EL PASO/FAR WEST TEXAS TRUCK PARKING ACTION PLAN

August 2024

Texas Department of Transportation

TEXAS DELIVERS TRUCK PARKING
EL PASO/FAR WEST TEXAS REGION

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Acronyms

Action Plan	Truck Parking Action Plan
ATCMTD	Advanced Transportation and Congestion Management Technologies Deployment
ATTIMD	Advanced Transportation Technologies and Innovative Mobility Deployment
BOTA	Bridge of the Americas
BTAC	Border Trade Advisory Committee
BTMP	Border Transportation Master Plan
CBP	Customs and Border Protection
CDA	Comprehensive Development Agreement
CDL	Commercial Driver License
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CMV	Commercial Motor Vehicle
COG	Council of Governments
CRIS	Crash Records Information System
CRRMA	Camino Real Regional Mobility Authority
DPAS	Dynamic parking available sign
ELD	Electronic Logging Device
EPMPO	El Paso Metropolitan Planning Organization
FDOT	Florida Department of Transportation
FM	Farm-to-Market
FMCSA	Federal Motor Carrier Safety Administration
FY	Fiscal Year
GDP	Gross Domestic Product
GSA	General Service Administration
HOS	Hours of Service
HP-ITD	FMCSA High Priority Innovative Technology Deployment
HSIP	Highway Safety Improvement Program
I-10	Interstate 10
IIFA	Infrastructure Investment and Jobs Act
INFRA	Infrastructure for Rebuilding America
LEP	Limited English Proficiency
MEGA	National Infrastructure Project Assistance

MOU	Memorandum of Understanding
MTP	Metropolitan Transportation Plan
NHFN	National Highway Freight Network
NHFP	National Highway Freight Program
NHPP	National Highway Performance Program
NHS	National Highway System
NMDOT	New Mexico Department of Transportation
O&M	Operations and Maintenance
OOIDA	Owner-Operator Independent Drivers Association
P3	Public Private Partnership
PBMPO	Permian Basin MPO
PBRPC	Permian Basin Regional Planning Commission
PPP	Project Prioritization Process
POE	Port of Entry
PROTECT	Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation
PRSC	Permian Road Safety Coalition
RAISE	Rebuilding American Infrastructure with Sustainability and Equity
RMA	Regional Mobility Authorities
RMS	Regional Mobility Strategy
RURAL	Rural Surface Transportation Grant Program
SMART	Strengthening Mobility and Revolutionizing Transportation
SRAs	Safety Rest Areas
Statewide TPS	2020 Texas Statewide Truck Parking Study
STBG	Surface Transportation Block Grant
SUP	Shared Use Path
TFMP	Texas Freight Mobility Plan
THFN	Texas Highway Freight Network
TICs	Travel Information Centers
TIP	Transportation Improvement Program
TMFN	Texas Multimodal Freight Network
TPAS	Truck Parking Availability System
TTP	Texas Transportation Plan 2050

TxDOT	Texas Department of Transportation
TxFAC	Texas Freight Advisory Committee
USDOT	U.S. Department of Transportation
UTP	Unified Transportation Program

Chapter 1:

Study Overview

Texas Department of Transportation

1 Study Overview

The Texas Department of Transportation (TxDOT) is identifying solutions for safe truck parking through the development of a Truck Parking Action Plan (Action Plan) for the Far West Texas Region, which includes the El Paso District and portions of the Odessa District. TxDOT has prioritized its truck parking needs statewide to invest in projects, policies, and programs that will have the greatest impact on the safety and mobility of truck drivers and the traveling public. With continued growth in international trade, population, employment, and expanding industries like oil and natural gas, aerospace, and manufacturing, the Far West region will see increased pressure on existing transportation infrastructure, thus finding solutions to ensure the safety of drivers and the efficient movement of goods is critical.

The Action Plan builds upon TxDOT's efforts dating back to the 2018 Texas Freight Mobility Plan (TFMP). The 2018 TFMP has led to numerous implementation efforts, including a statewide truck parking plan and program, weigh-in-motion strategic plan and program, freight network technology and operations plan, and freight infrastructure design considerations. After adopting the TFMP, TxDOT conducted the 2020 Texas Statewide Truck Parking Study (Statewide TPS) Completed in April 2020, the Statewide TPS provided the first comprehensive assessment of truck parking in Texas, highlighting how safe truck parking improves the safety of all motorists. The 2018 TFMP also served as a critical building block in developing policy and program recommendations for the most recent TFMP, Texas Delivers 2050, which continues advancing recommendations from both the previous TFMPs and the Statewide TPS.

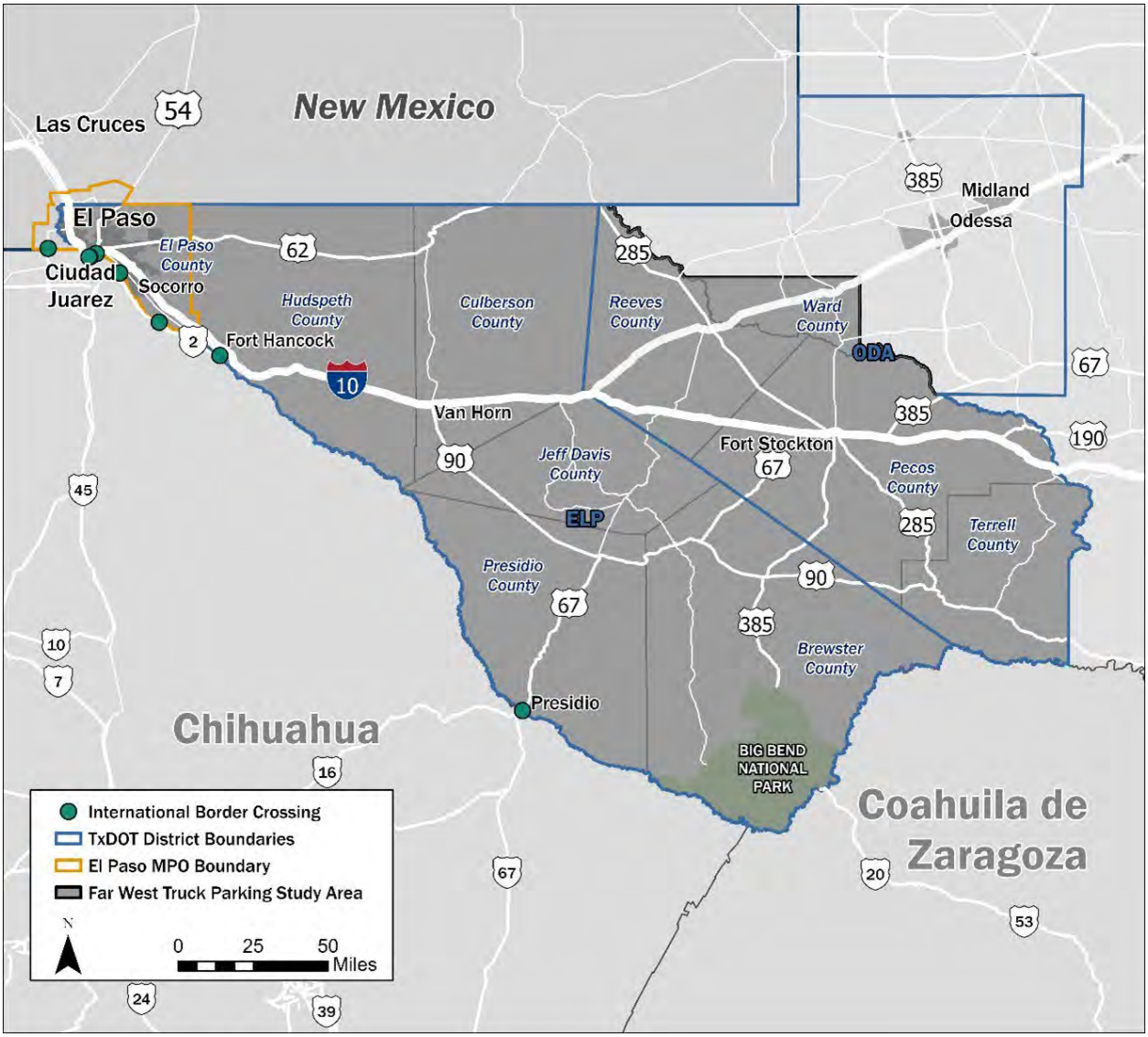
Several regional studies also recognize the importance of truck parking and its impact on the safety and mobility of all drivers in the Far West Texas Region. For example, the 2020 Permian Basin Freight and Energy Sector Transportation Plan identifies energy sector and other freight transportation needs and opportunities that impact the local, regional, and statewide transportation network and the region's economic competitiveness. Further, the El Paso Metropolitan Planning Organization (EPMPO) adopted its Metropolitan Transportation Plan (MTP), also known as Regional Mobility Strategy (RMS) 2050, in 2022 which conducted freight congestion analyses and incorporated freight considerations into its goals, objectives, and transportation strategies to inform its fiscally constrained program of projects.

1.1 Study Area

TxDOT employed a data-driven prioritization process in the Statewide TPS to identify areas with the highest truck parking need. The prioritization process was based on truck parking need related to capacity and safety and considered freight network significance. While almost every region in Texas is affected in some way by a lack of safe and available truck parking, the process identified nine districts that ranked as high priority. This ranking included the El Paso District due to its consistently high combined priority scores attributed to the I-10 corridor.

Because truck parking needs and travel patterns are not confined to TxDOT district boundaries, the Action Plan also conducted a data-driven approach to define regional boundaries for its study area based on truck travel patterns and parking demand. The identified regional truck parking demand resulted in an expanded study area that included counties with existing truck parking facilities. The Far West Region of Texas defined for this regional Truck Parking Action Plan includes the TxDOT El Paso and Odessa districts (Figure 1-1). The data analysis determined that the Far West Texas Region was a high-priority area with needs to invest in projects, policies, and programs that would positively impact the safety and mobility of truck drivers and the traveling public.

Figure 1-1: Far West Texas Region Truck Parking Project Area



The Far West Texas Region has a unique range of infrastructure, industries, and challenges that influence truck parking needs and solutions. The Far West Texas Region has national and global impacts due to its border location and the existence of major industries including mining, quarrying, oil and gas extraction, transportation and warehousing, and agriculture and forestry. Regional characteristics that help shape the demand for truck parking in the Far West Texas Region include:

- **International movement of goods across the United States – Mexico border**. The region facilitates significant Texas-Mexico trade that contributed $50.9 billion to the Gross Domestic Product (GDP) in 2019 and generated approximately 416,000 jobs, per the 2021 Texas-Mexico Border Transportation Master Plan (BTMP). The region's trade is enabled by three Ports of Entry (POEs): El Paso, Ysleta, and Presidio, which comprise six border crossing facilities **for** commercial vehicles or rail. In 2022, the three POEs processed $99.2 billion in United States - Mexico goods trade, of which nearly 44% was exports. Among this activity, electrical machinery, mineral products, transportation equipment, metals, plastics or rubbers, animal and animal products, and

other miscellaneous products were the top commodity groups processed in the study area's border region. Approximately 86.6% of the goods processed crossed the border by commercial vehicle.[1] Note that the Santa Teresa POE in New Mexico also contains regional significance as it is the designated oversized/overweight port in the region and also designated as a hazardous materials crossing. The rail crossing and intermodal terminal is privately owned and operated by Union Pacific, and its implications were discussed during the planning process.

- **National and global energy sector prominence**. The region is within the Permian Basin, the second largest oil and gas producing area in the world that contains more than 7,000 oil/gas fields; accordingly, the associated level of freight movement has far outpaced existing freight facilities in the region.[2] Prior to the pandemic, Texas produced roughly 1.75 billion barrels of oil, while the rest of the nation produced 4.46 billion barrels (i.e., approximately 39% of the nation's productivity). While the pandemic generated oversupply and affected the region's oil production levels, long-term projections imply the Permian Basin will continue to increase oil and gas production over the next several decades. In 2023, Texas was the nation's leading producer of crude oil and natural gas, accounting for 43% of crude oil or approximately 2.3 billion barrels.[3]

- **Urban / Border congestion due to northbound and southbound commercial vehicle travel**. Combined, El Paso and Juarez have a population of over 2 million, with citizens and goods traveling across the border daily. Per the EPMPO, major corridors within the urban area will experience heavy levels of freight congestion by 2050, implying increased wait times for commercial vehicles.[4] Due to the region's border proximity and international trade significance, El Paso County contains numerous freight generators related to agriculture, electronics, energy-mining, petroleum, production support, and transportation, among others.[5] Freight generators also exist along the United States – Mexico border in and surrounding Juarez, Mexico, which further impact urban and border congestion and have led to increased border crossing-related truck staging issues.

[1] 2024 Border District Trade Transportation Report, TxDOT Transportation Planning and Programming Division, 2024 Border District Trade Transportation Report (txdot.gov)
[2] 2020 Permian Basin Freight and Energy Sector Transportation Plan, TxDOT, 2020 Permian Basin Freight and Energy Sector Transportation Plan (txdot.gov)
[3] U.S. Energy Information Administration, Texas Profile (eia.gov)
[4] 2022 RMS 2050 Metropolitan Transportation Plan, EPMPO, 2022 RMS 2050 MTP
[5] https://ftp.txdot.gov/pub/txdot/move-texas-freight/resources/district-profiles/el-paso.pdf

1.1.1 El Paso District

The El Paso District contains more than 1,000 truck parking spaces, mostly located along the I-10 and US 62 corridors. The district is home to three POEs (e.g., El Paso, Presidio, Ysleta) which support a total of six border crossings that facilitated nearly $466.2 billion in trade value in 2022.[6] Commercial vehicles are a primary mode for trade in the region, with annual northbound crossings increasing by 7% from 2010 to 2020, reaching up to 819,699 northbound crossings in 2018.[7]

The I-10 corridor, one of the state's three most heavily used truck parking corridors, runs through the El Paso District and provides key freight connectivity to the district's border region. The Statewide TPS identified the El Paso District's I-10 corridor as one of the most highly utilized corridors for truck parking during peak parking hours and finds the district experiencing parking capacity issues equal to or worse than the Houston I-10 corridor area despite a significantly lower population and fewer freight generators. The study identified 18 facilities that are either near or over capacity at peak hours which is only less than totals identified for the Dallas, San Antonio, and Odessa Districts.

Commercial vehicle traffic related to border trade activity and the I-10 corridor's regional and national prominence has led to freight operators frequently parking in unauthorized areas. Per the Statewide TPS, the district experiences greater than 100 trucks parked in unauthorized areas on an average weekday – the highest threshold in the analysis. Because of this, the study has identified several high priority truck parking areas of need along the I-10 corridor for both existing and future conditions.[8]

Statewide TPS Highlights:

El Paso District

- *Contains truck parking capacity between 1,000 and 2,000 spaces, the second highest capacity threshold for TxDOT Districts.*
- *High priority truck parking needs largely exist along the I-10 corridor, for both existing and future conditions.*
- *I-10 corridor experiences some of the state's highest peak hour truck parking demand, creating capacity issues.*
- *Contains 18 parking facilities that are either near or over capacity at peak hours – the highest outside of Dallas, San Antonio, and Odessa Districts.*
- *Peak truck parking demand is projected to increase by 81% by 2050.*
- *Experienced 67 crashes with parked trucks (3% fatal) and 45 crashes (7% fatal) between 2013 and 2017.*
- *Experiences greater than 100 trucks parked in unauthorized areas (i.e., TxDOT right-of-way) on an average weekday, which is the highest threshold for the analysis.*

[6] https://ftp.dot.state.tx.us/pub/txdot/gov/trade-transportation-activities.pdf
[7] https://ftp.txdot.gov/pub/txdot/move-texas-freight/studies/texas-mexico-border-crossings-guide-2021.pdf
[8] Texas Statewide Truck Parking Study, https://ftp.txdot.gov/pub/txdot/move-texas-freight/studies/truck-parking/final-report.pdf

A full truck parking lot along I-10 in Van Horn, Texas.

1.1.2 Odessa District

Statewide TPS Highlights: Odessa District

- *Contains the most TxDOT maintained spaces statewide with more than 200.*
- *Contains truck parking capacity up to 2,000 spaces, the second highest capacity threshold for TxDOT districts.*
- *Contains 27 facilities either near or over capacity, the second most out of all districts.*
- *Within the top five districts in terms of peak hour truck demand for both 2018 and 2050.*
- *Crashes with both parked trucks and fatigued drivers between 2013 and 2017 resulted in some of the highest fatality percentages across the districts.*
- *Contains the largest increases in high and medium need mileage alongside Yoakum, Childress, and Amarillo districts.*

The Odessa District contains over 1,000 truck parking spaces, mostly along the I-10 and I-20 corridors. Among these, over 200 truck parking spaces are publicly owned, the highest out of all districts alongside the Amarillo district. Public facilities are generally found in rural areas of the district, while private facilities generally cluster around urban areas (i.e., Odessa and Midland).

The Odessa District is within the Permian Basin, one of the most significant oil and gas producing regions in the United States, and thus experiences unique challenges due to oilfield production and its influence on regional freight travel. A large portion of truck traffic is driven by the development of oil production sites, causing transient oilfield truck trip generation, this can create periods of intense short-term congestion (i.e., 45 to 75 days). This phenomenon contributes to high average daily traffic (i.e., greater than 30,000 trips daily) along I-20 and poor truck travel time reliability within and surrounding the Odessa and Midland urban areas. In turn, most of the district's truck parking facilities are in or near urban areas.

Like the rest of the state, the Odessa District experiences a lack of truck parking facilities. The Statewide TPS observed that truck parking densities in Midland and Odessa are generally greater than 100 parked trucks per week, with similar counts on other key corridors, such as US 285. The study also identified significant counts of unauthorized truck parking longer than 8 hours in these areas and indicated 27 truck parking facilities at near or over capacity, ranking the second highest across TxDOT districts. Further, peak truck parking demand is projected to increase by 54% by 2050. For these reasons, the Statewide TPS identified the Odessa District as having a high need to address truck parking.[9]

[9] Texas Statewide Truck Parking Study

1.2 Purpose

The Action Plan aims to assess the current supply and demand for truck parking at the regional level, identify truck parking needs, and recommend solutions to address existing and future parking gaps and needs. TxDOT worked closely with the districts and regional stakeholders and developed actionable strategies to meet truck parking needs across the region, promote partnerships with the private sector, enhance safety, reduce congestion, and improve efficiency on the Texas Highway Freight Network (THFN).

The final Action Plan provides strategies and recommendations to address truck parking needs in the southeast region. The document is organized as follows:

- **Chapter 1: Action Plan Overview** – Provides a general overview of the importance and types of truck parking, highlights TxDOT truck parking efforts to date, and outlines TxDOT's vision and goals for addressing truck parking challenges in the Far West Region.

- **Chapter 2: Needs Assessment** – Inventories existing public and private truck parking supply in the Far West Region, identifies needs related to designated and undesignated truck parking demand, and examines the effects of truck parking on safety and equity.

- **Chapter 3: Stakeholder Engagement** – Documents the robust stakeholder engagement effort and the input received during the development of the Action Plan through a range of outreach methods including industry workshops, targeted presentations, and a truck driver survey.

- **Chapter 4: Recommendations** – Identifies both TxDOT-led and TxDOT-supported strategies and recommendations to address truck parking needs including the advancement of specific policies, infrastructure improvements, technology applications, programs, and resources for communities, agencies, and industry partners.

- **Chapter 5: Opportunity Sites** – Provides an overview of the site assessment process that was used to identify specific locations to meet regional truck parking needs, summarizes the site development and conceptual design process, and provides detailed concepts and cost estimates for nine opportunity sites and one opportunity zone identified for further project development.

- **Chapter 6: Implementation** – Provides an overview of Federal and State funding opportunities that can be pursued to implement truck parking, as well as next steps and actions TxDOT, public agencies, and private industries can take to implement the recommendations outlined in this Action Plan.

1.3 Importance of Truck Parking

Truck drivers play a vital role in Texas by delivering goods to businesses and homes, ensuring food is on tables, shelves are stocked, manufacturing plants continue to operate, energy resources are available, and the flow of medical supplies is maintained. The trucking industry serves as a critical link in the supply chain, transporting over 1.2 billion tons of goods valued at $1.7 trillion annually

throughout Texas.[10] The 2023 RGMP states that trucks will continue to be the most prominent method of distribution of goods in the region transporting 933 million tons in 2050.

This will equate to over 58 million truck trips, more than doubling the truck trips in 2019. To maintain the movement of goods in the region and throughout Texas, TxDOT must meet the demands for trucking by maintaining the safety and efficiency of Texas roadways.

This includes providing adequate and strategically located safe, authorized parking to prevent increased congestion, tired drivers, lost productivity and income for drivers, higher shipping costs for businesses and consumer goods, and unsafe parking along highway shoulders and ramps. Safe truck parking is critical because:

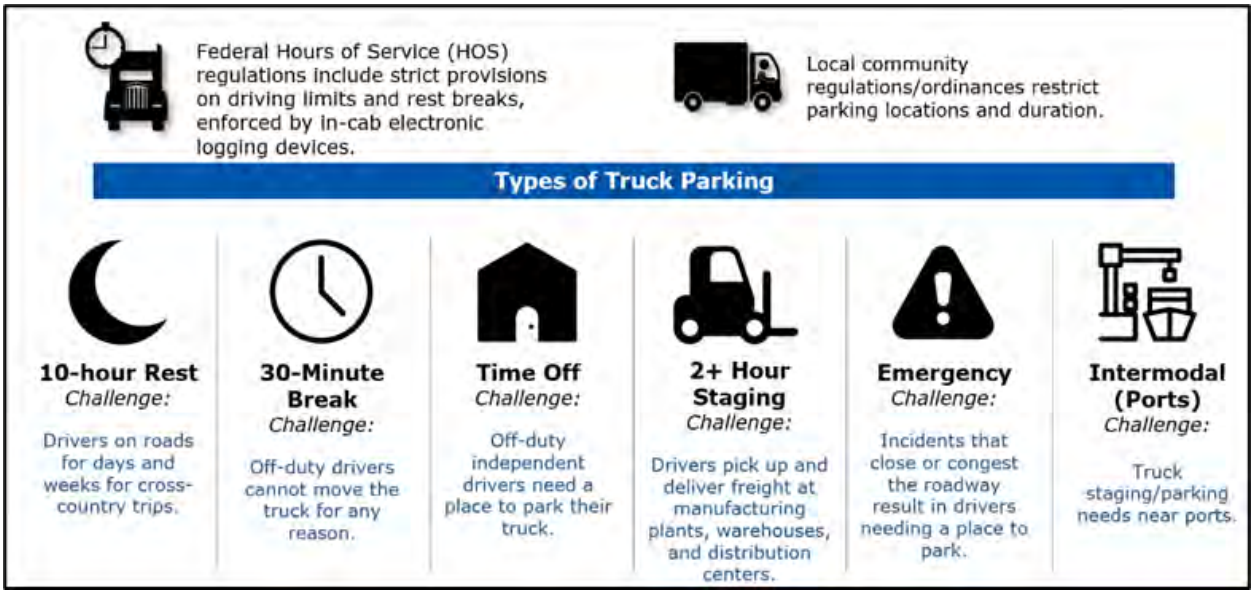
 **Safe truck parking leads to the safety of all motorists.**	Between 2018 to 2022 statewide, there were 144,377 commercial vehicle crashes, 2,950 of which involved parked trucks. Of the crashes that involved parked trucks, 930 caused injuries and 106 resulted in fatalities.[11] These crash statistics indicate an uptick in average annual commercial vehicle crashes, parked truck crashes, and fatalities when compared to the Statewide TPS that analyzed crash data between 2013 and 2017.[12]
 **Safe truck parking is vital to the state and national economy.**	As freight-intensive industries increase (especially those moving heavy, bulky goods, such as oil and gas, and construction), the need to develop safe truck parking is imperative. Significant growth in e-commerce has resulted in a rapid increase in the number of distribution centers and warehouses nationwide, decentralizing freight traffic and, in turn, truck parking demand. By 2050, freight tonnage is projected to more than double while parking demand exceeds 170%. This increase in tonnage corresponds to a similar increase in household spending with purchases of consumer goods and services leading to more freight activity.
 **Safe truck parking also matters in terms of time and money.**	The lack of safe and effective truck parking means that the average truck driver loses approximately 9,300 revenue earning miles and $4,600 each year looking for safe truck parking. Those costs impact everyone, from the driver to the consumer.
 **Finding solutions to truck parking is important in preserving the Texas highway system.**	Since truck drivers often cannot find a place to safely park, many choose to park on shoulders and ramps. This is a major safety hazard and damages the pavement, as ramps and shoulders are not designed to support parking.

[10] Texas Statewide Truck Parking Study
[11] 2018-2022 TxDOT CRIS Data Analysis completed by Cambridge Systematics
[12] Texas Statewide Truck Parking Study

1.3.1 Types of truck parking

Truck drivers require parking for different reasons, which creates unique challenges for various types of drivers to find suitable parking (Figure 1-2). Drivers must adhere to the Federal Motor Carrier Safety Administration's (FMCSA) hours of service (HOS) regulations that place specific time limits on driving and require rest intervals. Drivers often need to park and wait for their delivery time windows at shippers and receivers, and sometimes they are affected by unexpected road closures or congestion. Finally, truck drivers are essential workers who require rest breaks to protect their safety and that of others.

Figure 1-2: Common Reasons Truck Drivers Need to Park



1.3.2 Truck parking regulations

Commercial Motor Vehicle (CMV) labor regulations are under the purview of the FMCSA, which propagates rules to increase safety on the road. For CMVs, the mandatory HOS regulations have the greatest impact on their need for truck parking. The most recent HOS regulations (updated in September 2020) are outlined below in Table 1-1.

Table 1-1: Summary of Hours-of-Service Rules for Property-Carrying Drivers

HOS Provision	Description
11-Hour Driving Limit	May drive a maximum of 11 hours after 10 consecutive hours off-duty.
14-Hour Limit	May not drive beyond the 14th consecutive hour after coming on duty, following 10 consecutive hours off duty. Off-duty time does not extend the 14-hour period.
30-Minute Driving Break	Drivers must take a 30-minute break when they have driven for a period of eight cumulative hours without at least a 30-minute interruption. The break may be satisfied by any non-driving period of 30 consecutive minutes (i.e., on-duty not driving, off-duty, sleeper berth, or any combination of these taken consecutively).

HOS Provision	Description
60/70 Hour Limit	May not drive after 60/70 hours on duty in 7/8 consecutive days. A driver may restart a 7/8 consecutive day period after taking 34 or more consecutive hours off duty.
Sleeper Berth Provision	Drivers may split their required 10-hour off-duty period as long as one off-duty period (whether in or out of the sleeper berth) is at least two hours long and the other involves at least seven consecutive hours spent in the sleeper berth. All sleeper berth pairings must add up to at least 10 hours. When used together, neither time period counts against the maximum 14 hour driving window.
Adverse Driving Conditions	Drivers are allowed to extend the 11-hour maximum driving limit and 14-hour driving window by up to two hours when adverse driving conditions are encountered.
Short-Haul Exception	A driver is exempt from the requirements of §395.8 and §395.11 if: the driver operates within a 150 air-mile radius of the normal work reporting location, and the driver does not exceed a maximum duty period of 14 hours. Drivers using the short-haul exception in §395.1€ (1) must report and return to the normal work reporting location within 14 consecutive hours and stay within a 150 air-mile radius of the work reporting location.

Source: https://www.fmcsa.dot.gov/regulations/hours-service/summary-hours-service-regulations, August 19, 2023

HOS regulations are diligently enforced by Texas Department of Public Safety and penalties can be high. To avoid these steep fines, drivers are under pressure to find parking as quickly and efficiently as possible while trying to maintain their pick-up/delivery schedules.

To increase compliance with HOS regulations, most truck drivers are required to track their HOS with an electronic logging device (ELD). An ELD monitors a vehicle's engine to capture data on vehicle movement, miles driven, and duration of engine operation (engine hours). This approach to HOS monitoring replaced a paper version, which resulted in inherently less closely monitored hours-of-service. With the full implementation of the ELD mandate in December 2019, time and location are now tracked more precisely. This allows for closer enforcement of existing HOS regulations, which makes finding parking within allowable time limits even more critical.

All of this means truck drivers are forced to make tough decisions. Many choose to park in undesignated and unsafe areas or drive beyond their daily mileage limit, putting everyone at risk.

1.4 Plan Review

The following TxDOT transportation and freight planning efforts were reviewed to ensure consistency and guide the direction of future truck parking implementation activities in the region.

1.4.1 TxDOT Mission and Vision

TxDOT's mission is to "Connect you with Texas." As such, the agency's vision is to be a "forward thinking leader delivering mobility, enabling economic opportunity, and enhancing quality of life for all Texans."

1.4.2 Texas Transportation Plan Goals

The Texas transportation system will face many challenges, most notably population growth, over the next 30 years. To ensure the future transportation system works for the traveling public and the "economy in motion," TxDOT developed the Texas Transportation Plan 2050 (TTP). The plan focuses on determining the needs of the multimodal system, exploring technology innovations that could improve safety/mobility, and planning for future capital investments – all focused on bringing Texans' vision of the future to fruition. To achieve this, the plan created a series of goals for future transportation investment and decision-making:

- Promote safety
- Preserve our assets
- Optimize system performance
- Deliver the right projects
- Focus on the customer
- Foster stewardship

1.4.3 Texas Delivers 2050: The Texas Freight Mobility Plan

Texas has the second-largest economy in the nation and the ninth largest in the world. To support the growing economy, TxDOT recently updated its TFMP, developed a Statewide TPS, and conducted several implementation projects to advance freight planning and goods movement. The Statewide TPS was developed to support the goals of the TFMP, and both plans were designed to achieve the goals of the TTP.

Having a safe, efficient, and reliable freight system that connects Texas to global and domestic trade markets and supports the state's future growth is essential to Texas' prosperity. The most recent Texas Freight Mobility Plan published in March 2023, *Texas Delivers 2050,* focuses on congestion, safety, system operations, asset management, connectivity, international border crossings, community impacts/benefits, resiliency/security, and funding. The plan included updating the Texas Multimodal Freight Network (TMFN), which facilitates the efficient movement of goods by concentrating investment on the most critical corridors and junctions to the freight industry.

Goals of Texas Delivers 2050 included:

- Improve safety, efficiency, and performance of the TMFN
- Enhance the contribution of the transportation infrastructure to economic competitiveness
- Maintain, preserve, and modernize the TMFN, and
- Reduce congestion and improve system efficiency

1.4.4 2020 Statewide Truck Parking Study

The Far West Texas Truck Parking Action Plan builds off the 2020 Statewide TPS, which utilized stakeholder input and data analysis to determine existing and future needs, identify strategies and recommendations to address those needs, and set the stage for future implementation efforts at the regional and district levels.

The goals of the Statewide TPS included:

- Improve safety, reduce congestion, and enhance economic competitiveness of the Texas Multimodal Freight Network
- Reduce undesignated truck parking on TxDOT right of way
- Develop actionable strategies to meet truck parking and basic driver needs across the state, including oversize/overweight loads
- Identify ways to partner with the private sector to meet the state's truck parking needs
- Leverage technology to ensure efficient use of TxDOT maintained truck parking
- Address parking needs at key truck generators including seaports and border ports of entry

1.4.4.1 Policy, Outreach, and Coordination Strategies

The Statewide TPS led to the development of a comprehensive set of strategies to address truck parking needs in Texas. There are three broad categories of strategies: policies, infrastructure, and technology and programs.

- **Policies**. Broad policy recommendations are provided to help change the way Texas approaches truck parking.
- **Infrastructure**. Specific infrastructure strategies that provide safe, efficient, and desirable truck parking that makes Texas roadways safer, better maintained, and more efficient.
- **Technology and Programs**. A collection of technology and programs that can be undertaken to improve the effectiveness of existing truck parking and facilitate the development of new truck parking.

While developing the potential policies, TxDOT identified that over 90% of truck parking in Texas is provided by the private sector, thus requiring TxDOT to be strategically supportive of stakeholders and businesses in areas outside of its jurisdiction where it cannot be a lead agency. As a result, TxDOT designated both TxDOT-led and TxDOT-supported policy strategies.

The Statewide TPS includes six TxDOT-led policy recommendations. These policies focused on areas under the control of TxDOT and included planning, operations, project development, and right of way acquisition. The Statewide TPS also outlined TxDOT-supported policies to provide recommendations and resources for local communities, agencies, and the freight industry. TxDOT can serve a supporting role and be the catalyst for initiating action. More detail can be found in the Truck Parking Recommendations and Action Plan Report.

1.4.4.2 2020 Statewide TPS Key Findings and Recommendations

Addressing truck parking needs must be a coordinated public-private effort and include improvements discussed in the study as well as the initiation of new statewide programs and policies. Current and future efforts should focus on:

1. **Policy and Program Recommendations:** The State should take short- and medium-term actions to fully advance truck parking policy and program recommendations outlines in the Statewide Truck Parking Study.

2. **High priority Truck Parking Capacity Investments:** The State should undertake near-term expansion and upgrading of truck parking facilities in the highest need areas.

3. **Low and Medium Truck Parking Capacity Investments:** The State should undertake:

    a) Advancement of feasibility studies for the medium and low need truck parking facilities located on high need highway segments.

    b) Monitoring the remaining facilities to ensure changing truck parking needs are met without the need for a complete update of the Statewide Truck Parking Study.

    c) Ensuring that the Unified Transportation Program (UTP) project prioritization incorporates truck parking safety and congestion considerations.

    d) Outlining how to advance the truck parking projects through project development and implementation.

    e) Identifying potential funding sources to pay for needed investments in truck parking infrastructure.

    f) Focusing efforts at the corridor, border, energy production regions, district and Metropolitan Planning Organization (MPO) levels on identifying and addressing truck parking needs.

These steps are crucial to addressing truck parking needs and impacts in Texas and advancing TxDOT's commitment to support a safer highway system, continued economic growth and development, and quality of life for all Texans.

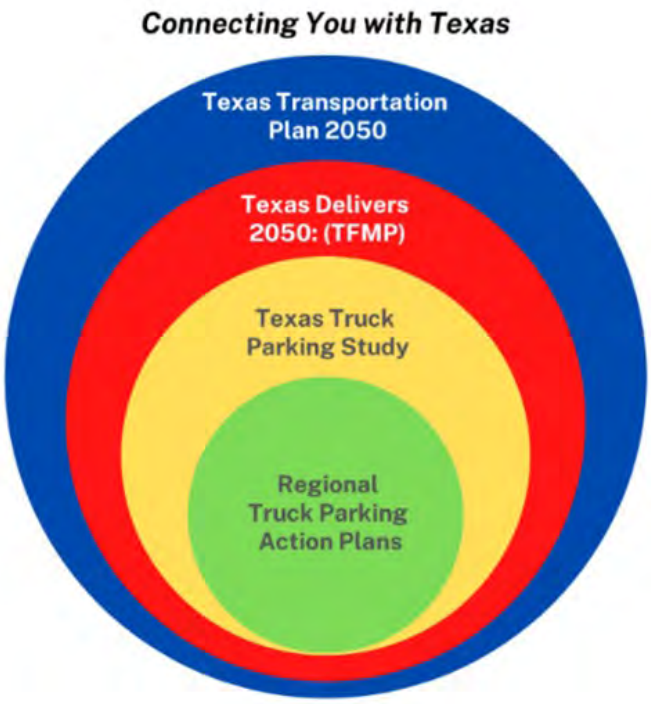
1.5 Vision, Goals, and Objectives

The Action Plan's vision and goals directly support the Statewide TPS, Texas Delivers 2050, and the TTP. They were developed utilizing a multi-pronged approach that included:

- Assessment of TxDOT mission, vision, and statewide plans for relevant goals and objectives.
- Review of needs identified in the 2020 Statewide TPS for the El Paso and Odessa Districts.
- Documentation of implementation priorities from TxDOT District and TPP staff.
- Review of recent truck parking legislation and funding programs.

- Consideration of stakeholder input and unique characteristics of the project area.

Visit https://www.txdot.gov/ and search “Truck Parking” to learn more.



Vision: The Far West Texas Region envisions a THFN with adequate truck parking spaces located where they are most needed, outfitted with the amenities drivers require. To accomplish this vision, the region will leverage innovative solutions to ensure cost-effective improvements are developed to meet truck parking needs.

Goals and Objectives: While the goals are directly aligned with the Statewide TPS goals, the objectives consider local lessons from Statewide TPS and feedback from district staff and stakeholders.

Figure 1-3 outlines the Far West Texas Region Truck Parking Action Plan’s goals and objectives.

Figure 1-3: Far West Texas Region Truck Parking Goals & Objectives

Goal 1 - Reduce crashes involving parked trucks and improve truck driver safety

- Focus on reducing undesignated truck parking through new and expanded truck parking in the Far West region
- Improve safety through design of new and improved truck parking facilities, including lighting
- Improve resiliency by considering emergency truck parking needs during extreme weather events and major traffic incidences

Goal 2 - Invest with an eye toward the life-cycle cost of infrastructure

- Consider the long-term benefits and costs associated with design and amenity decisions
- Reduce shoulder damage by reducing undesignated parking and hardening of ramp shoulders in freight-intensive areas

Goal 3 - Develop truck parking facilities in/near freight-intensive areas

- Embrace innovative ideas like appointment systems or “cell phone lots” near major freight areas

Goal 4 - Support trucking needs around multimodal centers and POEs

- Explore solutions focused on safe parking for staging
- Evaluate potential opportunities to improve truck parking near POEs to ensure drivers can maximize load pick-up/drop-off times

Goal 5 - Improve economic development and quality of life in Far West Texas

- Reduce unproductive legal driving hours used to find parking by building new and expanded capacity
- Identify opportunities to address freight impacts on overburdened communities

Goal 6 - Support private sector truck parking development and innovation

- Develop a strong and evolving relationship with the private sector to encourage policy, program, technology, and communication collaboration
- Collaborate with the CRRMA and other regional agencies to address truck parking needs throughout the El Paso bistate/binational region

Goal 7 - Improve the truck driver experience and quality of life in Far West Texas

- Prioritize driver needs that can help prevent crashes and improve productivity
- Focus on the diverse range of truck parking needs (HOS breaks, staging, emergencies)
- Consider truck parking needs for owner-independent drivers who do not have options for their truck during time their time off
- Address the truck parking needs of various industry segments – drayage, agricultural, bulk, e-commerce, over-size over-weight, etc.

Goal 8 - Leverage technology to solve truck parking challenges

- Embrace technologies, like TPAS, that match available truck parking supply with demand
- Future-proof investments to handle future industry demands – like alternative fuels, autonomous trucking, or new modes (i.e., Freight Shuttle)

Chapter 2:

Needs Assessment

Texas Department of Transportation

2 Needs Assessment

Truck parking needs can vary widely between regions, neighboring municipalities, and even within local communities and neighborhoods, depending on a range of factors. For instance, communities near major freight routes like I-10 or congested border crossings may see trucks parked overnight along highway shoulders, ramps, and local roads when truck stops, and other designated parking facilities are at capacity. Areas with large concentrations of freight-intensive land uses, including areas with major warehousing, distribution, and manufacturing facilities, often experience an influx of trucks staging as drivers wait for pick-up and delivery windows during certain times of the day. This unauthorized parking can cause increased congestion and safety issues. In both urban and rural communities, local ordinances may prohibit truck parking on local streets or within city limits, forcing local owner-operators to park in unauthorized areas or in vacant parking lots, which may result in fines.

To better understand the unique truck parking needs in the Far West Region, the project team conducted a comprehensive data assessment to better understand existing public and private truck parking facilities, designated and undesignated parking demand, and the safety and equity impacts of truck parking throughout the region. The needs assessment leverages information and data collected for the 2020 Statewide TPS and updated crash data to analyze truck movements and stopping events on the THFN and within census tracts throughout the Far West Region. The following chapter provides a summary of the results of this assessment:

- **Truck Parking Supply** – provides a regional inventory of public and private truck parking facilities
- **Truck Parking Demand** – quantifies truck parking demand at designated and undesignated locations based on GPS data
- **Crash Analysis** – updates the Statewide TPS safety analysis of crashes involving parked trucks within the Far West region
- **Areas of Greatest Need** – identifies truck parking needs on the THFN based on data driven prioritization factors
- **Equity Analysis** – assesses the impacts of truck parking on equity-focused areas

A more detailed analysis of the results of this assessment can be found in the *Needs Assessment Technical Memorandum*, along with additional full-size maps of the El Paso MPO area.

2.1 Truck Parking Supply

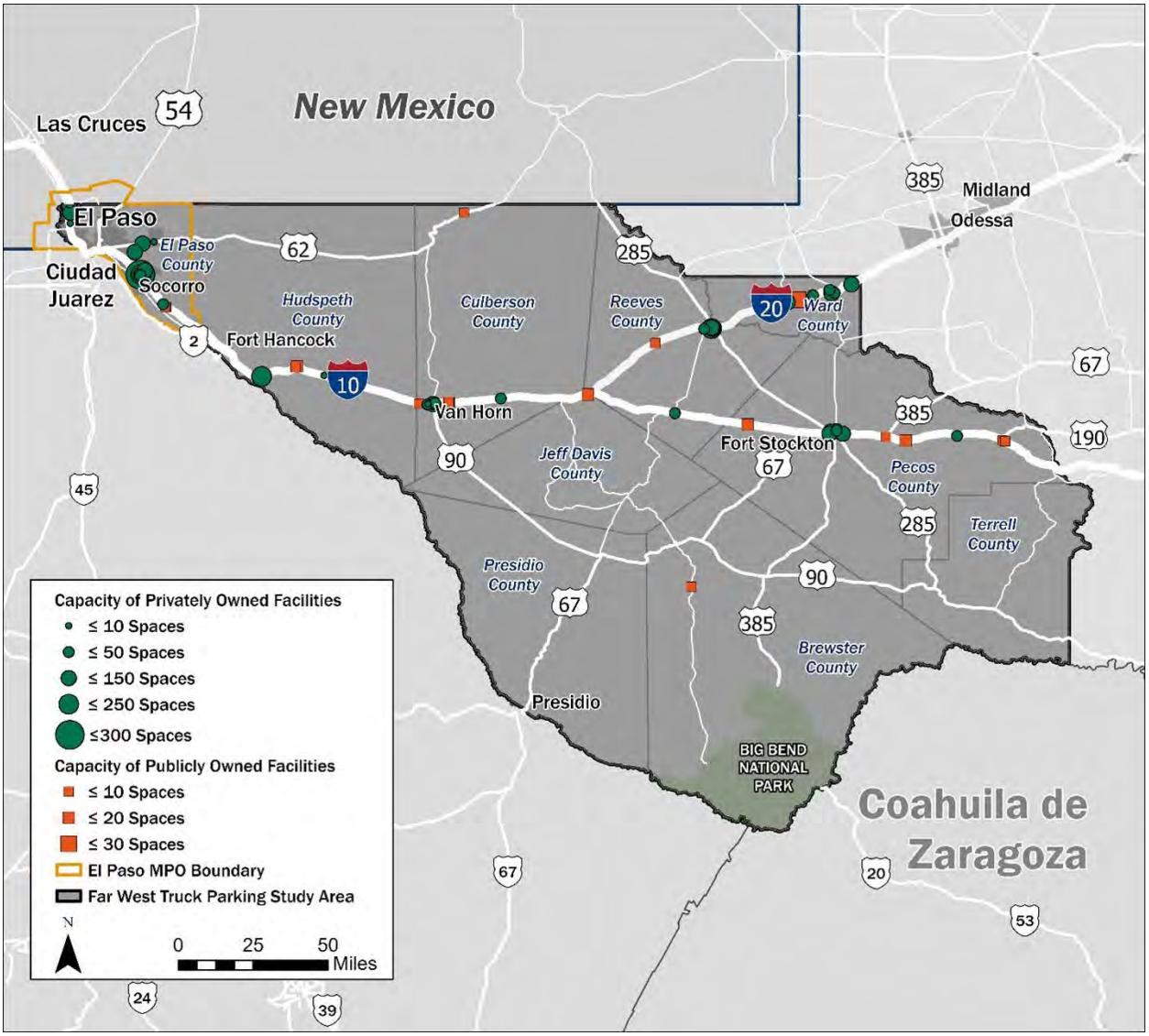
Identifying designated truck parking capacity, which includes an inventory of the number of spaces at both public and private parking locations, is a critical first step to understanding the scope of truck parking challenges in the Far West Region. Designated truck parking locations are defined for this effort as parking facilities where truck drivers are allowed and encouraged to park, such as truck stops, Safety Rest Areas (SRAs), and Travel Information Centers (TICs). This section provides an overview of how the regional supply of truck parking was determined, processed, analyzed, and validated, along with the subsequent inventory results.

This Action Plan excluded any private truck parking sites that had fewer than ten spaces. Private secure truck parking facilities, private truck stops with services (including commercial chains), and all public sites (typically SRAs and TICs) were included. For private facilities, the information on the capacity for truck parking was not always consistent. As a result, the Action Plan used multiple data sources, including information from the Statewide TPS, crowdsourced driver-facing parking applications, and aerial imagery to develop accurate capacity estimates given limitations in data.

In total, there are **65 truck parking facilities in the Far West region** (Figure 2-1), including public facilities, private secure truck parking, and commercially owned truck stops with amenities and services. These facilities provide an estimated **3,320 truck parking spaces** serving El Paso and the Far West region. Parking capacity typically reaches peaks along the major highways of I-10 and I-20, and at international border crossings, specifically near central El Paso and the city of Socorro as well as near the New Mexico state border. Facilities in dense urbanized areas tend to be privately-owned with publicly owned facilities often situated outside of major cities or on rural stretches of highway. The highest concentration of truck parking capacity is found within the El Paso MPO boundaries, which holds over one third of all truck parking capacity in the region.

There are **21 public facilities in the Far West region**, primarily consisting of state-owned rest areas. The public facilities include an estimated 284 parking spaces. The **44 private truck parking facilities** provide over 3,000 parking spaces. Out of the 65 total truck parking locations, **the majority (57 locations) have capacity of less than 100 spaces**. Six locations have a capacity of between 100-199 spaces, and only two locations have capacity of over 200 parking spaces, with the maximum capacity at 290 spaces. Figure 2-1 depicts both public and private facilities along with their estimated capacities.

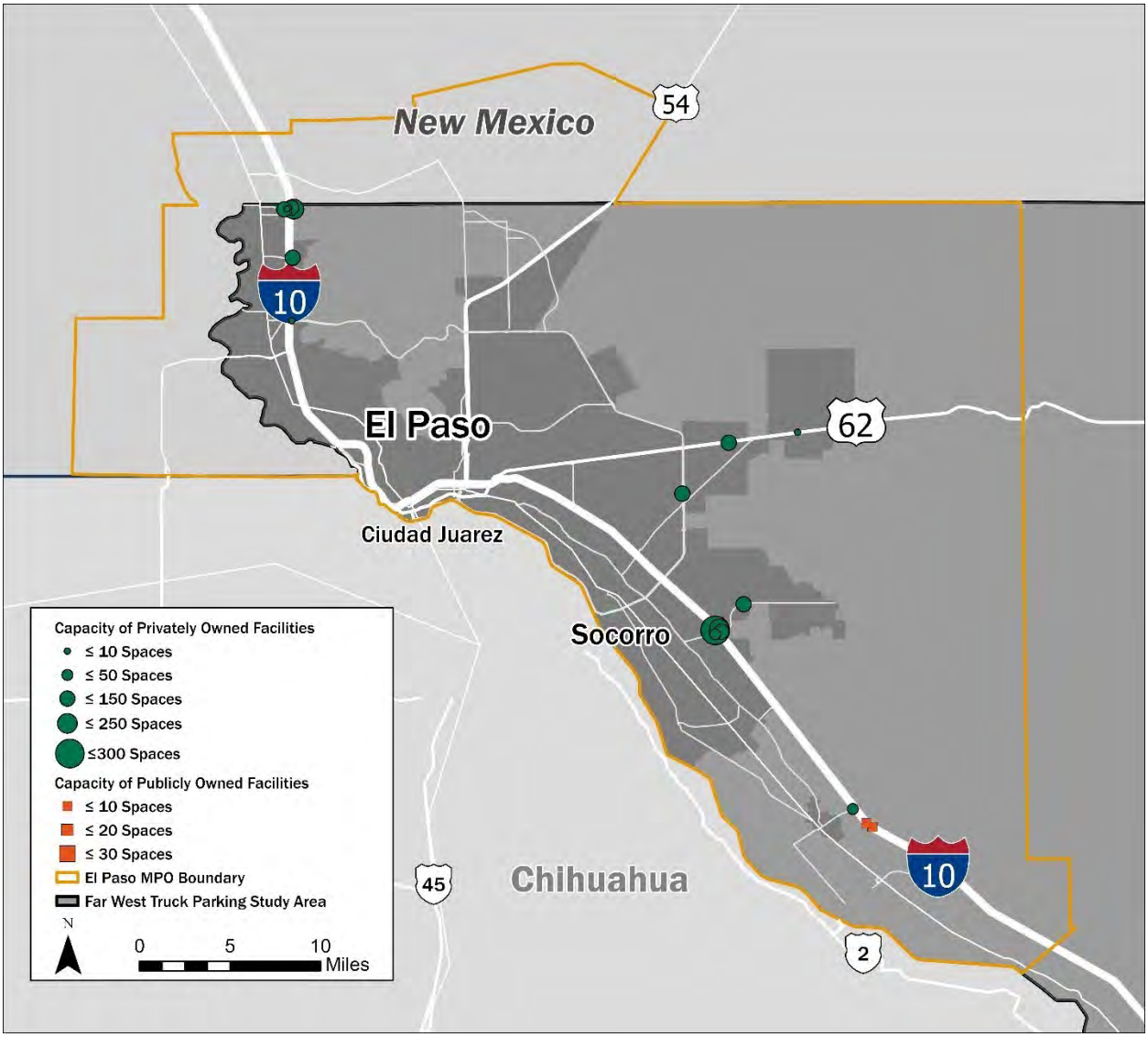
Figure 2-1: Capacity of Truck Parking Facilities Across Far West Texas



Source: Compiled by Cambridge Systematics

Commercially owned facilities can be separated into two categories: truck stops with services and secure truck parking facilities which are often used by owner-operators and smaller fleets for extended parking needs. Truck stops offering services are often preferred by truck drivers making longer trips as they typically provide more amenities such as restrooms, food, and fuel. These stops comprise 63.1% of all facilities and provide roughly 80% of private spaces, at 2,586 spaces. Secure truck parking facilities account for only three locations in the region (4.6%) but hold a greater proportion of spaces at 13.6%. Typically, secure truck parking facilities are larger lots that can accommodate more trucks given the lack of structures or amenities such as restrooms. Public facilities account for approximately 32% of all locations, but only 8.6% of spaces, indicative of the limited availability of parking spaces per facility.

Figure 2-2: Capacity of Truck Parking Facilities within the El Paso MPO

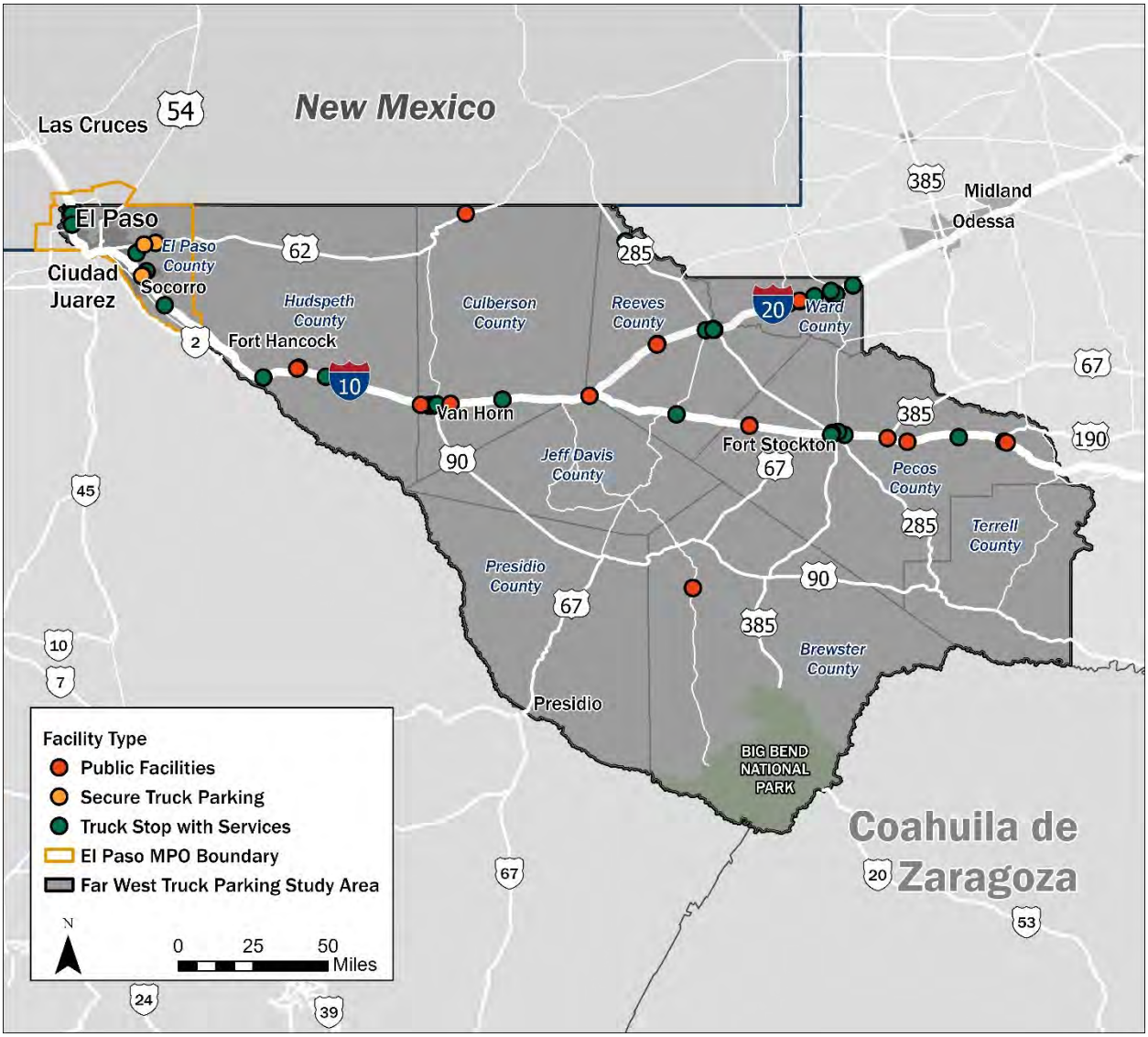


Source: Compiled by Cambridge Systematics

The most capacity at truck parking facilities in the far west region is located within the El Paso MPO boundary. Nearly all parking in the MPO is privately owned (Figure 2-2).

Figure 2-3 shows this geographical distinction between facilities and the large hotspots of private truck stops along the I-10 and I-20 corridors, particularly at the intersections of state highways in Van Horn and Fort Stockton. Several truck parking facilities also run parallel to the U.S.-Mexico border, specifically within the El Paso MPO boundary.

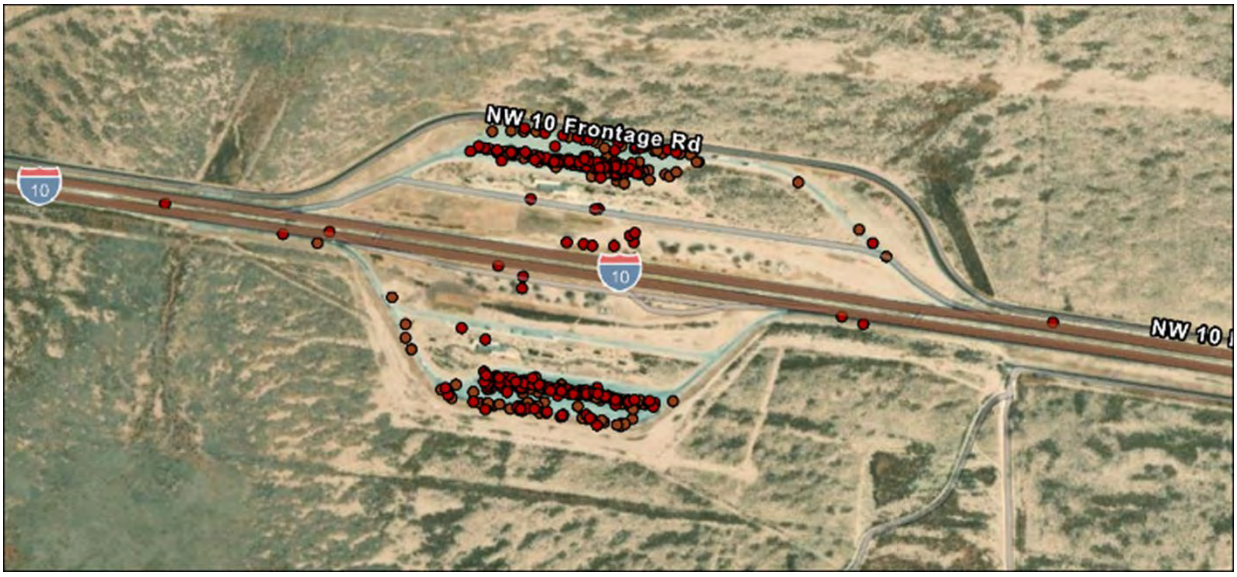
Figure 2-3: Designated Truck Parking Facilities by Type



Source: Compiled by Cambridge Systematics

The Far West Region is comprised of ten counties throughout the El Paso District and portions of the Odessa District. Truck parking supply is distributed unevenly within these ten counties. El Paso County accounts for 26.2% of all truck parking locations and approximately 41% of all truck parking spaces. In other words, high-capacity facilities exist within the El Paso District. On the other hand, Reeves County, in the Odessa District, has the second highest capacity in the region, with 15.5% of total spaces. Interestingly, Reeves only accounts for approximately 12% of total locations, again indicating higher capacity lots. Pecos, Ward, and Culberson counties round out the top five highest capacities, respectively.

2.2 Truck Parking Demand



Source: INRIX Parking Facility Demand image

Identifying demand is a critical component of understanding if a specific location, corridor, or geographic area has a shortage or surplus of truck parking. The 65 facilities identified in the Far West region are considered designated truck parking facilities. Parking is considered undesignated when it occurs outside of a designated truck parking facility within a roadway right-of-way or other unauthorized location.

The regional truck parking demand assessment uses GPS information provided by INRIX to estimate demand at designated parking facilities, preferred locations for trucks to park, and undesignated areas such as on-street parking or along roadway ramps and shoulders. The demand analysis was conducted at the census tract and corridor levels using the THFN corridors. This data was then compared against the INRIX data for the same period to estimate the percentage of trucks captured in the study area. The resulting percentages were used to develop expansion factors which were then applied to the raw data to estimate total truck parking demand in the Far West Texas region.

2.2.1 Demand at Designated Facilities

Demand at designated truck parking locations includes the estimated peak hour demand and estimated average daily demand defined as:

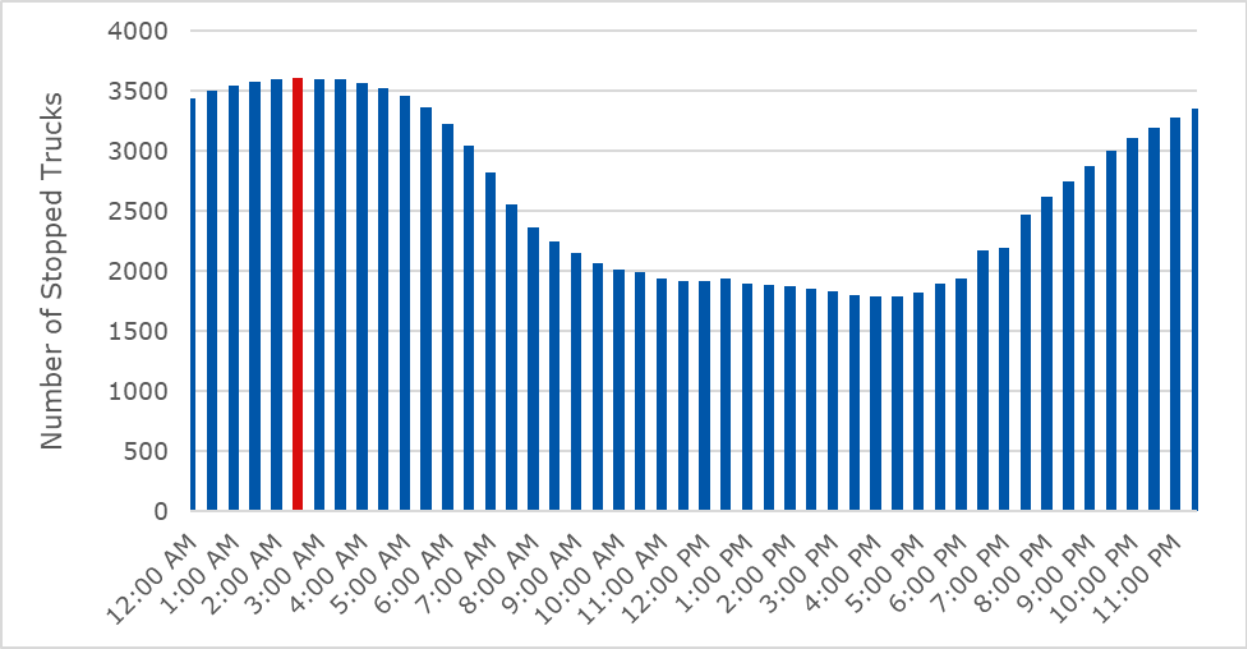
- **Peak Hour Demand**: Calculated by first identifying the region wide peak hour and then totaling the average number of trucks parking at a given designated location during that period. Truck parking demand is typically the highest overnight, and facilities are often at or over capacity at these times.

- **Average Daily Demand**: The number of trucks parked at a particular location during an average weekday. It is helpful for understanding the total number of trucks parking at a location throughout a 24-hour period, but because trucks arrive and depart throughout the day this value

does not indicate the number of spaces needed to accommodate trucks that need parking at the same time.

Within the Far West Region, the peak hour for truck parking begins at 2:30 a.m., as shown in Figure 2-4, averaging 3,600 trucks parked at this peak hour. The lowest demand occurs at 4:30 p.m., averaging 1,785 trucks parked at the same time in the region. Furthermore, demand exceeds capacity in the Far West area on average for 13 hours of the day.

Figure 2-4: Hourly Truck Parking Demand



Source: Cambridge Systematics analysis using 2019 INRIX data

While peak hour demand is essential for understanding capacity constraints, parking duration and average daily demand give a better view of daily truck operations in the region. Table 2-1 shows that peak hour utilization is over-capacity for truck stops and public facilities. Truck stops also have a much higher average daily demand than other facility types, accounting for 66% of all average daily demand. Peak hour and average daily demand are highly correlated, as seen in Figure 2-4.

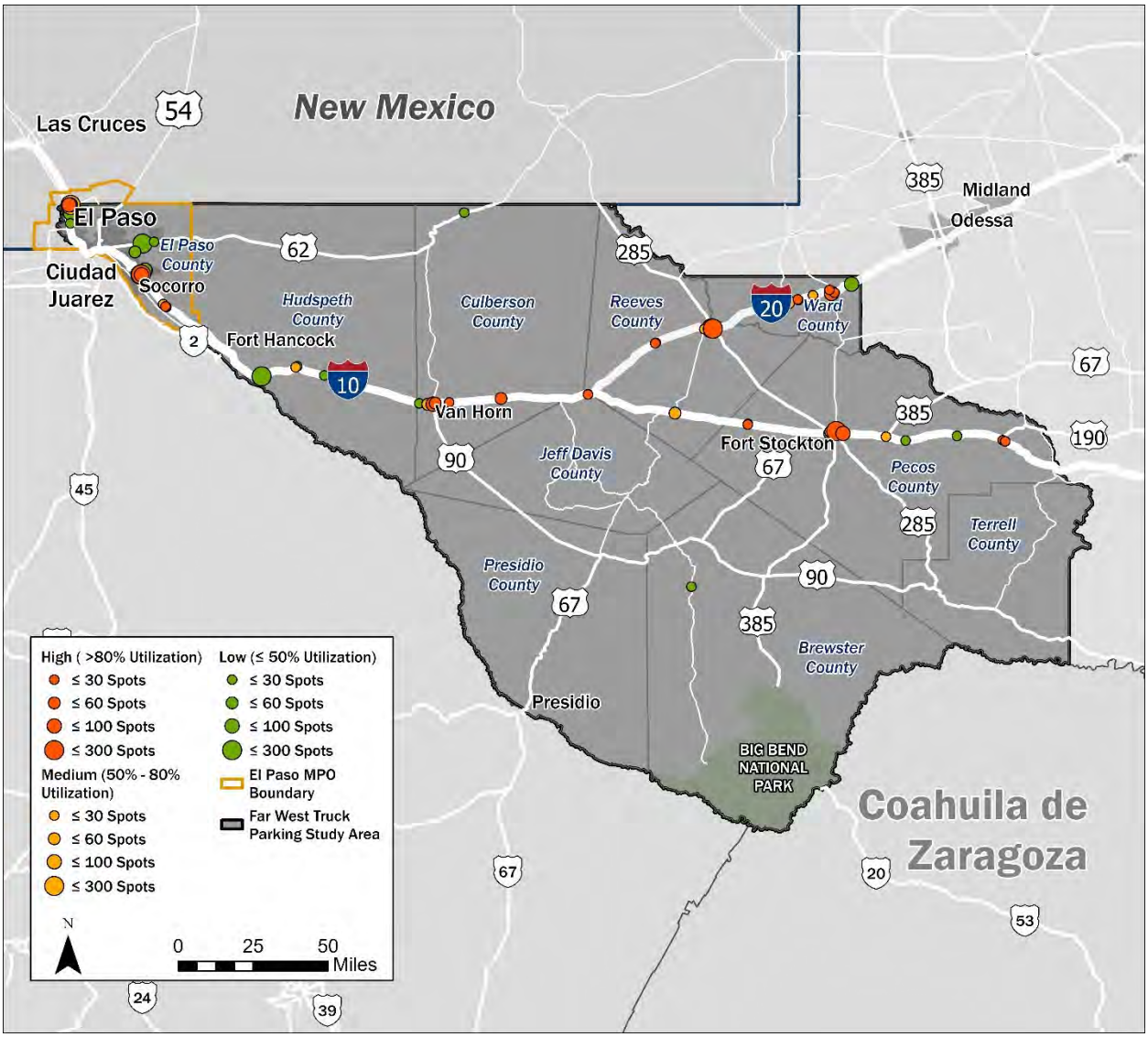
Table 2-1: Average Peak Hour Utilization and Daily Demand

Ownership	Average Daily Demand	% of Average Daily Demand	Average Peak Hour Utilization
Truck Stop with Services	5,519	66%	72%
Public Facilities	2,651	32%	106%
Secure Truck Parking	159	2%	82%
Total	**8,329**	**100%**	**84%**

Source: Cambridge Systematics analysis using 2019 INRIX data

Figure 2-5 shows the geographic distribution of truck parking facilities by peak hour utilization. All designated locations that fall within the highest utilization category are along the major interstates of I-10, and I-20 corridors. Utilization is categorized as low (< 50% utilization), medium (50 to 80% utilization), and high (> 80% utilization). Across all facilities, 43% have high rates of utilization and 26% have medium rates of utilization.

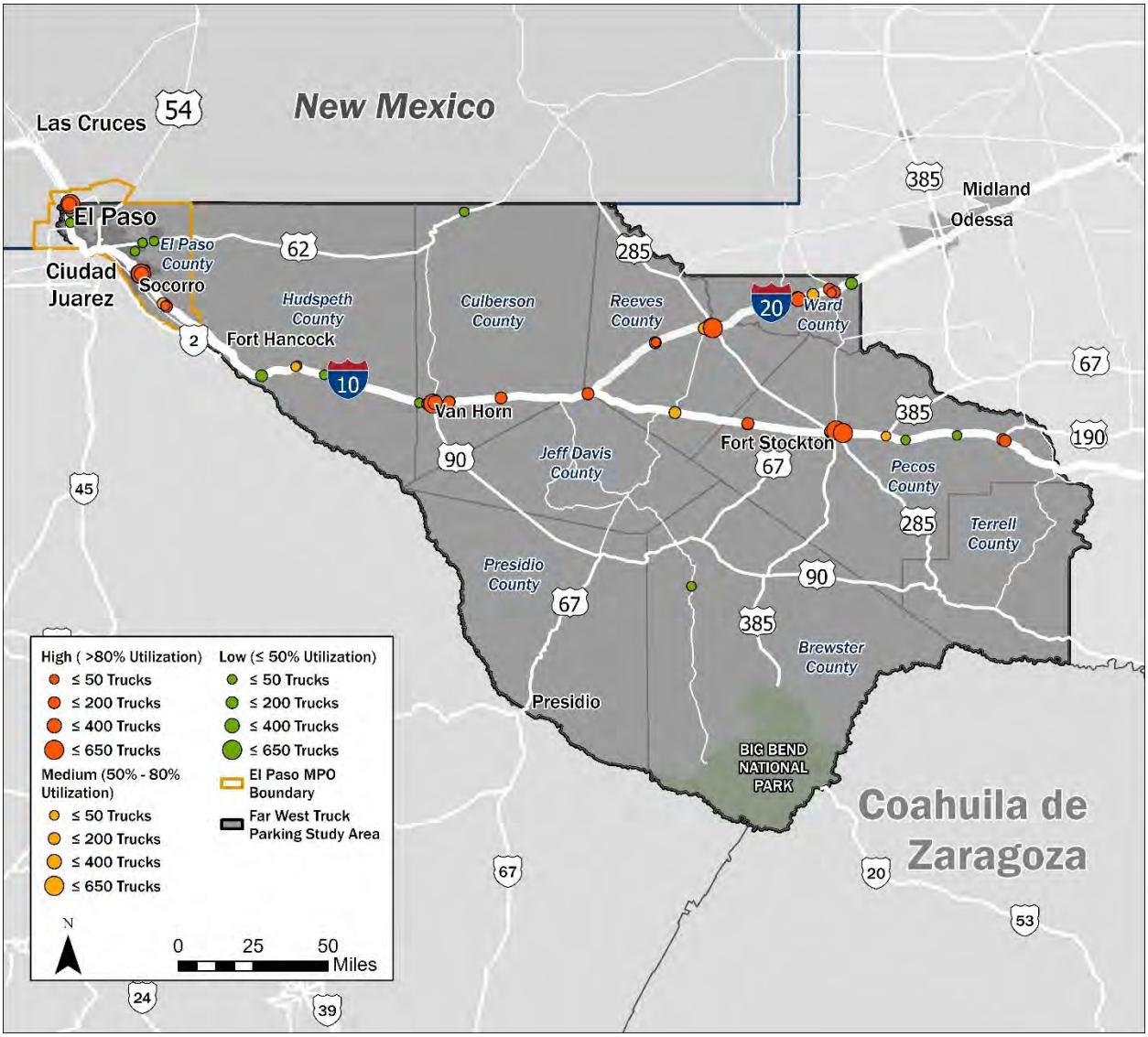
Figure 2-5: Peak Hour Utilization at Designated Locations by Truck Parking Capacity



Source: Cambridge Systematics analysis using 2019 INRIX data

Demand concentrates at highly utilized facilities along major corridors such as I-10 and I-20. Average daily demand is concentrated in areas similar to peak hour demand along the major corridors in the region. Demand also concentrates at the junctions of corridors where small towns tend to be located, see Van Horn, Pecos, and Fort Stockton in Figure 2-6 below.

Figure 2-6: Average Daily Demand at Designated Facilities



Source: Cambridge Systematics analysis using 2019 INRIX data

In addition to understanding peak hour and daily average parking demands throughout the region, analyzing the duration of parking incidents provides insight into the parking needs of truckers including overnight stays, staging, and other hours of service requirements. Based on the INRIX data, short breaks and staging (0-4 hours) account for 68% of the overall parking at designated facilities, which accounts for most of the daytime activities of truckers.

2.3 Demand at Undesignated Facilities

Undesignated locations are defined as any area outside of a designated parking facility that falls within the right-of-way. Truck drivers often use these locations for parking when they are unable to find available space at designated parking facilities within the time allotted by HOS regulations. The truck GPS data used for this Action Plan was overlaid onto the ROW to estimate the number of trucks parked on shoulders of Interstate freeway ramps, highways, and local roads.

The results of the undesignated parking analysis were summarized by two different geographies:

- **By corridor** – TxDOT's THFN was broken into corridor segments less than five miles in length with a half mile on either side of the highway, creating a mile-wide buffer from the centerline of the roadway. All trucks parked within any roadway ROW inside a corridor segment were assigned to that segment.

- **By census tract** – Census tracts are determined by the US Census Bureau and represent roughly equal levels of population and largely differ in geographical size between rural and urbanized areas. There were 182 census tracts within the study area, the vast majority of which are located within the El Paso MPO. The land outside of the El Paso MPO is primarily rural and unpopulated.

Within the El Paso MPO boundary, undesignated truck parking ranges from negligible to significant levels, with the highest rates of undesignated parking found within the northern and eastern areas of the city. Figure 2-7 shows peak hour undesignated parking by County for the ten counties that comprise the study area.

Figure 2-7: Peak Hour Undesignated Parking by County

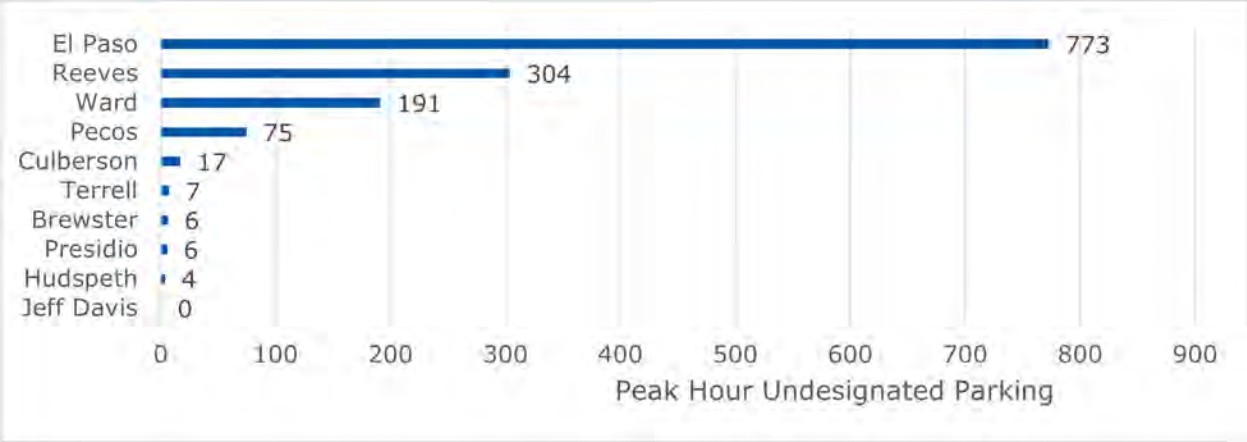
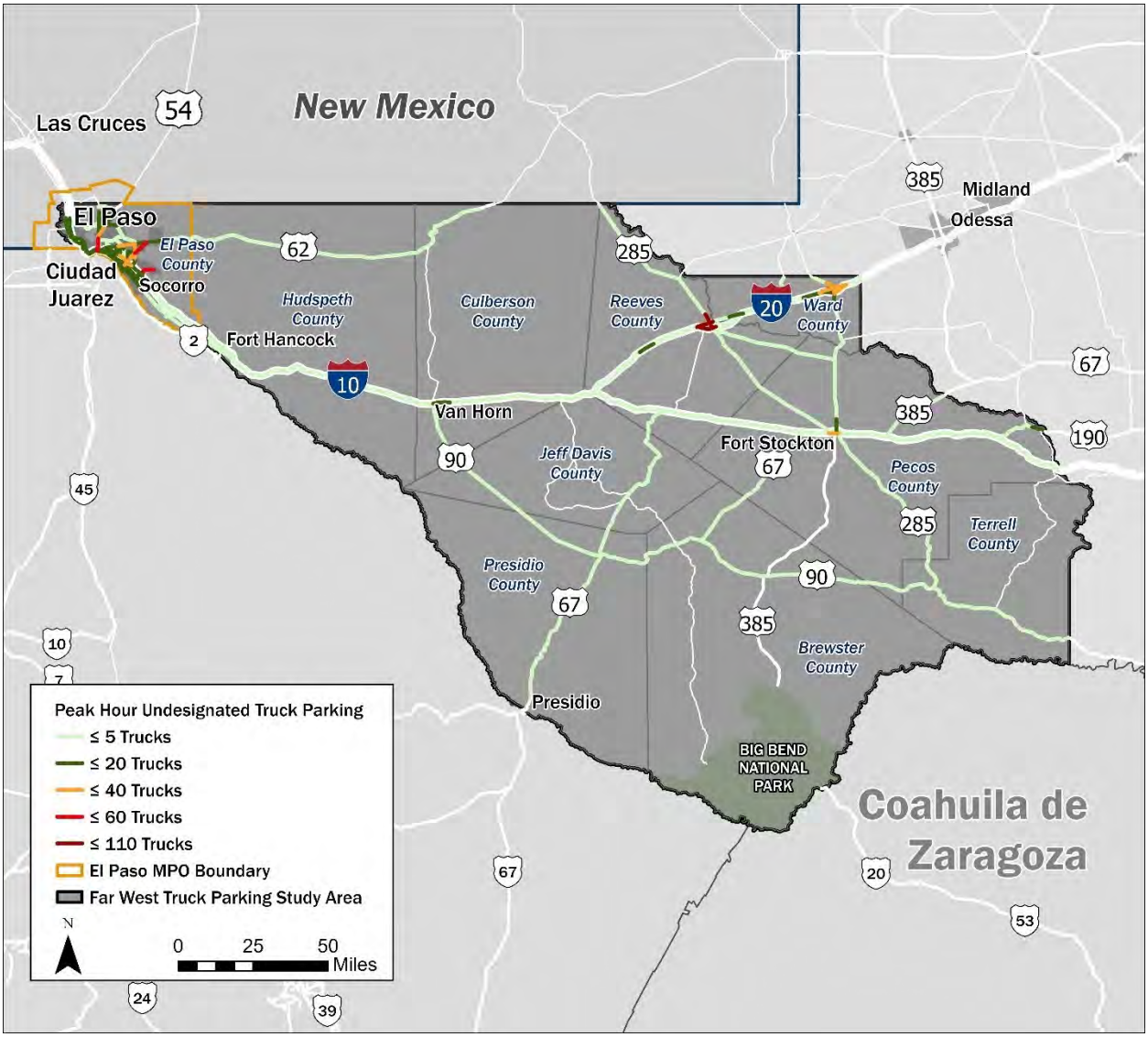


Figure 2-8: Peak Hour Undesignated Parking by Corridor, Study Area



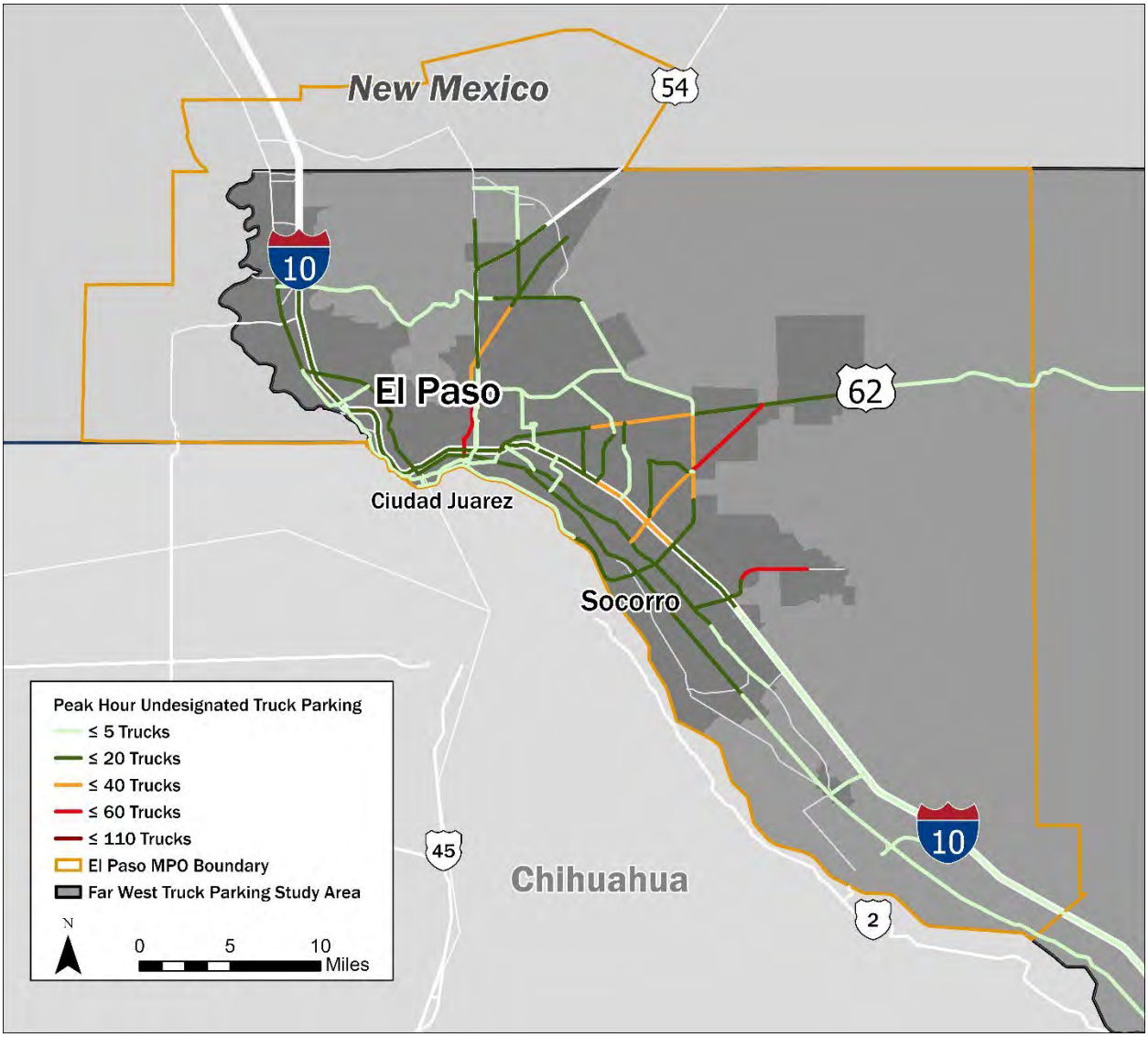
Source: Cambridge Systematics analysis using 2019 INRIX data

Figure 2-8 shows peak hour undesignated parking by corridor. As with previous analyses, undesignated parking is concentrated in the El Paso MPO region and in towns in more rural counties.

Corridors in the eastern counties that have the most undesignated parking (Figure 2-8) include: I-20 Business Loop and TX-18 in the town of Monahans and neighboring Thorntonville, I-20 and US-285 surrounding the town of Pecos in Reeves County, and I-10 Business Loop/US-285 in Fort Stockton, Pecos County.

Corridors within the El Paso MPO region that have the most undesignated parking (Figure 2-9) include: FM-659/Zaragoza Rd from US-62/Montana Ave to Loop 375, TX-478 from I-10 to Conzelman Ave, FM 1281/Horizon Blvd in southeastern El Paso, Loop 375 from US-62/Montana Ave to Vista del Sol Dr, and I-10 from Loop 375 to Yarbrough Dr at the intersection with Zaragoza Ave.

Figure 2-9: Peak Hour Undesignated Parking by Corridor, El Paso



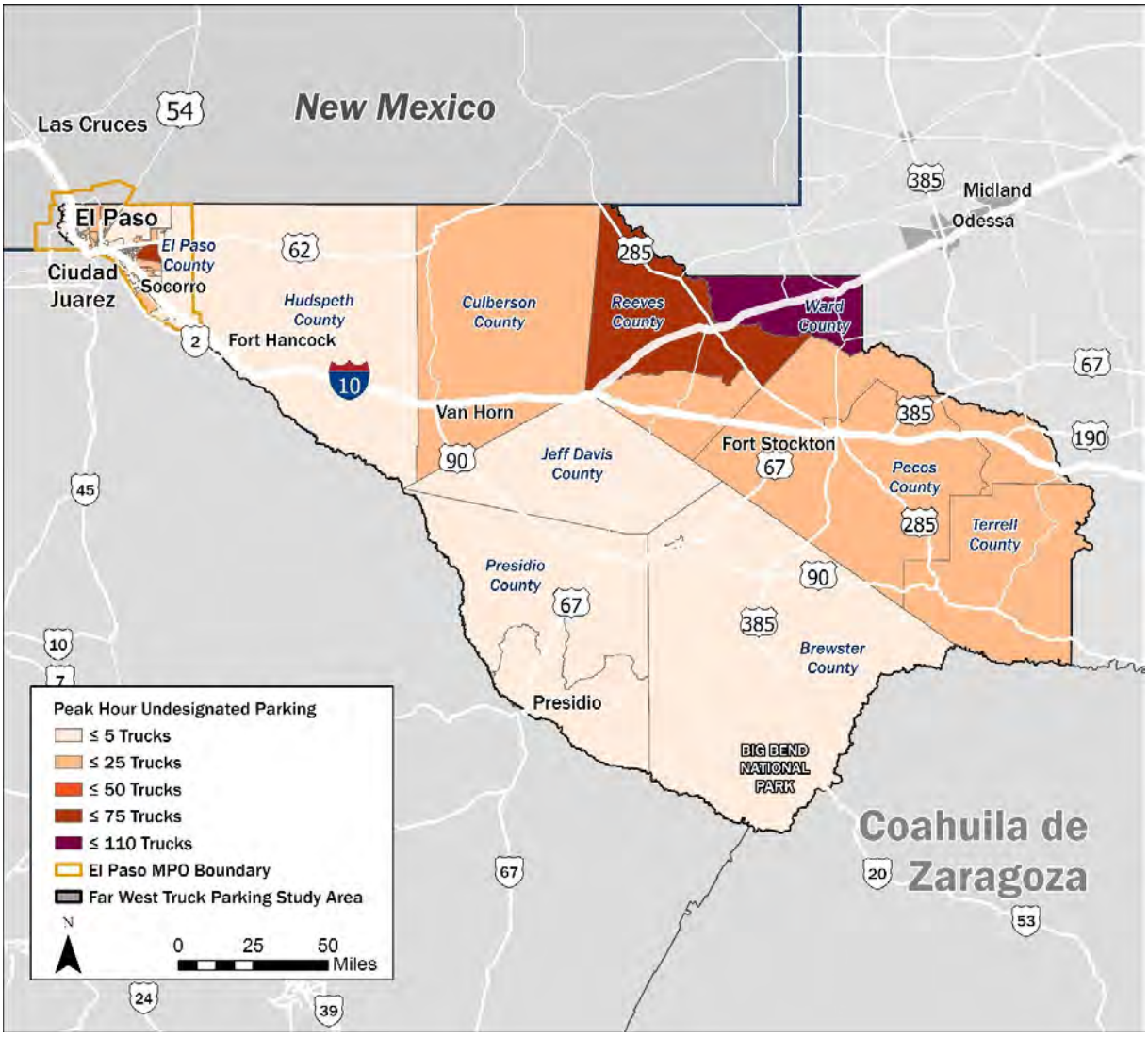
Source: Cambridge Systematics analysis using 2019 INRIX data

Parking needs can differ throughout the day, from drivers looking for a comfortable place to sleep at night to flexible areas for staging. Table 2-2 shows the duration of trucks parking in undesignated locations. Approximately a third of trucks are short staging for 1 to 4 hours, followed closely by 29% of trucks taking breaks for under an hour.

Table 2-2: Undesignated Truck Parking Duration Throughout the Day

Duration	% Share
Short Break (<1 Hour)	29%
Short Staging (1-4 Hours)	35%
Long Staging (4-8 Hours)	7%
10-Hour Rest (>8 Hours)	29%

Figure 2-10: Peak Hour Undesignated Parking by Census Tract



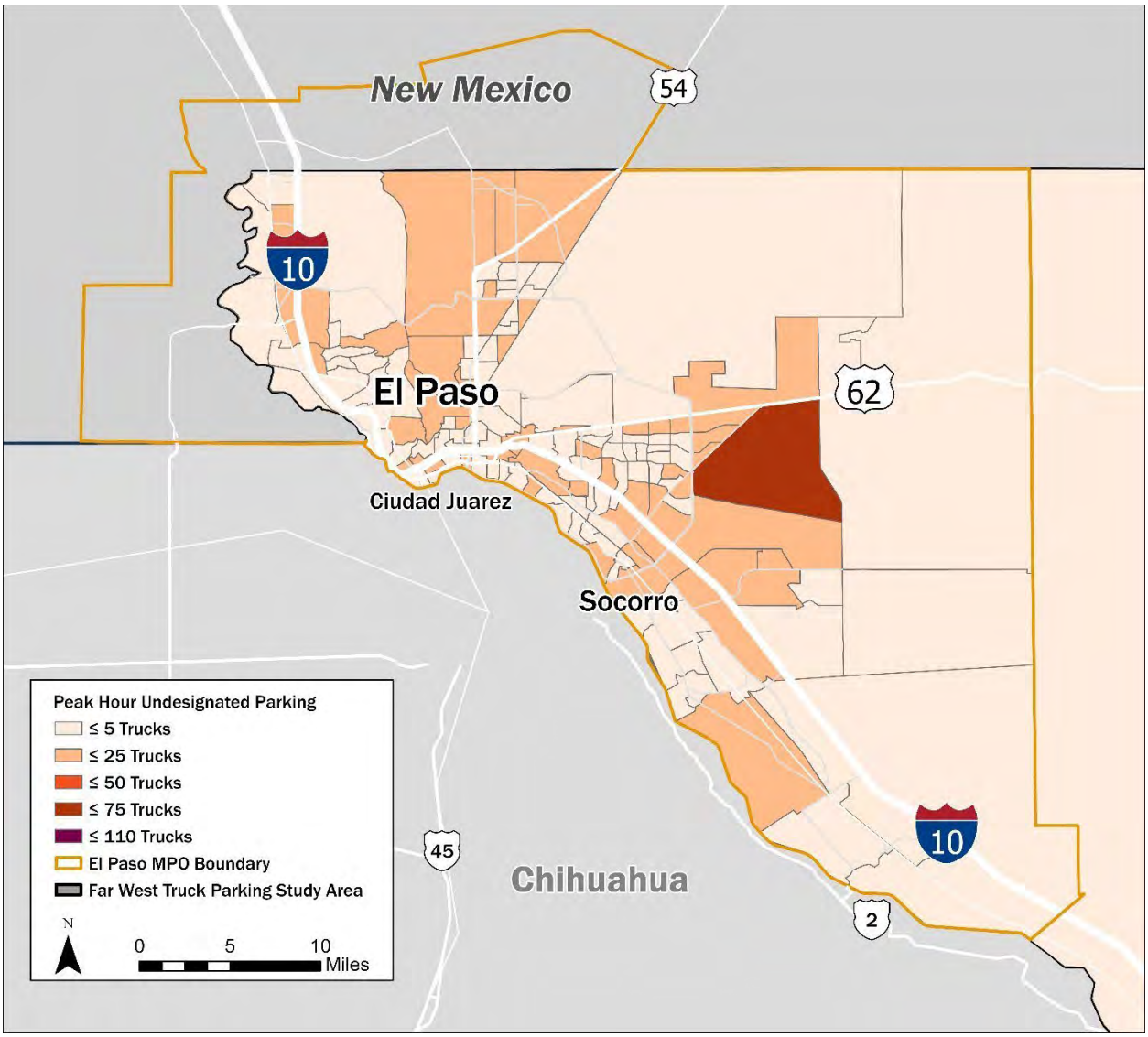
Source: Cambridge Systematics analysis using 2019 INRIX data

As previously mentioned, undesignated parking is a result of truck drivers' needs, including overnight parking and staging, not being met by designated facilities. Similar to the results of the designated parking analysis, approximately a third of trucks are short staging for one to four hours, while 29% of trucks are taking breaks that are less than an hour. Extended parking that lasts between 4-14 hours makes up the remaining truck parking stops during the analysis period.

To better understand the sufficiency of daytime parking needs of truck drivers in the region, the Action Plan also calculated a daytime peak for undesignated parking locations based on truck parking incidents between 6 a.m. and 6 p.m. Figure 2-12 shows that daytime parking peaks at 12:30 p.m.

Within the El Paso MPO (Figure 2-11), peak hour, undesignated parking is concentrated on the eastern edge of the urban area between SL 375 and N. Ascencion Street. This area offers a number of paved and unpaved roads within undeveloped subdivisions. Because these roads are unmonitored and free of traffic, while also being readily accessible from the highway freight network, they are a popular choice for undesignated parking.

Figure 2-11: Peak Hour Undesignated Parking by Census Tract, El Paso MPO



Source: Cambridge Systematics analysis using 2019 INRIX data

Figure 2-12: Daytime Parking Activity

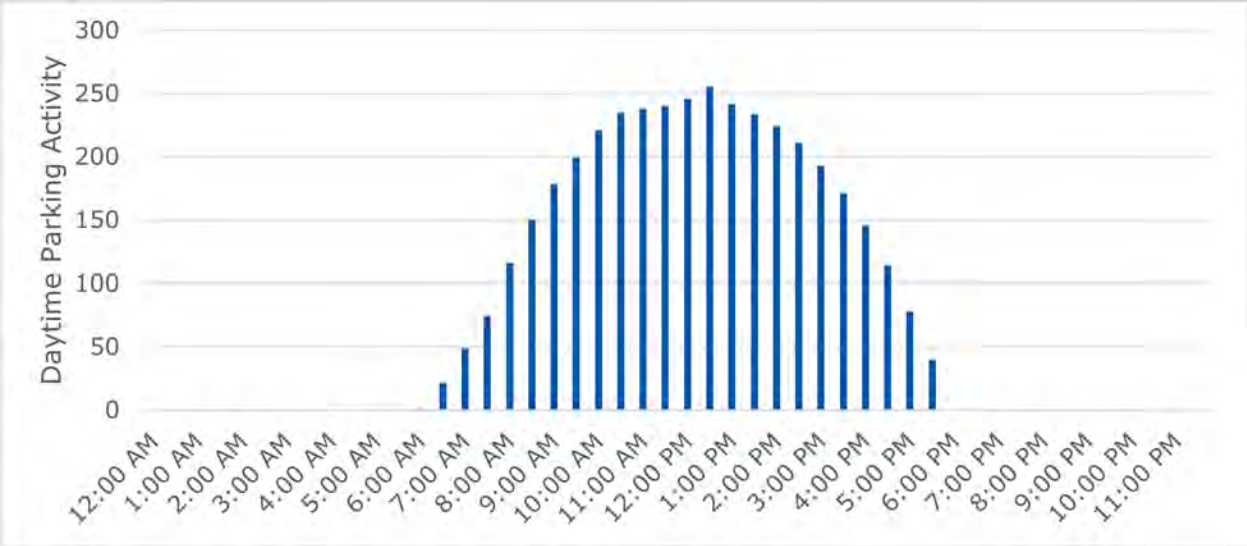
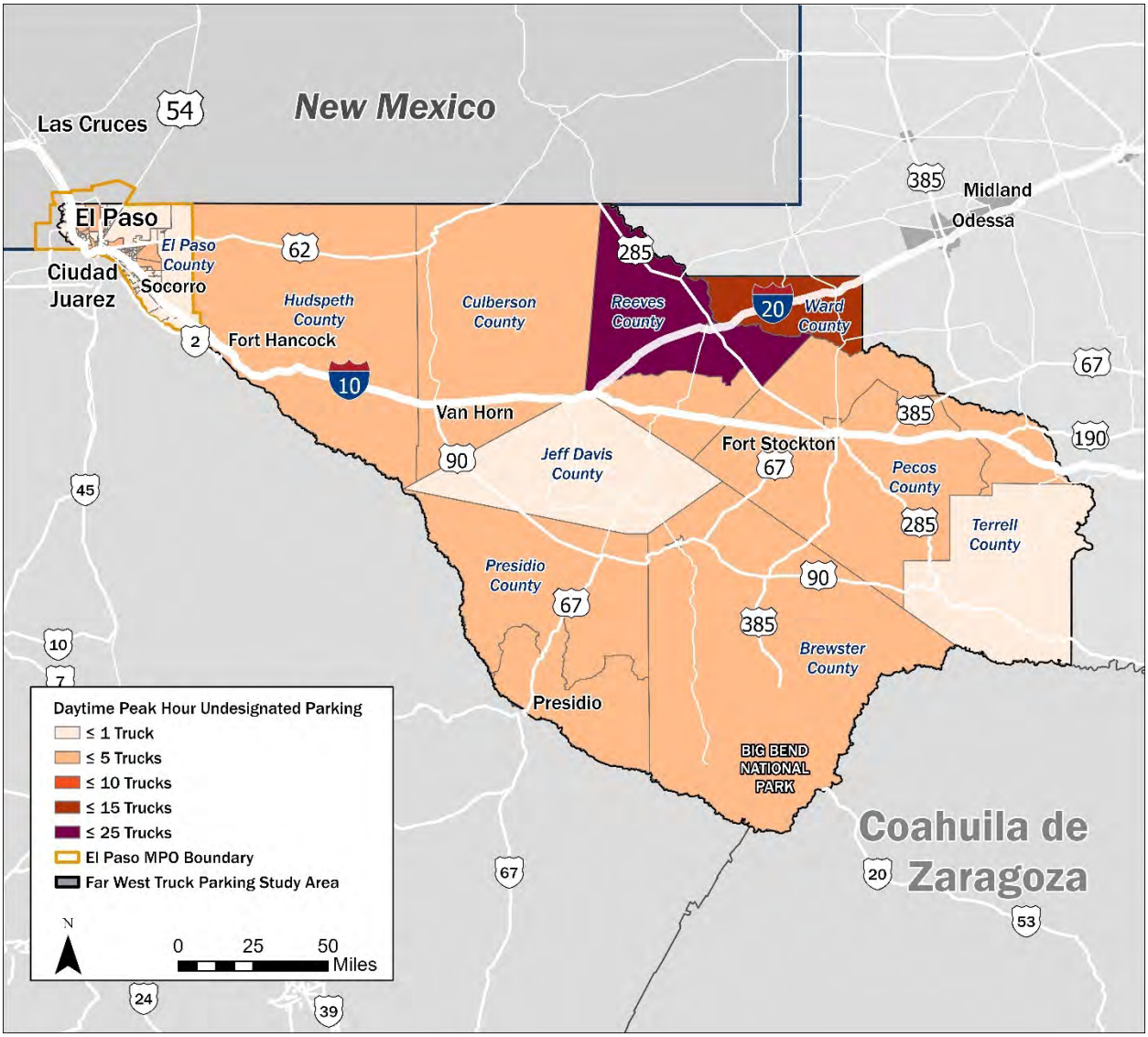


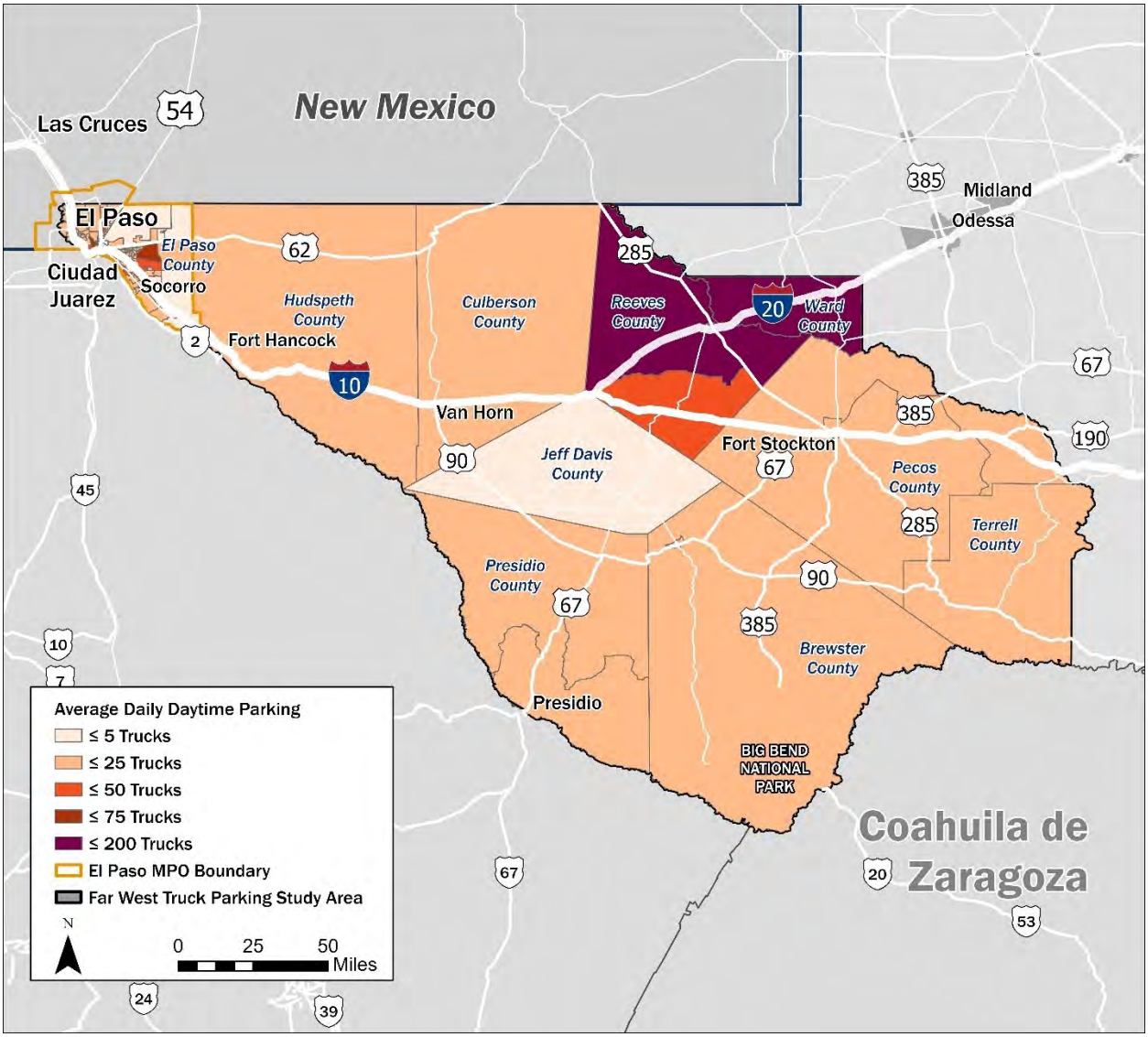
Figure 2-13 shows the average number of trucks parking in an undesignated area at daytime peak hours within the region. Figure 2-14 demonstrates the average daily undesignated daytime parking by census tract. The daytime peak parking demand indicates the number of additional parking spaces needed to accommodate peak demand. Undesignated parking is most prevalent in Reeves and Ward counties, where high volumes of truck freight coincide with few designated truck parking options.

Figure 2-13: Daytime Peak Hour Undesignated Parking by Census Tract



Source: Cambridge Systematics analysis using 2019 INRIX data

Figure 2-14: Average Daily Daytime Undesignated Parking by Census Tract

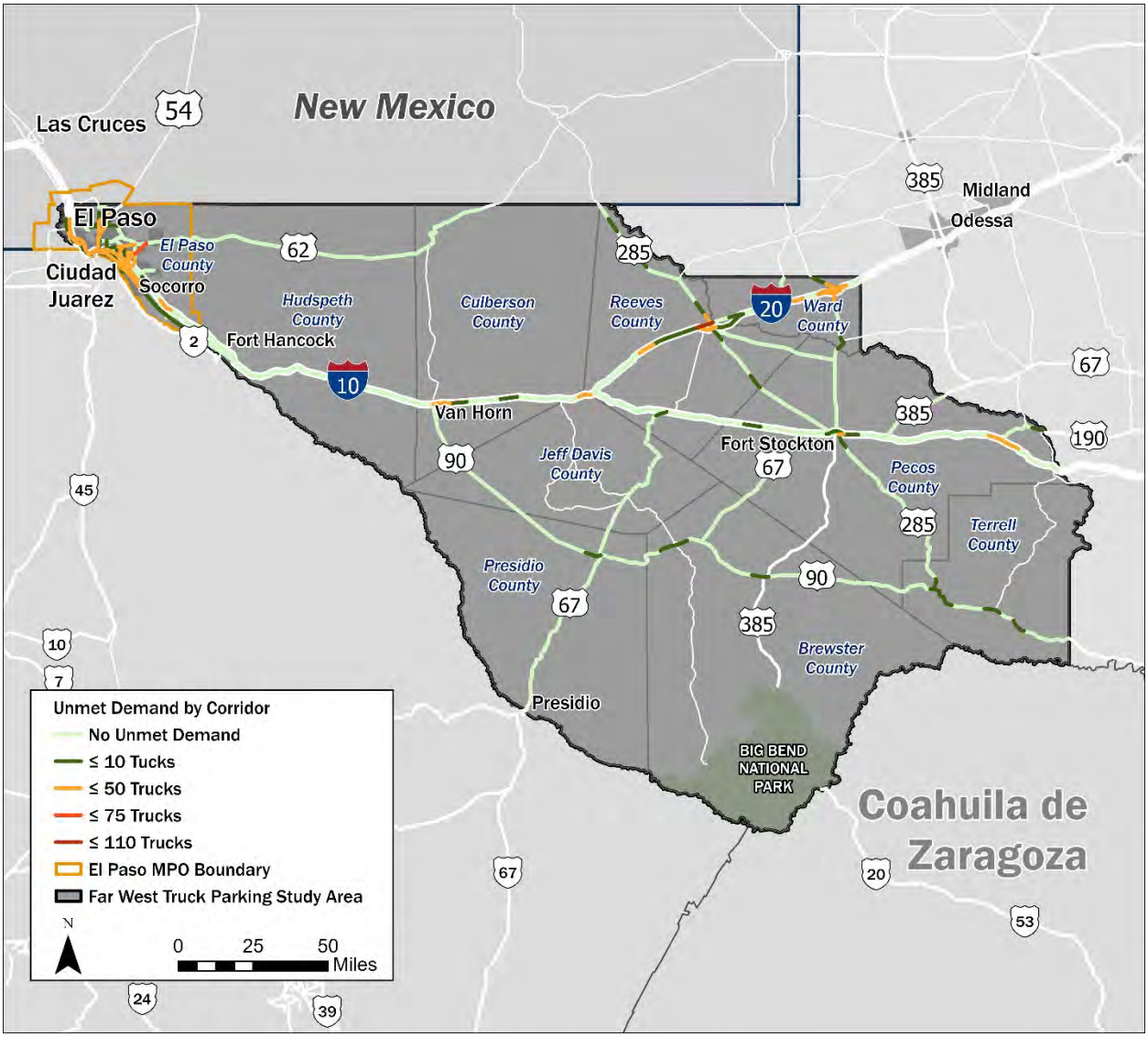


Source: Cambridge Systematics analysis using 2019 INRIX data

2.4 Unmet Demand and Other Needs

The shortage or surplus of truck parking is determined by calculating the difference between the total demand and supply of truck parking spaces within a corridor segment or census tract. Total demand is defined as the sum of trucks parking at designated facilities and within undesignated ROW during the peak overnight hour. Figure 2-15 summarizes the gap between truck parking demand and supply by major corridor segments.

Figure 2-15: Unmet Demand by Corridor

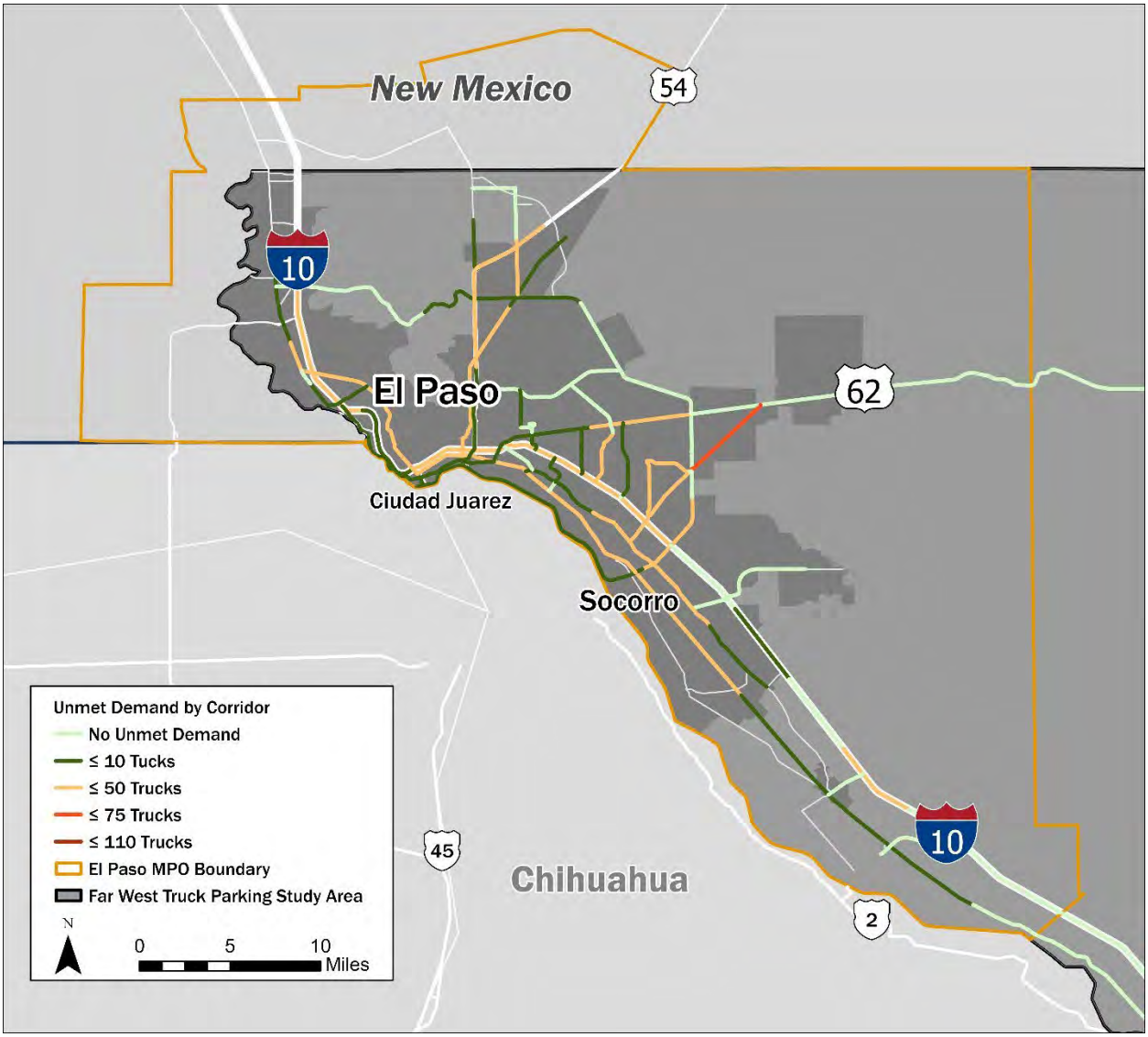


Source: Cambridge Systematics analysis using 2019 INRIX data

Figure 2-15 summarizes the gap between truck parking demand and capacity by major corridor segments. Most unmet demand is within the El Paso MPO boundaries (see Figure 2-16). The 5 highest corridors of unmet demand are:

- **I-20 Business Loop** in the City of Pecos
- **Zaragoza Rd** between Loop 375 and I-10
- **TX-478** from I-10 to Conzelman Ave
- **US-285** in the city of Pecos
- **I-20** in the city of Pyote

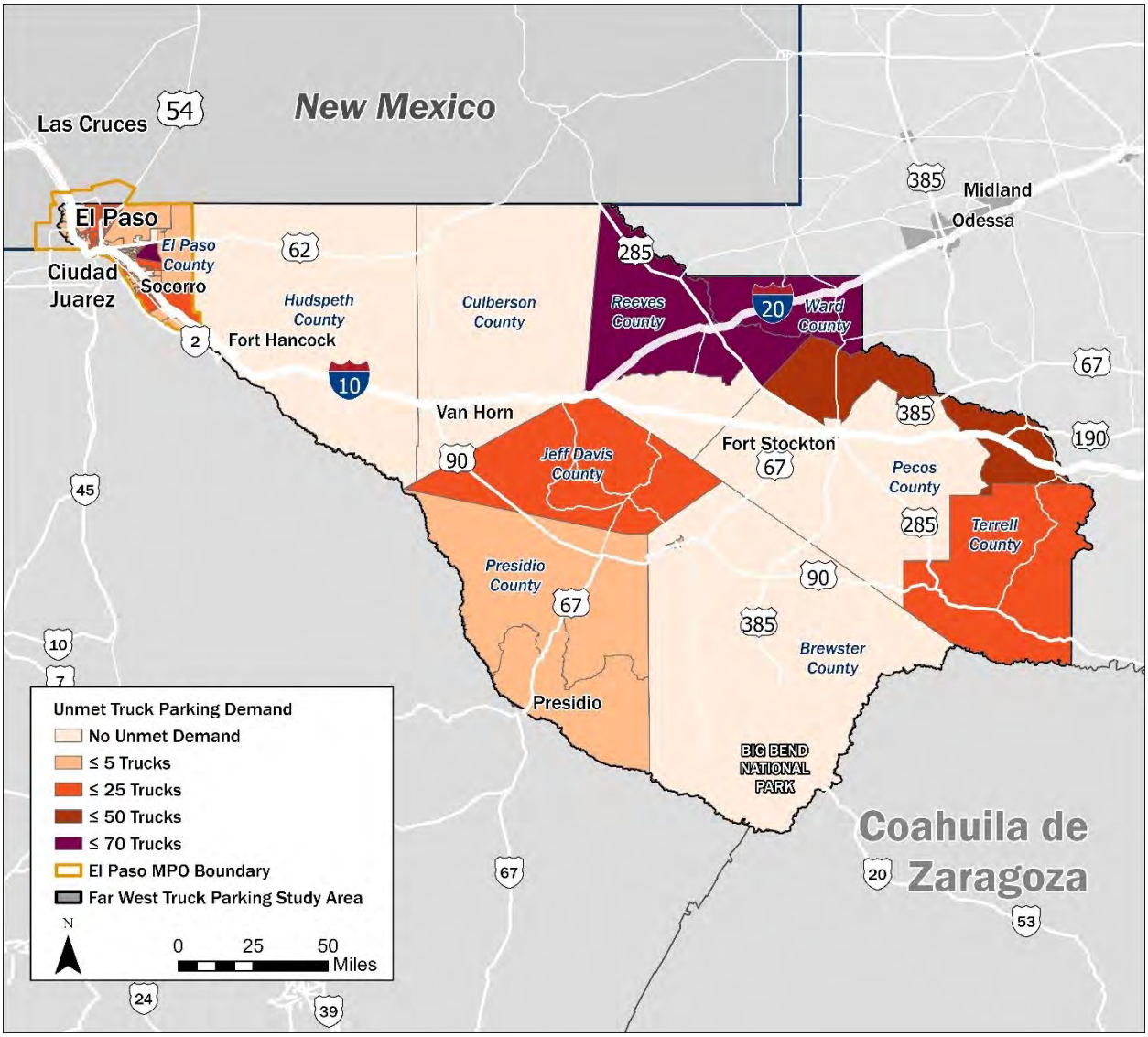
Figure 2-16: Unmet Demand by Corridor, El Paso MPO



Source: Cambridge Systematics analysis using 2019 INRIX data

Unmet Demand in El Paso, see Figure 2-16, also mirrors the overall results of the peak hour demand forecast. Most of the designated facilities in El Paso are located along I-10, especially in the northern and southern part of the city. The highest level of unmet demand is in the eastern portion of the city along US-62 and Zaragoza Rd. While there are three truck parking locations in the area, they are small and underutilized, indicating an inability to meet driver needs.

Figure 2-17: Unmet Demand by Census Tract



Source: Cambridge Systematics analysis using 2019 INRIX data

Unmet demand for truck parking exists across the study area, most significantly in Reeves and Ward counties, and in eastern El Paso. Additional areas of significant unmet demand follow US-67 to US-90. This route has become especially trafficked in recent years as industrial exports such as prefabricated homes coming across the Presidio Port of Entry increase. the Presidio-Ojinaga International Bridge is the only commercial border crossing outside of the El Paso MPO within the district, but the nearest truck parking facilities are on I-10. Eastern Pecos and Terrell Counties show significant unmet demand from a combination of local and long-haul truck traffic.

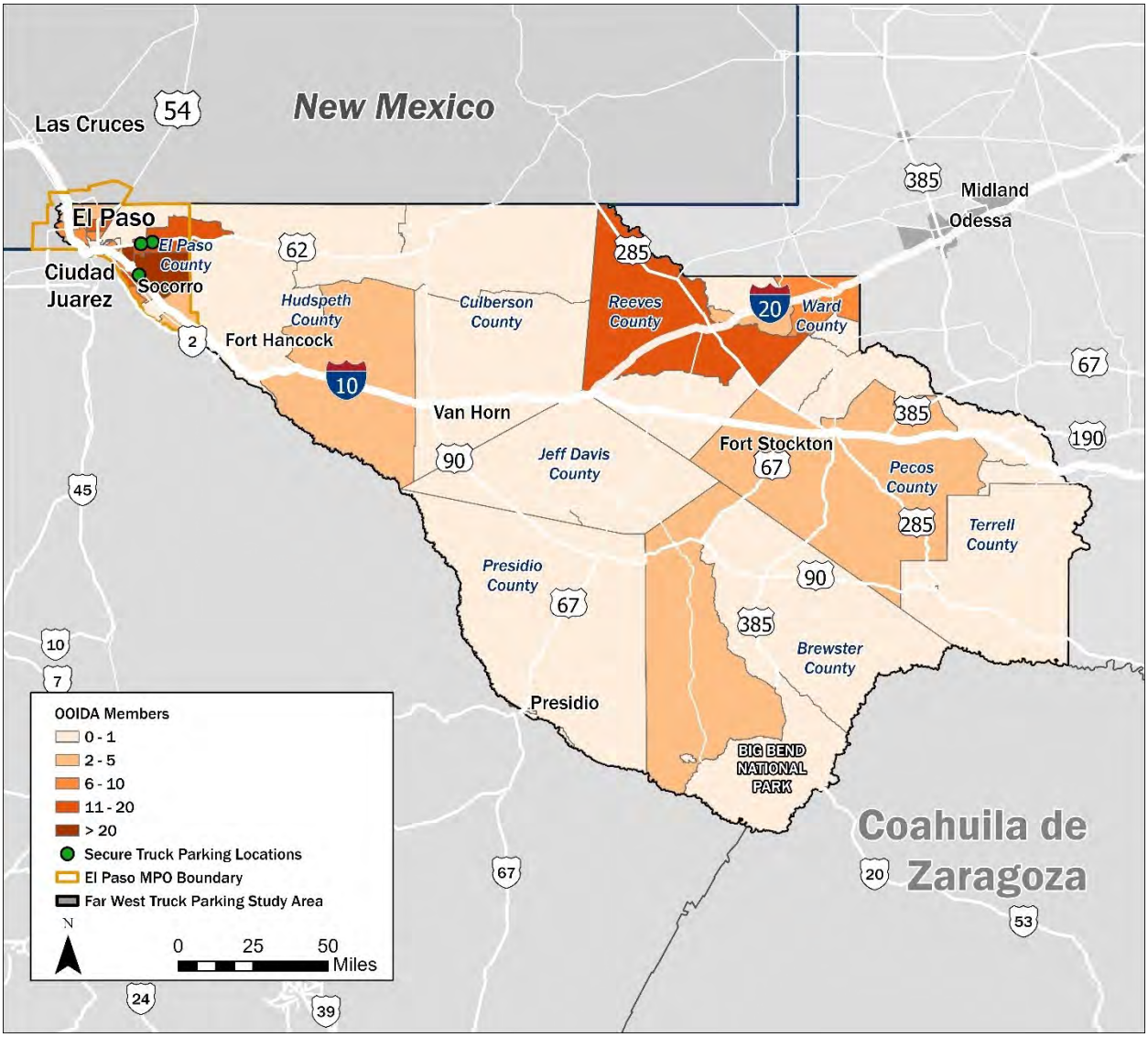
2.5 Owner Operators

The Owner-Operator Independent Drivers Association (OOIDA) is a trade association that represents independent owner-operators and professional truck drivers. OOIDA is involved in regulatory and legislative forums on highway safety and transportation policy and advocates for a safe, efficient, and equitable business climate for its members.

The OOIDA has approximately 240 members in the study area. While OOIDA membership is not inclusive of all truck drivers in Texas, their membership reflects a particular type of truck parking need: secure parking near residential areas. Owner-operators own their trucks and do not drive a company vehicle. Without a warehouse or truck terminal to park their trucks when off-duty, they often park in residential areas near their homes between trips, which municipalities and local governments often regulate.

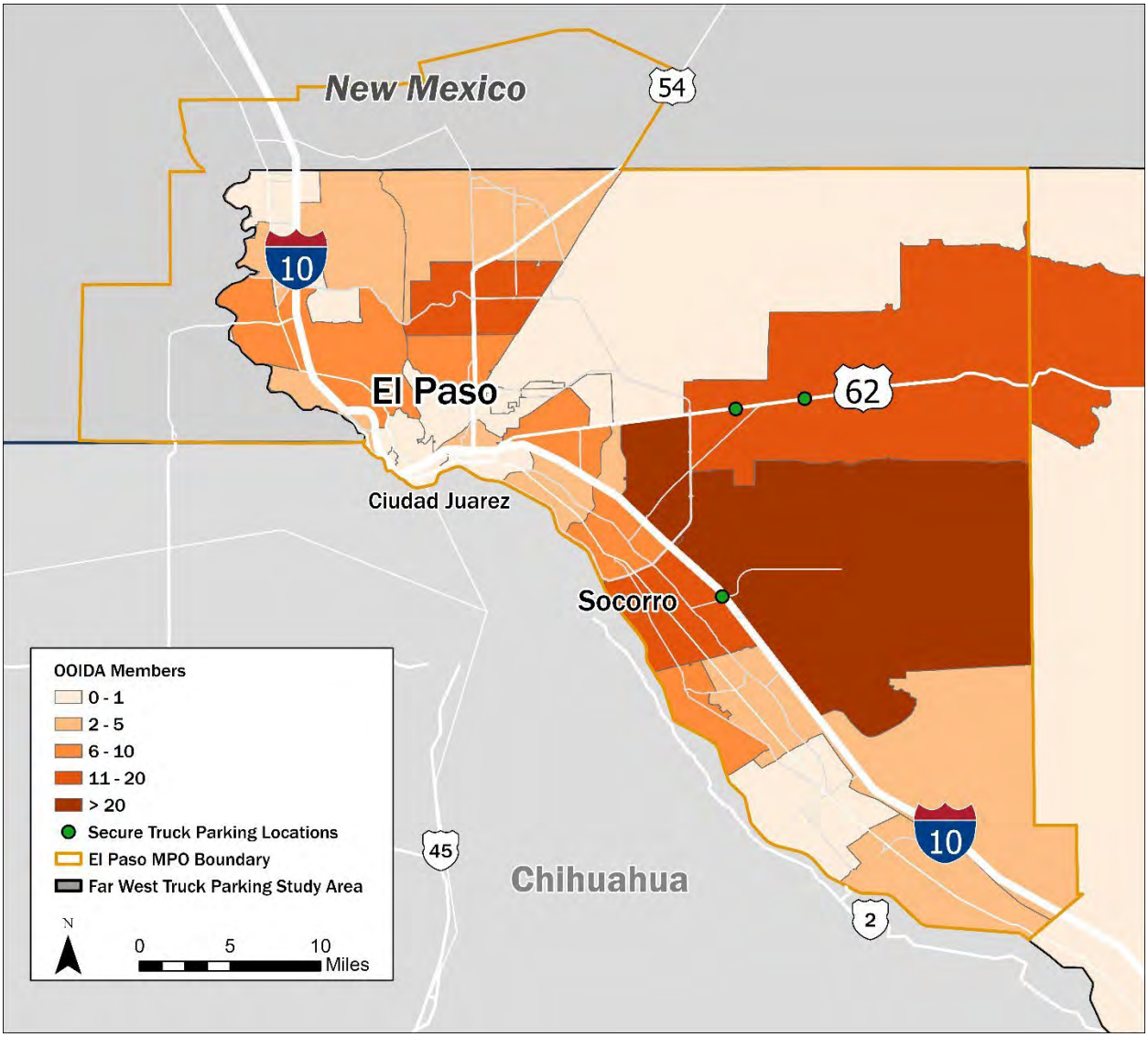
Figures 2-18 and 2-19 overlay the secure truck parking locations identified in Section 1.0 with the concentrations of OOIDA membership by zip code. Most OOIDA members live in El Paso County near major highways (I-10 and SR 62). Several OOIDA members also live in Reeves and Ward County. However, all secure truck parking sites are located within the El Paso MPO. This can become a source of conflict with neighboring residents and puts the owner-operator at risk of vehicle or cargo theft. As complaints mount, municipalities commonly restrict truck parking in residential areas, but this may only lead to parking in other undesirable areas. Additional truck parking in these areas would potentially benefit both owner-operators and the larger community.

Figure 2-18: OOIDA Members by Zip Code and Secure Parking Locations



Source: Compiled by Cambridge Systematics with data from OOIDA

Figure 2-19: OOIDA Members by Zip Code and Secure Parking Locations, El Paso



Source: Compiled by Cambridge Systematics with data from OOIDA

2.6 Parking Needs at International Border Crossings

The El Paso/Far West region encompasses several freight border crossings including El Paso Rail Bridges (Union Pacific and BNSF Railway), Bridge of the Americas (BOTA), Ysleta-Zaragoza Bridge and Marcelino Serna at Tornillo. Truck parking needs at international border crossings are unique. These areas typically have a high concentration of shippers, receivers, and intermodal facilities that generate significant truck traffic. Drivers near these facilities often need parking while waiting for appointments to pick up or drop off a load, especially near the rail bridges.

Drayage drivers, typically Mexican carriers, haul loads back and forth across the border between the maquiladoras in Mexico and distribution centers in the U.S. Drivers sometimes must wait for paperwork to be processed at border crossings, which can take several hours. This holding pattern

requires drivers to find truck staging near the border. In some cases, a driver might need long-term truck parking if the required paperwork is not received before a port of entry facility closes or if the driver arrives after it has closed. This is a significant concern for the Presidio Port of Entry where there are no designated truck parking locations. Highways near the US-Mexico border are also projected to experience significant growth in truck parking demand.

During the extensive stakeholder outreach conducted in the development of the Action Plan and highlighted in greater detail in Chapter 3, many of these border crossing issues were highlighted as significant challenges for truck drivers in the region. Other concerns uncovered through stakeholder meetings include:

- Border crossings are typically closed overnight and there is limited parking available during these hours. This causes some trucks to stay in queue, which is a violation. Some drivers leave their trucks on the U.S. side and get dropped back over the border to skip the queue.
- Truck parking north of the Ysleta-Zaragoza Bridge with bathroom facilities would benefit drivers who have been waiting in long queues to enter the U.S.
- There is a lack of data on the Mexican drayage trucks.
- There is a lack of available land near the border to build new facilities.

Truck parking near freight border crossings should be open at all times so that they can address multiple needs including short-term, staging, long-term, storage, and emergency truck parking. While no specific projects were included in the 2021 Texas-Mexico Border Transportation Master Plan, it identified a need for additional truck parking.

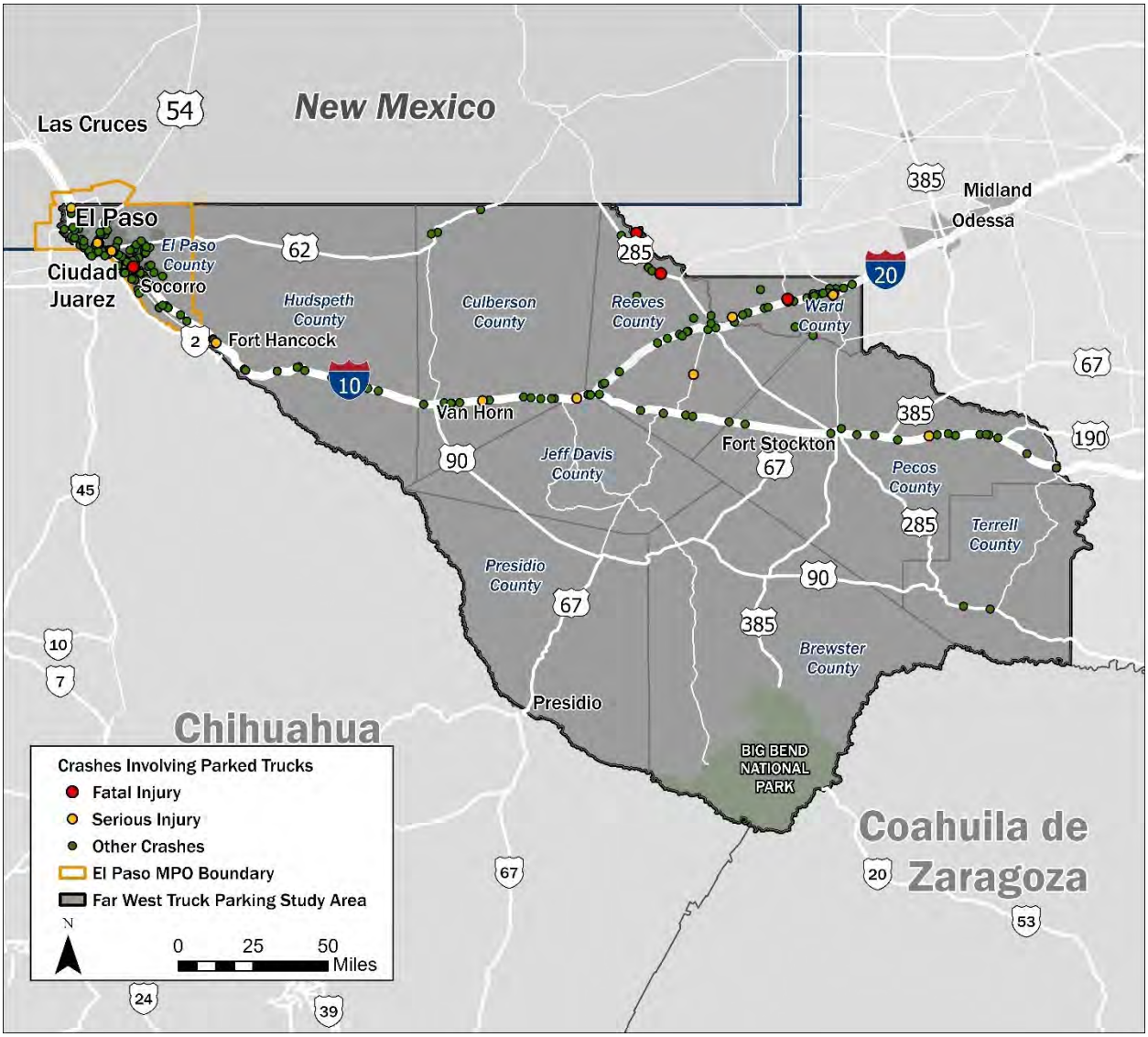
2.7 Crash Analysis

Truck drivers are mandated to rest at regular intervals; without sufficient parking, drivers often find themselves parking in hazardous locations, such as on the side of roads, highways, or ramps. In the worst cases, these potentially hazardous situations result in a crash that causes a serious injury or fatality. This section updates the 2020 TPS safety analysis of crashes involving parked trucks within the Far West region.

The analysis uses crash data retrieved on January 15, 2024, from TxDOT's Crash Records Information System (CRIS) database. The analysis presented within this Action Plan covers the five-year period from 2018 to 2022. During the study period, there were 5,989 truck crashes within the region, with 447 (7.4%) of those crashes involving parked trucks, resulting in 3 fatalities and 7 serious injuries.

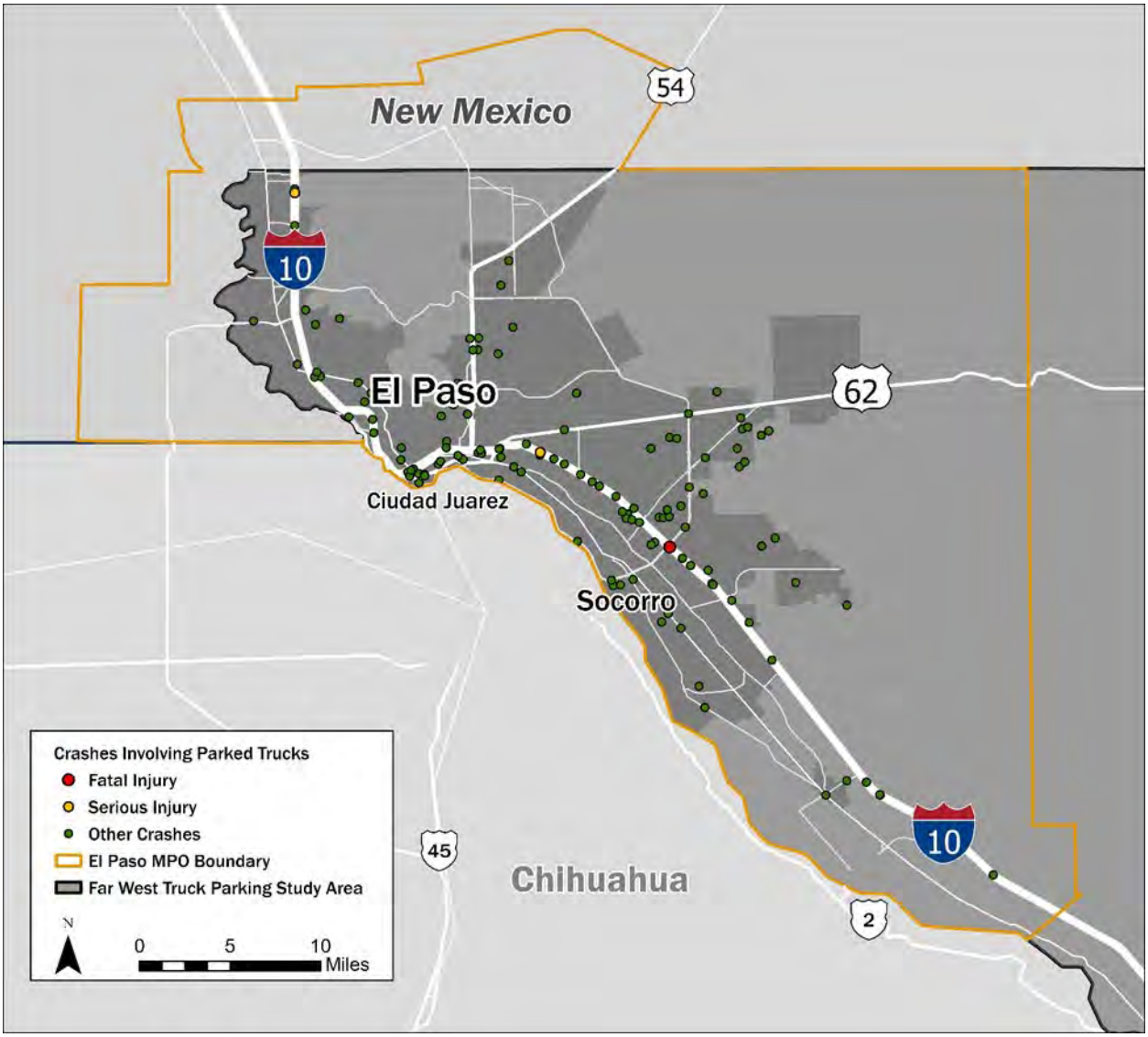
Figure 2-20 shows the location of crashes involving a parked truck in the study area. Although there were additional incidents involving parked trucks, only records that contained crash coordinates are mapped below. Almost 80% of incidents involving parked trucks occurred in El Paso County, likely due to denser and more populated roadways compared to rural areas. Most crashes involving parked trucks are also located on interstates (primarily along I-10 and I-20) and Farm to Market (FM) roads. For more detailed information regarding the safety analysis, please refer to the Needs Assessment Technical Memorandum.

Figure 2-20: Geographic Location of Crashes Involving Parked Trucks



Source: Cambridge Systematics analysis using 2018 to 2022 CRIS data

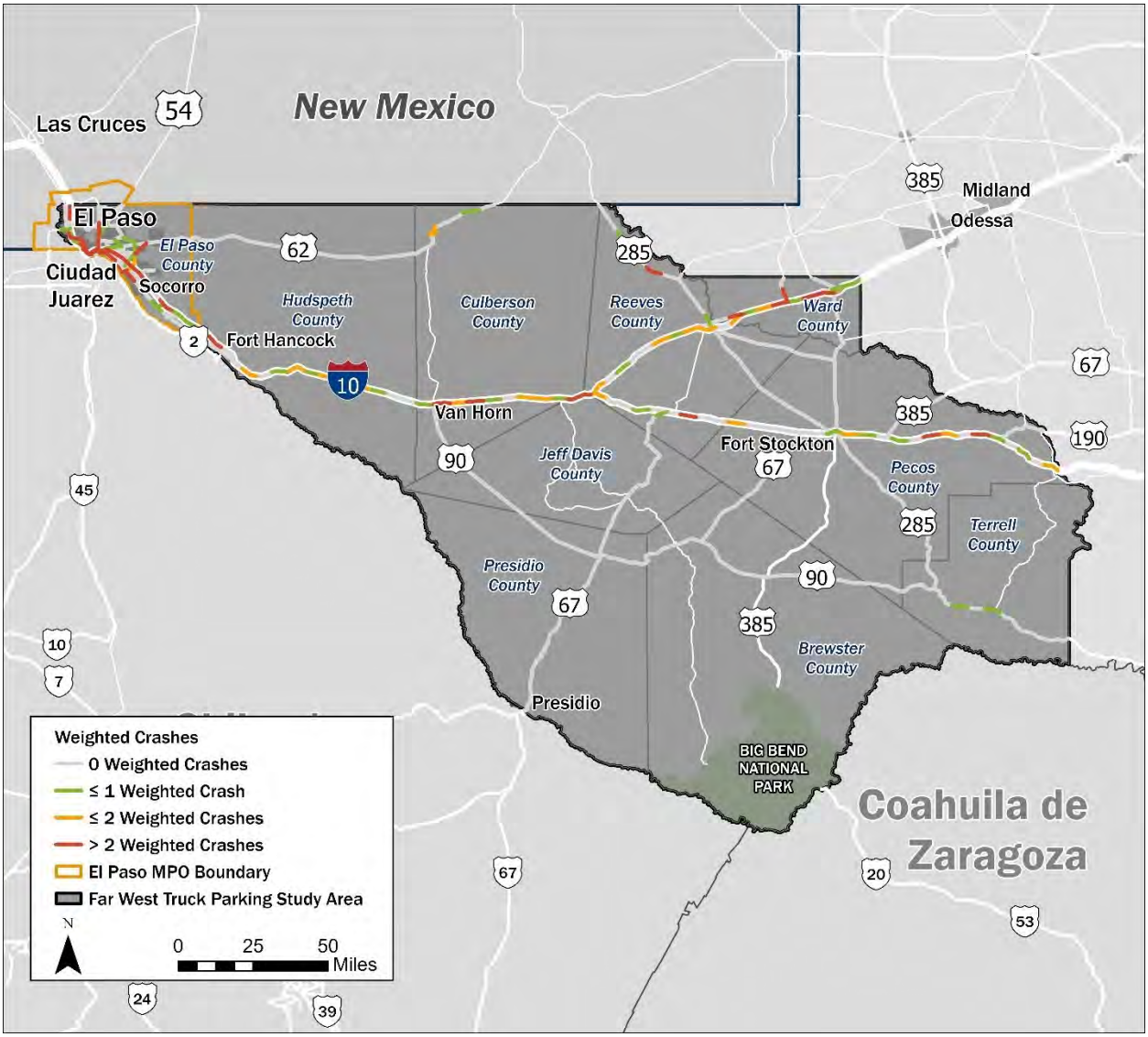
Figure 2-21: Geographic Location of Crashes Involving Parked Trucks, El Paso



Source: Cambridge Systematics analysis using 2018 to 2022 CRIS data

To better understand where severe crashes with parked trucks are clustered, the Action Plan calculated a parked truck crash score along the THFN within the study area. To calculate the crash score, crashes were weighted by severity. Fatal crashes received a weight of 5, crashes resulting in injury received a weight of 3, and all other crashes were weighted as 1. The crashes within 0.5 miles of a corridor were correlated to that area and then summed by crash weight and divided by segment length to calculate the parked truck crash score per mile. The results of this analysis are presented in Figure 2-22 below.

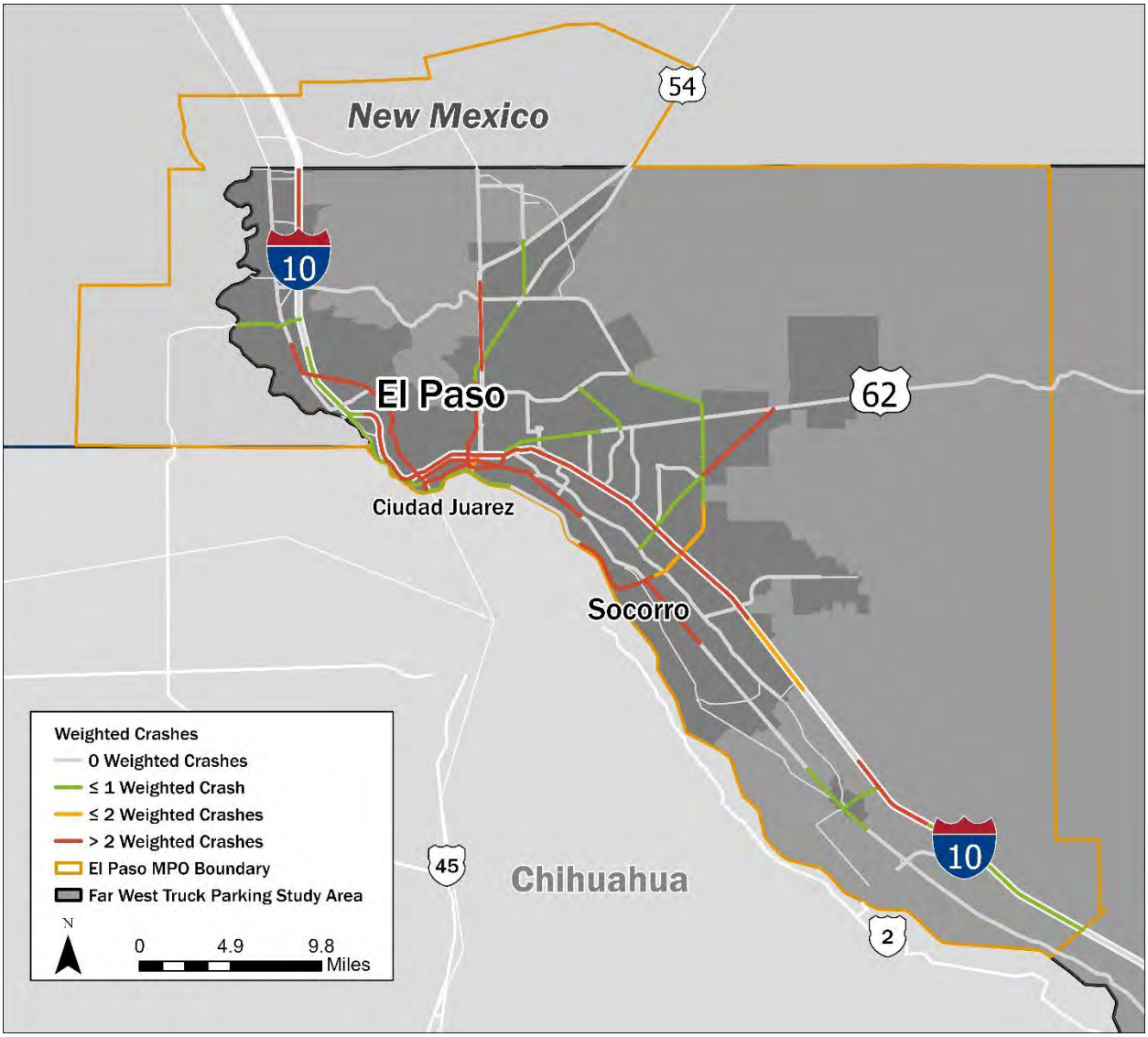
Figure 2-22: Weighted Crashes Involving Parked Trucks by Corridor



Source: Cambridge Systematics analysis using 2018 to 2022 CRIS data

The overwhelming majority of crashes in the study area occurred on Interstates 10 and 20, with additional significant crash activity located within the El Paso area (Figure 2-23).

Figure 2-23: Weighted Crashes Involving Parked Trucks by Corridor, El Paso



Source: Cambridge Systematics analysis using 2018 to 2022 CRIS data

Crashes within the El Paso area are most prevalent on I-10, N Mesa St./SH 20, US 54, N Zaragoza Rd, and SH 20/Alameda Ave. Aside from I-10 and US 54, these roadways are high-mobility/high-access arterials with traffic consistently entering and exiting the roadway to access adjacent commercial development. These types of arterial roadways are often the most direct route to an access-controlled highway, but their design presents many safety hazards for truck traffic.

2.8 Areas of Greatest Need

To determine which locations have a high need for truck parking, a combination of truck parking demand, collision factors, and freight needs for each road segment were analyzed at the corridor level. These factors were calculated for each corridor on a per-mile basis and sorted into low, medium, and high priority bins of similar sizes and combined into a prioritization score. The combined prioritization score incorporates the three factors for a comprehensive view of truck parking needs in the region. For more detailed information regarding the individual factor prioritization score methodology and results, please refer to the *Needs Assessment Technical Memorandum*.

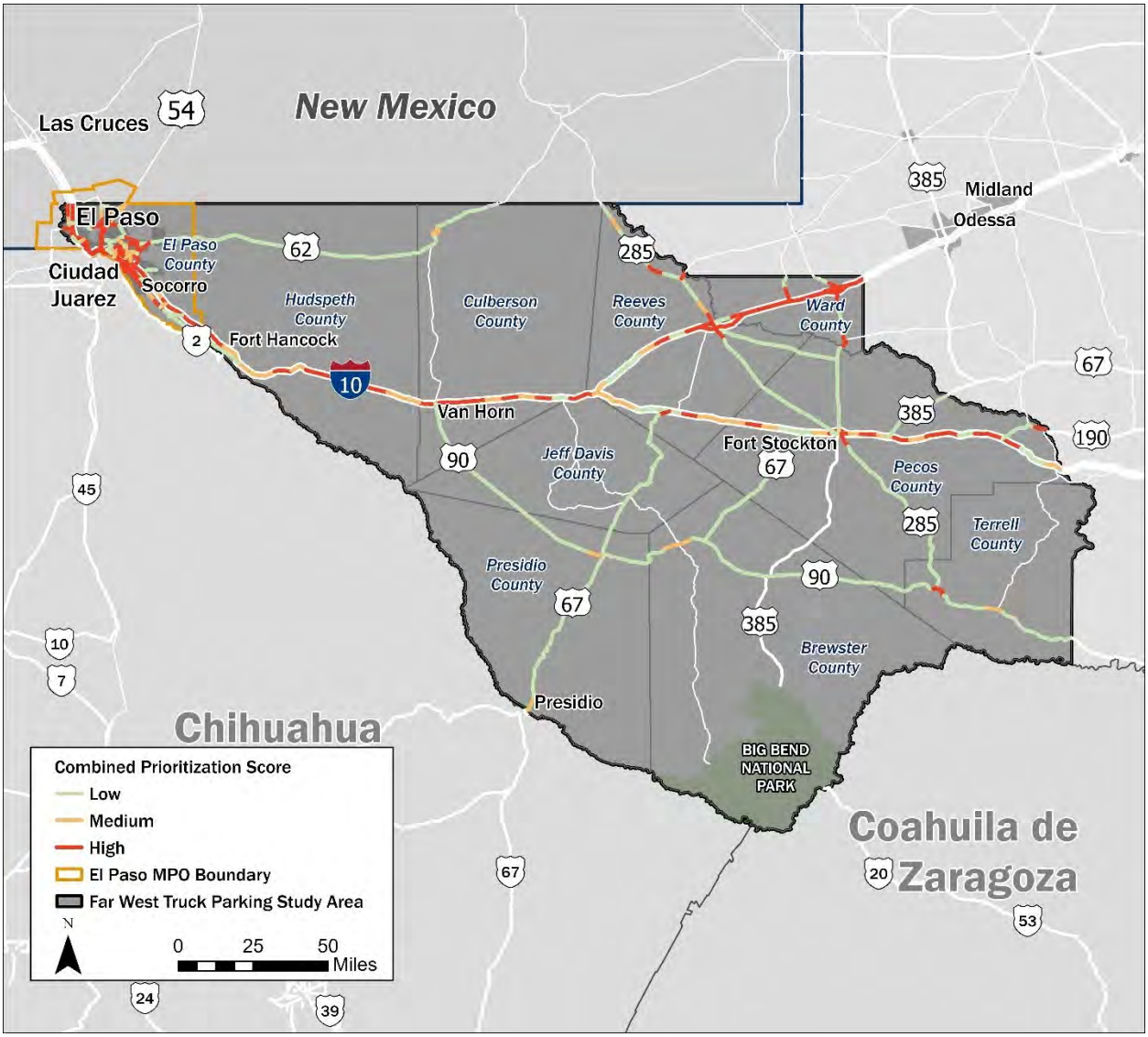
The combined score adds the weighted scores from all three prioritization factors. The Prioritized Demand Factor is considered the most reliable indicator of need, both in terms of truck parking demand and safety. For example, trucks parked on a ramp or roadway shoulder are at risk of being hit even if a crash has not yet occurred at that location. Therefore, the Prioritized Demand Factor is weighted at 50%, and the Prioritized Collision and Freight Need Factors are each weighted at 25%.

$$\boldsymbol{Combined\ Prioritized\ Score} =$$

$$50\% \times Prioritized\ Demand\ Factor + 25\% \times Prioritized\ Collision\ Factor + 25\%\ x\ Freight\ Need\ Factor$$

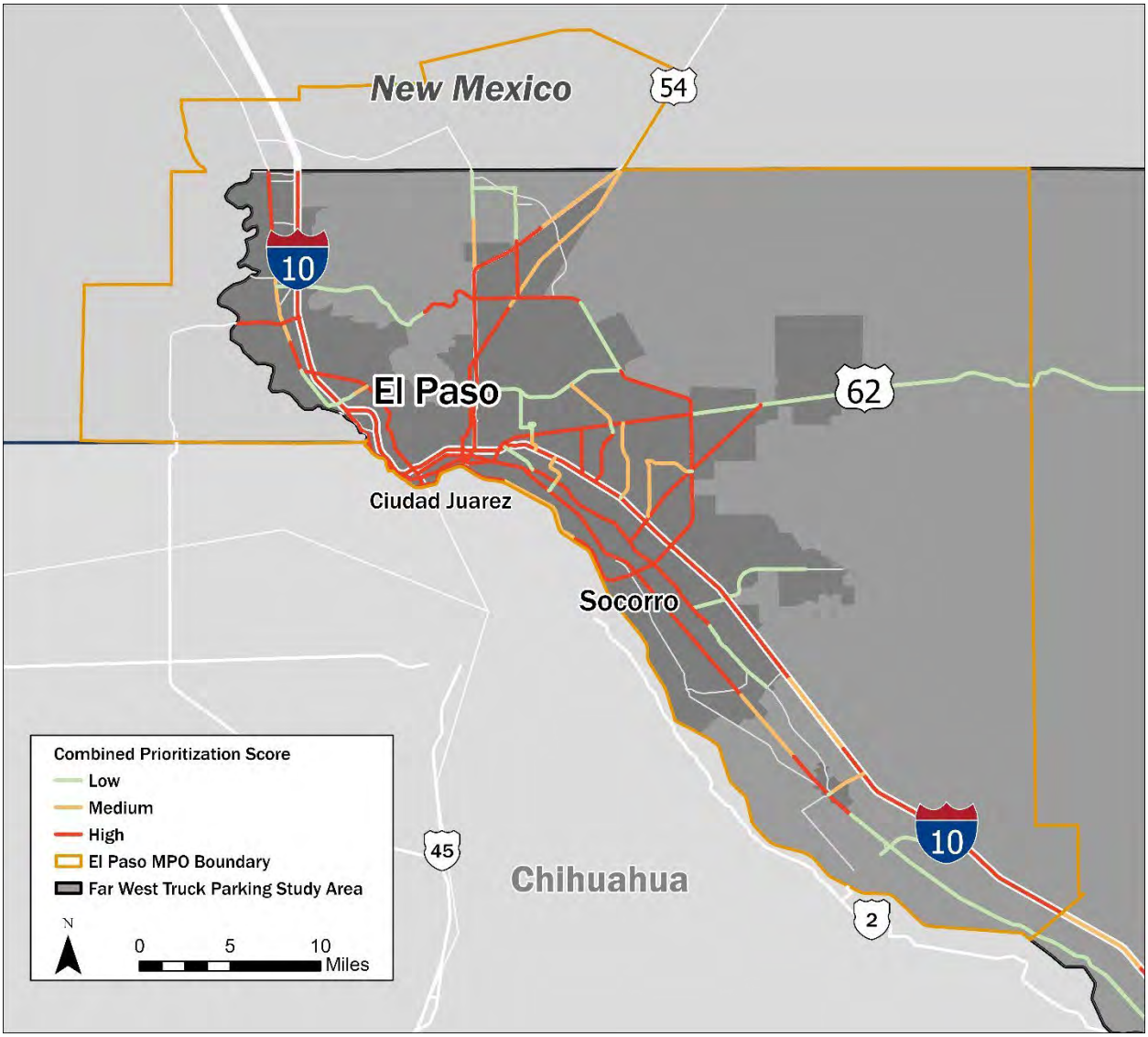
Figure 2-24 shows the results of this analysis. Segments with the highest parking need tend to be within the El Paso MPO region (see Figure 2-25). Segments along I-10 at Van Horn and Fort Stockton scored the highest outside of the El Paso MPO area. There is additional demand along I-20 beyond Pecos towards Odessa. U.S Highway 62 and 54 leading into El Paso see the highest demand for parking, while most highways within the regions have at least a medium demand.

Figure 2-24: Combined Prioritization Score



Source: Cambridge Systematics analysis using 2019 INRIX data, 2024 CRIS data, and Texas Delivers 2050

Figure 2-25: Combined Prioritization Score, El Paso



Source: Cambridge Systematics analysis using 2019 INRIX data, 2024 CRIS data, and Texas Delivers 2050

2.9 Equity Analysis

A major portion of the freight movement in Texas is facilitated by trucks that require adequate parking facilities to ensure efficient operations. Undesignated truck parking is a visible indicator of inadequate parking facilities, often accompanied by significant negative externalities on the environment, quality of life, and public health outcomes of neighboring communities.

Texas Delivers 2050, approved by the Texas Transportation Commission and Federal Highway Administration in 2023, includes equity as one of the nine goals of the plan. Defined as the “equitable

distribution of the positive and negative impacts of freight movement across all Texans,"[13] the Plan delineates two equity objectives:

- Minimize, mitigate, or eliminate the adverse impacts (e.g., emissions and wildlife habitat loss) of transportation projects on Historically Disadvantaged Communities.
- Work with Historically Disadvantaged Communities to encourage and increase access to economic opportunities within the freight and logistics sectors.

Texas Delivers 2050 examined the susceptibility of vulnerable communities to freight transportation impacts and opportunities. This assessment involved identification of equity focus areas based on the concentration of marginalized population groups determined using several equity indicators, which included:

- Population under 18 years of age
- Population over 65 years of age
- Population with a disability
- Population who identifies as Non-White
- Population with No High School diploma (over 25 years)
- Population Below Poverty level (between 20 to 64 years)
- Unemployment Rate (between 20 to 64 years)
- Households with Limited English Proficiency (LEP)

As freight activities tend to be concentrated in and around historically disadvantaged communities, the negative impacts of undesignated truck parking disproportionately affect individuals residing within these regions. This exacerbates the existing disparities, further compromising the well-being of vulnerable populations.

Within this context, the project team conducted an equity analysis with a focus on assessing the negative impacts of undesignated truck parking on local communities within the study region. This analysis employed the same data and criteria that was used previously for the equity assessment in Texas Delivers 2050. For this study, the intent behind conducting an equity assessment is twofold:

- Reduce the burdens of undesignated parking on vulnerable populations in equity focus areas, and;
- Ensure the benefits stemming from proposed solutions are distributed equitably among all population groups.

Using data from the 2014-2018 U.S. Census American Community Survey, the project team identified concentrations of disadvantaged communities in the study area, utilizing various metrics historically linked with the marginalization among population groups. The analysis was conducted at the census tract level, where a particular tract was considered an "equity focus area" if the census tract data contained one or more metrics that exceeded more than double the 2018 state average (referred to as

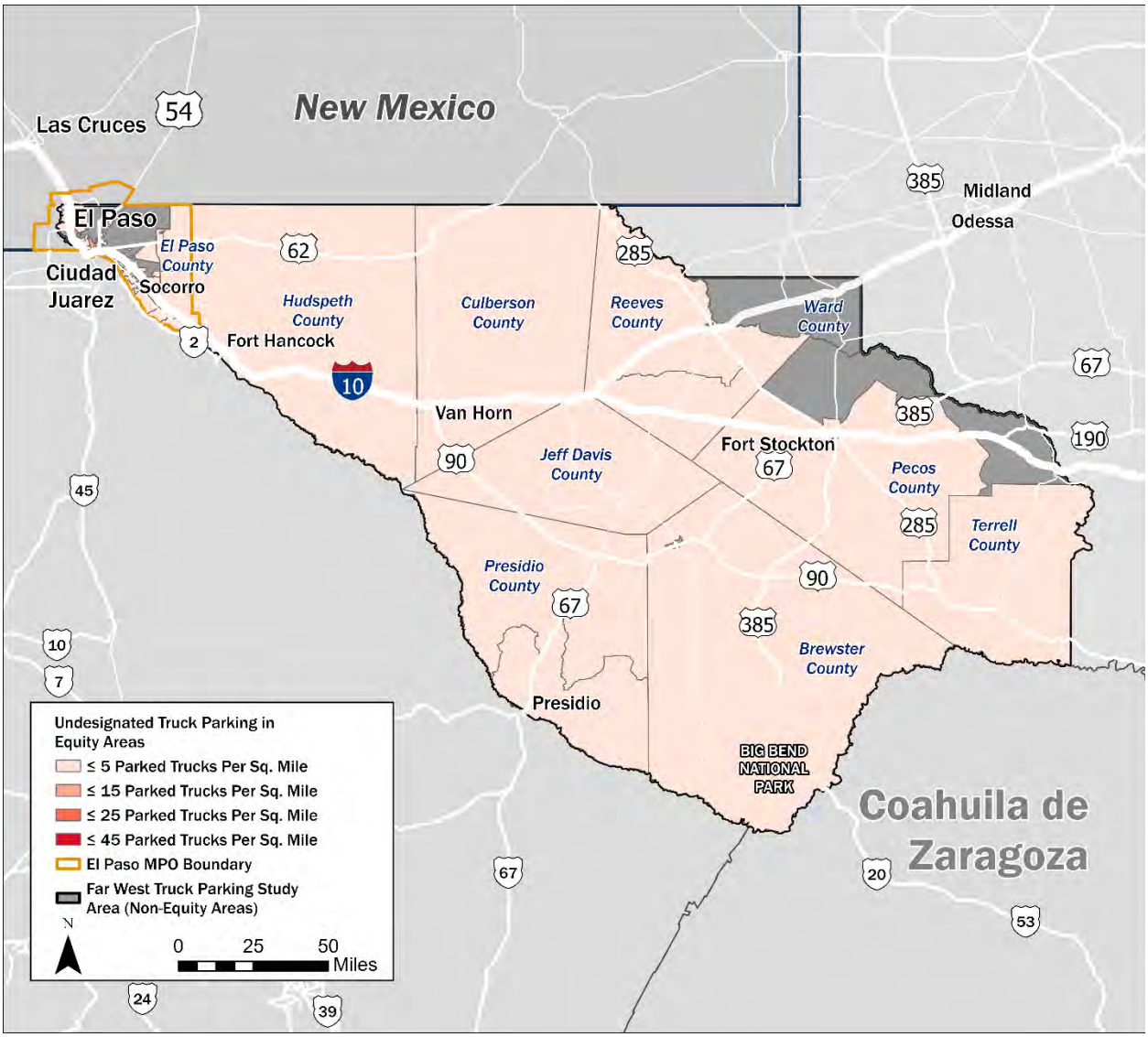
[13] TxDOT. Texas Delivers 2050. (March 2023). pp. 22. https://ftp.txdot.gov/pub/txdot/move-texas-freight/resources/texas-delivers-2050.pdf

the statewide threshold). As mentioned previously, this methodological approach mirrors what was used for the equity assessment in Texas Delivers 2050.

The study region exhibits a high presence of equity focus areas, with 22 percent of census tracts in the study area displaying a presence of more than three concentrations of disadvantaged population groups. Parts of Presidio County and El Paso County, especially communities bordering the U.S.-Mexico border and eastern boundaries of El Paso MPO, exhibit high concentrations of marginalized groups. The undesignated truck parking demand, however, is observed predominately in Ward, Reeves, and Culberson counties, and some parts of El Paso County.

Examining the undesignated truck parking density by area highlights the presence of parked trucks per square mile during peak hour. As seen in the following figures, the equity focus areas (i.e. disadvantaged communities) of certain counties show significant levels of peak hour truck parking densities. Figure 2-26 shows the geographic density of the entire study area. Figure 2-27 displays these densities in the El Paso MPO region.

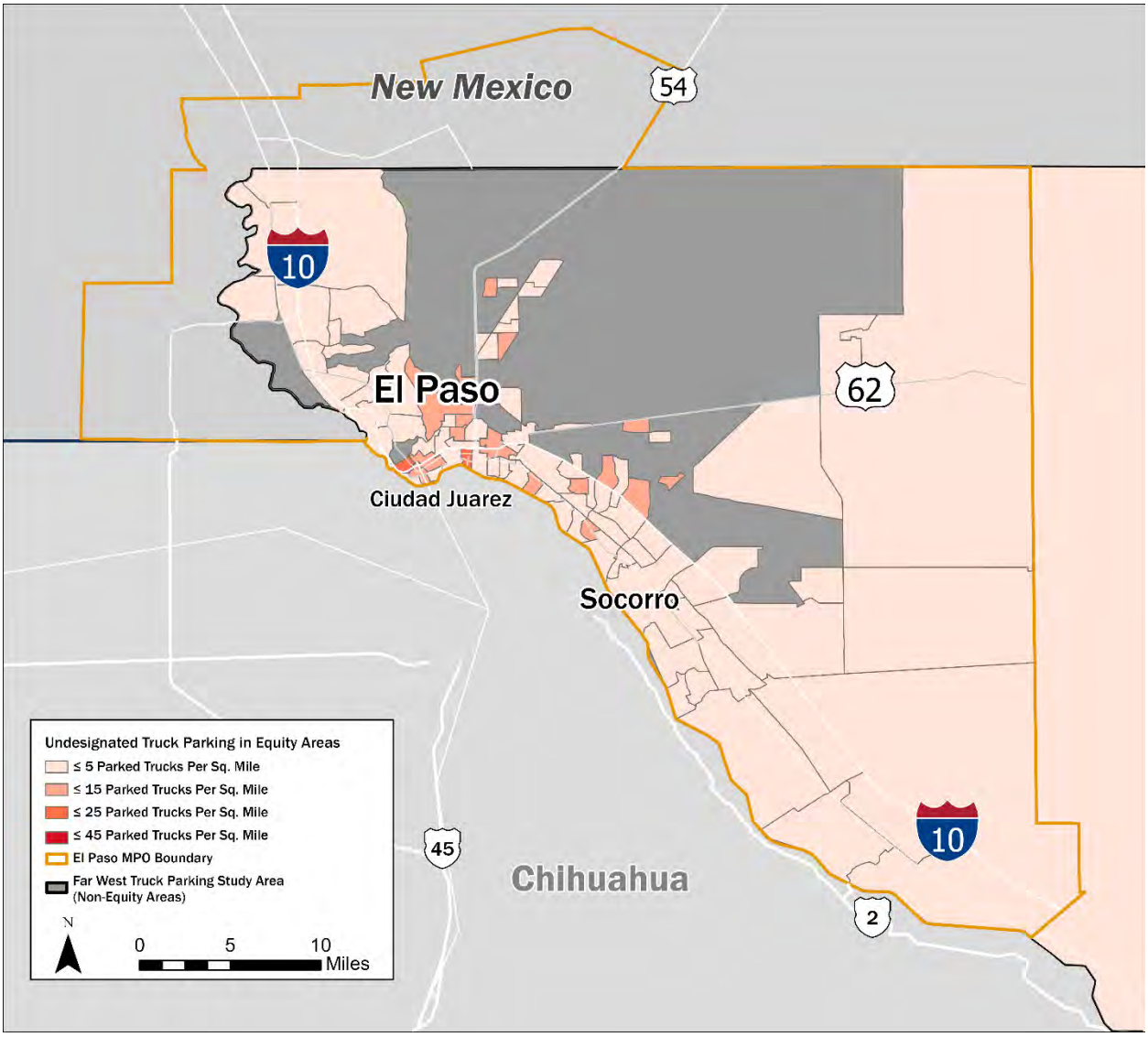
Figure 2-26: Peak Hour Undesignated Truck Parking Density in Equity Focus Areas



Source: Analysis by Cambridge Systematics (2024)

Within the El Paso MPO, there is heavy truck movement of up to 25 trucks per square mile in peak hour across the Ciudad Juarez-El Paso border. This area encompasses a major port of entry facility between the U.S. and Mexico, which contributes to the notable levels of undesignated truck parking in disadvantaged communities.

Figure 2-27: Peak Hour Undesignated Truck Parking Density in Equity Focus Areas, El Paso



Source: Analysis by Cambridge Systematics (2024)

Table 2-3 provides an overview of the undesignated truck parking density and equity indicators at the county level. The equity focus areas of Reeves, Pecos, and El Paso County display the highest averages of undesignated truck parking density with 21.6, 4.9, and 3.6 trucks parked per square mile during peak hour, respectively.

Table 2-3: Undesignated Truck Parking Density at the County Level

County Name	Number of Census Tracts in the County	Number of Census Tracts with 3 or more Equity Indicators	% of Census Tracts with 3 or more Equity Indicators	Average Undesignated Truck Parking Density (per sq. mile)	Average Undesignated Truck Parking Density (per sq. mile) in Equity Focus Areas
Brewster	3	1	33.3%	0.35	0.00
Culberson	1	1	100.0%	0.00	0.00
El Paso	161	106	65.8%	**3.55**	**3.48**
Hudspeth	1	1	100.0%	0.00	0.00
Jeff Davis	1	1	100.0%	0.00	0.00
Pecos	4	2	50.0%	**5.10**	**4.93**
Presidio	2	2	100.0%	0.00	0.00
Reeves	5	4	80.0%	**25.24**	**21.56**
Terrell	1	1	100.0%	0.00	0.00
Ward	3	0	0.0%	**12.43**	0.00

To note, counties that display 100% of tracts with three or more concentrations of marginalized populations are typically those with only one census tract.

While there are no universally established benchmarks to classify truck parking density as high or low, it remains crucial to address concerns associated with undesignated truck parking which presents challenges related to congestion, safety, and pollution.

In conclusion, the region witnesses significant negative impacts stemming from peak hour undesignated truck parking, especially in El Paso County as evidenced by analysis maps. These findings deeply resonate with the equity goals identified in Texas Delivers 2050, emphasizing equitable distribution of benefits and impacts related to freight transportation. Moving forward, a concerted effort to balance truck parking demand and supply strategies and the well-being of disadvantaged communities living in the El Paso and Far West Region will be required.

Chapter 3:

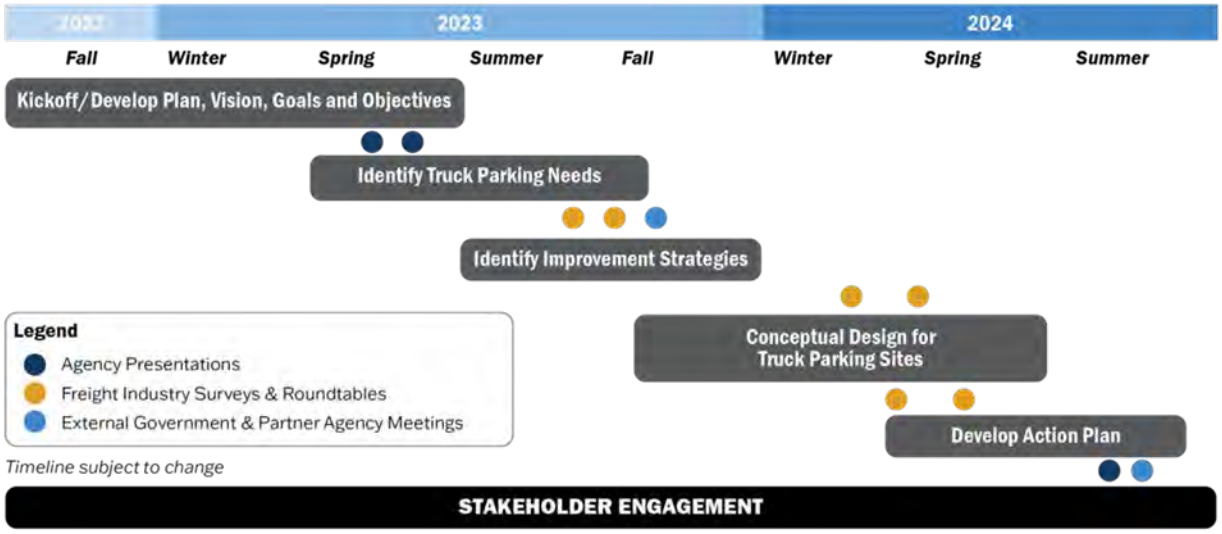
Stakeholder Engagement

Texas Department of Transportation

3 Stakeholder Engagement

Leveraging the data-driven needs assessment highlighted in the previous chapter, a robust stakeholder engagement effort was conducted to solicit input from both public partners and private stakeholders. Engagement occurred throughout the development of the Action Plan and involved a wide range of meetings, workshops, and other communications methods with internal and external stakeholders at key milestones. Figure 3-1 provides an overview of the Action Plan planning process, which notably highlights stakeholder engagement activities during each of the major tasks.

Figure 3-1: Stakeholder Engagement Schedule



Stakeholder engagement was critical to capture insights and input from regionally targeted stakeholders, which was of particular need due to the changes Texas has undergone since the completion of the 2020 Statewide TPS. Stakeholder input helped define the regional needs and opportunities, leading to a meaningful and implementable action plan. The following chapter provides a summary of the stakeholder engagement process and is organized as follows:

- **Stakeholders** – provides an overview of the various public and private stakeholders engaged in this process and areas of requested input and feedback
- **Stakeholder Engagement Process** – outlines the overall engagement process, including the outreach methods used, meeting information, and the number of stakeholders engaged
- **What We Heard** – summarizes key themes, issues, needs, and opportunities identified throughout the engagement process

3.1 Stakeholders

The Action Plan was guided by internal and external stakeholders throughout the TxDOT El Paso District and parts of the Odessa District. The El Paso District includes El Paso County, home to the City of El Paso, and Brewster, Culberson, Hudspeth, Jeff Davis, and Presidio counties. Counties from the Odessa District covered by the Action Plan were Pecos, Terrell, Ward, and Reeves counties. The stakeholder engagement process was designed to vet and support the identified vision, goals, and objectives of the Far West Texas Region Truck Parking Action Plan.

3.1.1 TxDOT

TxDOT staff from both the El Paso and Odessa districts, along with representatives from the Maintenance Division, were engaged throughout the development of the Action Plan based on their role in addressing truck parking issues in the Far West Region. This included bi-weekly project team meetings, breakout sessions, and other direct coordination activities. This close collaboration with TxDOT districts and divisions allowed the project team to:

- Keep district and division leadership and key staff updated on progress.
- Identify local stakeholders and coordinate external outreach activities.
- Solicit input on regional truck parking needs, opportunities, and solutions.
- Review work products and vet proposed opportunity sites and recommendations.

TxDOT districts are responsible for the planning, design, construction, and ongoing maintenance of mobility projects within their defined geographic boundaries and will lead the implementation of proposed capacity projects. The El Paso and Odessa Districts work closely with their local and regional

planning partners to implement projects, plans, and initiatives that improve the multimodal transportation system, enhancing safety and mobility for both people and freight.

The Maintenance Division is responsible for operations, maintenance, and construction activities at SRAs. The Maintenance Division is currently leading an effort, in coordination with TxDOT districts, to add truck parking capacity throughout the state through construction of new SRAs, increasing the number of spaces at existing SRAs, where feasible, conversion of old SRAs to truck parking only facilities, and constructing new truck parking within state-owned right-of-way.

3.1.2 MPOs and Public Agency Partners

MPOs are federally mandated local decision-making bodies required for each urbanized area with a population greater than 50,000. MPOs are responsible for overseeing the metropolitan transportation planning process, including developing long range transportation plans, identifying and prioritizing projects for the transportation improvement program (TIP), public outreach, stakeholder engagement, and other planning efforts to address issues and ensure a multimodal transportation system that meets the needs of residents and businesses. Freight transportation planning has increasingly become a core component of many MPO planning programs, and truck parking remains a polarizing topic at the local and regional levels.

The truck parking team collaborated with planning organizations for the study area, including the EPMPO, the Permian Basin MPO (PBMPO), the Rio Grande Council of Governments (Rio Grande COG), and the Permian Basin Regional Planning Commission (PBRPC). Representatives from these organizations attended meetings throughout the length of the Action Plan. The project team also presented at the El Paso MPO's Transportation Policy Board meeting.

Local governments can regulate truck parking within their communities by enacting policies and zoning controls to restrict truck parking in certain areas or specify designated truck parking areas and associated parking requirements. Many communities within the Far West Region see the impacts of unauthorized truck parking firsthand and understand the critical safety and economic development implications of providing safe and available parking.

TxDOT engaged public agency partners at key milestones throughout the Action Plan to effectively communicate with constituents and gather feedback. These public agency partners included elected officials, municipalities, counties (Texas and New Mexico), chambers of commerce, U.S. Customs and Border Protection, economic development partnerships and organizations, emergency services, and advocacy groups. Throughout this process, these local partners often stressed the importance of working collaboratively towards sustainable policies that proactively address truck parking and meet the needs of their communities.

3.1.3 Industry Partners

Engagement with private sector industry partners is a critical success factor in the development of any freight-focused planning study. Recommendations or proposed solutions should have buy-in from the industry to increase the likelihood that an implemented project improves the operational and safety conditions for the industry while minimizing negative impacts. Input and feedback from industry stakeholders was a key component of the overall stakeholder engagement process and provided the project team with critical information and unique industry insight to ensure recommendations in the Action Plan address the industry's specific truck parking issues and needs in the Far West Region.

The project team leveraged a range of sources and communication methods to actively engage industry partners throughout the project, providing opportunities for direct and indirect input, updates on project progress, and additional feedback in group or one-on-one settings at key milestones of the Action Plan. Industry partners engaged included the Texas Trucking Association, the Permian Road Safety Coalition, public safety and law enforcement agencies, local energy companies, the Permian Basin Petroleum Association, MOTRAN, the Permian Strategic Partnership, transportation companies, truck stop operators, and numerous other businesses and interested stakeholders.

3.2 Stakeholder Engagement Process

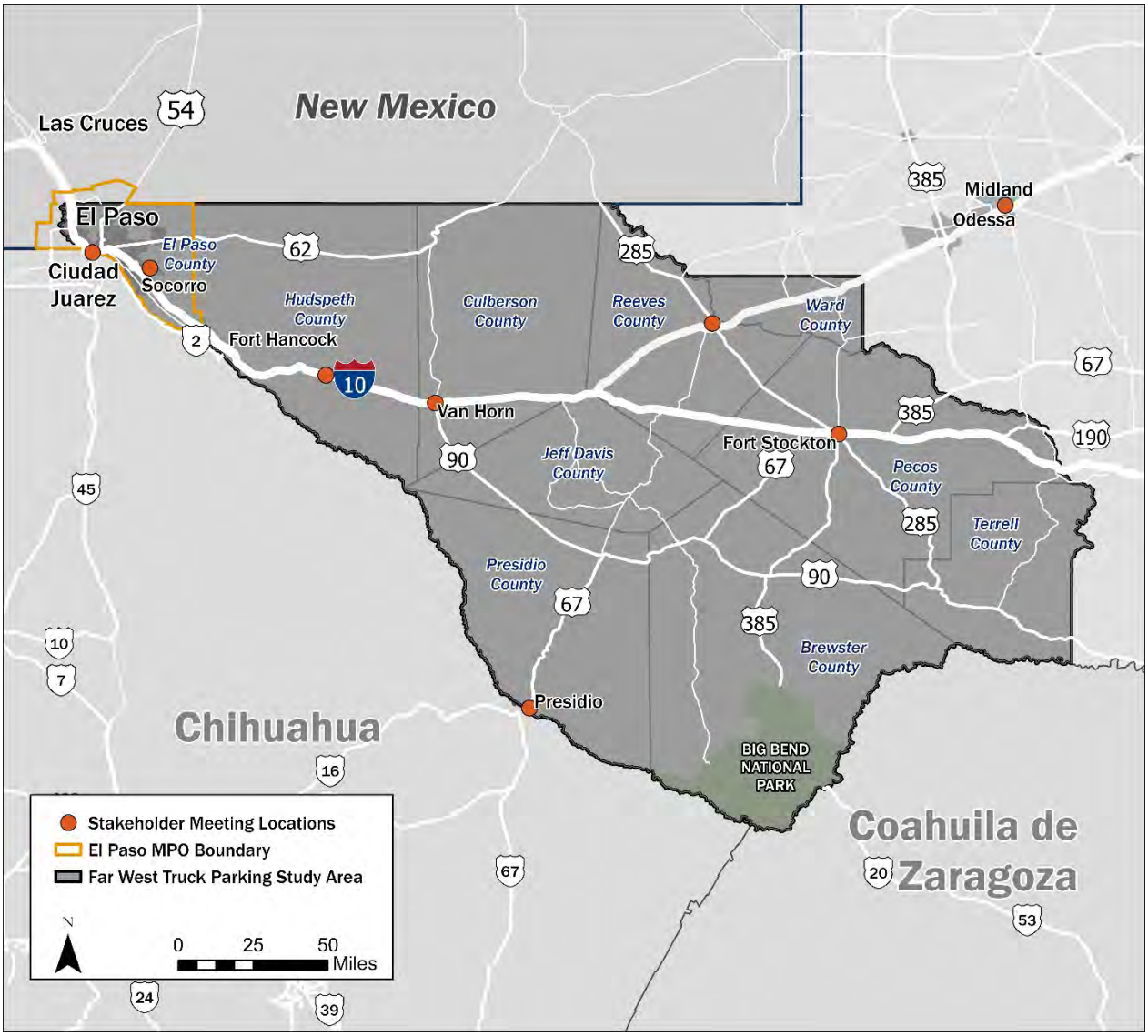
The stakeholder engagement process consisted of five rounds of outreach activities to provide updates and solicit feedback from stakeholders listed in Section 3.1. Outreach activities were primarily accomplished through internal TxDOT project team meetings, workshops, partner agency presentations, virtual break out meetings, and other correspondence, as well as industry workshops and a truck driver survey (see below). Information was typically presented and vetted by TxDOT first, then presented to MPOs, commissions, advocacy groups, and other public agency and private industry stakeholders.

From November 10, 2022, to June 28, 2023, the study team gave introduction presentations to six key agencies during their regularly scheduled meetings:

- El Paso International Bridges Steering Committee
- Camino Real Regional Mobility Authority
- El Paso MPO Transportation Project Advisory Committee
- El Paso MPO Transportation Policy Board
- Rio Grande Council of Governments
- Permian Basin Partners

The purpose of these presentations was to introduce the Truck Parking Action Plan and raise awareness within these groups and stakeholders.

Figure 3-2: El Paso/Far West Stakeholder Meeting Locations



3.2.1 Industry Workshops

From July 17-20, 2023, the project team conducted five workshops with key stakeholders across the region to provide an overview of the Plan, and solicit input on truck parking issues, needs, and opportunities. Input was received via facilitated discussion. Both online and hard copy maps were created depicting potential sites for truck parking facilities, and the maps were also used by stakeholders to identify other locations of interest in their area. The trip also included two site visits.

From September 26-October 2, 2023, the study team conducted five virtual, one-on-one meetings with elected officials from Presidio, Sanderson/Terrell County, Monahans/Ward County, Pecos/Reeves County and Sierra Blanca/Hudspeth County to discuss the outcomes of the July stakeholder meetings and to conduct community focused needs assessments.

From November 1-8, 2023, the project team conducted three workshops with key stakeholders in Van Horn and Pecos. Opportunity sites identified in Van Horn and Pecos were mapped and presented to stakeholders for feedback. In addition, the project team held four virtual meetings to explore potential opportunities for parking facilities. These meetings were held with key stakeholders, including various city officials, to discuss potential sites for truck parking facilities within their jurisdictions.

TxDOT was invited to participate in a unique opportunity to present and gather feedback from industry participants, including truck drivers, at the Permian Road Safety Coalition Luncheon Series on November 2, 2023, in Monahans, Texas, sponsored by Ryder Trucking. Maps were available on side tables before and after the luncheon, and attendees were invited to comment on them. The event had 178 pre-registered participants from key industries in the area. During the interactive presentation, attendees were asked to respond to survey questions regarding truck parking needs. A key takeaway includes that drivers typically must wait before making a delivery and most wait times are over an hour and up to six hours. See the Driver Input section below for more information.

On February 26 and 27, 2024, workshops were held in both the El Paso and Odessa TxDOT Districts. The purpose of these workshops was to discuss the concept of the public awareness toolkit and review:

- Truck parking opportunity sites
- Site concepts (where applicable)
- Maintenance sites
- Strategies and programs
- Next steps

From March 19-22, 2024, the project team conducted six workshops across the area. The purpose of these workshops was to update the stakeholders on the progress of truck parking sites and to review parking facility concepts. Stakeholders also highlighted the need to raise public awareness, with the concept of the Public Awareness Toolkit being put forth.

3.2.2 Engagement Summary

Overall, the project team presented the Action Plan updates at a total of 35 meetings attend by approximately 340 stakeholders. Table 3-1 shows the stakeholder engagement activities by organization, date, and number of participants.

Table 3-1: Stakeholder Engagement Meetings

Meeting Name	City	Meeting Date	Approximate # of Attendees
Introduction Presentations			
El Paso International Bridges Steering Committee Meeting	El Paso	November 10, 2022	15
Camino Real Regional Mobility Authority Board Meeting	El Paso	December 14, 2022	6
El Paso MPO Transportation Project Advisory Committee Meeting	El Paso	January 11, 2023	20
El Paso MPO Transportation Policy Board Meeting	El Paso	January 20, 2023	27
Rio Grande Council of Governments Board of Director's Meeting	El Paso	February 3, 2023	27
Permian Basin Partners Meeting	Virtual	May 31, 2023	4
Round 1			
M1: Shippers/Receivers/Developers	El Paso	July 18, 2023	7
M2: Greater El Paso	El Paso	July 18, 2023	6
M3: East El Paso	Horizon City	July 19, 2023	7
Sierra Blanca Site Visit	Sierra Blanca	July 19, 2023	2
Van Horn Site Visit	Van Horn	July 19, 2023	3
M4: Pecos	Pecos	July 20, 2023	17
M5: Fort Stockton	Fort Stockton	July 20, 2023	17
Round 2			
Presidio/TxDOT 1-on-1 Far West Truck Parking	Virtual	September 26, 2023	2
Sanderson/Terrell County/TxDOT 1-on-1 Far West Truck Parking	Virtual	September 27, 2023	1
Monahans/Ward County/TxDOT 1-on-1 Far West Truck Parking	Virtual	September 28, 2023	1
Pecos/Reeves County/TxDOT 1-on-1 Far West Truck Parking	Virtual	September 29, 2023	3
Sierra Blanca/Hudspeth County/TxDOT 1-on-1 Far West Truck Parking	Virtual	October 2, 2023	1
Round 3			
Van Horn/Culberson County	Van Horn	November 1, 2024	5
Permian Road Safety Coalition Luncheon	Midland	November 2, 2024	178
Pecos Meeting	Pecos	November 3, 2024	7

Meeting Name	City	Meeting Date	Approximate # of Attendees
Paisano/Montana Corridor Study Coordination Meeting	Virtual	November 6, 2024	3
El Paso Water Land Process Meeting	Virtual	November 6, 2024	2
City of Horizon/City of Socorro Follow-Up Meeting	Virtual	November 7, 2024	3
El Paso County, City of El Paso, U.S. General Services, U.S. Customs and Border Patrol Follow-Up Meeting	Virtual	November 8, 2024	10
Round 4			
TxDOT El Paso District Workshop	Virtual	February 26, 2024	14
TxDOT Odessa District Workshop	Virtual	February 27, 2024	8
Round 5			
Permian Partners TxDOT Truck Parking Updates and Feedback	Midland	March 19, 2024	11
Pecos Area Stakeholder Meeting	Pecos	March 20, 2024	10
Van Horn Area Stakeholder Meeting	Van Horn	March 20, 2024	4
East El Paso Stakeholder Meeting	El Paso	March 21, 2024	7
El Paso Regional Stakeholder Meeting	El Paso	March 21, 2024	9
El Paso MPO Transportation Policy Board Meeting	El Paso	March 22, 2024	20
Meeting with El Paso MPO	El Paso	March 22, 2024	5
Binational Regional Meeting: Texas-Mexico Border Connectivity Plan	Presidio	May 29, 2024	N/A
Presidio Port of Entry Parking Site Visit	Presidio	May 29, 2024	4

3.3 What We Heard

The collaborative participation and input from internal and external stakeholders informed Action Plan recommendations across the region. The input provided was consistent across stakeholder groups. The interaction between the internal and external stakeholders was effective and highlighted that a lack of truck parking is an issue across the region and throughout the state. The top themes, issues, needs, and other items of note heard from stakeholders include the following:

- There is a general lack of appropriate parking for trucks. Trucks are seen parked illegally along exits, in neighborhoods, in parking lots within the community, and overflowing at existing rest stops.

- Preservation of infrastructure is important to local communities; the volume of truck traffic plus the age of city roads leads to degradation of curbs, gutters, etc.

- Different areas have varying needs for truck parking. Urban El Paso requires more staging areas for day-trip truck traffic, while rural areas deal with unique challenges due to industries like oil, gas, and fracking, as well as providing facilities for long haul safety rest stops.

- Border crossings present a significant challenge for drayage truck drivers, who frequently contend with prolonged wait times. The lack of adequate facilities for drivers stuck in these queues compounds the issue, posing logistical and operational challenges. Extended wait times disrupt supply chains, and it has effects on the well-being and safety of drivers.

- Safety and security are top concerns for truck parking facilities. Participants noted that truck parking areas can attract unsavory elements, making it imperative to prioritize safety measures like fencing and illumination. Ensuring the security of these parking areas can help address the drivers' needs and mitigate potential risks.

- Funding is a critical issue across the region, affecting the ability to build and maintain necessary facilities. There is a significant interest in exploring public/private partnerships as a solution to address these funding challenges and develop suitable truck parking amenities.

- Enforcement of truck parking regulations is inconsistent, which leads to widespread non-compliance. Fines may not deter the problem as drivers often continue to park in unauthorized areas, exacerbating issues like congestion, pavement deterioration, and safety hazards.

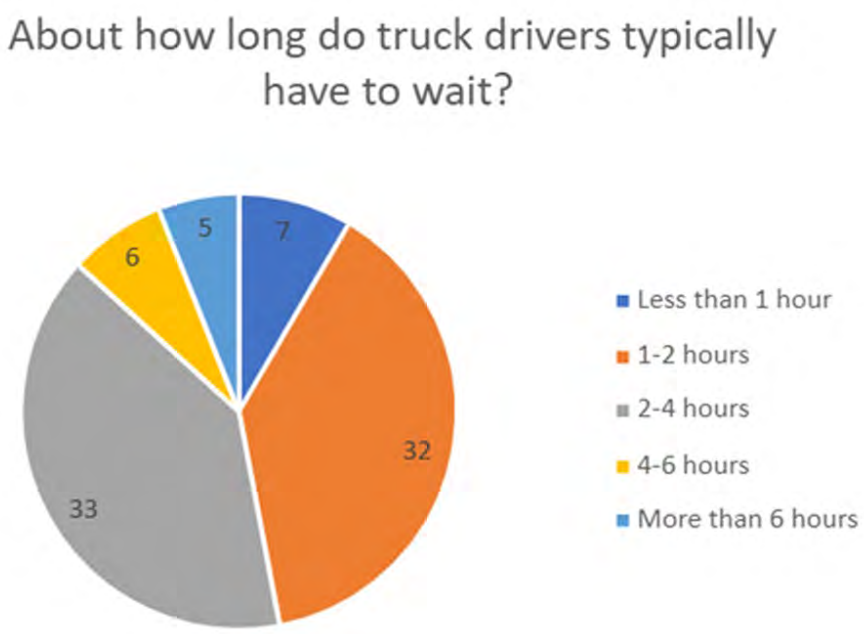
- Adverse weather events cause significant issues for rural communities. Trucks can be stranded when there are no adequate parking facilities. Without facilities, trucks must stop in unsafe or unauthorized locations, posing risks to both the drivers and the public.

- Existing SRAs are located too far from urban centers and lack essential amenities such as restaurants and laundry services, which are crucial for long-haul drivers. The absence of these amenities forces drivers to seek alternative locations for rest and basic needs, often leading to unsafe parking practices.

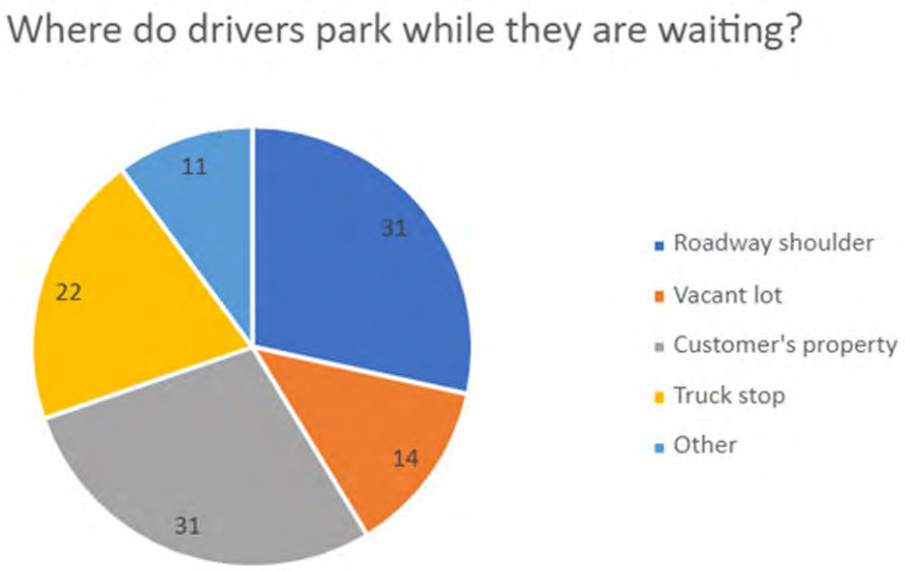
3.3.1 Driver Input

Truck driver input was collected at the Permian Road Safety Coalition Luncheon Series on November 2, 2023, in Monahans, Texas. The team used Mentimenter, or “Menti,” an interactive presentation tool that gathers input during the live presentation. Driver input was critical to support and validate data analysis and helped shape the recommendations. Pie charts documenting responses to key questions are highlighted below and represent total comments received, not the total number of participants. The average participation rate on the survey was 43% of the attendees.

The first questions were geared toward understanding driver wait times prior to deliveries. Of the 73 responders, 59 said that at least half or more than half of their trips require a wait. Of those wait times, 83 people responded and 65 people said they must wait between 1-4 hours before delivery. When asked if their company or client provides a place to park, 73 responded and 47 said yes or sometimes.



The audience was asked where they park while they wait to make a delivery. Answers were varied but the top two were “Roadway shoulder” and “Customer’s property.” Drivers also indicated that they were willing to drive 1-10 miles to find a safe parking facility with restrooms.



The next set of questions were directed toward where drivers park while off duty. Of the 94 respondents, 46 indicated they park at a company yard while off duty. Six said they park on roadway shoulders, 17 selected vacant lots, seven said they park at a paid parking area and 18 selected other but did not indicate where.

When asked how far from home drivers are willing to park at a secure facility, 50 of the 72 responders selected 0-10 miles. They were also asked if they pay for parking. Of the 72 responders, 37 do not pay for parking, 16 pay monthly, 13 pay daily, and 6 pay weekly.

Chapter 4:

Recommendations

Texas Department of Transportation

4 Recommendations

The Action Plan recommendations address the significant truck parking needs, input, and key takeaways from the robust stakeholder engagement process detailed in the previous chapter. While TxDOT plays a vital role in maintaining and expanding the state's public truck parking infrastructure, the vast majority of existing truck parking capacity is owned and operated by the private sector, and local governments are typically responsible for enacting land use controls and ordinances to regulate truck parking and development in their communities.

Advancing the Action Plan recommendations requires a comprehensive approach that leverages continued collaboration between TxDOT, local public agency partners, private industry, as well as statewide committees like the Texas Freight Advisory Committee (TxFAC) and the Border Trade Advisory Committee (BTAC) to ensure the implementation of proposed strategies and solutions. The Action Plan recommendations are organized into two categories: TxDOT-led and TxDOT-supported. The following chapter provides an overview of the truck parking recommendations developed for the El Paso/Far West Region:

- **TxDOT-Led** – provides a summary overview of the recommendations and solutions identified to address truck parking issues and needs in the El Paso/Far West Region with implementation activities led by TxDOT Divisions and the El Paso and Odessa Districts.

- **TxDOT-Supported** – highlights the various recommendations and initiatives that public agencies and the private sector can undertake with support from TxDOT.

- **Toolboxes** – provides an overview of the stakeholder engagement and local planning toolboxes developed to aid TxDOT, public agencies, and the private sector in implementing the recommendations identified in this Plan.

4.1 TxDOT-Led Recommendations

TxDOT-led recommendations address truck parking capacity needs within the right-of-way adjacent or near the THFN or near major freight generators on TxDOT-owned and maintained facilities. Recommendations that do not directly increase truck parking capacity focus on the deployment of technology applications to improve utilization at existing facilities, outline guidance and best practices related to integrating truck parking into the project development process, and address public awareness needs through educational materials that public agencies can utilize in outreach and engagement activities. A Public Awareness Toolkit and Policies and Strategies Toolkit were developed to support this final recommendation and are summarized in Section 4.3.

4.1.1 New Parking Capacity

TxDOT currently provides truck parking capacity at state-owned and operated SRAs at regular intervals along major interstates and freight routes and at TICs located at the state border. SRAs are managed by the TxDOT Maintenance Division and serve both passenger and freight vehicles, typically with limited amenities that include bathrooms, vending machines, safety lighting, and picnic areas. TICs and welcome centers are managed by the TxDOT Travel Division and serve passenger and freight vehicles but are staffed by professional travel counselors to help with routing, information on points of interest, and road conditions. Although these public parking facilities serve a critical need in providing

safe and available truck parking, they make up a small number of the overall truck parking facilities and spaces throughout the El Paso/Far West Texas region.

For example, the TxDOT Maintenance Division recently constructed new SRAs in Culberson County and plan to convert the old SRAs into truck parking-only facilities. There are also plans for new truck parking facilities in Hudspeth County and additional parking planned for the Ward County SRA. In addition to the recently constructed Culberson County SRAs, there are multiple opportunities to add new TxDOT truck parking facilities and increase the amount of public truck parking spaces in the El Paso and Odessa districts. The TxDOT Maintenance Division's Texas Truck Parking Initiative has identified potential truck parking projects statewide through close coordination with all 25 TxDOT districts in various stages of the project development process. As part of the extensive stakeholder outreach efforts and close coordination with the districts outlined in this Action Plan, nine opportunity sites and one opportunity zone were identified throughout the region to increase truck parking and serve as multimodal hubs. See Chapter five for more information on these projects.

4.1.2 Technology Applications

TxDOT has invested in technologies designed to support truck parking, collect and provide advanced traveler information, communicate with commercial motor vehicles, and disseminate information through various channels, including truck parking availability systems, mobile applications, and connected infrastructure and automated driving systems.

4.1.2.1 Truck Parking Availability System (TPAS)

The I-10 Truck Parking Availability System (TPAS) project, funded through an Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant, is installing a system to detect, monitor, and provide truck parking availability information at public truck parking sites along I-10 in Texas including the Anthony TIC, the El Paso County SRAs, the new Culberson County SRAs in the El Paso District, and the West Pecos County SRAs in the Odessa District. TPAS is a multi-state collaboration through the I-10 Corridor Coalition and voluntary partnership of four state DOTs (Texas, New Mexico, Arizona, and California) that are committed to coordination, organized around a common agenda, and facilitated through a cooperative support structure.

TPAS will collect real-time truck parking availability through detection technology sensors, which will transfer the parking data to states and 3rd party processors. Once the data is collected, it will be processed into a public data feed and disseminated to truck drivers and dispatchers through roadside dynamic parking available signs (DPAS), state traveler information websites (including DriveTexas), third party mobile applications, and in-cab systems. In addition to full deployment along I-10, TxDOT plans to expand the TPAS system to all SRAs along major interstates and highways throughout the state.

As new truck parking sites are developed in the region, incorporation of TPAS should be included during initial planning and design to ensure future facilities can be integrated into the statewide network and provide critical parking availability to drivers and other interested stakeholders.

4.1.3 Guidance and Best Practices

During the development this Action Plan, the project team conducted extensive outreach and collaboration with the TxDOT El Paso and Odessa districts to better understand their internal processes related to integrating truck parking considerations into their daily activities, procedures, and workflows. The Statewide TPS recommended developing guidelines for integrating truck parking in the TxDOT Project Development Process and consider truck parking needs prior to the purchase or sale of TxDOT right-of-way. For the El Paso/Far West Action Plan, the project team worked with El Paso and Odessa District staff to discuss integrating truck parking into their process. Highlights from those discussions are provided below:

- There is currently no formal method in place to integrate truck parking into the project development process, but numerous offices and champions throughout the districts have made truck parking a major priority. The TxDOT El Paso and Odessa districts have a vision to add truck parking to their projects and are actively looking for currently owned and maintained locations to convert into a flex-space where truck parking can be implemented.

- Typically, planning and schematic design teams will integrate truck parking into an existing project when there is a documented truck parking need or an available TxDOT parcel whose location and surrounding conditions could meet the needs of truckers. These factors could include proximity to an existing truck stop, convenient interstate or highway access, and locations that are in a semi-rural setting to avoid land use conflicts. Current projects like the Border Highway East and the Borderland Expressway are good opportunities where truck parking can be implemented, due to their locations and ability to meet the needs of traffic entering from the north of El Paso and Mexico.

- Interim projects that leverage existing construction and maintenance storage sites or unused right-of-way can be an effective near-term solution to address truck parking by adding gravel and grading a site, which can be easily removed if the location is needed for another use or moves forward as a permanent truck parking site that would require a more formal project development process. The El Paso District has implemented special jobs at Sierra Blanca and at the off- and on-ramps of Tornillo and Fort Hancock to provide a safer area for parking.

4.1.3.1 Shoulder Parking Opportunities

Energy sector operations in the Permian Basin tend to be in rural areas accessed by state highways and FM roads, which often are only two lanes with no shoulders. Truckers waiting to load or unload frac sand used in the hydraulic fracturing process to produce oil and natural gas often need to wait and stage outside of these areas. Unfortunately, these trucks have no other option but to park along the state highways and FM roads, creating a safety hazard. During the stakeholder meetings, participants noted that in high-volume locations, a hard shoulder could be added to select state highways and FM roads to accommodate a safe area to park and stage. These areas could also provide a safe area to pull over for incident management.

During development of the Southeast Texas Truck Parking Action Plan, staff from the Beaumont District noted that some state-owned roadways near or adjacent to large freight facilities or industrial complexes have included a 10-foot hard concrete shoulder in roadway design and construction to improve safety along roadways with high truck volumes. This hard shoulder was not considered an official parking lane but did provide sufficient room for a heavy-duty truck to safely pull off without

obstructing traffic. During a site visit to the Cedar Port Industrial Park, the truck parking team noted the use of this hard shoulder by a truck. Depending on factors like available right-of-way, access management, drainage, signage, and funding, this could be implemented in the Far West region as a best practice to meet the staging needs of the oil and gas industry.

4.2 TxDOT-Supported Recommendations

TxDOT currently has a limited role in truck parking at the local level and will need continued support from industry and local partners. Additionally, these recommendations will require continued coordination with planned and anticipated improvement projects near the international border crossings in the region.

These planned improvements include projects by the City of El Paso International Bridges, General Services Administration, Customs and Border Protection (CBP), the New Mexico Department of Transportation (NMDOT), and improvements connecting to the Santa Teresa POE. The improvements include:

- Santa Teresa is a land crossing and is the only POE in the region that can currently accommodate oversize/overweight loads. Efforts are underway to study and identify recommendations for expansion and modernization of this critical POE which could support more efficient freight operations and increased truck traffic in the future.

- The BOTA will be modernized to reduce wait times and decrease the carbon footprint in the region. The GSA is currently studying the feasibility of several options at BOTA, including potentially eliminating or significantly reducing truck traffic, which will have implications for other border crossings in the region.

    - This could mean increased future freight traffic at other crossings, including Ysleta-Zaragoza and Marcelino Serna (formerly Tornillo-Guadalupe).

- In addition, the City of El Paso is actively looking for grant opportunities for enhancements at the POEs and has recently been awarded a RAISE grant for pedestrian and site improvements at the Ysleta-Zaragoza POE.

- At the Presidio-Ojinaga POE, a new inspection facility and the planned reopening of the international rail bridge could provide opportunities for increased freight traffic for transloads.

TxDOT-supported recommendations address truck parking needs off the THFN that support local and regional planning efforts, develop policies and programs that proactively address local truck parking issues, coordinate on innovative partnerships to increase truck parking capacity, and identify potential funding strategies and opportunities to move recommendations.

4.2.1 Local and Regional Planning

MPOs, regional planning agencies, and local governments are critical to the planning, development, and implementation of truck parking projects in the El Paso/Far West Texas region. The EPMPO and the Rio Grande COG can leverage their roles in regional coordination, short- and long-range planning, and

allocating federal funding to advance truck parking projects that address the region's truck parking needs.

4.2.1.1 Regional Coordination

The EPMPO and Rio Grande COG are uniquely positioned to lead regional coordination efforts, given that they already convene public and private stakeholders on freight-specific and larger transportation issues and work with TxDOT to address and facilitate freight planning in the region. Additionally, the EPMPO planning area extends into portions of New Mexico, giving them a unique perspective and experience coordinating across local and state jurisdictions to plan, prioritize, and fund regional transportation projects.

4.2.1.2 Short and Long-Range Planning

MPOs are required to produce two plans that guide the short- and long-range transportation system for the region: the Transportation Improvement Program (TIP), which lists upcoming transportation projects covering a period of at least four years, and the Metropolitan Transportation Plan (MTP), which outlines how the metropolitan area will manage and operate a fiscally constrained multimodal transportation system over a 20-plus-year horizon. The EPMPO can include truck parking in these short- and long-range planning efforts by conducting truck parking studies that document regional needs and identify solutions, prioritize truck parking projects in their TIP, incorporate truck parking considerations into the long-term vision outlined in the MTP, and develop policies and guidelines that support safe and accessible truck parking.

4.2.1.3 Prioritization and Funding

MPOs are responsible for allocating federal transportation funds within their regions; however, the transportation needs, and funding requests, often surpass the amount of money available, requiring a defined Project Prioritization Process (PPP), to score and rank projects based on how well they meet the community's long-term needs and MTP goals and objectives. EPMPO can incorporate truck parking into their defined prioritization process to ensure that truck parking capacity projects are competitive when compared to other multimodal projects. Additionally, "set asides" within the Surface Transportation Block Grant (STBG) program can be utilized to fund special regional needs like truck parking.

4.2.2 Policies and Development

Local governments have significant authority over land use planning, local policies, ordinances, and permitting, which can be codified in municipal codes and comprehensive plans that guide when, where, and how commercial motor vehicles park. The El Paso and Odessa districts, in coordination with the EPMPO and Rio Grande COG, industry stakeholders and local governments can work collaboratively to address the current demand for truck parking and proactively plan for future demand and needs through various mechanisms currently at their disposal.

4.2.2.1 Comprehensive Planning

Comprehensive planning is the cornerstone of local land use development. Cities and counties adopt and update their comprehensive plans to guide the growth of their communities. These documents are long range, directing the physical development of a place for 15 to 30 years. For a municipality, these plans are referenced the most frequently in their community planning.

Texas is considered a Home Rule State, granting the authority to regulate land uses, building codes, etc. to the state's respective county and city governments, although most of the cities and all counties within the El Paso and Odessa TxDOT districts lack comprehensive plans. Municipal comprehensive plans within the region consider the broader role of freight and industrial development on their region, the impacts of traffic and congestion to the transportation network, designation of truck routes and restrictions, and have typically highlighted truck parking in relation to these broader freight considerations. In most cases, these comprehensive plans acknowledge the need for improved freight mobility and truck parking, including the need for compatible land use planning, improved design standards, and increased safety.

There are examples of communities that have incorporated truck parking and/or freight needs into their comprehensive plans that cities and counties in the El Paso/Far West Texas region could look to as best practices if they decided to pursue the development of comprehensive plans in the future. These communities may recognize the potential that freight has within their communities; they may be localities that have several existing freight facilities and want to prepare for future growth; or these communities may be burdened by freight activity and aim to set standards for the future. Whether it be encoded as an opportunity or a challenge, these communities are proactively planning for truck goods movement and implementing truck parking.

4.2.2.2 Land Use and Ordinances

The development of truck parking is fundamentally a land use issue in which local governments can play a pivotal role. With respect to local land use planning, local governments have the greatest expertise and a keen sense of where and when usage conflicts may arise, and an awareness of which areas may need truck parking.

Land use reflects the desired future development pattern in a given area (often established in a comprehensive plan), while zoning designations explicitly define and regulate what types of uses are allowed on parcels, as well as design and development requirements. Local governments are the ultimate authority in zoning development, writing, and revising ordinances on a fixed or as-needed, schedule.

A parking ordinance, when adopted, allows a local government to regulate the parking, standing, or stopping upon public streets or right-of-way. Parking ordinances address where and when truck parking is prohibited. Building and development codes, in general, specify the minimum standards for the construction of buildings within a local government. A common application of building codes is to require a set number of parking spaces based on type, quantity of a development (square feet), and expected trip generation.

When land use and zoning decisions allow for commercial/industrial development but do not consider the demand for truck parking, the costs for future mitigation are often passed on to the local government and, by extension, tax-paying residents. This could manifest as construction costs to build future truck parking or time and resources spent on enforcement. Thus, a common response is to pass ordinances restricting truck parking, which shifts the need to another area in the community or a nearby municipality. This is not beneficial to any stakeholders involved.

4.2.2.3 Truck Parking Demand Analysis

Permitting agencies, freight industry professionals, and other individuals in the development or planning fields must be able to estimate the demand for truck parking that a freight-generating facility, like a warehouse or distribution center, may generate. This enables professionals to plan for sufficient truck parking on-site or at a share lot for a new development or estimate how many truck parking spaces should be accommodated for an existing site based on building (in this case, warehouse) typology.

As part of the development of this Action Plan, the project team developed a standardized truck parking generation rate for the El Paso/Far West region for professionals to estimate and plan for sufficient truck parking on-site or at a shared lot for developments based on the number of truck trips generated by that facility. Based on this data-driven assessment, it was determined that for warehouses in the Far West region, approximately 10.5% of total trips (trucks) to a facility will require parking. The daily peak parking rate of those trips that do need to stop at a facility for parking is estimated at 47.4%, meaning that at some point during the day, almost half of the trucks that park must compete for available spaces at the same time.

For example, a traffic impact study might estimate that a facility classified as a warehouse would generate 1,000 daily truck trips. Approximately 105 trucks (10.5% of the 1,000 truck trips) would need parking; of those, 50 trucks would need simultaneous parking (105 trucks x 0.473). This implies that the facility should provide about 50 parking spaces to meet the parking demand that their operations would generate.

4.2.3 Innovative Partnerships

Leveraging partnerships to generate more truck parking creates a win-win for both the public and private sectors. Developers, municipalities, and stakeholders share risks and benefits when constructing, maintaining, and operating a local facility for regional truck parking needs. While improving safety, air quality, and efficiency, these types of facilities also give truck drivers more truck parking options and access to full-service amenities unavailable at most public facilities.

Partnering reduces initial public agency investment by sharing costs with the private sector and provides a partner to mitigate public opposition. Local governments can also facilitate connections to freight networks and off-site improvements, as well as build truck parking adjacent to existing truck stops. An example of this is the Pecos Freight Village opportunity site concept (see Chapter 5 for more details). By sharing risks and benefits, truck parking partnerships can provide four key advantages for public and private sector stakeholders:

- Leverage and extend public funding.
- Reduce public sector truck parking facility operation, maintenance, and management costs.
- Increase private sector truck parking investment by mitigating up-front costs and other barriers.
- Provide more amenities available to truck drivers including full-service restrooms with showers as well as multiple food, beverage, and retail options.

However, agencies often have competing interests for limited public funding. Likewise, it can be challenging to have public funding—that can be dedicated to truck parking—available the moment a partnership opportunity arises.

This section explores five potential partnership scenarios that leverage the combined strengths of the public and private sectors to address truck parking challenges.

4.2.3.1 Long-Term Land Lease

The public sector can leverage publicly owned land (excess right-of-way or an acquired parcel) to help offset a private sector partner's upfront truck parking facility development cost. Through a low- or no-cost lease, the jurisdiction incentivizes private sector investment, and the public sector benefits by minimizing the long-term operation and maintenance (O&M) costs of investing in traditional public truck parking facilities.

This strategy is often employed near major freight facilities. Identified parcels must be large enough to accommodate the specific parameters and design criteria needed for trucks of varying sizes. The surrounding transportation network must also be able to support increased truck traffic.

4.2.3.2 Lease Underutilize Public Parking Lots

Most major entertainment venues feature large parking lots that are underutilized assets outside of scheduled events. These venues generally have easy access to major highways and are located near major freight destinations.

The site owner can lease a portion of an underutilized parking lot to a private company to set up temporary, secured truck parking and offer it for a fee to truck drivers. Similarly, a public agency with excess parking could execute a similar arrangement. Municipalities can form partnerships to lease an underutilized parking lot and generate public tax revenues outside of scheduled events when the parking lot is vacant, also addressing truck parking needs.

4.2.3.3 Public Private Partnerships (P3)

A local Government can partner with the TxDOT to construct truck parking facilities that are operated and managed by the local jurisdiction or private entity over the long term. This is usually done through a Memorandum of Understanding (MOU) or a Comprehensive Development Agreement (CDA).

4.2.3.4 Implementation through a Reginal Mobility Authority

State legislation authorized the creation of Regional Mobility Authorities (RMA) in 2001 to give communities an additional mechanism to implement transportation projects. This enabling legislation allows RMAs to fund mobility improvements through the study, evaluation, design, finance, acquisition, construction, maintenance, repair, and operation of transportation projects. Such projects could include truck parking facilities and associated amenities and access improvements identified in this summary report. The Camino Real Regional Mobility Authority (CRRMA), created in 2007 by the El Paso City Council, addressed congestion by developing and building infrastructure in the El Paso region. RMAs may also enter into contracts or operating agreements with other local, state, and federal governmental bodies of the United States or Mexico. The is ideal for the CRRMA because it can develop and manage projects in Texas, New Mexico, and Mexico.

4.2.3.5 Construct Parking Near Existing Facility

Truck drivers prefer to park at truck stops for access to fuel, food, restrooms, and showers, some of which public agencies cannot provide.[14] Stakeholder feedback noted that newer truck stops in smaller communities, including Van Horn and Pecos, tend to have less than 50 truck parking spaces. Recognizing this, the public sector could construct basic truck parking facilities with ample lighting and secured parking but no full-service restrooms or other amenities next to existing private-sector truck stops to allow more truck drivers access to basic services. In this scenario, the public sector could reach an agreement with the adjacent truck stop operator to operate and maintain the publicly constructed facility.

4.2.3.6 Shipper of Choice

Today, few companies provide designated parking for service trucks. Recognizing those who do, through a Shipper of Choice[15] award, will encourage others to do the same. Shippers of Choice are businesses that strategically collaborate with drivers to build partnerships. It is an industry-wide designation that distinguishes shippers (and receivers) that value and respect the services truck drivers provide, and in turn, the designation provides an advantage in a challenging market by communicating the awardee's business values and strong partnership with drivers.

The award should be based on providing parking, short dwell times, amenities (e.g., restrooms and lounges), respectful engagement, and proactive communication.

4.2.3.7 Energy Sector Company Recognition

A similar recognition program could be developed in the Permian Basin to recognize companies and operations that allow truck drivers to park on-site for staging and rest breaks. As noted previously, truck drivers often must wait in long lines near wellheads to load or unload frac sand and other materials. In addition to allowing on-site truck parking and staging, energy sector operations would ideally provide restrooms and other amenities, such as shade structures and drinking water, for rest breaks. Like the Shipper of Choice program, these companies and operations could be recognized with safety awards that raise awareness and demonstrate how this can improve safety and operations.

4.2.4 Funding Opportunities

Truck parking projects and partnership opportunities can be funded by multiple funding sources, including local government budgets, which may include revenue from vehicle registration fees and other local improvement-related sources, state funding programs, P3s, impact fees, or special assessments. Federal funding, which is allocated by MPOs, is also a key source for truck parking projects. Please see Chapter 6 for more information on additional state and federal funding sources, including formula funding programs and discretionary grants.

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[14] Page 17. Texas Statewide Truck Parking Study. 2020. https://ftp.txdot.gov/pub/txdot/move-texas-freight/studies/truck-parking/final-report.pdf.
[15] FreightWaves. 2024. https://www.freightwaves.com/awards/2024-shipper-of-choice-award

4.3 Toolkits and Supporting Material

Consistent messaging and useful resources are critical components to TxDOT's efforts in implementing truck parking projects and recommendations in the El Paso/Far West Region and throughout the state. Toolkits with individual and customizable resources allow TxDOT and its partners to create public awareness and provide consistent strategies for advocacy groups, agencies, local governments, and other interested stakeholders to address the unique truck parking needs in their communities.

For example, the Permian Road Safety Coalition was an active participant in the stakeholder engagement process and expressed interest in helping to continue raising awareness and work with communities and the private sector to address truck parking and other safety needs. The Permian Road Safety Coalition's mission is to make roads better and safer across the region. Given the strategies and tools, the Permian Road Safety Coalition and other regional advocacy groups, agencies and local governments can continue to champion the implementation of the Action Plan recommendations.

Other key organizations in the region include but are not limited to the Permian Strategic Partnership, the Permian Basin Petroleum Association. This plan introduces two toolkits: The Public Awareness Toolkit and the Policies and Strategies Toolkit.

4.3.1 Public Awareness Toolkit

The El Paso/Far West Texas Truck Parking Action Plan Public Awareness Toolkit provides various outreach tools for advocacy groups, public agencies, local communities, and industry partners to use when communicating the importance of addressing local and regional truck parking issues. The turnkey materials are easy for stakeholder partners to engage on the importance of truck parking with their communities through multiple communication channels. The Public Awareness Toolkit includes the following resources:

- **Fact Sheet** – provides an overview of the Action Plan, truck parking facts, where to get more information, and a call to action.
- **Posters** – provide a visual way to inform the public of the need for additional truck parking and why it matters to the local community.
- **Rack Cards** – an educational tool highlighting various truck parking information and statistics to be distributed at safety rest areas or a "leave-behind" for targeted audiences.
- **Social Media Kit** – provides easily customizable posts to directly connect with followers who live, work, and travel in the El Paso/Far West Region about the importance of truck parking, safety information, and economic impacts.
- **Story Map** – provides educational awareness material and the need for truck parking in an online map-based visual story format.

4.3.2 Policies and Strategies Toolkit

The El Paso/Far West Texas Truck Parking Action Plan Policies and Strategies Toolkit provides local governments and other interested stakeholders with a series of technical white papers, fact sheets, and presentations that provide additional detail, case studies, and implementation steps associated with each of the TxDOT-Supported recommendations. The Policies and Strategies Toolkit includes the following resources:

- Integrating Truck Parking into Local and Regional Transportation and Land Use
- Public/Private Partnerships
- Estimating Site-Specific Parking Demand
- Dual Use Truck Parking and Emergency Staging Areas
- Shipper of Choice Program
- Freight Villages Fact Sheet

Both the Public Awareness Toolkit and the Policies and Strategies Toolkit are available on the TxDOT website. To access the toolkit materials, visit TxDOT.gov and search “Truck Parking” and select the El Paso/Far West Truck Parking webpage.

Chapter 5:

Opportunity Sites

Texas Department of Transportation

5 Opportunity Sites

The project team utilized the data-driven needs assessment, an expansive stakeholder engagement process, and worked closely with key El Paso and Odessa district staff during the development of the plan through workshops and focused meetings to identify a number of potential locations for new truck parking facilities. This process also allowed the project team to identify plans, projects, and opportunities the districts were currently developing or had previously considered that could be included in the opportunity site identification assessment.

Through this iterative process and collaborative workshops held with district staff and regional stakeholders to review the technical analysis of regional needs and opportunity locations, the project team prioritized nine specific opportunity sites and one opportunity zone to move forward and provide conceptual design support. The following chapter provides an overview of the results of this process:

- **Site Identification and Screening** – provides an overview of the site identification process that included extensive stakeholder and district input, site screening process, and opportunity site selection determination conducted in close coordination with key staff from the El Paso and Odessa Districts.

- **Site Amenities** – highlights the various site amenities and features that were included in the opportunity site conceptual designs to ensure proposed facilities meet the needs of local communities, drivers, and other stakeholders that could potentially use these multimodal facilities.

- **Design Considerations** – documents the key design manuals, standards, and specifications that were utilized during conceptual design and cost estimate development, including geometry, pavement, and drainage for parking facilities, roadway structures, and multimodal connections.

- **Opportunity Sites** – presents an overview of each of the ten identified opportunity sites, including a description of the features and amenities at each facility, conceptual design exhibits, and planning-level cost estimates.

- **Additional Sites** – includes an overview of additional public truck parking sites including low-cost maintenance improvements and SRA projects that the districts are currently developing.

5.1 Site Identification and Screening

The Far West Texas region truck parking site identification and screening analysis considered several factors, including stakeholder input, local and regional needs, existing plans and projects, safety and equity impacts, site feasibility, and other factors to effectively identify, screen, and prioritize opportunity sites for conceptual design and engineering.

5.1.1 Screening Process

The initial opportunity site screening process was developed with input from district staff to identify key site prioritization factors and review of the TxDOT National Environmental Policy Act (NEPA) and Project Development Toolkit to ensure that proposed sites would: reasonably meet federal and state environmental compliance, consider impacts to cultural, natural, social, and physical resources, and

provide supporting information for future environmental assessments. Note: this analysis was not designed to satisfy the requirements for an Environmental Impact Statement (EIS), Categorical Exclusion (CE), or Environmental Assessment (EA) under NEPA and any associated federal or state laws and regulations.

In future project development phases, if an opportunity site project meets the criteria for a CE, NEPA clearance would be obtained following district approval and coordination with the TxDOT ENV Project Delivery Section to discuss. An EA is required if the project cannot be classified as a CE, and it is not known whether the project would have significant environmental impacts.

Figure 5-1 and Figure 5-2 highlight the screening results for an opportunity site outside of the El Paso International Airport.

Figure 5-1: El Paso International Airport Opportunity Site Screening Maps Example

Figure 5-2: Sample El Paso Airport Opportunity Site Screening Checklist

Site Information	Site	Site 2
	District	El Paso
	County	El Paso
	City	El Paso
	Acreage	12.26
Env. Justice	Site	Yes
	HDC	No Impacts
	Census tract	98.00
Land Use	Current Land Use	Industrial
	Future Land Use (2045)	Industrial
	Surrounding Land Use	Industrial/Commercial
	Future Surrounding Land Use	Industrial/Commercial
Performance	Ownership	Public
	Owner	City of El Paso
	Texas Congestion Index	1.03 Congestion Score
	Truck Stops Available	0
	Description of Amenities	N/A
Environmental	Historic Areas	No impacts
	Surrounding Historic	No impacts
	Flood Zone	A-1 Base floodplain/B Low or moderate chance of flood
	Soil	Aridisols
	Wetlands	No impacts
	Critical habitat	No impacts

Utilizing the results of the detailed screening analysis, the project team, in coordination with the El Paso and Odessa Districts, were able to prioritize sites based on key factors:

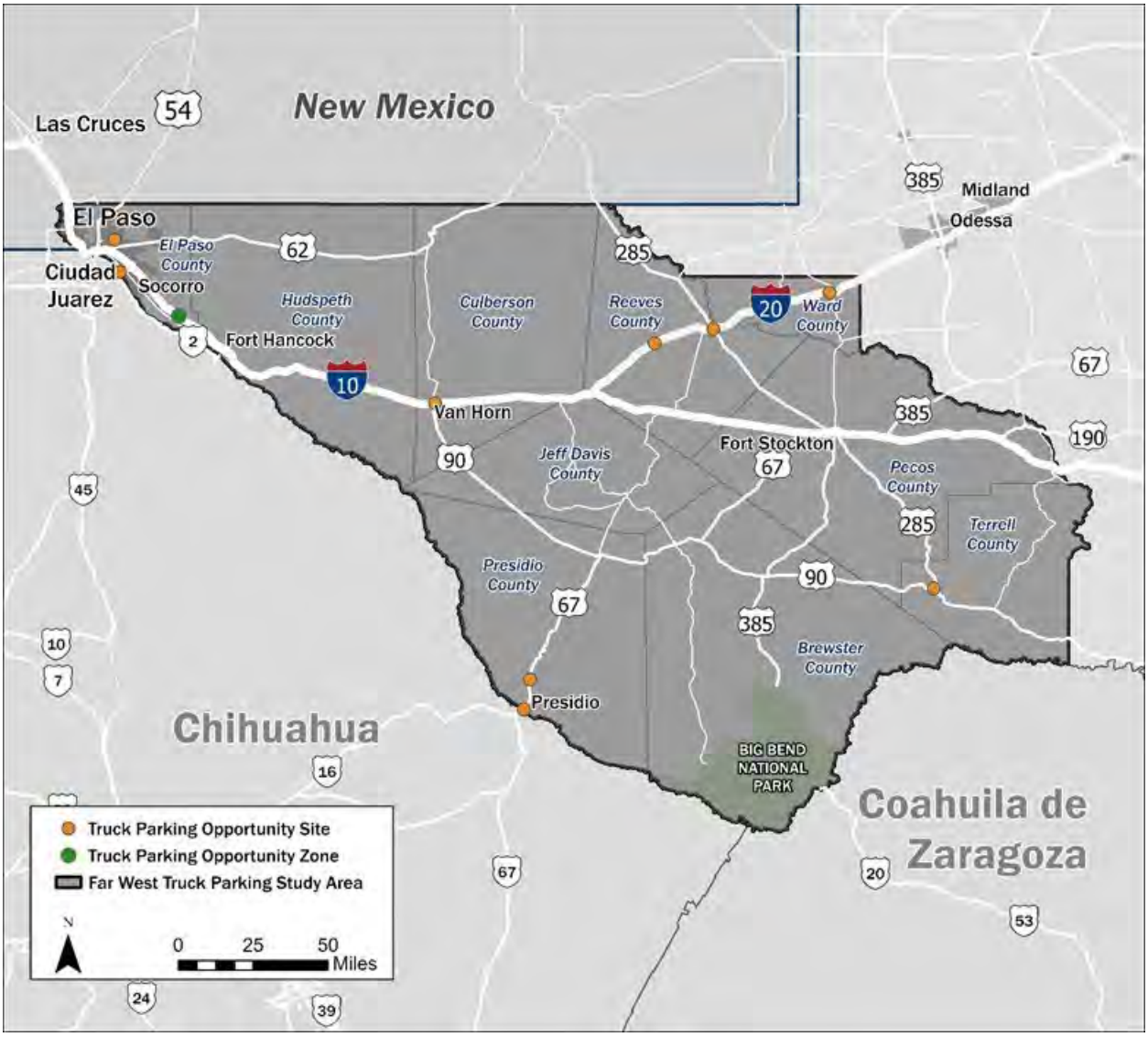
- **Parcel Ownership** – sites owned by TxDOT or a local agency willing to partner with TxDOT to advance a truck parking project.

- **Parcel Size** – although there were no minimum size requirements, sites were analyzed for their ability to accommodate a range of truck parking needs, multimodal connections, and amenities to ensure an appropriate return on investment for TxDOT and its partner agencies.

- **Defined Need** – sites were further screened utilizing the results of the needs assessment and their ability to address a defined truck parking need, including HOS rest breaks, overnight parking, staging and queuing, owner-operator parking, and FEMA staging capacity.

See below for a map of the nine opportunity sites and one opportunity zone.

Figure 5-3: Far West Texas Region Opportunity Sites



5.2 Site Amenities

After extensive stakeholder input, district guidance, and a context sensitive design approach for each opportunity site, the conceptual designs incorporated a variety of amenities to ensure that the needs of all truck parking facility users, and the larger community, are met. The proposed amenities will serve to facilitate operations, safety, recreation, and environmental needs of the truck parking facilities:

- **Safety Improvements** – fencing or gates would make the site safer for trucks to park by providing secure access management into and out of the facility.

- **Lighting** – high mast illumination in the parking areas will enhance safety by improving visibility, deterring suspicious activity, and reducing the risk of accidents. Where practical, lighting should be designed to minimize night-sky impacts to the McDonald Observatory.

- **Restroom and Shower Facilities** – provide a safe and secure necessary facility for the trucking community. These facilities are proposed to be in strategic, highly accessible areas. These facilities could also include vending machines and other services that might improve the user experience.

- **Innovative Drainage Features** – necessary components to multimodal truck parking facilities both from an environmental and aesthetic point of view. Retention ponds and basins assist in capturing stormwater during rain events and provide a beautiful backdrop for pedestrians and drivers alike.

- **Shared Use Paths (SUPs), Sidewalks, and Trails** –incorporated into many of the truck parking facilities for passive recreational opportunities for drivers as well as a community resource. These pedestrian features will help connect truck drivers and community members with different features of the site, including amenity buildings, picnic areas, water retention facilities, transit centers, and economic development.

- **Park and Ride and Transit Facilities** – proposed at some multimodal facilities to leverage the proximity of nearby park and ride lots or transit stops. These facilities support regional transit connectivity and accommodate both community members and truck drivers.

- **Highway-Oriented Economic Development** – potentially fostered through P3s and oriented for maximum visual exposure from adjacent highways. Additional economic development will solidify the truck parking facilities as destinations for all different users.

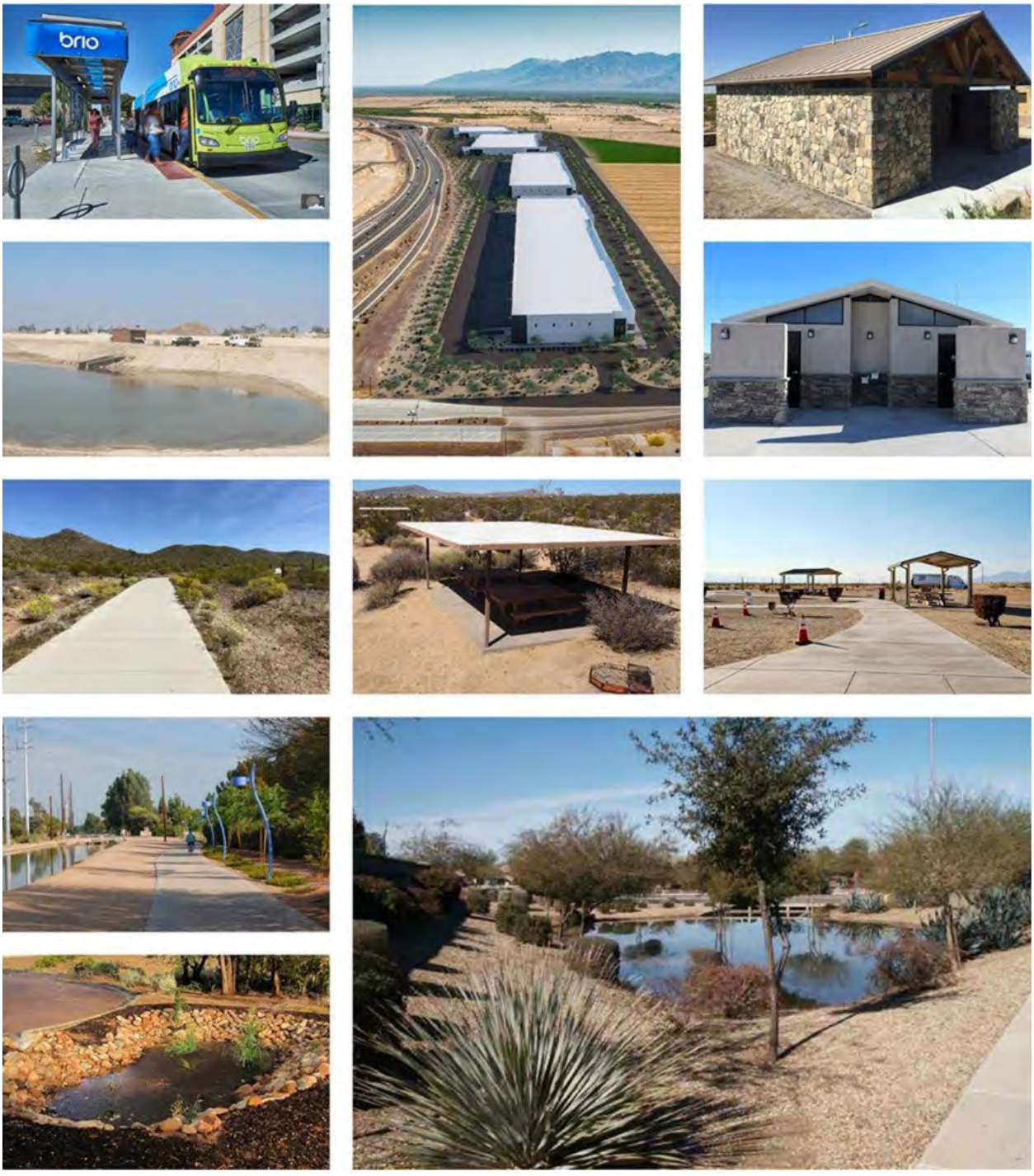
- **Picnic Areas** – provide a comfortable and shaded area for passive outdoor activities that are accessible from walking paths and near the parking facility.

Figure 5-4 provides visual examples of the proposed amenities outlined above. Table 5-1 provides information on the amenity and the source of each picture.

Table 5-1: Proposed Amenity Example Descriptions and Sources

Amenity	Source
Restroom and shower facility	Romtec
Small retention pond	GoGreen Landscaping & Garden Center
Park and ride facility	Flickr
Retention basin	City of Surprise, Arizona
Covered picnic structure	National Park Service
Picnic area	Yelp
Walking path	City of Tempe, Arizona
Highway-oriented economic development	CBRE
Large retention pond	Romtec

Figure 5-4: Proposed Amenity Visual Examples



5.3 Design Considerations

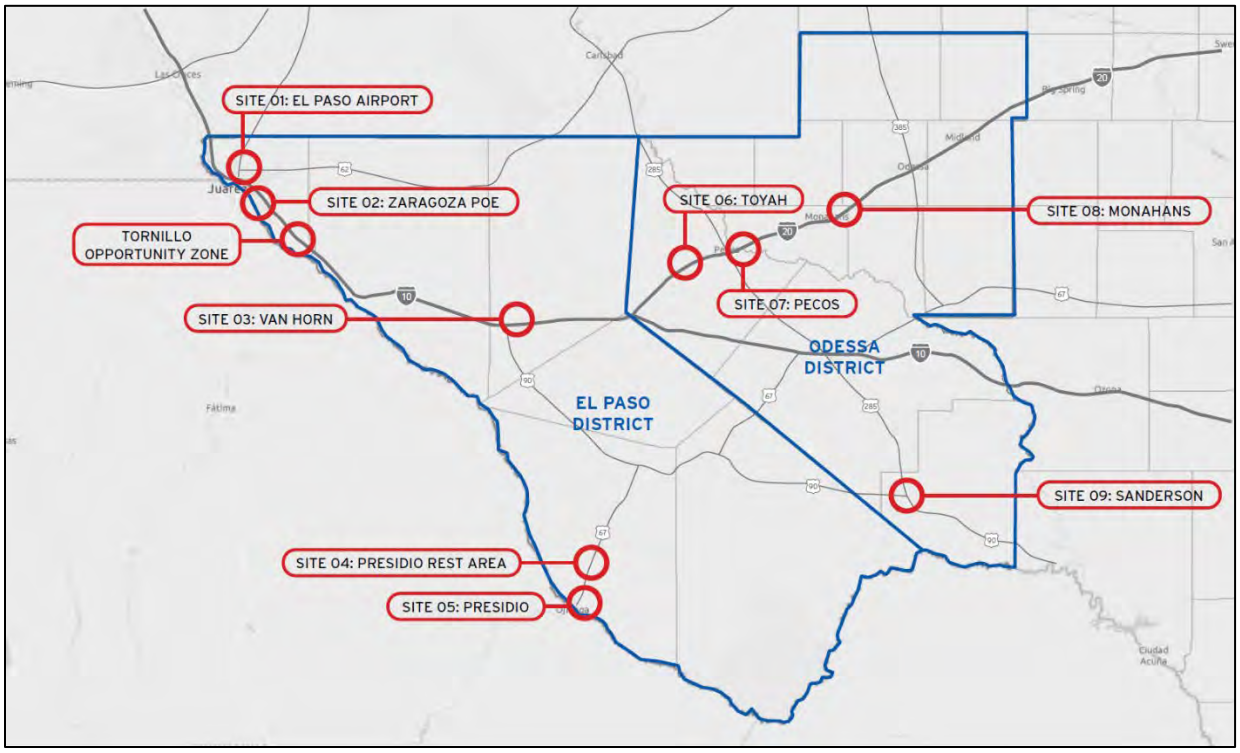
TXDOT provides several manuals, standards and specifications for planning, design, and construction activities that the project team utilized in the development of the Far West Texas Region opportunity sites. The project team performed a review of existing TXDOT-approved design guidance documents to identify applicable current design standards for truck parking. This review included the following documents:

- TxDOT Facility Design Standards and Production Guidelines (2009)
- TxDOT Transportation Planning & Programming Manual (2022)
- TXDOT Roadway Design Manual (RDM) (2022)
- TxDOT Bicycle Accommodation Design Guidance (2021)
- TxDOT Hydraulic Design Manual (2019)
- TxDOT Standard Specifications for Construction & Maintenance of Highways, Streets, and Bridges (2024)
- FHWA Truck Parking Development Handbook (2022)

5.4 Opportunity Sites

The development of the Far West Texas Region truck parking opportunity sites was a collaborative effort that included input from numerous stakeholders and ensured each site met the unique truck parking and multimodal needs of its surrounding community. Each opportunity site concept was designed with a context-sensitive approach and may serve a wide range of applications and users. Figure 5-5 provides a graphical map that outlines the name and location of each Far West Texas region truck parking opportunity sites.

Figure 5-5: Far West Texas Region Opportunity Site Locations



5.4.1 El Paso International Airport

The El Paso International Airport developed a Master Plan for land in its vicinity. Their plans include the expansion of commercial, industrial/manufacturing, business, and entertainment (see Figure 5-6 below). The project team met with the Airport to discuss an opportunity site compatible with their master plan. The corner of Global Reach Drive and SPUR 601 access road has been considered for a potential gas station by private developers. The El Paso Airport agreed that this location would be ideal for a truck parking facility.

Figure 5-6: El Paso Airport Master Plan

The El Paso Airport truck parking facility is located on the eastern side of SPUR 601 at Global Reach Drive and is positioned between the northbound on-ramp to SPUR 601 and Walter Jones Boulevard. The facility developers are exploring a P3 that serves both the need for long-term truck parking and supports private economic development. However, the proposed site location currently holds a drainage pond, and the El Paso Airport confirmed that there is an on-going study that will provide the recommendation to move that drainage pond to another location. In

addition, El Paso Water Utilities has provided the El Paso Airport a letter of support to relocate the drainage pond.

The facility is accessible from Walter Jones Boulevard and the long-term trucking is located on the northern portion of the site. Areas for private development are located on the western end of the site.

The potential for private development is 5.7 acres and strategically located to leverage access from Global Reach Drive and SPUR 601. Adjacent to the area designated for private development is a 20-vehicle parking space and associated restroom facility. The parking and restroom support a shared green space with walking trails that encircle the long-term truck parking facility. These amenities are intended for both truck drivers and public use. The long-term truck parking area is 8.5 acres, contains 63 spaces, and is easily accessed by two entrances from Walter Jones Boulevard. See Figure 5-7 for the El Paso International Airport opportunity site conceptual design.

Preliminary cost estimates for the El Paso International Airport opportunity site concept:

- Truck Parking and Development: $17,625522.54
- Mobilization and Contingencies: $8,284,300
- Total Estimate: **$25,909,900**

Figure 5-7: El Paso International Airport Concept

5.4.2 Ysleta-Zaragoza Port of Entry

The Action Plan's stakeholder engagement identified a variety of truck parking needs that includes staging at the border, long haul movements along I-10 and the daily border crossing. Having a truck parking facility close to the U.S.-Mexico border could help solve these needs. Long queues to cross to and from Mexico create a need for a truck parking facility with minor amenities close to border

crossings to provide a break to traffic that has been waiting in line. The study considered different POEs and identified the Ysleta-Zaragoza POE as one of the preferred locations, based on land availability. At the time of this report, GSA is undergoing a feasibility study to update the bridge facilities and operations. Alternatives under consideration include expansion of commercial traffic as well as removal of commercial traffic from the POE. A preferred alternative has not been selected at this time; project recommendations remain the ideal line of action.

The Ysleta-Zaragoza POE truck parking facility is located on the south side of Loop 375 at South Zaragoza Road. The border with Mexico and the US Customs and Border Protection Ysleta-Zaragoza POE facility are located immediately adjacent to the west and south respectively. The 5.4-acre site is accessed from South Americas Avenue and provides two separate parking facilities: a 20-space parking lot and a 16-space truck parking lot. Entering trucks from Mexico would have to travel one mile west via Loop 375, perform a U-turn and then travel one mile east to access the site. The site could also be a waiting area for the industrial warehousing just east of the POE and can serve as a staging area not only to cross to Mexico but to load/unload at these facilities.

As the concept drawing in Figure 5-8 illustrates, the parking facility will include tree plantings around the perimeter of the parking lots to provide aesthetic benefits, shade, and some visual screening. Detention ponds at the northern and southern portions of the site will collect run-off from the parking surfaces.

Ysleta-Zaragoza POE opportunity site preliminary cost estimates:

- Truck Parking: $4,200,000
- Mobilization and Contingencies: $1,980,000
- Total Estimate: **$6,180,000**

Figure 5-8: Ysleta-Zaragoza POE Concept

5.4.3 Van Horn

The study proposes a truck parking facility east of downtown Van Horn, Texas at the I-10/Ross Drive interchange. The facility would be positioned between the westbound I-10 exit to Ross Drive and E Broadway/Frontage Road. Accessed from Ross Drive, the truck parking site would contain 20 spaces in total and include a 44,800 square foot Flex TxDOT space. This space could be used for purposes such as additional truck parking, staging areas, or storage.

The truck parking area would need to reroute an existing drainage channel. There are two large truck convenience stops located nearby, making this truck parking facility convenient for drivers. In addition, this site would provide relief to any weather-related closures on the I-10 and I-20 split that often add pressure to Van Horn businesses and roadways.

Van Horn opportunity site preliminary cost estimates:

- Truck Parking: $7,945,954
- Mobilization and Contingencies: $3,734,800
- Total Estimate: **$11,680,800**

Figure 5-9: Van Horn Concept

5.4.4 Presidio Rest Area

The Presidio Rest Area site is located approximately 35 miles north of Presidio along Highway 67. This rest area is accessible by northbound trucks and vehicles, providing many amenities to support those travelers. Truck and vehicle traffic diverge to their own respective parking facilities upon entry to the

site. The truck parking contains 25 spaces located closest to Highway 67. Vehicular traffic is channeled to an area with 28 parallel parking spaces and amenities that serve both truck and vehicular travelers.

Amenities illustrated on the concept plan include a semi-covered water tank, picnic areas, and restroom facilities. The area also hosts a wastewater leach field. Truck and vehicle traffic is consolidated into one exit lane as it approaches Highway 67. The study team will further examine access and turning movements from Highway 67 in the future. Figure 5-10 highlights the Presidio Rest Area opportunity site conceptual design.

Presidio Rest Area opportunity site preliminary cost estimates:

- Truck Parking and Multimodal: $6,385,050
- Mobilization and Contingencies: $3,001,300
- Total Estimate: **$9,386,400**

Figure 5-10: Presidio Rest Area Concept

5.4.5 Presidio Multimodal Center

The Presidio multimodal facility is located along the north side of Bridge Street and on the western end of the City of Presidio, adjacent to the POE facility bearing the city's name. The entire site is 25.88 acres and has a range of accommodations for truck parking while also allowing for private economic development.

The Presidio site is proposed to be developed over two phases. Phase 1 develops the eastern side of the site and the first segment of the internal U-shaped access road that will serve the entire site. Phase 1 includes a 116-space 2- to 4-hour vehicle staging area with a restroom facility. Adjacent to the staging area is a 1.63-acre parcel designated for private development. This location for private

development is ideal due to the visual access from Bridge Street. A temporary gravel parking lot with 230 spaces is proposed for the eastern most portion of the site, next to the residential neighborhood further to the east. Phase 2 completes the U-shaped access road, which connects to Bridge Street. The access road is designed with a queuing lane that extends from the point of exit to the entry point to mitigate potential truck congestion heading into Mexico.

Phase 2 includes two truck parking lots containing a total of 97 parking spaces. These lots are located along the western and northern boundary of the site. The land adjacent to the truck parking is undeveloped, resulting in minimal disruptions from truck movements.

Within the center of the access drive a 4.14-acre amenity park hosts a detention pond, walking paths, entry monument/sign, and restroom facility to provide recreation and comfort for all users. Phase 2 proposes to replace the temporary gravel parking lot with additional economic development parcels, increasing the combined economic development opportunity to 4.17 acres.

Presidio opportunity site preliminary cost estimates:

- Truck Parking and Multimodal: $23,221,556
- Mobilization and Contingencies: $10,914,400
- Total Estimate: **$34,136,000**

Figure 5-11: Presidio Concept

5.4.6 Toyah Rest Area

A proposed truck parking site east of Toyah, Texas will address existing, but inadequate, truck parking facilities located on both the eastbound and westbound side of I-20. Personal and commercial traffic separates upon site entry. Existing parallel truck parking would be replaced with angled parking. The

eastbound parking area would contain 24 spaces and the westbound side would contain 26 spaces. The existing parallel parking would remain to accommodate personal vehicular use. Existing amenities, such as covered picnic tables, walking paths, and windmill installations, would remain in the new configuration. A physical barrier provides a modest safety buffer between the truck parking area and I-20.

Toyah Rest Area opportunity site preliminary cost estimates:

- Truck Parking and Multimodal: $6,042,966
- Mobilization and Contingencies: $2,840,400
- Total Estimate: **$8,883,400**

Figure 5-12: Toyah Rest Area Concept

5.4.7 Pecos Freight Village

The Pecos Freight Village is located on the south side of I-20 at the interchange with Highway 285 on the southeast side of the City of Pecos. The site is 197.43 acres in total and includes 662 truck parking 126 car parking stalls. The site can be accessed from several locations, including two entrances from Highway 285, a right-in, right-out access point on the ramp from Highway 285 to eastbound I-20, and three entrances along the I-20 Frontage Road. A proposed new County Road 116 alignment will create a four-way intersection with the backage loop road, providing access to the Pecos truck parking facility.

Six zones are allocated for private development along the highway and interstate frontage to maximize visual access and support commercial use.

The Pecos facility contains four truck parking areas that are programmed for various needs:

- 280 spaces designated for 2- to 4-hour truck staging with high mast lighting, allowing them to be used 24/7.
- 192 spaces designated for overnight occupied truck parking along the southern edge of the property.
- Within the overnight truck parking lot, an area comparable to 30 truck parking spaces is designated for flex/oversized vehicle parking, and
- 160 spaces designated for long-term parking with a perimeter fence and controlled entry points for extra security. This lot also contains a separate 100-space car parking lot for truck drivers to keep their personal vehicles while they are driving off-site.

Walking trails surround a detention pond at the center of the site and extend to the periphery along the various entrance drives. The detention pond is designed in relation to an existing drainage area that extends into the site from the southeast. A culvert bridge along the Backage Loop Road allows for the unobstructed flow of water during rainfall events. An amenity area adjacent to the green space, complete with a 26-space designated parking area, a small restroom and shower facility, picnic area, flex space, trail connection to the central park space, entry monument, and a variety of shade and ornamental trees provides recreation and comfort for visitors.

Pecos Freight Village opportunity site preliminary cost estimates:

- Truck Parking and Multimodal: $142,132,945
- Mobilization and Contingencies: $64,670,700
- Total Estimate: **$206,803,645**

Figure 5-13: Pecos Freight Village Concept

5.4.8 Monahans

The Monahans truck parking facility is located southwest of downtown Monahans, bordered by Interstate 20 to the south, W. 15th Street to the north, and the I-20 Westbound on-ramp to the east. This simply designed truck parking facility provides 34 spaces directly accessible from W. 15th Street via two entrance drives. Trucks traveling on I-20 would exit the interstate and travel north on Highway 464, before heading west on W. 15th Street. Land uses to the north of the site are mainly industrial, with a few residential properties located on S. Teresa Street. A small detention pond located in the southeast corner of the site will collect runoff from the parking lot.

Monahans opportunity site preliminary cost estimates:

- Truck Parking and Multimodal: $2,848,050
- Mobilization and Contingencies: $1,338,900
- Total Estimate: **$4,187,000**

Figure 5-14: Monahans Concept

5.4.9 Sanderson

The truck parking facility is located west of Sanderson at the intersection of Highway 90 and Highway 285. The parking lot is accessed from the north on McDonald Road. The 82,313 square foot parking area accommodates 9 truck parking spaces and a flex parking area. A small detention pond will capture runoff from the parking lot.

Sanderson opportunity site preliminary cost estimates:

- Truck Parking and Multimodal: $3,228,101
- Mobilization and Contingencies: $1,517,500
- Total Estimate: **$5,745,700**

Figure 5-15: Sanderson Concept

5.4.10 Tornillo Opportunity Zone

As previously mentioned, if commercial traffic operations were removed from BOTA, the Marcelino Serna POE at Tornillo would attract higher commercial traffic. This was seen in 2022, when policy necessitated the halt of commercial traffic in BOTA. More users began to use the Marcelino Serna POE. In addition, the Mexican government has invested in a tolling facility, Libramiento de Ciudad Juarez, that can bypass traffic and directly connect to the Marcelino Serna POE. This investment provided a safe route from Mexico to the United States.

5.4.10.1 Tornillo Site - Option A

Based on this consideration, Concept A proposes the Tornillo truck parking and intermodal facility along Highway 20 at the interchange with Highway 3380. Highway 3380 connects I-10 with the United States/Mexico border at the Marcelino Serna POE facility, while Highway 20 extends northwest to the City of El Paso. The parcel is currently owned by El Paso County and would require additional coordination with the County to move forward with conceptual designs. The entire facility is located

within the area defined by the ramp from Southbound Highway 3380 to Highway 20. However, a small portion of the site runs underneath the overpass that carries Highway 3380 over Highway 20.

The truck parking is directly accessible from Highway 20 and contains 88 truck spaces. A central access drive extends through the truck parking area and provides access to 95 park and ride spaces. The park and ride facility includes a bathroom facility and walking trails that extend throughout the site. A large detention pond will collect runoff from the truck parking and park and ride facility while also adding to the aesthetic quality of the site. The trails will surround an existing stormwater detention facility located directly underneath the Highway 3380 overpass.

Figure 5-16: Tornillo Opportunity Zone Option A

5.4.10.2 Tornillo Site - Option B

Concept B was created from stakeholder meetings, where it was discussed that if commercial traffic did not increase significantly in the Marcelino Serna POE, commercial operations may be limited or removed from this POE. If no commercial traffic is allowed, a facility closer to I-10 would further benefit the trucking community, as they wouldn't have to detour further south to the Concept A location. Concept B for the Tornillo truck parking facility is located at the interchange of 3380 and Interstate 10, approximately 3.5 miles east of Concept A. Concept B contains truck parking, a park and ride facility, and a large amenity area. Concept A would provide an easier access to trucks traveling East and West along I-10.

The site is accessible from Highway 3380, with a long entrance drive directing traffic to the different zones of the facility. The park and ride area contains 80 spaces and a restroom facility, while the truck parking area is comprised of two lots with a total of 208 truck parking spaces. The first lot is a secure truck parking facility containing 88 of those spaces as well as an 88-space car parking lot. The car lot, with 3,105 linear feet of fencing and two controlled access points is intended for personal vehicle storage by truck drivers while driving off-site. A restroom and security facility adds to the amenities

and security features. The adjacent truck parking lot has 24-hour 120 truck parking spaces. Additionally, this lot includes a flex truck parking area.

A large amenity area buffers the truck parking from 3380 and includes extensive walking trails and a large detention pond. The detention pond will not only provide environmental benefits by collecting runoff from the driving and parking surfaces, but also provides aesthetic benefits to all site users. These trails connect to an existing SUP that extends into the center of Tornillo.

Figure 5-17: Tornillo Opportunity Zone Option B

5.5 Additional Sites

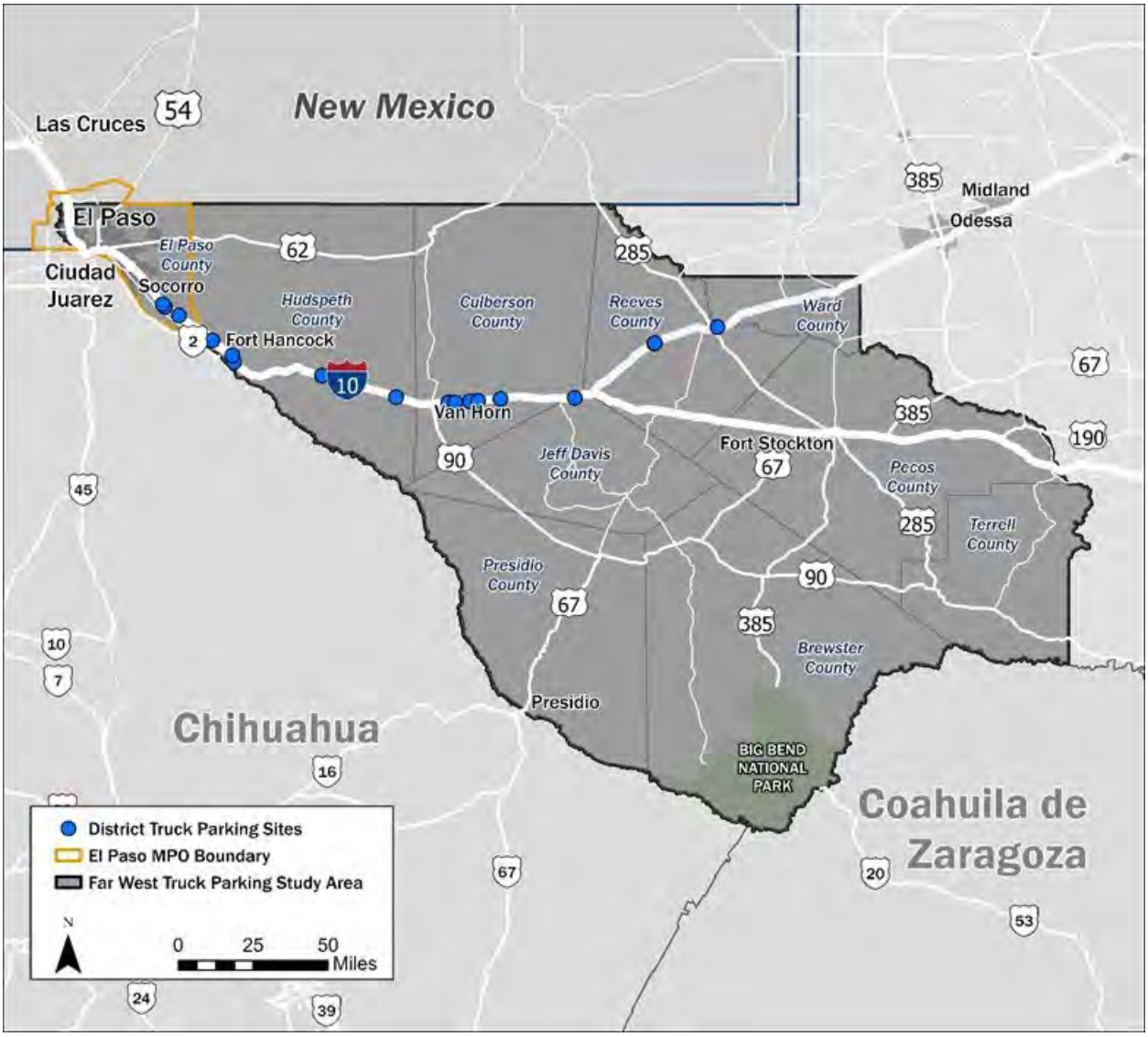
In addition to the nine Far West Texas Region opportunity sites and one opportunity zone developed for this Action Plan, several other initiatives are underway in the region to increase the amount of safe and available public truck parking while meeting unique regional needs like truck staging and queuing to serve border crossings, the oil and gas industry, and major freight generators. The following section includes an overview of these additional public truck parking sites, including low-cost maintenance improvements and projects that the TxDOT districts are currently advancing, such as port-initiated truck staging and queuing projects.

5.5.1 Maintenance Sites

Through the Texas Truck Parking Initiative, the TxDOT Maintenance Division has coordinated with the El Paso and Odessa District staff to identify TxDOT-owned property and ROWs in high-need locations where truck parking can be quickly and efficiently implemented through cost-effective improvements. Some of these locations may require simple improvements such as adding pavement or gravel and access improvements, while others could include more formal striping and lighting. These locations

tend to have basic amenities (i.e., no restrooms) and lower O&M costs compared to the other opportunity sites identified in this Action Plan. As shown in Figure 5-18, currently there are 13 truck parking maintenance projects identified for the Far West Region. These sites will primarily serve short-term staging needs and rest breaks.

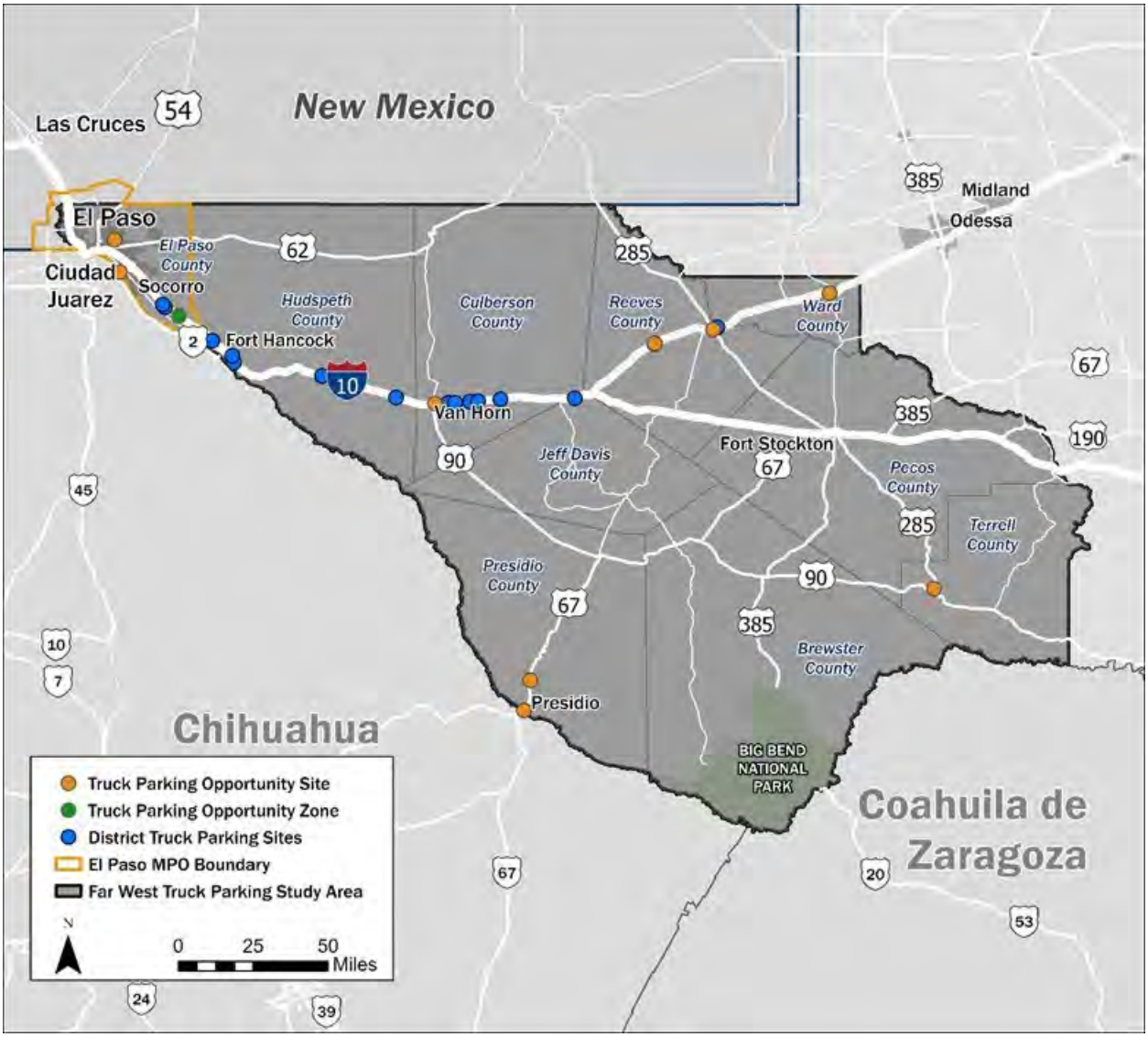
Figure 5-18: Far West Texas Region District Maintenance Sites



5.5.2 All Regional Sites

As documented throughout this chapter, there are numerous initiatives underway by the TxDOT El Paso and Odessa Districts to address unique truck parking needs through planning, designing, and implementing truck parking projects throughout the Far West Texas Region. In total, 23 proposed or existing projects were identified that are in various stages of the project development process, and implementation will provide critical truck parking capacity in the region. Figure 5-19 provides a comprehensive map of all planned or implemented truck parking projects in the Far West Texas Region including the opportunity sites identified in this Action Plan.

Figure 5-19: Far West Texas Region Truck Parking Sites



Chapter 6:

Implementation

Texas Department of Transportation

6 Implementation

As documented in this Action Plan, the shortage of truck parking throughout the Far West Texas Region is exacerbated by several factors, including but not limited to public truck parking options, inadequate facilities at border crossings, limited funding, inconsistent parking regulation enforcement, restrictive local ordinances and development codes, and incompatible land uses. These challenges deter the effective implementation programs, policies, and projects aimed at addressing these issues. However, the robust stakeholder engagement process and data driven needs assessment conducted during Plan development provided the opportunity to raise awareness and advance early implementation activities. These activities also highlighted the strong necessity of existing partnerships and commitments to overcome these challenges and deliver truck parking solutions.

This commitment to improving safety and solving regional truck parking challenges through collaboration among TxDOT, EPMPO, PBMPO, PBRPC, Rio Grande COG, CRRMA, U.S. Customs and Border Patrol, and other stakeholders, such as elected officials, counties, and municipalities, led to early project development activities, coordination with existing construction projects, and submission of federal grant applications. With early implementation activities already underway, TxDOT and its regional stakeholders aim to enhance safety, reduce congestion, and increase efficiency throughout the region.

For many truck parking projects, funding availability can be a major roadblock to implementation, but recent significant federal and state investments in truck parking across the country have reinforced the critical need to address the truck parking shortage. Entities can leverage state and federal funding programs, including competitive grants, to advance the recommendations and projects identified in this Action Plan. The following chapter provides an overview of these opportunities:

- **State Funding Opportunities** – a summary of TxDOT funding sources and existing programs that can program District truck parking projects in the 10-year funding plan.
- **Federal Funding Opportunities** - legislation and discretionary and competitive grant programs public agencies can pursue to implement truck parking projects.
- **Next Steps** – actions that TxDOT, local public agencies, and private industries can take to implement the recommendations outlined in this Action Plan.

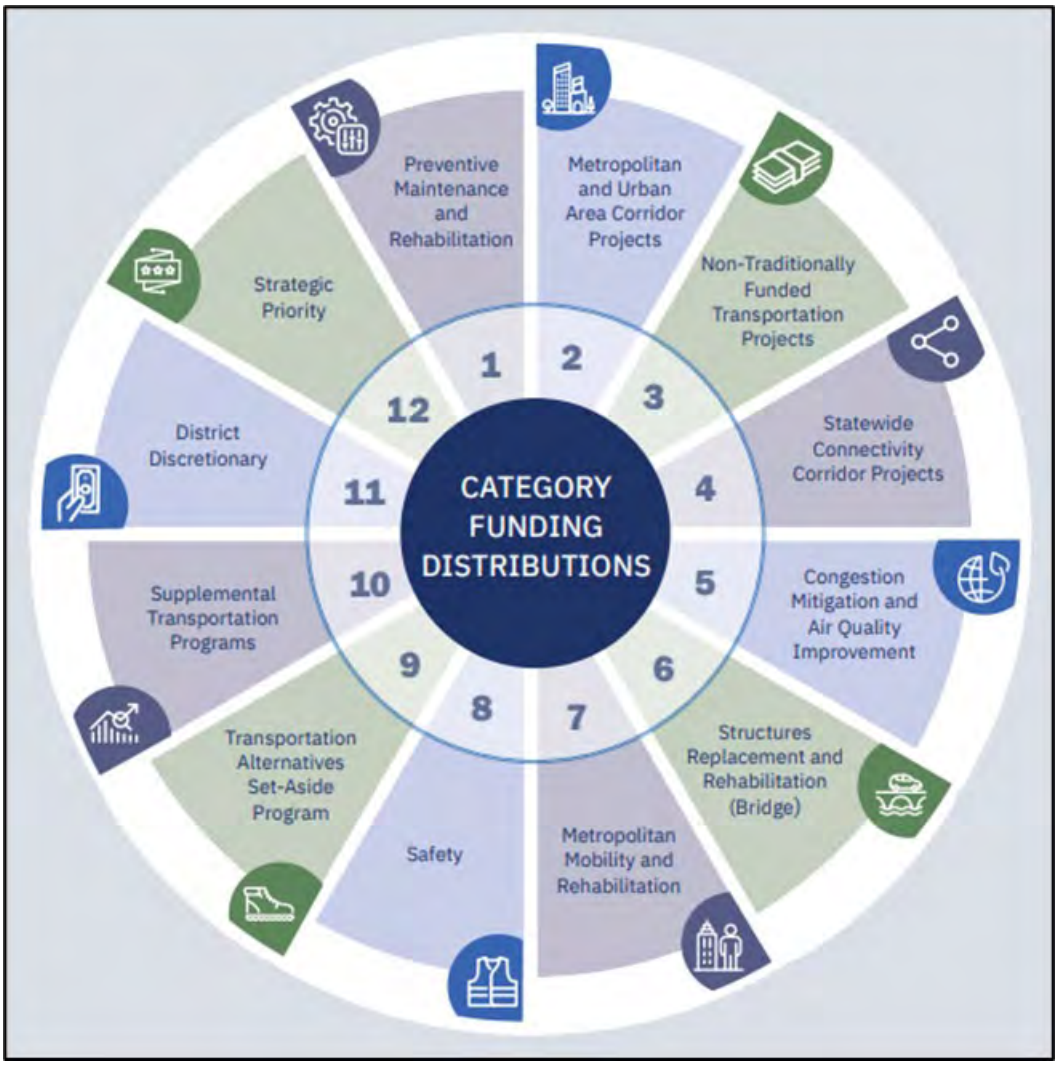
6.1 State Funding

Project funding is planned and updated annually through TxDOT's ten-year UTP. Projects compete for regional and statewide funding programs defined by the UTP categories. To evaluate projects and prioritize funding awarded through the UTP, TxDOT assesses the candidate project's alignment with TxDOT's safety, mobility, connectivity, and system preservation goals. Some projects may also compete for discretionary funding opportunities, such as federal grants.

The UTP consists of 12 funding categories with varying purposes, decision making processes, and project requirements. For example, the El Paso and Odessa Districts are developing truck parking as a component of larger highway projects under Categories 2, 4, and 12, which are programs specifically prioritizing mobility and connectivity. Additional truck parking solutions may be programmed through more targeted programs within Category 10, such as the Carbon Reduction Program and Texas Truck Parking Initiative. Figure 6-1 highlights the 12 UTP Funding Distribution Categories:

1. Preventative Maintenance and Rehabilitation
2. Metropolitan and Urban Area Corridor Projects
3. Non-Traditionally Funded Transportation Projects
4. Statewide Connectivity Corridor Projects
5. Congestion Mitigation and Air Quality Improvement
6. Structure Replacement and Rehabilitation
7. Metropolitan Mobility and Rehabilitation
8. Safety
9. Transportation Alternatives Set-Aside Program
10. Supplemental Transportation Programs
11. District Discretionary
12. Strategic Priority

Figure 6-1: UTP Funding Distribution Categories



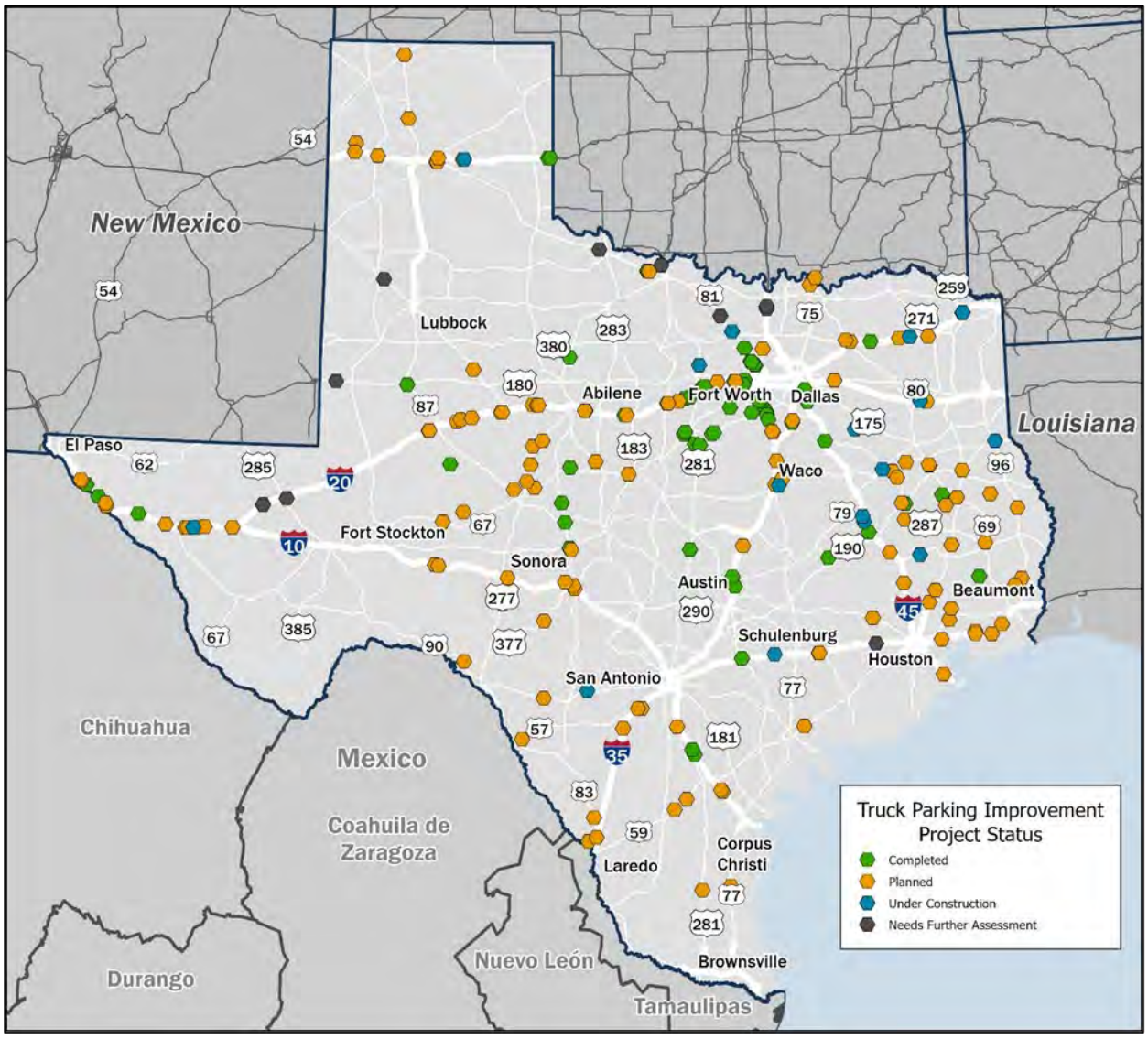
In addition to these project development efforts, the El Paso and Odessa Districts are also developing near-term solutions through district maintenance efforts. For example, the TxDOT Maintenance Division recently constructed new SRAs in Culberson County funded from Funding Category 9 and plan to convert old SRAs into truck-parking-only facilities. These strategic efforts are targeted at appropriate locations, where TxDOT-owned property can quickly and efficiently accommodate truck parking by adding pavement or gravel, along with needed access improvements.

6.1.1 Texas Truck Parking Initiative

To help address the need for safe truck parking locations, TxDOT has committed $300 million to the statewide Texas Truck Parking Initiative within the 2024 UTP under Funding Category 10.[16] Roughly $30 million of truck parking improvement projects will be funded per year from 2024 through 2033, including new truck parking construction, expansion of existing parking, and access and operational improvements. TxDOT's Maintenance Division leads this effort in coordination with all 25 TxDOT districts to deliver truck parking solutions across Texas. Currently, 13 projects are planned for funding through the Statewide Truck Parking Initiative within the El Paso and Odessa Districts. Figure 6-2 displays the list of Statewide Truck Parking Initiative projects categorized by their current project status.

[16] 2024 Unified Transportation Program, page 186. https://ftp.txdot.gov/pub/txdot/get-involved/tpp/utp/070723-draft-2024utp.pdf

Figure 6-2: Statewide Truck Parking Initiative Projects



6.1.2 Border Infrastructure Funding

Stakeholder engagement and technical analysis conducted for this Action Plan identified several issues related to commercial vehicle traffic and truck parking at border crossings that affect efficiency, safety, and the overall flow of goods and people. El Paso border crossings are some of the busiest in the nation, which has highlighted issues related to:

- Congestion caused by high daily traffic volumes, inspection delays, parking and staging overflow issues, and compliance issues as vehicles cross northbound from Mexico.
- Limited designated parking and staging areas leading to unauthorized parking and increased border wait times.

These reasons highlight the need for additional efforts outlined in this Action Plan, as well as parallel efforts with the BTMP and Region to Region Connectivity Study, as they continue to progress in addressing the El Paso District's border crossing truck parking and staging needs.

6.2 Federal Funding Support

Local and state funds will not be sufficient to construct all truck parking opportunity sites identified in this Action Plan. TxDOT and its partners must leverage federal funding opportunities and encourage local agencies and industries to support these efforts. The trucking industry supports the proposed H.R. 2367 Truck Parking Safety Improvement Act, which would provide up to $755 million in dedicated funding over three years for the construction of safe and secure truck parking. The bill was passed in 2023 by the House Committee on Transportation and Infrastructure with an overwhelming majority; however, the act is currently awaiting further action.

Further, the U.S. House Appropriations Committee released its fiscal year (FY) 2025 funding bill in June 2024 which includes $200 million for truck parking availability. Members of the Appropriation Committee approved the bill in July 2024.

In the near term, there are numerous existing federal formula funding programs and competitive grant funds through the Infrastructure Investment and Jobs Act (IIJA) that provide competitive opportunities for TxDOT and its partners, including MPOs, cities, and counties, to secure additional federal funds for truck parking projects. In 2023, the U.S. Department of Transportation (USDOT) provided more than $80 million in grant awards to support truck parking improvements, which is a 65% increase over the previous year. In early 2024, USDOT announced $292 million in truck parking related federal grants, the largest of which was a $180 million grant for the Florida Department of Transportation (FDOT) to build over 900 new truck parking spaces along the I-4 corridor in Central Florida.

Table 6-1 highlights federal formula funding programs and discretionary grant programs that have the greatest potential to fund truck parking capacity projects or components of truck parking projects.

Table 6-1: Federal Discretionary Grant and Formula Funding Programs for Truck Parking

Discretionary Grant Programs	Formula Funding Programs
Infrastructure for Rebuilding America (INFRA)	Surface Transportation Block Grant (STBG)
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	National Highway Freight Program (NHFP)
Rural Surface Transportation Grants	Highway Safety Improvement Program (HSIP)
National Infrastructure Project Assistance (MEGA)	National Highway Performance Program (NHPP)
Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT)	Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT)
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)	

Federal Discretionary Grant Programs that have historically funded regionally significant truck parking projects include:

- **National Infrastructure Project Assistance (Mega)**: Funds large, complex projects that may be difficult to fund by other means and will provide significant benefits to the U.S. economy, mobility, or safety located on the National Multimodal Freight Network (NMFN), the National Highway Freight Network (NHFN), or National Highway System (NHS).

- **Nationally Significant Multimodal Freight and Highway Projects (INFRA)**: Funds freight, highway, and other intermodal projects of national or regional significance located on or connected to the NHFN or NHS.

- **Rural Surface Transportation Grant Program (RURAL)**: Funds highway, freight, and other projects that improve transportation infrastructure connectivity to rural regions while improving the safety, reliability, and mobility of people and freight.

- **Rebuilding American Infrastructure with Sustainability and Equity (RAISE)**: Funds multimodal transportation infrastructure projects that have significant local or regional impact and achieve national objectives.

Additional Federal grant programs that could be used to support truck parking projects, especially technology components like TPAS, curbside management, and reservation systems include:

- **FMCSA High Priority Innovative Technology Deployment (HP-ITD)**: Funds innovative technology deployment projects that enhance commercial motor vehicle safety.

- **Advanced Transportation Technologies and Innovative Mobility Deployment (ATTIMD)**: Funds advanced technology deployment projects that improve safety, mobility, connectivity, and system performance.

- **Strengthening Mobility and Revolutionizing Transportation (SMART)**: Funds demonstration projects focused on advanced smart community technologies and systems that will improve transportation efficiency and safety.

This is not an exhaustive list of every available grant opportunity that could be used to support a truck parking project. TxDOT encourages potential applicants to visit the USDOT Grants website for more information on available grants, project requirements, and funding limits and matches before beginning development of a grant application.

6.2.1 Grant Partnership Spotlight

The project team was able to support the development of project concepts used by regional stakeholders to pursue grants and alternative funding sources that would support implementation. This was accomplished by leveraging the extensive feedback obtained through the Action Plan's stakeholder engagement efforts.

For example, the TxDOT Odessa District partnered with the City of Pecos and Reeves County to develop a federal grant application seeking FY2024 RAISE funding for the Pecos Freight Village Concept, a project aimed at providing safe and affordable truck parking with private and public amenities to create a one-of-a-kind truck parking facility. The proposed concept would be located off

I-20 near the I-10 split and would provide approximately 280 spaces for two- to four-hour truck staging, 192 spaces for overnight parking, and 160 spaces for long-term truck parking. The project would include the following components to provide a range of services for trucks in need of short- to long-term facilities:

- Amenity center
- Security fencing
- Walking trails
- Enhanced connections to I-20 and US 285
- Space for future private developments
- Shade trees and landscaping
- Safety Lighting

Overall, the Pecos Freight Village Concept would add parking in an area of need, promote freight economic development, improve safety by mitigating the need for unauthorized truck parking, and improve the overall quality of life for truck drivers and local communities impacted by unauthorized truck parking.

Figure 6-3: Pecos Freight Village Draft Conceptual Plan

6.3 Next Steps

TxDOT will continue to support Action Plan implementation through the Texas Truck Parking Initiative and coordination with regional partners. Funding support through state and federal programs can help move regional truck parking projects through the project development process into construction and operations. However, as noted in Chapter 4, advancing the Action Plan recommendations will require continued collaboration between TxDOT and local public and private sector partners in the region.

This Action Plan provides the resources to continue the dialogue with local partners to raise public awareness and the program and policy tools to implement solutions beyond the THFN. The EPMPO, PBMPO, PBRPC, Rio Grande COG, CRRMA, and local governments in the Far West Region are encouraged to use these resources and integrate truck parking considerations into their planning processes. They should also support messaging and information sharing with decision-makers and the public regarding the critical need for freight and the supporting infrastructure including truck parking facilities to improve safety, increase economic competitiveness, and enhance the quality of life for residents, businesses, and local communities. These resources can be found at TxDOT.gov. Search “Truck Parking” and review the Far West Texas Truck Parking webpage.