truck parking (8%), the 30-minutes rest requirement for HOS compliance (7%) and other challenges (5%). (Figure 28)



Figure 28: Question 5 - Ranked Truck Parking Challenges According to Frequency

Other challenges reported via write-in responses included issues like the layout (in terms of maneuverability) and paving quality of parking lots, the convenience and quality of food options, the availability of parking spaces during evening and night hours and availability in general for oversized trucks, and the presence of litter in truck parking areas.

Question 6 was regarding what time of day that truck parking was most frequently challenging. A large majority of respondents (77%) identified the time period between 9 PM and 4 AM (nighttime hours) as the most challenging time to find parking. 22% of respondents said that the afternoon – from 1 PM to 8 PM – was the most challenging, and 1% said it was during the morning, from 5 AM to 12 PM. (Figure 29)



Figure 29: Question 6 - Time Periods When Truck Parking is Most Frequently a Challenge

Next (question 7) respondents were asked to rank four reasons why truck parking is most frequently a challenge – that truck parking facilities were full, that truck parking facilities were not full but all the spaces were reserved, that there were no truck parking facilities, or that the parking lot configurations were difficult to navigate. Truck parking facilities being full was the top ranked reason given (59%), followed by there being no truck parking facilities (25%), then that truck parking facilities were not full but all the spaces were reserved (12%), and that the parking lot configuration was difficult to navigate (4%). (Figure 30)





In question 8 respondents were asked to rate their preferences for types of truck parking facilities. Private truck stops with fuel and amenities was the top pick for 74% of respondents, followed by public safety rest areas (16%), private truck parking lots (4%), and commercial parking lots (4%). Other (2%) covered a range of options identified by respondents in a text field and included options such as shipper and drop off locations and "truck-only" parking areas (Figure 31).



Figure 31: Question 8 - Ranked Preferred Type of Truck Parking Facilities

Respondents asked in question 9 what were the primary ways that they used to locate available truck parking spaces and were asked to pick three options from truck parking apps, roadside parking availability signs, receiving directions from dispatch, going to familiar truck parking facilities, and other miscellaneous options. Other options identified by respondents in write-in responses included getting information on truck parking availability from other drivers (either over the phone or using the truck-board CB radio), researching stops and preplanning the route using Google maps or similar websites, using a truck stop directory or as one respondent put it, through "pure luck". Going to familiar truck parking facilities was the most popular actions (37%), followed by using truck parking apps (29%), roadside parking availability signs (27%), other options (4%) and taking directions from dispatch (3%). (Figure 32)



Figure 32: Question 9 - Top Ranked Options for Finding Available Parking

Next respondents were asked when an authorized parking location was not available, which of the following options (shopping centers, interstate ramps, roadway shoulders/emergency lanes, grass fields/vacant lots, other options) would they consider and to pick all that applied (question 10). Shopping centers were the most common option chosen (37%), followed by interstate ramps (29%), grass fields or vacant lots (19%), other options (8%), then roadway shoulders or emergency lanes (7%). (Figure 33)



Although shopping centers are outside of the Tier 1 network addressed by this study, limited truck parking activity was observed in an evaluation of shopping center parking lots. Other options identified by respondents in write-in answers included abandoned business properties, weigh stations, or side streets. Many respondents said they simply continued driving, until they found legal, available parking, regardless of how tired they were or whether they were in violation of HOS compliance limits, because they wanted to avoid fines, license penalties, or being robbed or towed. Respondents noted that when hauling hazardous materials, the given options were never an option for them.

In the next question (11) Respondents were asked to indicate how often they were required to park in unauthorized locations. Only 16% of respondents were able to give never as the response. The remaining 84% of respondents were obligated to park in unauthorized areas on a daily (9%), weekly (26%) or monthly basis (29%) or otherwise infrequently (30%). (Figure 34)



The final structured question (12) asked Respondents to identify specific locations in Mississippi where truck parking is a challenge. Respondents identified sites throughout the state. Mapped responses to this question are shown in Figure 35. Primary observations of the selected sites are:

- East/West Interstate corridors that cross the state had a high concentration.
- Interstate corridor intersections, especially I-20 and I-55 in Jackson, Mississippi had the highest concentration.
- North/South corridors had a light concentration.



Figure 35: Question 12 - Where have you encountered truck parking challenges in Mississippi?
Survey Announcements

The driver survey was advertised through social media as well as by email with the following text.

Social Media

Short Version

Attention trucking industry professionals!

The Mississippi Department of Transportation needs your help to evaluate the state's truck parking system. They want to hear directly from you through a statewide survey, as your input is crucial in identifying issues. Share your daily challenges and suggestions in just 5 minutes - don't miss the opportunity to shape the future of truck parking in Mississippi!

Thank you for your participation!

Emoji and Hashtag Version

Attention all truck drivers, dispatchers, and representatives of the trucking industry in Mississippi!

The Mississippi Department of Transportation needs your help to evaluate the state's truck parking system. Your feedback is crucial in this process - what challenges do you face on a daily basis and how could it be better?

Complete the 5-minute survey linked in the post and let your voice be heard.

Don't miss out on this opportunity to make a positive impact! 💪

#TruckingIndustry #MississippiTransportation #TruckParkingStudy #HaveYourSay #WeCanMakeADifference

Email

The Mississippi Department of Transportation (MDOT) is studying truck parking in the state. MDOT recognizes the vital role that drivers, dispatchers, and all representatives of the trucking industry play in keeping the economy moving, and they want to hear from you.

The truck parking study aims to identify the challenges faced by truckers in Mississippi, including areas where truck parking is limited or non-existent, and how frequently truck parking challenges occur. By sharing your insights, MDOT will have better visibility into solutions that can improve truck driving in Mississippi.

Figure 36: Social Media Post Advertising the Driver Survey



We urge all industry representatives to participate in this important study by completing a 5minute survey. Your feedback will help inform decision-making and help MDOT understand your Mississippi truck driving experience.

Survey

<image/>
The Mississippi Department of Transportation is conducting a Truck Parking Study to evaluate current and expected future truck parking supply and demand in the state.
We would like to express our sincere appreciation for your contribution in providing your experiences on this matter and taking part in our survey on truck parking.
This survey has 13 questions and should take about 5 minutes.
All survey responses are anonymous.
Please click SUBMIT before exiting the survey
1. Do you drive in Mississippi?
O Yes
Νο

2. Which of the following best describes your role in the trucking industry?

O Dispatcher
C Fleet Manager
Other (please specify in provided comment box if applicable)

Other role:

3. Approximately how many drivers are working for your company?

O Less than 20 drivers
20-99
0 100-999
More than 1,000

4. Rank these truck stop features from 1 to 6, where 1 is the most important to you.

To select your top choice, click on it. Then, to assign the desired ranking order, press and hold to drag each answer box into its appropriate position within the ranking. For use on mobile devices tap and hold the three bars on the right side of the answer to drag it.

\bigcirc	Security	
\bigcirc	Wi-fi	
\bigcirc	Restrooms	
\bigcirc	Showers	
\bigcirc	Fuel	
\bigcirc	Food	
Re	set	

5. Rank the following truck parking challenges in order of 1 to 5, where 1 is the most frequent issue you encounter.

To select your top choice, click on it. Then, to assign the desired ranking order, press and hold to drag each answer box into its appropriate position within the ranking. For use on mobile devices tap and hold the three bars on the right side of the answer to drag it.

\bigcirc	Waitin	g on an appointment (Stage Parking)
0	Driver	8+ hour rest (HOS Compliance)
\bigcirc	Driver	30-minute rest (HOS Compliance)
\bigcirc	Truck p	parking near home when not driving (Off Duty)
\bigcirc	Other	(please specify in provided comment box if applicable)
	set	

Other challenge:

Please scroll down and click SUBMIT before exiting the survey

6. Rank the time of the day that truck parking is most frequently a challenge?

To select your top choice, click on it. Then, to assign the desired ranking order, press and hold to drag each answer box into its appropriate position within the ranking. For use on mobile devices tap and hold the three bars on the right side of the answer to drag it.

\bigcirc	Morning (5AM-12PM)
0	Afternoon (1PM-8PM)
0	At Night (9PM-4AM)
Re	set

7. Rank the reason that truck parking is most frequently a challenge?

To select your top choice, click on it. Then, to assign the desired ranking order, press and hold to drag each answer box into its appropriate position within the ranking. For use on mobile devices tap and hold the three bars on the right side of the answer to drag it.

\odot	Truck parking facilities are full					
0	Truck parking facilities are not full, but all spaces are reserved					
0	There are no truck parking facilities					
Parking lot configuration difficult to navigate						
Re	set					

8. Rank your truck parking facility preferences from 1 to 5, where 1 is the most preferred.

To select your top choice, click on it. Then, to assign the desired ranking order, press and hold to drag each answer box into its appropriate position within the ranking. For use on mobile devices tap and hold the three bars on the right side of the answer to drag it.

\bigcirc	Private Truck Stop with fuel and amenities
\bigcirc	Private truck parking lot
\bigcirc	Commercial parking lot (such as Walmart)
\bigcirc	Public safety rest area
0	Weigh stations
\bigcirc	Other (please specify in provided comment box if applicable)
Re	set
Other	facility preference:
9. V	Vhat are the primary ways that you locate available truck parki

Truck parking apps
Roadside parking availability signs
Receive directions from dispatch
Familiar truck parking facilities
Other (please specify in provided comment box if applicable)
Other method of locating available truck parking spaces:
10. If an authorized parking location is not available, which of the following options do you consider? (Select all that apply)
Shopping center
Interstate ramp

Roadway shoulder/Emergency lane					
Grass field/Vacant lot					
Other (please specify in provided comment box if applicable)					
Other parking location:					
11. How often are you forced to park in an unauthorized location in Mississippi?					
O Daily					
O Weekly					
O Monthly					

Please scroll down and click SUBMIT before exiting the survey

12. Where have you encountered truck parking challenges in (1) (1)

Please select a location in Mississippi. To add additional locations click the plus button. See instructions below.



Desktop: Click on the home icon to navigate to Mississippi. Then type a location in the search bar or use the controls to move the map. Click to drop a pin. Click the Check mark when you are finished.

Mobile: Tap on the map to open it then tap the home icon to navigate to Mississippi. Use one finger to move the map and two fingers to zoom. Tap on a location in Mississippi to drop a pin and then tap "OK" in the top right corner of the screen to save it.

13. Do you have any additional comments regarding truck parking in Mississippi you would like to add?

Please click SUBMIT before exiting the survey



Appendix D – Top 4 Private and Public Truck Parking Gap Locations

The top four truck parking hot spots for private and public facilities are shown below.

Location	Туре	Hwy	County	Truck Parking Spaces	Parked Trucks	Utilizatio n	Gap
Love's Travel Stop #776	Truck Stop	I-20	Warren	94	144	154%	50
Love's Travel Stop #595	Truck Stop	I-10	Harrison	110	141	129%	31
Love's Travel Stop #343	Truck Stop	I-20	Lauderdale	75	94	125%	19
Love's Travel Stop #639	Truck Stop	I-20	Scott	80	97	122%	17

Table 12: Top 4 Truck Parking Gaps at Private Locations on Mississippi's Tier I Freight Network, 2023

Source: HNTB Analysis, 2024

Figure 37: Love's Travel Stop #776, I-20 Warren County, 2023



Figure 38: Love's Travel Stop #595, I-10 Harrison County, 2023



Figure 39: Love's Travel Stop #343, I-20 Lauderdale County, 2023



Figure 40: Love's Travel Stop #639, I-20 Scott County, 2023



Table 13: Top 4 Truck Parking Gaps at Public Locations on Mississippi's Tier I Freight Network, 2023

Location	Туре	Hwy	County	Truck Parking Spaces	Parked Trucks	Utilizatio n	Gap
Hancock County Welcome Center	Welcome Center	I-10	Hancock	20	37	186%	17
Jackson County Welcome Center	Welcome Center	I-10	Jackson	10	20	200%	10
Forrest County Parking Area	Parking Area	I-59	Forrest	10	19	190%	9
Copiah County Rest Area	Rest Area	I-55	Copiah	10	17	170%	7
Courses LINTE Analysis 2024							

Source: HNTB Analysis, 2024

Figure 41: I-10 Hancock County Welcome Center, 2023



Figure 42: I-10 Jackson County Welcome Center, 2023



Figure 43: I-59 Forrest County Parking Area, 2023



Figure 44: I-55 Copiah County Rest Area, 2023

