Chapter 3: Transportation Assessment

3.1. Introduction

The El Paso region's transportation system is the foundation of regional mobility, economic opportunity, and quality of life. As the region grows and evolves, so do the demands on its multimodal network. This chapter provides a comprehensive assessment of the current state of the system, identifies pressing needs, and outlines strategies for improvement across all major modes: roadways, freight, and Ports of Entry, transit, and active transportation. The analysis draws on the latest data and findings from the RMS 2052 Existing Conditions and Needs Analysis technical memoranda, ensuring that recommendations are grounded in robust evidence and aligned with regional goals.

The chapter is organized by mode, with each section presenting a summary of existing conditions, an analysis of needs, and a set of actionable recommendations and strategies. Throughout, references are made to supporting tables, figures, and maps to provide a data-driven foundation for decision-making. For additional information and details on existing conditions, please refer to **Appendix B: Existing Conditions**. For additional information and details on needs, recommendations, and strategies, refer to **Appendix D: Existing Needs Analysis**.

Figure 3-1. Socorro Road

3.2. Roadways

The roadway system forms the core of regional mobility in the EPMPO area. While local streets comprise most lane miles, regional person and freight movements depend on a comparatively small share of higher functional class facilities, most notably IH-10, Loop 375, and principal arterials, that connect neighborhoods, job centers, industrial districts, and Ports of Entry. The analysis in this section documents how that system is performing today and where targeted recommendations and strategies that align with identified needs can most effectively enhance safety, reliability, and multimodal access.

3.2.1. Existing Conditions

The EPMPO region's roadway network is extensive and diverse, serving as the backbone for personal mobility, freight movement, and transit operations. The network is dominated by local roads, which account for 64% of total lane miles, but critical mobility is provided by interstates (notably IH-10), principal arterials, and collectors (see **Table 3-1**).

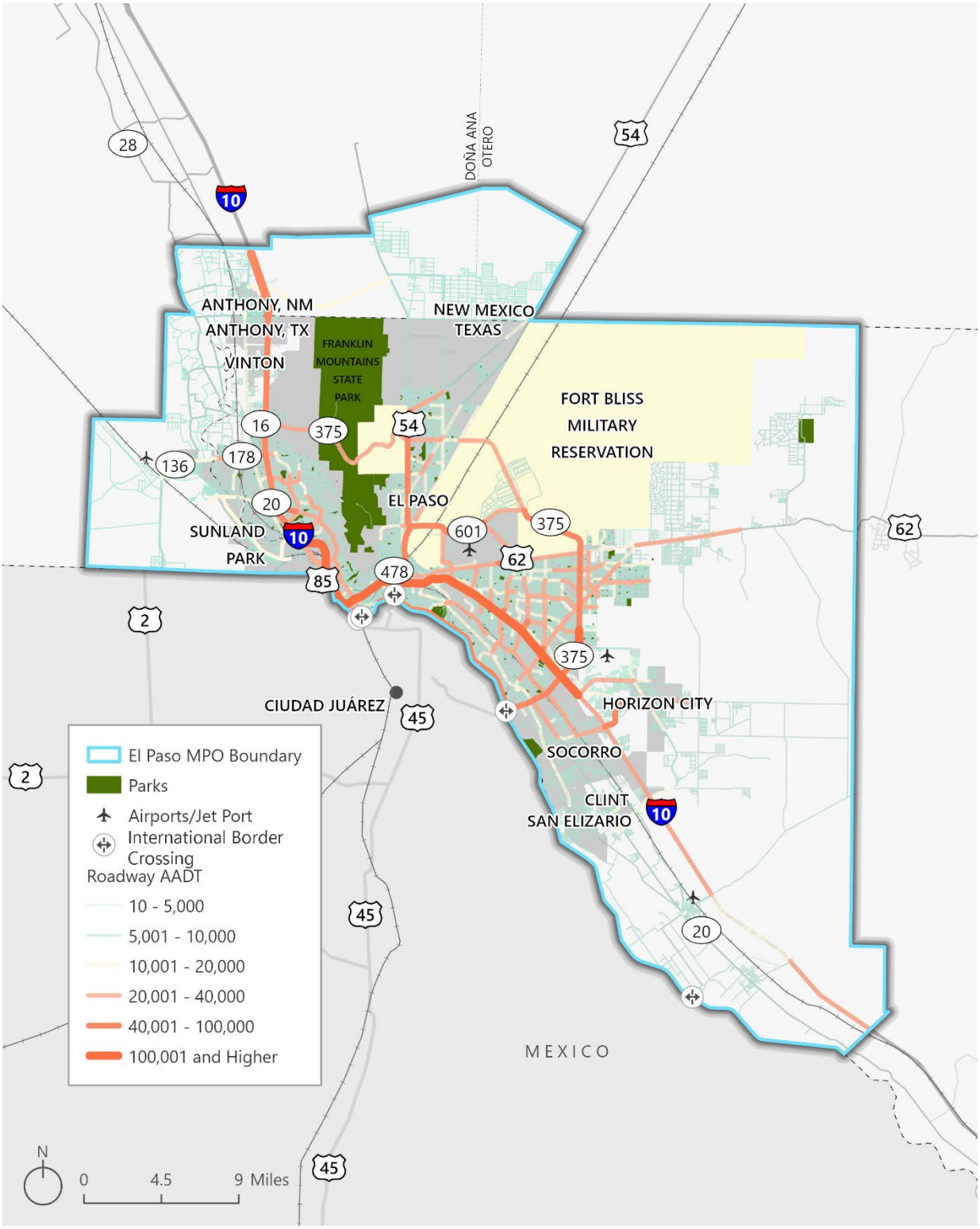
Table 3-1: Lane Miles by Functional Classification

Functional Classifications	Texas		NM		Total EPMPO	
	Lane Miles	Percentage	Lane Miles	Percentage	Lane Miles	Percentage
Interstate	338.4	4.0%	18.0	2.7%	356.4	3.9%
Freeway and Expressway	294.7	3.5%	0.0	0.0%	294.7	3.2%
Principal Arterial	1064.1	12.6%	88.5	13.0%	1152.6	12.6%
Minor Arterial	692.1	8.2%	32.5	4.8%	724.6	7.9%
Major Collector	604.6	7.2%	57.7	8.5%	662.4	7.3%
Minor Collector	52.2	0.6%	15.2	2.2%	67.4	0.7%
Local	5391.7	63.9%	468.7	68.9%	5860.4	64.3%

Source: Texas Department of Transportation Roadway Inventory & New Mexico Department of Transportation Roadway Inventory

Traffic volumes are highest along IH-10 and Loop 375, with major congestion and crash hotspots concentrated in urban corridors. **Figure 3-2** illustrates the spatial distribution of average annual daily traffic (AADT), with the busiest corridors exceeding 100,000 vehicles per day.

Figure 3-2: Traffic Volume



Source: Texas Department of Transportation Roadway Inventory & New Mexico Department of Transportation Roadway Inventory

Level of Service and Congestion Analysis

Level of Service (LOS) is a standard measure used to evaluate roadway performance from the drivers' perspective, focusing on congestion and travel time delays. In the EPMPO region, LOS is described by the Volume-to-Capacity (V/C) ratio, which compares the number of vehicles using a roadway to the number it was designed to accommodate. As the V/C ratio approaches or exceeds 1.0, the roadway becomes increasingly congested, with traffic flow deteriorating and delays becoming more frequent.

Table 3-2 summarizes the LOS categories based on V/C ratios, as defined by the USDOT, and describes the typical operating conditions experienced at each level.

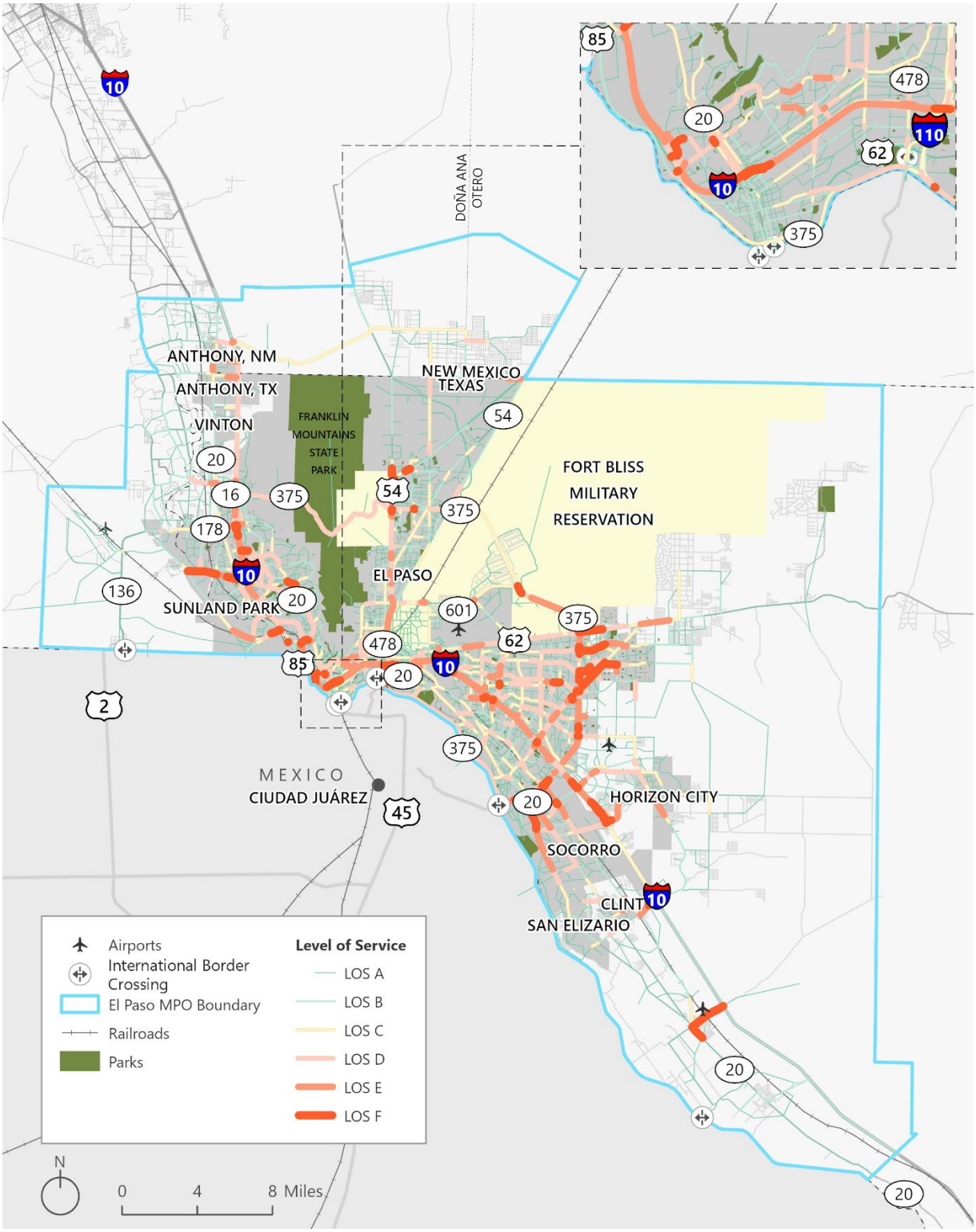
Table 3-2: Level of Service (LOS) Categories

LOS	V/C Ratio	General Operating Conditions
A	0.0 – 0.2	Free flow, low volumes, high speeds
B	0.2 – 0.4	Reasonably free flow, minor speed restrictions
C	0.4 – 0.6	Stable flow, limited freedom to select speeds
D	0.6 – 0.8	Approaching unstable flow, little freedom to select speeds
E	0.8 – 1.0	Unstable flow, short stoppages possible
F	>1.0	Forced or breakdown flow, unacceptable congestion, stop-and-go

Figure 3-3 illustrates the LOS across EPMPO roadways during the evening peak period (3:30 pm to 7:30 pm) for the baseline year 2022, when travel demand is at its highest. This analysis highlights the most congested corridors, including IH-10, IH-10 frontage roads, and segments of Socorro Road, Artcraft Road, and Eastlake Boulevard. These locations experience the greatest strain during peak hours and should be prioritized for congestion mitigation improvements.

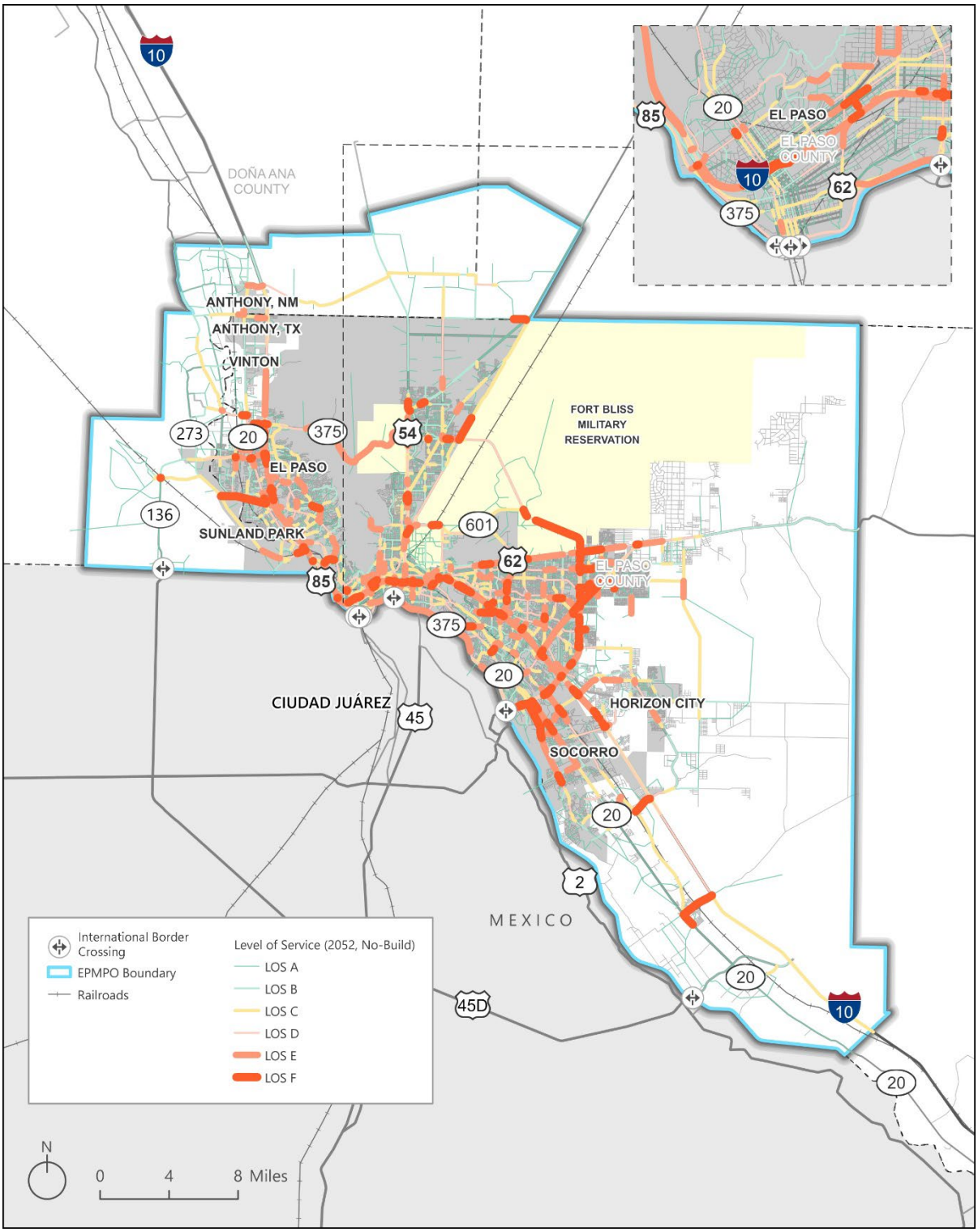
Figure 3-4 depicts the LOS across the region if no new improvements are implemented in 2052. This shows that roadway improvements are needed to address movement of goods and people in the future. In addition to targeted roadway enhancements, policy measures, such as land use strategies and parking management, can help reduce vehicle demand and alleviate congestion across the region.

Figure 3-3: Base Year 2022 Evening (PM) Level of Service (LOS) in the EPMPO Area



Source: EPMPO Travel Demand Model Output, 2025.

Figure 3-4: No Build 2052 Evening (PM) Level of Service (LOS) in the EPMPO Area



Source: EPMPO Travel Demand Model Output, 2025.

Safety Analysis

Safety remains a central concern for the EPMPO region's roadway network, with persistent challenges related to crash frequency, severity, and societal impact. A comprehensive safety analysis was conducted using crash data from both the Texas Department of Transportation (TxDOT) Crash Record Inventory System (CRIS) and the New Mexico Department of Transportation (NMDOT) Statewide Traffic Records System (STRS), covering the years 2019 through 2023.

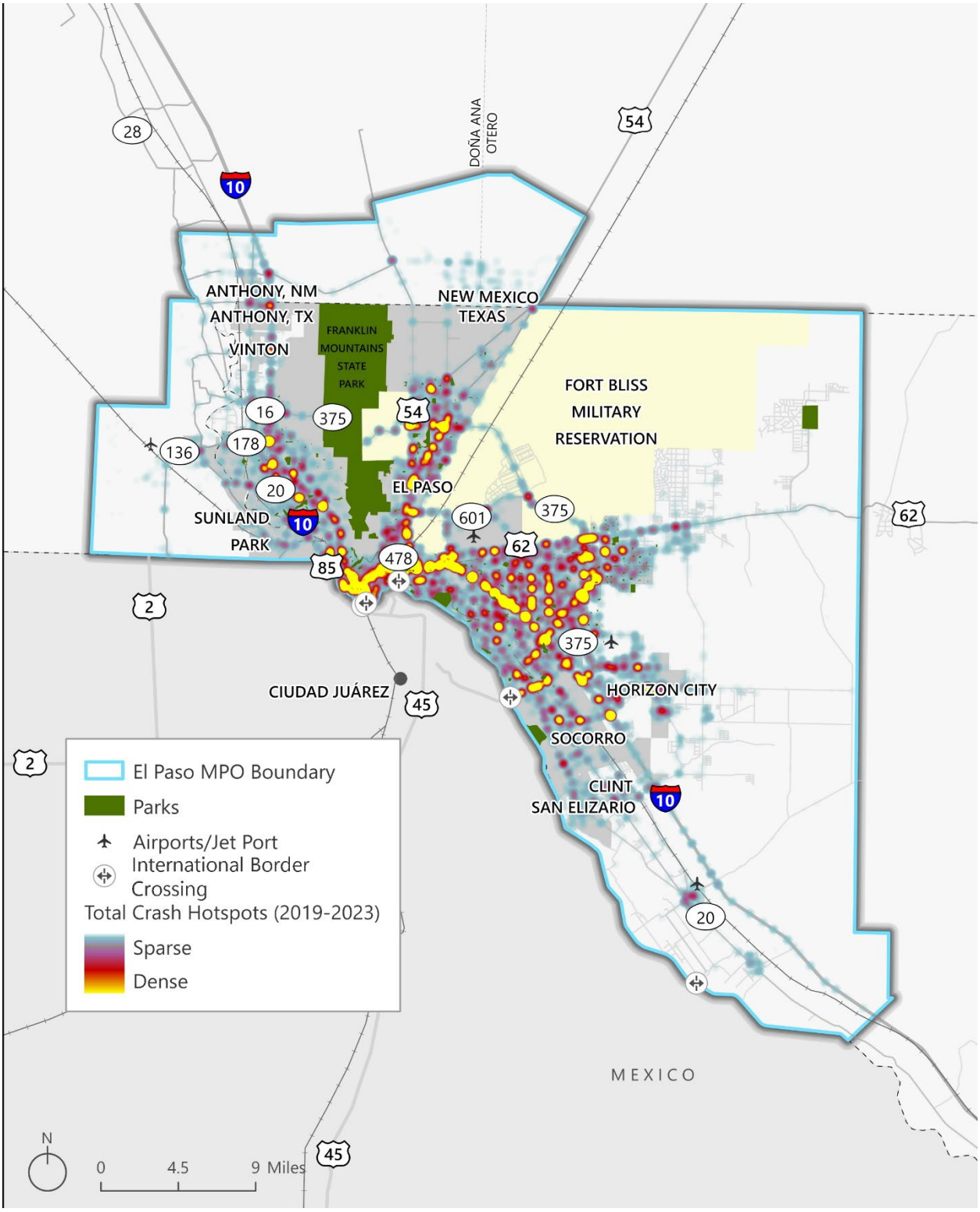
Crash Locations and Hotspots

Over the five-year period, a total of 112,697 crashes were recorded across the MPA, averaging more than 22,500 crashes annually. The highest number of crashes occurred in 2022, coinciding with the return of travel activity following COVID-19 disruptions, while the lowest was in 2020, reflecting reduced travel during the pandemic.

Spatial analysis reveals that crash hotspots are concentrated in urbanized areas, particularly Downtown El Paso and along major corridors such as IH-10, SH 20, US 62, Loop 375, US 54, and US 85. Fatal crash hotspots are similarly clustered in these high-volume corridors, underscoring the need for targeted safety interventions (see **Figure 3-6** for hotspots for all crashes and **Figure 3-7** for hotspots for fatal crashes exclusively).

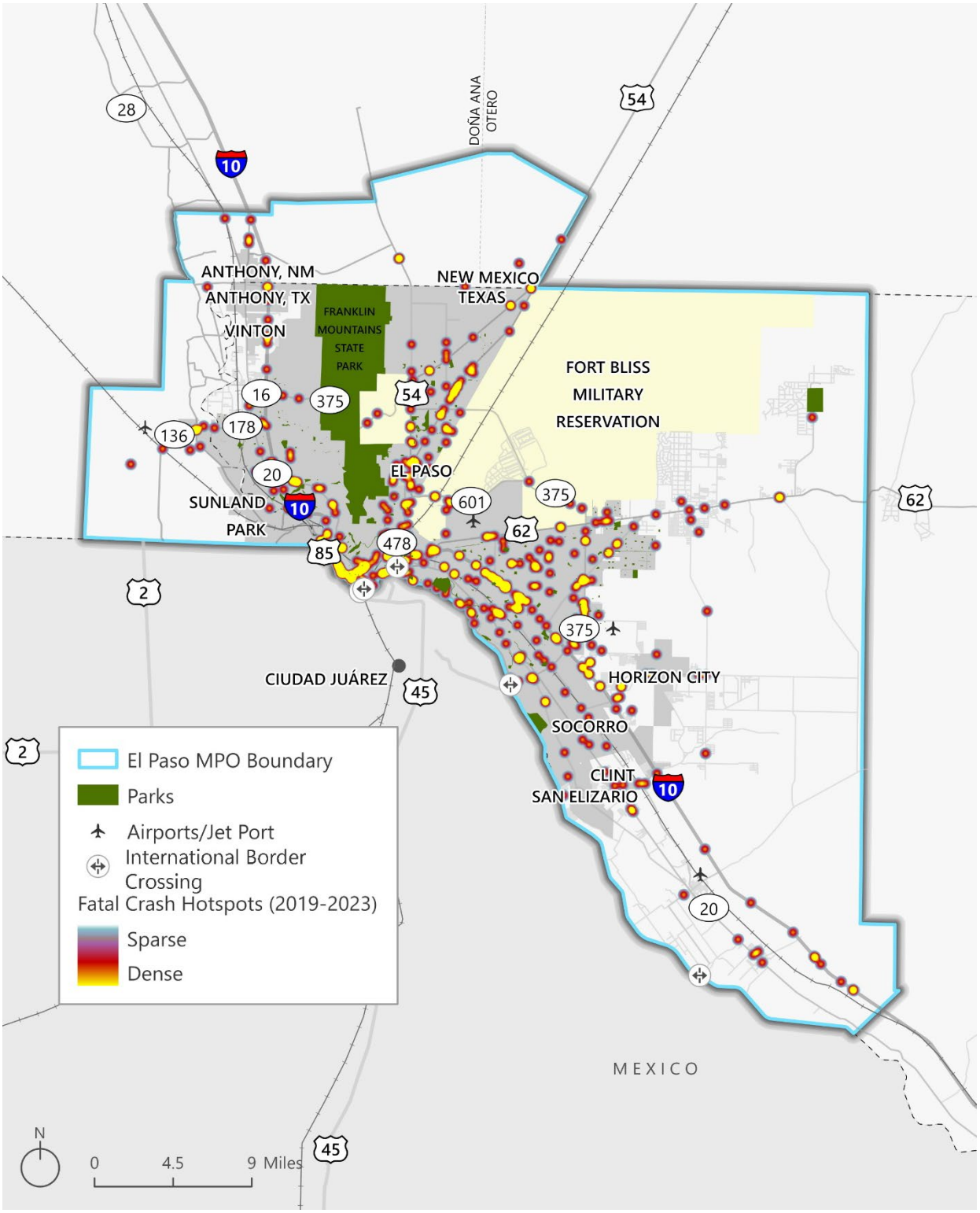
Figure 3-5. Traffic Light on Street

Figure 3-6: Crash Hotspots (2019–2023)



Source: Texas Department of Transportation Crash Record Inventory System and the New Mexico Department of Transportation Statewide Traffic Records System

Figure 3-7: Fatal Crash Hot Spots



Source: Texas Department of Transportation Crash Record Inventory System and the New Mexico Department of Transportation Statewide Traffic Records System

Crash Severity

Crashes are categorized by severity, ranging from no injury to fatal injury. As shown in **Table 3-3**, the majority of crashes resulted in no injury (75,832), followed by possible injury (12,457) and minor injury (10,781). Serious injury and fatal crashes, while less frequent, remain a significant concern, with 1,287 serious injury crashes and 441 fatal crashes recorded over five years.

Table 3-3: Count of Crashes by Severity (2019-2023)

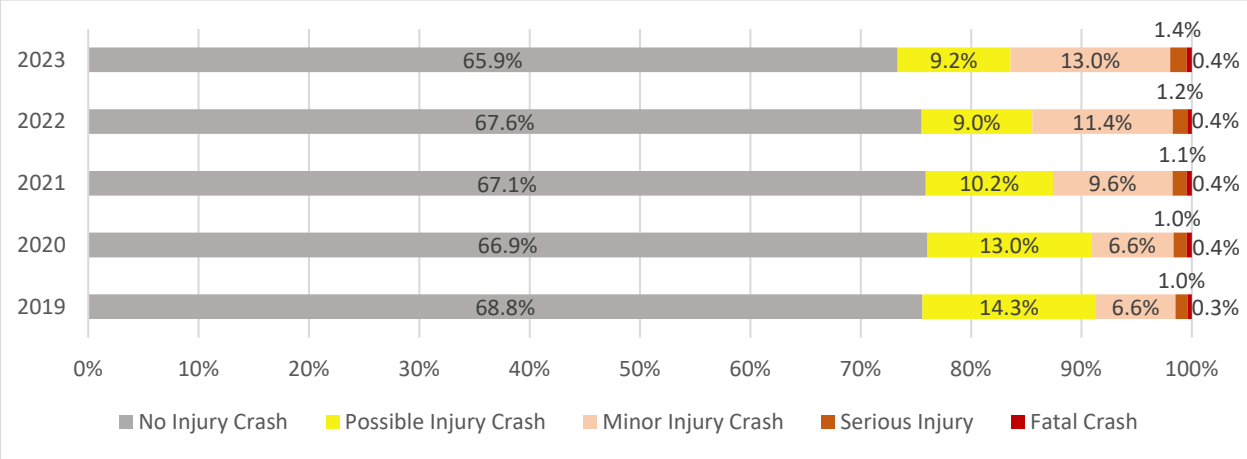
Crash Severity	2019	2020	2021	2022	2023	Total
Possible Injury Crash	3,366	2,410	2,337	2,175	2,169	12,457
Minor Injury Crash	1,545	1,216	2,196	2,758	3,066	10,781
Serious Injury Crash	234	192	256	286	319	1,287
Fatal Injury Crash	82	76	97	89	97	441
No Injury	16,186	12,367	15,376	16,364	15,539	75,832

Source: Texas Department of Transportation Crash Record Inventory System and the New Mexico Department of Transportation Statewide Traffic Records System

The distribution of crash severity is further illustrated in **Figure 3-8**, which shows that non-injury crashes accounted for approximately two-thirds of all incidents, while possible and minor injuries comprised most of the remainder. Fatal and serious injury crashes represented about 1.7% of all crashes, but their impact is disproportionately high.

Trends in crash severity indicate that, although there was a decline in fatal and serious injury crashes in 2020, these numbers have steadily increased from 2021 through 2023. This pattern highlights the ongoing need for safety improvements, particularly in locations with recurring severe crashes.

Figure 3-8: Percent of Crashes by Severity (2019-2023)



Source: Texas Department of Transportation Crash Record Inventory System and the New Mexico Department of Transportation Statewide Traffic Records System

Crash Cost to Society

Beyond the immediate human impact, crashes impose a substantial economic burden on the region. Using Federal Highway Administration (FHWA) unit cost estimates, the total societal cost of crashes in the EPMPO region exceeded $10.4 billion over five years (in 2016 dollars). Nearly half of this cost – $5.8 billion – is attributable to injuries and fatalities (**Table 3-4**).

Table 3-4: Cumulative Crash Costs by Severity for El Paso MPA

Severity	Crashes	Comprehensive Crash Unit Cost (2016 dollars)
Serious Injury	1,287	$842,985,000
Minor Injury	10,781	$2,140,028,500
Possible Injury	12,457	$1,564,599,200
Fatal Injury	441	$4,981,271,400
No Injury	75,832	$902,400,800

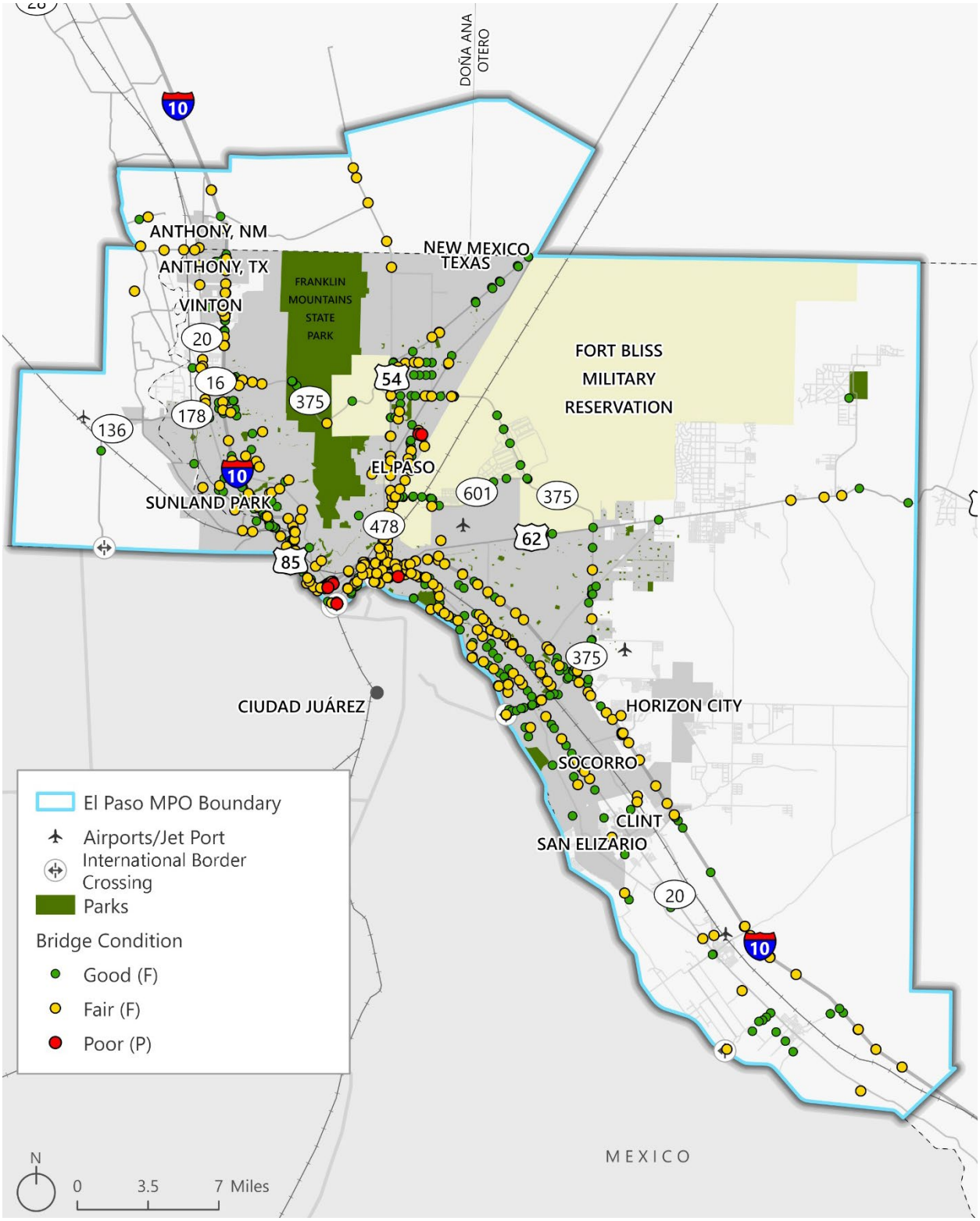
These figures underscore the urgency of implementing effective safety countermeasures, focusing resources on high-risk corridors and intersections, and prioritizing strategies that reduce the frequency and severity of crashes for all roadway users.

Asset Condition

Bridges are a critical element of regional reliability. The region's 800 bridges are a critical component of the transportation network. Across the El Paso MPA, 45% of bridges are rated "Fair" and 1% "Poor" (**Figure 3-10**). Vertical clearance is an operational constraint on several freight-relevant corridors: 19 bridges have less than 15 feet of clearance (with additional structures between 15.0–16.4 feet). These low-clearance locations are concentrated along IH-10 and US-62 and can affect routing, safety, and incident risk for over-height vehicles.

Figure 3-9. Sunset Heights

Figure 3-10: Bridge Conditions



Source: Federal Highway Administration. National Bridge Inventory.

3.2.2. Roadway Needs

Determining Roadway Needs

Roadway needs were identified through a comprehensive review of existing conditions, including traffic volumes, congestion patterns, crash data, and asset condition assessments. The analysis incorporated both quantitative measures, such as AADT, V/C ratios, and crash severity, and qualitative input from regional stakeholders. This dual approach ensures that the needs reflect the realities of daily travel, safety concerns, and infrastructure challenges unique to the El Paso region.

Identified Needs

- **Safety**: Targeted interventions are needed at crash hotspots, especially in high-volume corridors and for road users with limited access (pedestrians, cyclists).
- **Congestion**: Operational improvements and targeted capacity enhancements are required to address recurring congestion, particularly on IH-10, Loop 375, and key arterials.
- **Asset Management**: Ongoing maintenance and upgrades are needed for aging infrastructure, especially bridges in fair/poor condition and corridors with low vertical clearance.
- **Multimodal Integration**: Facilities must be enhanced to support transit and active transportation, including first/last-mile connections and safe crossings.

3.2.3. Roadway Recommendations & Strategies

Developing Roadway Recommendations

Recommendations for the roadway system were developed to be context-sensitive and responsive to the specific needs of the El Paso region. Drawing on national and state best practices, as well as lessons learned from peer MPOs, each strategy was tailored to local conditions, priorities, and resource constraints. The recommendations are designed to be actionable, measurable, and aligned with the region's long-term vision for mobility, safety, and sustainability.

Recommendations & Strategies

- **Capacity and Operations:**
    - Implement Intelligent Transportation Systems (ITS) and advanced traffic management to optimize flow and reduce delays.
    - Improve roadway functionality through targeted capacity enhancements and operational strategies, such as signal timing and access management.

- Consider parking controls and demand management to reduce congestion in high-activity areas.

- **Safety:**
  - Prioritize safety countermeasures, including improved lighting, signage, lane markings, and traffic calming.
  - Implement protected bike lanes, pedestrian crossings, and intersection redesigns at high-risk locations.
  - Target crash hotspots with countermeasures such as lower speed limits, roundabouts, and median barriers.
- **Asset Management:**
  - Focus on bridge maintenance and develop an asset management framework to prioritize repairs and replacements.
  - Address bridges with low vertical clearance to improve freight mobility and safety.
- **Multimodal Upgrades:**
  - Expand bike lanes, sidewalks, and transit access along key corridors.
  - Integrate multimodal considerations into all roadway projects, ensuring safe and convenient connections for all users.

3.3. Freight & International Border Crossings

The El Paso region anchors one of the United States' most consequential binational freight gateways. Its multimodal freight system – highways, railroads, airports, pipelines, and a set of international border crossings (IBCs) – moves time-sensitive, high-value, and high-volume goods within Texas, across the U.S., and to/from Mexico. The backbone of this system is a truck-reliant highway network supported by two Class I railroads (Union Pacific and BNSF), a growing air cargo platform at El Paso International Airport (ELP), key intermodal terminals (including UP's Santa Teresa Facility), and a constellation of truck-oriented industrial districts and services near IH-10/Loop 375.

Designations under federal and state programs underscore the network's national significance. Within the National Highway Freight Network (NHFN), the EPMPO area contains 84.48 miles of the Primary Highway Freight System (PHFS), including key corridors such as IH-10, Airway Blvd, Hawkins Blvd, and NM 136/TX 178 linking the Santa Teresa IBC to IH-10. The region also features assets identified in the National Multimodal Freight Network (NMFN), including approximately 106 miles of rail on the NMFN (within a total regional rail mileage of approximately 112 miles), nine IBCs (six roadway, two rail, and one airport), and ELP as the primary air-cargo airport. In addition, Strategic Highway Network (STRAHNET)/Strategic Rail Corridor Network (STRACNET) designations link Fort Bliss to other strategic military nodes (e.g., Fort Cavazos, Red River Army Depot), emphasizing defense mobility needs.

Six roadway and two rail IBCs knit this network together – Santa Teresa, Paso del Norte, Good Neighbor (Stanton), Bridge of the Americas (BOTA), Ysleta-Zaragoza, Tornillo-Guadalupe, plus the UP and BNSF rail bridges – offering different modal allowances and lane configurations that shape how people and freight cross the border and connect to U.S. markets.

3.3.1. Existing Conditions and Trends

The EPMPO region is a critical gateway for US-Mexico trade. The Texas-Mexico border is North America's busiest trade gateway, with over $107 billion in trade passing through the El Paso region in 2019.

Freight Roadway Network

The majority of freight value in 2023 passing through El Paso goes through trucks on roadways. A safe, reliable, and connected roadway system is essential to deliver these goods that are distributed throughout the state and beyond. There are several facility designations for roadways across the region.

National Highway Network

The Fixing America's Surface Transportation (FAST) Act introduced the National Highway Freight Network (NHFN) to strategically direct federal resources and policies toward improved performance of highway portions of the freight transportation system. The IIJA/BIL authorizes $1.37 billion in Fiscal Year (FY) 2022 and $1.40 billion in FY 2023. The NHFN has several components.

- **Primary Highway Freight System (PHFS)** – The PHFS, as designated by the FHWA, is a network of highways identified as the most critical highway portions of the U.S. freight transportation system. The EPMPO portion of the PHFS totals 84.48 miles.
- **Other Interstate portions not on the PHFS** – These highways consist of the remaining portion of interstate highways not included in the PHFS. These routes provide important continuity and access to freight transportation facilities. EPMPO has zero miles of non-PHFS Interstates.
- **Critical Urban/Critical Rural Freight Corridors** – These designations were created at the federal level to allow TxDOT and MPOs to add to the NHFN. Critical Urban Freight Corridors (CUFCs) are determined by TxDOT in partnership with MPOs, and Critical Rural Freight Corridors (CRFCs) are designated by TxDOT. TxDOT is limited by federal law to approximately 745 miles of CRFC corridors and 382 miles of CUFC corridors. These locations must meet federal criteria and be submitted to FHWA to become eligible for National Highway Freight Program funding.

As shown in **Figure 3-12**, 84.48 miles of highway in the EPMPO area are designated as PHFS of the NHFN, including:

- **IH-10** from the TX/NM border to the EPMPO boundary near Tornillo.
- **Airway Boulevard** from the El Paso International Airport to IH-10
- **Hawkins Boulevard** from the Union Pacific Railyard to IH-10
- **NM SH136 / TX SH 178** from Santa Teresa POE in New Mexico to IH-10 in El Paso, Texas

National Multimodal Freight Network

In addition to the NHFN designation for important freight roadways, the FAST Act also provided a new National Multimodal Freight Network (NMFN) designation for other important freight multimodal infrastructure. The purpose of the NMFN is to:

- Strategically direct resources toward improved system performance for the efficient movement of freight.
- Inform freight transportation planning.

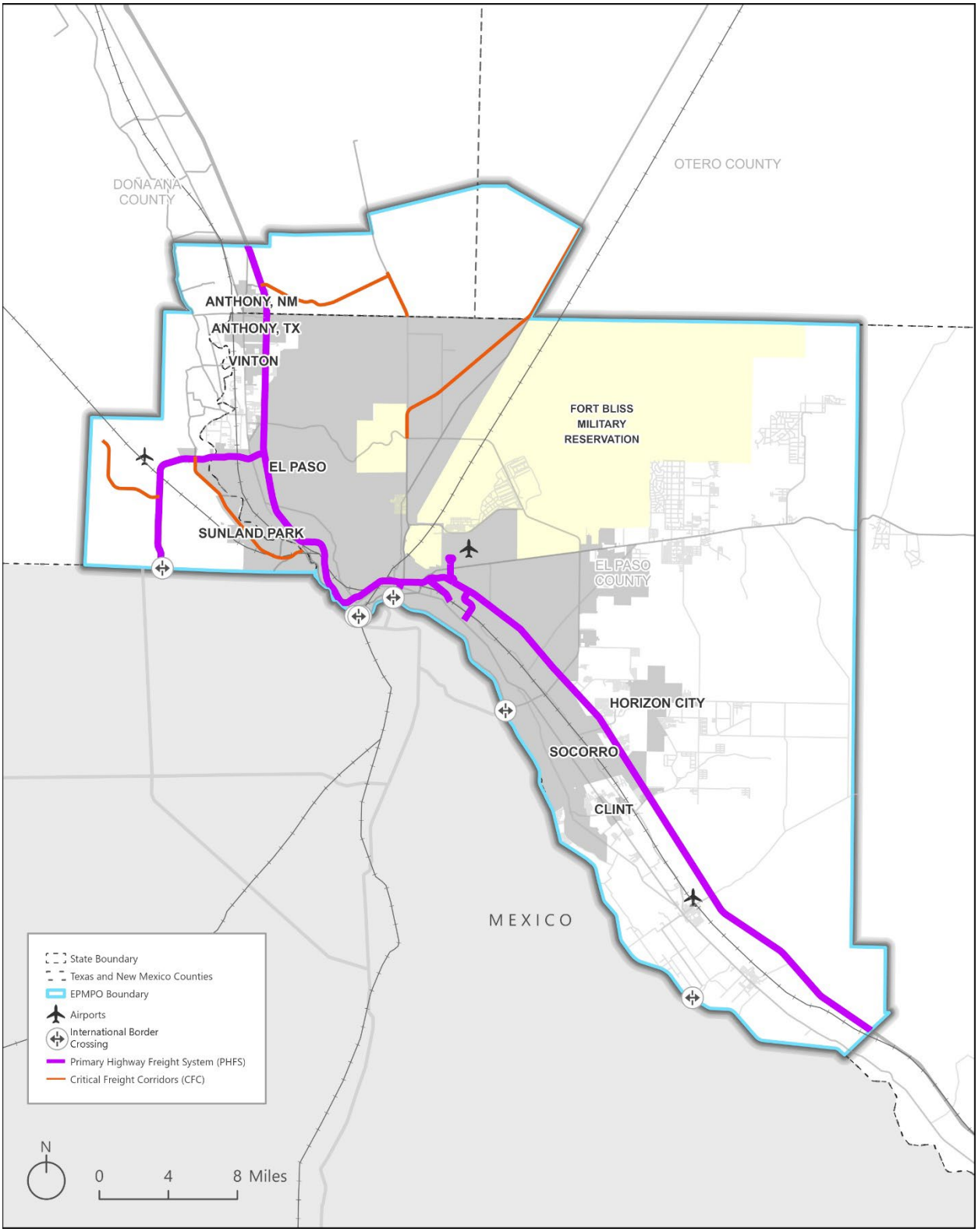
- Assist in the prioritization of federal investments.
- Evaluate and support investments to achieve national goals.

NMFN components within the El Paso region include:

- **Highways***:* 84.48 miles total, consisting of the NMFN designations of IH-10, SH 136/178, Airway Boulevard , and Hawkins Boulevard , as discussed above
- **Railways***:* 105.61 miles total, consisting of BNSF and Union Pacific (UP) railroads
- **International Border Crossings***:* Six roadway IBCs, two rail POEs, and one airport IBC
- **Airport***:* El Paso International Airport (ELP)

Figure 3-11. Paso del Norte International Border Crossing

Figure 3-12: National Highway Freight Network (NHFN)



Source: Federal Highway Administration National Highway Freight Network

Strategic Highway Network/ Strategic Rail Corridor Network

In addition to NHFN and NMFN designations, the USDOT has designated the Strategic Highway Network (STRAHNET) and Strategic Rail Corridor Network (STRACNET), which identify the highways and railroads most important for military transportation. In El Paso, Fort Bliss is connected by rail and the highway network to ensure connections with other primary deployment centers (Fort Cavazos) and key military arsenals (namely Red River Army Depot).

Truck Traffic and Land Use Conflicts

Traffic volumes help determine the type of improvements needed for different roadways. Data from TxDOT and NMDOT show truck percentages overlaid on land use in **Figure 3-14**. Segments with high truck share (10-25%) are shown in red, and very high share (>25%) in dark red, with some reaching up to 92%. The top corridors are labeled in **Figure 3-14** and listed in **Table 3-5**: Top Roadways of Truck Percentage of AADT. High truck concentrations can accelerate pavement deterioration, slow traffic, and increase crash risk. These corridors should be prioritized for improvements during MTP project selection.

Several locations also combine high truck percentages with adjacent residential land uses, creating noise, emissions, and safety concerns. These areas, listed in **Figure 3-13**, represent the most significant incompatibility for which mitigation strategies should be considered.

Table 3-5: Top Roadways of Truck Percentage of AADT

Map Number	Roadway
1	IH 10 from Horizon Boulevard to El Paso County Boundary
2	Ysleta-Zaragoza Bridge
3	Stockyard Drive from Ballard Coldwell Ct to Horizon Boulevard
4	Intersection of Henry Brennan Drive, Don Haskins Drive, and Peter Cooper Drive
5	Vista Del Sol from North Zaragoza Road to TX-Loop 375
6	Strauss Road from Pete V Domenici Highway to entry of Santa Teresa Intermodal Terminal
7	IH 10 from Paseo del Norte to Woodrow Bean Transmountain Drive
8	Stan Roberts Ave from McCombs Street to Gateway Boulevard

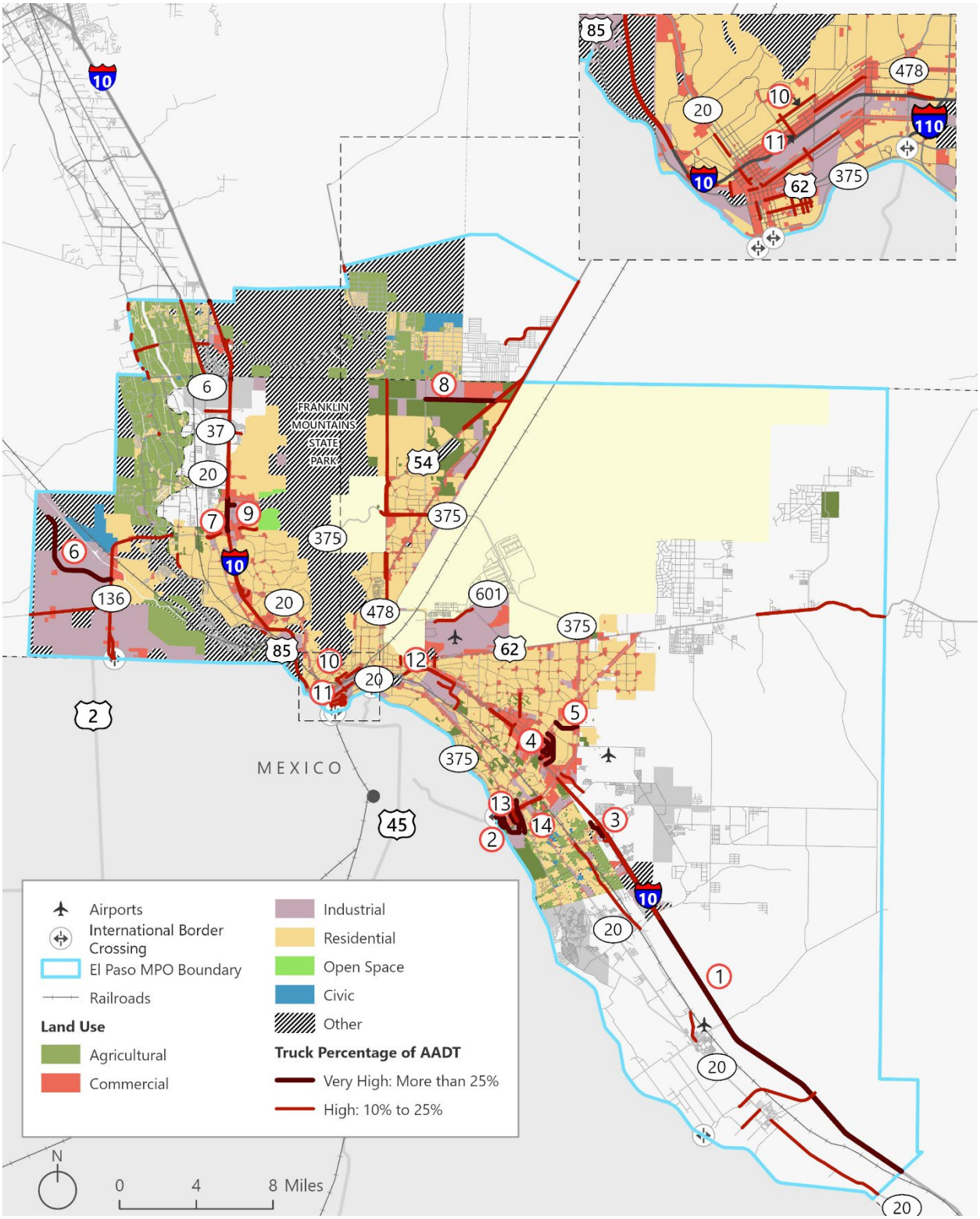
Source: WSP Analysis of Texas Department of Transportation, New Mexico Department of Transportation Data

Figure 3-13: Roadways with High or Very High Percentage of Truck AADT that are Adjacent to Residential Land Use

Map Number	Roadway (Percent of Truck AADT)	Adjacent Land Use
5	Vista Del Sol from North Zaragoza Road to Loop 375 (27.6%)	Residential and some commercial
9	Paseo Del Norte Road from North Resler Drive to Northern Pass Drive (12.8%)	Mostly residential
10	Arizona Avenue from Brown Street to North Cotton Street (10.0%)	Residential only
11	Newman Street from IH-10 to E Nevada Avenue (13.4%)	Residential and commercial
12	Chelsea Street from Timberwolf Drive to Trowbridge Drive (11.7%)	Residential only
13	Carl Longuemare Road from Nakitu Drive to Loop 375 (31.5%)	Residential and other land uses
14	Carl Longuemare Road from Loop 375 to Winn Drive (31.5%)	Residential and other land uses

Source: WSP Analysis of Texas Department of Transportation, New Mexico Department of Transportation Data

Figure 3-14: Roads with Highest Percentage of Truck AADT



Source: WSP Analysis of Texas Department of Transportation, New Mexico Department of Transportation Data. City of El Paso. City of Socorro. Doña Ana County CAD.

Truck Safety

Between 2019 and 2023, 6,345 crashes involving commercial trucks were recorded in the EPMPO region (TxDOT CRIS and NMDOT STRS). Of these, 31 crashes involved pedestrians and 7 involved cyclists. Most incidents resulted in no injury (5,166 crashes), while 498 crashes involved possible injuries and 440 involved minor injuries. The most severe outcomes were less frequent, with 70 serious-injury crashes and 47 fatal crashes.

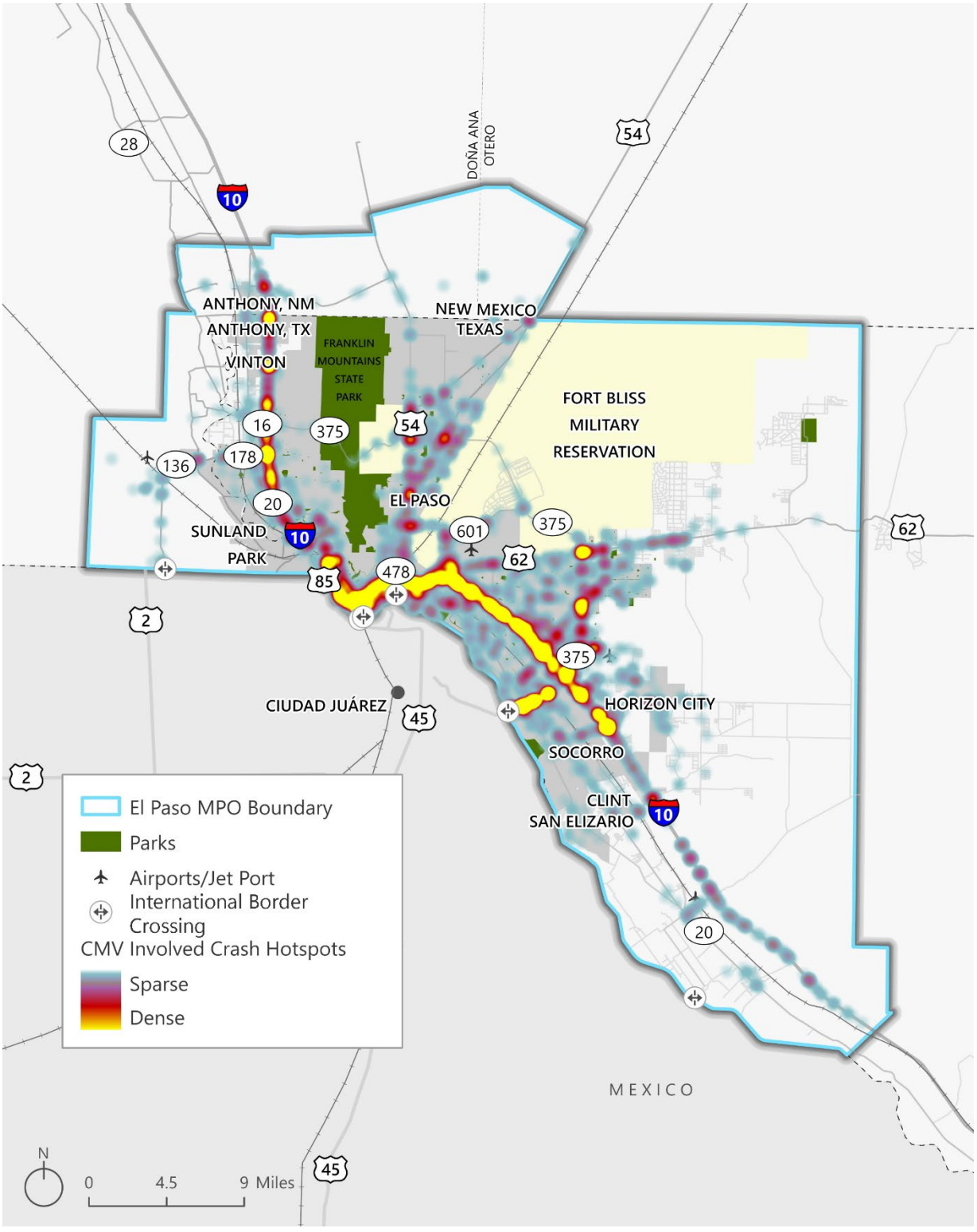
Table 3-6 summarizes crash counts by severity and involved party. As shown in **Figure 3-15**, truck crash hotspots are concentrated along major freight corridors, including IH-10, SH 20, US 62, Loop 375, US 54, and US 85.

Table 3-6: Truck-Involved Crash Summary

Crash Severity	Truck Involved Crash Count	Truck and Pedestrian Involved Crash Count	Truck and Bike Involved Crash Count
Unknown	124	0	0
Not Injured	5,166	0	0
Possible Injury	498	5	1
Suspected Minor Injury	440	8	6
Suspected Serious Injury	70	8	0
Fatal Injury	47	10	0
Total	**6,345**	**31**	**7**

Source: WSP Analysis of Texas Department of Transportation, New Mexico Department of Transportation Data

Figure 3-15: Truck-Involved Crash Hotspots



Source: WSP Analysis of Texas Department of Transportation, New Mexico Department of Transportation Data

Bridge Vertical Clearance

Bridge vertical clearance, the distance from the roadway surface to the underside of a bridge, is a critical factor for truck routing. Insufficient clearance can lead to bridge strikes, where an over-height vehicle collides with the structure. The National Bridge Inventory (NBI), maintained by the USDOT, records this information nationwide.

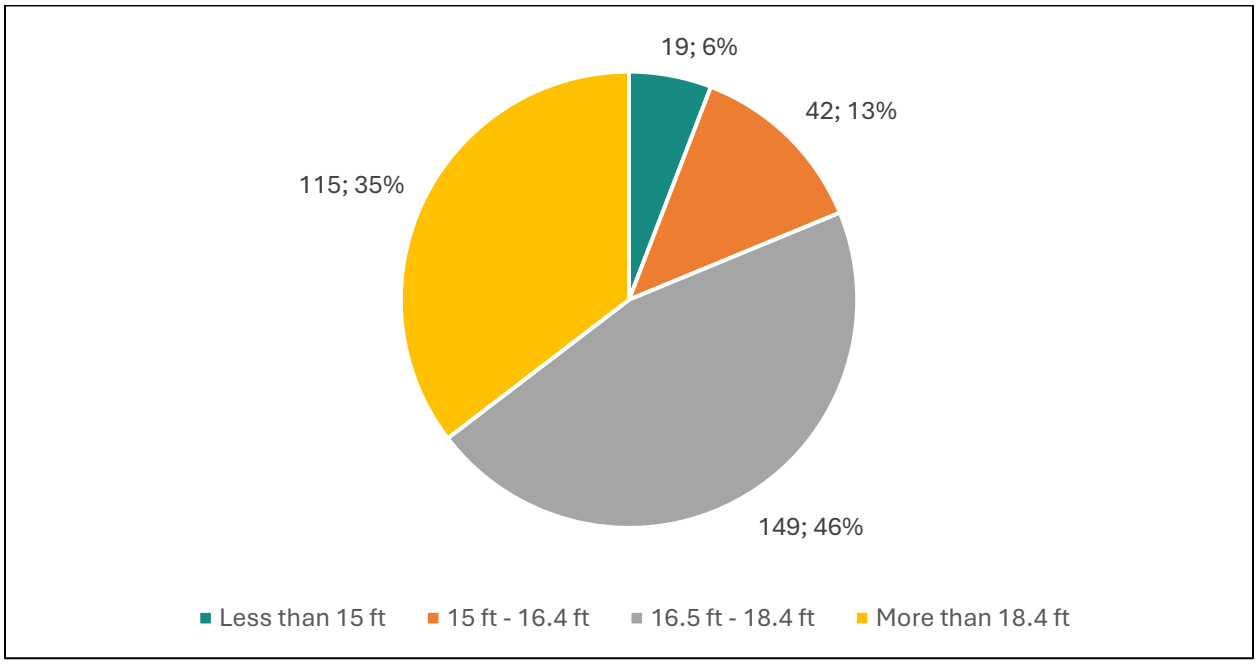
Within the EPMPO region, the NBI reports 325 bridges, most in Texas and two in New Mexico. Bridges with clearances of 15 feet or less are considered very low, while 18.4 feet or greater provide comfortable clearance for most vehicles.

Figure 3-16 illustrates the distribution of bridges by clearance category:

- 19 bridges under 15 feet
- 42 bridges between 15.0 and 16.4 feet
- 149 bridges between 16.5 and 18.4 feet
- 115 bridges at 18.4 feet or higher

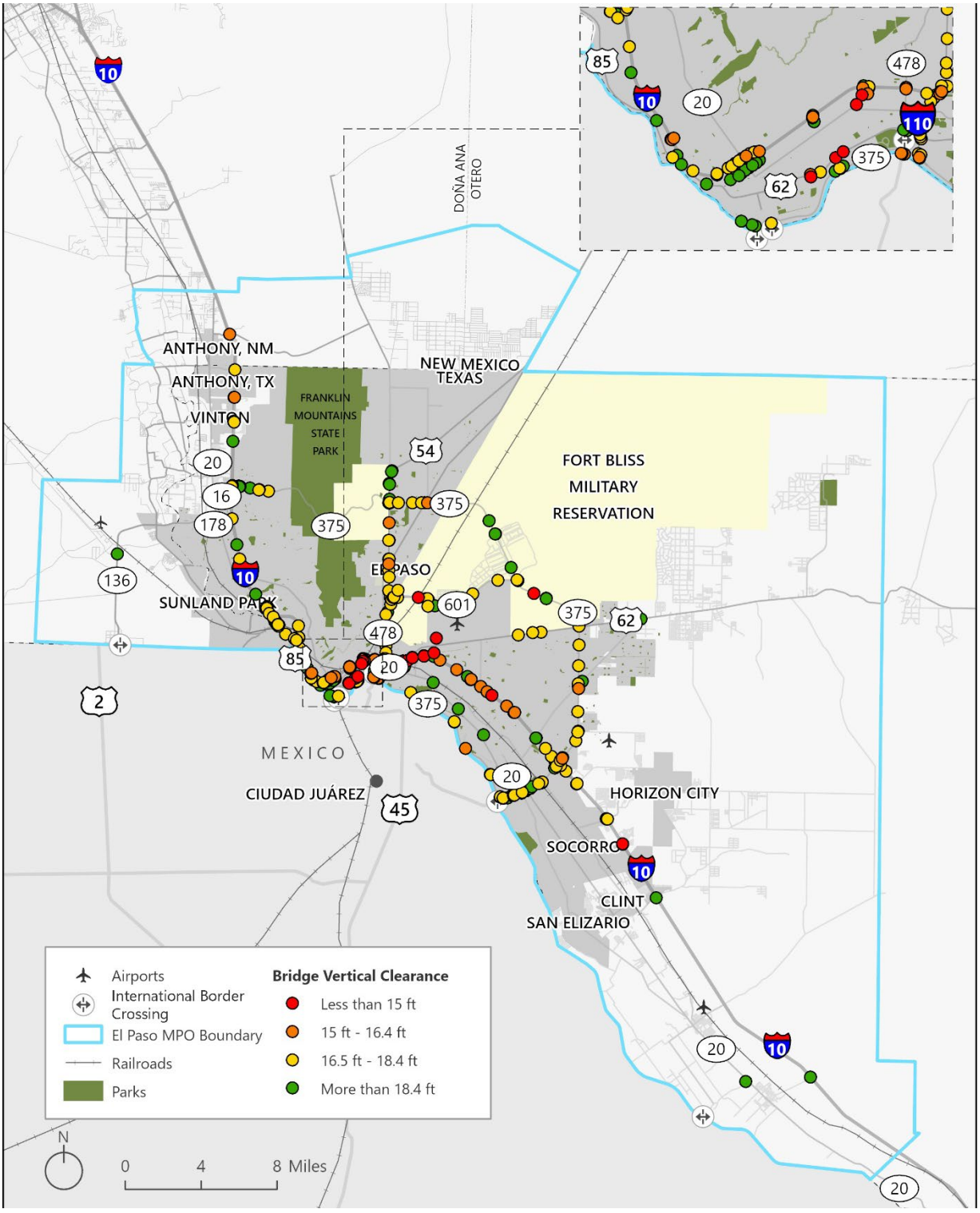
Figure 3-17 maps these bridges across the region. Bridges with the lowest clearances (under 15 feet) are concentrated along IH-10 and US 62 in the City of El Paso. According to NBI data, all bridges in the region provide at least 14 feet of clearance.

Figure 3-16: Counts of Bridges by Bridge Vertical Clearance



Source: National Bridge Inventory

Figure 3-17: Bridge Vertical Clearance in the EPMPO Area



Source: National Bridge Inventory

Freight Railroad Network and Facilities

Rail is the only freight mode that relies exclusively on private funding for both infrastructure and operations. Rail is an important freight mode for the El Paso region. Two of the seven rail International Border Crossings (IBCs) are located within El Paso. A total of 112 miles of rail is in the EPMPO region.

The U.S. Surface Transportation Board classifies railroads based on their annual operating revenue. The following operating revenue thresholds determine the railroad classification:

- **Class 1 –** $1,032,002,719 or more
- **Class 2 –** Less than $1,032,002,719 and greater than $46,325,455
- **Class 3 –** $46,325,455 or less

These revenue thresholds are periodically updated to account for the effect of inflation. The most recent update was in 2022.

Two major Class 1 railroads operate in the El Paso region:

- **Union Pacific (UP) Railroad** – UP operates the most extensive rail network not only in Texas, but also in the United States. Union Pacific lines run from El Paso to the east, connecting with the rest of the Texas rail network.
- **BNSF Railway** – BNSF is the largest freight railroad in the United States and covers most of the United States west of the Mississippi River. The BNSF line runs from El Paso to the north into New Mexico.

In the EPMPO region, there are two railroad bridges connecting the United States and Mexico. One is operated by UP, and the other is operated by BNSF. Both rail bridges are on either side of the Paso del Norte Port of Entry. They each lead to a rail yard for their respective companies. UP has another railyard at St. Rogers Depot next to IH-10. UP has an additional railyard in New Mexico called the UP Santa Teresa Facility. This rail yard serves as an intermodal terminal for UP.

International Border Crossing

The EPMPO area is home to six international roadway crossings, two rail bridges, and a major air cargo gateway at El Paso International Airport (ELP). Each facility has unique characteristics and serves different modes of travel:

- **Santa Teresa**: Located in New Mexico, this road was created to help alleviate traffic from the El Paso Bridge of the Americas IBC This IBC has three dedicated commercial vehicle lanes and four passenger lanes. It is directly connected to IH-10 via the Pete V. Domenici Highway (NM 136), a major freight corridor designed for efficient cross-border trade. NM 136 runs north from the IBC to NM 404, which links to I-10 near Anthony, NM. In addition to this primary route, Santa Teresa is

connected to the City of El Paso through NM 273 (McNutt Road) and NM 28, providing access to Sunland Park and El Paso's west side. These connections ensure Santa Teresa is fully integrated into the El Paso metropolitan area and the regional transportation network.

- **Paso del Norte**: Frequently called the Santa Fe Bridge, the Paso del Norte Bridge serves downtown El Paso and only permits non-commercial vehicles. It has four northbound lanes and serves pedestrians.
- **Good Neighbor**: Also known as the Stanton Bridge; it has three southbound lanes and one northbound lane, all for non-commercial traffic. Commercial vehicles are not permitted on this bridge.
- **Bridge of the Americas (BOTA)**: This bridge is federally owned and operated. It is the only bridge handling commercial traffic in the center of the bi-national region that does not charge a toll. The bridge is also open to non-commercial vehicles and pedestrians. It connects US 54 (and indirectly IH-10) to MX 45. Each direction has four lanes for non-commercial traffic. Under the modernization plan finalized by the General Services Administration, significant improvements are scheduled, including the complete removal of commercial truck traffic from the bridge and the expansion and reconfiguration of lanes on the U.S. side to enhance capacity for non-commercial vehicles and pedestrians. These upgrades, funded through the Bipartisan Infrastructure Law, aim to improve traffic flow, reduce congestion, and address air quality concerns in central El Paso, with construction expected to begin in late 2026.
- **Ysleta-Zaragoza**: The Ysleta-Zaragoza Bridge consists of two structures. One structure is a four-lane facility exclusively serving commercial vehicles, and the other is a five-lane bridge for non-commercial traffic, including pedestrians.
- **Tornillo-Guadalupe International Bridge**: The Tornillo-Guadalupe bridge has three travel lanes in each direction, with one lane designated for commercial traffic and the other two for passenger vehicles. The bridge also has two pedestrian walkways.
- **Union Pacific Rail Bridge**: UP's rail bridge in El Paso is a single-track crossing located due east of the Paso del Norte Bridge. In El Paso, it connects to a UP rail switching yard, while on the Mexican side, it connects to a Ferromex track that serves the interior of the country.
- **BNSF Rail Bridge**: BNSF's rail bridge in El Paso is a single-track rail bridge located due west of the Paso del Norte Bridge. In El Paso, it connects to the BNSF intermodal rail facility, while in Mexico, it connects to Ferromex Railroad.
- **El Paso International Airport**: Located approximately seven miles from downtown El Paso and four miles from the U.S.–Mexico border, ELP serves as the region's

primary air cargo hub. The airport offers direct access to US 62 and IH-10, features three runways, and provides over 280,000 square feet of cargo handling space. Major carriers such as FedEx, UPS, and DHL operate at ELP, making it a critical gateway for time-sensitive, high-value goods and an emerging intermodal hub for cross-border trade.

Figure 3-18. Sign Toward US and Mexico

International Border Crossing Delays

Several of the IBCs operate at or above capacity for both passenger and commercial vehicles. **Table 3-7** and **Table 3-8** show that five out of six crossings approach or exceed their operational capacity for privately owned vehicles (POVs) and commercial trucks.

Table 3-7: Passenger Vehicle and Bike/Pedestrian Volume-to-Operational Capacity at Ports of Entry

Border Crossing	Privately Owned Vehicles	Bike and Pedestrian
Paso Del Norte Bridge	93%	N/A
Good Neighbor (Stanton St) Bridge	133%	N/A
Bridge of the Americas	114%	96%
Ysleta-Zaragoza Bridge	145%	112%
Tornillo-Guadalupe Bridge	41%	7%
Santa Teresa Bridge	116%	58%

Source: Texas-Mexico Border Transportation Master Plan (2021), Texas Department of Transportation

Table 3-8: Truck Volume-to-Operational Capacity at Ports of Entry

Border Crossing	Volume-to-Operational Capacity (2014-2018)
Paso Del Norte Bridge	N/A
Good Neighbor (Stanton St) Bridge	N/A
Bridge of the Americas	97%
Ysleta-Zaragoza Bridge	97%
Tornillo-Guadalupe Bridge	N/A
Santa Teresa Bridge	100%

Source: Texas Delivers 2050: Texas Freight Mobility Plan (2023), Texas Department of Transportation

Multimodal Connectivity to IBCs

The downtown bridges have very good access to transit. Sun Metro's downtown transfer center is approximately 1,000 feet from the foot of the Paso Del Norte bridge (about 2,000 feet from Good Neighbor), and at least 14 bus routes can be accessed from it, connecting to every part of El Paso and some areas in New Mexico. Paso del Norte and Good Neighbor IBCs are served by Routes 2, 4, and 24, with Route 24 also serving BOTA. Ysleta IBC is connected to Routes 60 and 89. Pedestrian access to these transit stops remains limited, often crossing major roadways. Several of the bridges have pathways for pedestrians and bicyclists. While international crossings by pedestrians and bicyclists are far below their pre-pandemic levels, these pathways still play a critical role for the businesses and families that share a connection between the two countries. In addition, these pathways also help people avoid sitting in the multi-hour traffic at IBCs.

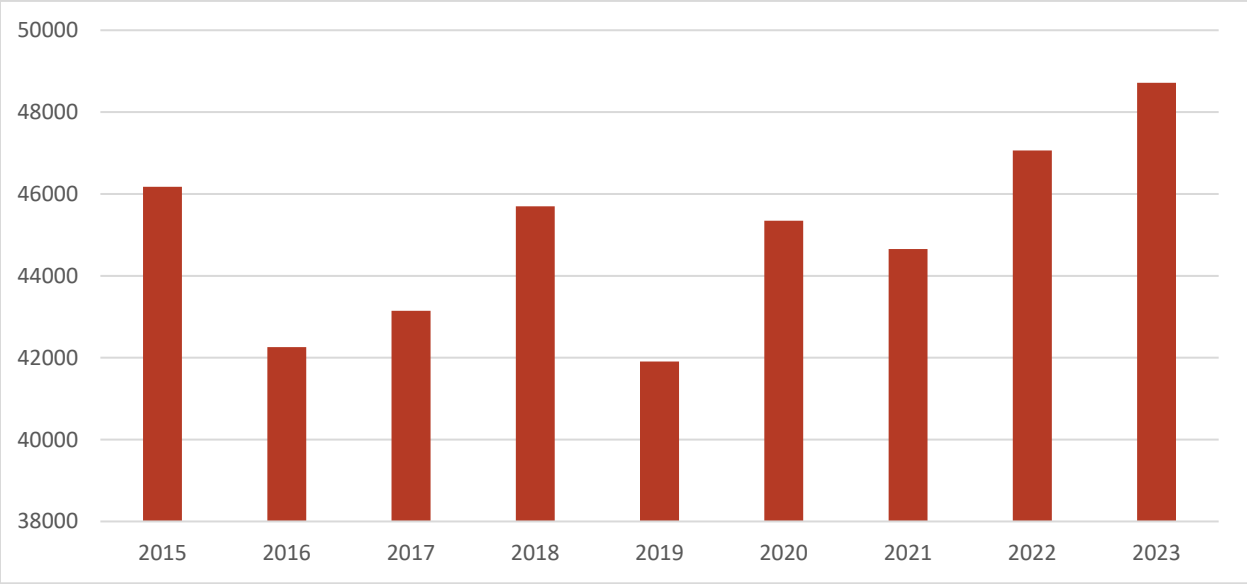
Air Freight

Air freight in El Paso is served by El Paso International Airport (ELP), which has dedicated facilities to handle air freight. ELP is located seven miles northwest of downtown El Paso and four miles from the international border (straight distance). The airport has direct access to US 62, with IH-10 a short drive away.

ELP currently has three runways, 280,000 square feet of storage space, and three major air cargo operators, including Federal Express, UPS, and DHL. ELP is home to the border's largest cargo facility and is emerging as the border's most centralized intermodal hub.

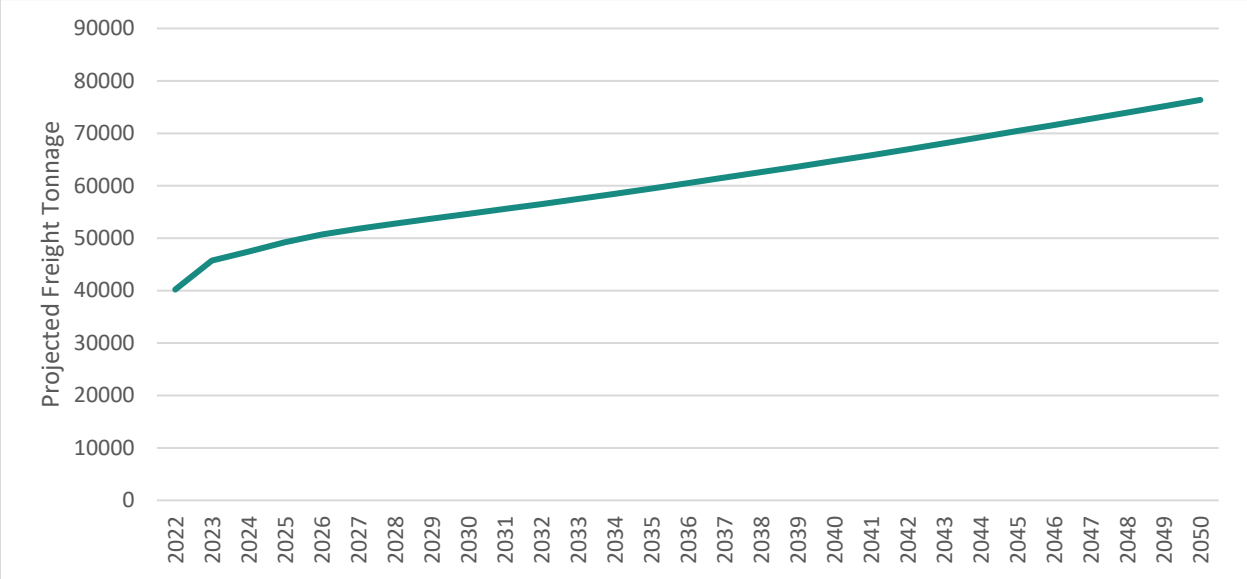
In the EPMPO region, air freight is becoming an increasingly important component of the transportation of goods. Air freight typically serves time-sensitive, high-value commodities such as documents and precision equipment. Demand for air freight is increasing as nearshoring becomes more common. Total air freight enplanements at ELP by tons for the years 2015 through 2023 are shown in **Figure 3-19**. Projected air carrier operations for ELP for 2023 forecasted to 2050 are shown in **Figure 3-20**.

Figure 3-19: Total Air Freight Enplanements at ELP by Tons, 2015-2023



Source: Terminal Area Forecast Detail Report, FAA

Figure 3-20: Projected Air Carrier Operations at ELP, 2023-2050



Source: Terminal Area Forecast Detail Report, FAA

Intermodal Facilities

Intermodal facilities are cargo transfer points between one mode of freight transportation to another. In the region, intermodal facilities transfer freight loads from truck to rail or rail to truck. Typically, freight cargo is packaged in a container transferred from one mode to another. Using the container allows the transfer to occur without any direct handling of the

cargo. This method reduces cargo handling by improving security, reducing damage and losses, and allowing faster freight transport. As the transfer point between rail and truck modes, intermodal facilities in the El Paso region are at the nexus of railroad and highways.

Three areas were identified as the main intermodal facilities in the EPMPO region.

- **IH-10/Loop 375 intersection area:** This area has several intermodal facilities, including warehouses, and serves as a transfer point for goods moving from one truck to another.
- **El Paso Airport (ELP)**: A few intermodal facilities are in the immediate surrounding area of the airport, serving as a transfer point for goods moving from air freight to truck and vice versa.
- **Union Pacific Intermodal Terminal:** A large intermodal facility transferring goods to and from freight rail is located at the UPRR Yard, Santa Teresa facility.

Pipelines

Texas is the leading domestic oil and natural gas producer and has the most extensive pipeline network of any state. Pipelines are critical in freight transportation for moving natural gas, crude oil, and various liquefied products.

While El Paso does not contain any natural gas processing plants or underground storage, it does have several natural gas pipelines and hydrogen gas liquids (HGLs) pipelines running through the MPO region. These pipeline networks are highly relevant to the transportation system because they often run parallel to major highways and freight corridors, influencing infrastructure planning, safety considerations, and emergency response coordination. A single petroleum refinery is in the EPMPO region, in proximity to IH-10.

Goods Movement

The El Paso region functions as a high throughput, binational gateway where truck-centric highway corridors interface with Class I rail, a growing air cargo platform at ELP, and multiple International Border Crossings (IBCs). Both domestic and cross-border freight are expanding in value and volume, with time-sensitive, high-value commodities growing fastest. This growth concentrates demand on the PHFS/NMFN corridors, IBC approaches, and last mile connectors that link industrial districts, rail terminals, and the airport.

Domestic Goods Movement

Domestic movements are projected to rise substantially by 2050. In nominal terms, inbound value increases by roughly 56% and outbound by 48%, while tonnage grows more modestly (inbound approximately 25%, outbound 6.5%), reflecting a shift toward higher value density and time sensitivity. Trucks remain the dominant domestic mode, expanding their share of value from approximately 65% to 3% and of tonnage from approximately 56% to 70% by 2050. Pipelines, while still carrying heavy tonnage, decline sharply in value

share, underscoring the changing commodity mix and the continued importance of highway capacity, operations, and pavement preservation on key freight corridors.

Domestic commodity patterns reinforce this trend. Electronics, pharmaceuticals, and plastics/rubber increase their shares of total value through 2050, while gasoline declines significantly in both value and tonnage share. The upshot is more freight that is high-value, schedule-sensitive, and reliant on reliable truck access to distribution nodes, with targeted rail and air interfaces where warranted.

International Goods Movement

On the international side, total import and export values together are forecast to grow by roughly 64% and tonnage by approximately 51% by 2050. Trucks continue to carry most international value, though their share moderates as rail and air expand their roles by 2050; by tonnage, the portfolio remains diversified across truck, rail, and other modes. These shifts suggest rising pressure on IUBC processing capacity, lane management, and binational operational coordination, alongside increased importance of rail connections and air cargo handling for select high-value flows.

International commodities are led by electronics, which remains the largest category, but with a gradually declining share as the mix diversifies. Motorized vehicles, machinery, and plastics/rubber post the strongest gains in both dollar value and tonnage, consistent with nearshoring and deeper U.S.–Mexico supply chain integration. Together, these trends heighten the need for IBC operational improvements (trusted shipper lanes, pre-inspection/appointments, adaptive lane control), last-mile upgrades to rail and air intermodal facilities, additional truck parking/staging, and safety/asset strategies on the region's principal freight corridors.

International Border Crossing Strategic Plan

EPMPO at time of writing is developing the International Border Crossing Strategic Plan (IBCSP). The IBCSP aims to enhance border crossing mobility and infrastructure through analyzing existing conditions and operations as well as future scenarios to recommend specific improvements at border crossings within the EPMPO boundary. The analysis provides binational context and captures transportation infrastructure improvement projects that will foster economic growth, improve border communication and coordination amongst stakeholders, and guide transportation improvement policies and programs. The analysis will highlight system wide findings as well as for each individual border crossing. The IBCSP emphasizes freight rail operations due to existing infrastructure and identifies potential improvements.

Stakeholders engaged through the strategic planning process include bridge owners and operators, municipal and state governments in the MPA, freight and logistics industry representatives, customs brokers, binational planning agencies, economic development

organizations, law enforcement, and both U.S. and Mexico based community organizations.

3.3.2. Freight and Ports of Entry Needs

Determining Freight and IBC Needs

Freight and IBC needs were identified through analysis of existing conditions, including truck volume data, border crossing capacity and delay metrics, crash data, and land use compatibility. The process incorporated both quantitative indicators, such as operational capacity ratios and truck AADT, and qualitative feedback from stakeholders and local communities. This ensures that the needs reflect both the economic importance of cross-border trade and the lived experience of residents affected by freight movement.

Figure 3-21. IH-10 and Loop 375 Interchange

Identified Needs

- **Border efficiency and reliability**: Northbound (NB) crossing times in the El Paso segment are among the longest on the Texas border, with 78% of NB crossings exceeding 30 minutes and commercial truck delays often near 60 minutes; BOTA (97%), Ysleta-Zaragoza (97%), and Santa Teresa (100%) operate at or near truck capacity. Delay drives regional economic losses and unreliability for just-in-time supply chains.

- **Safety on freight corridors**: Between 2019 and 2023, there were 6,345 truck-involved crashes, including 70 serious-injury and 47 fatal crashes; 31 involved pedestrians and 7 involved cyclists. Hotspots tended to cluster on IH-10, SH 20, US 62, Loop 375, US 54, and US 85.
- **Neighborhood compatibility**: High and very high truck AADT shares occur adjacent to residential areas (e.g., Vista del Sol, Paseo del Norte Road, Arizona Avenue, Chelsea Street, Carl Longuemare Road), elevating risks and impacts (noise, emissions, pavement wear).
- **Structural constraints (bridge clearances)**: Substandard bridge clearance along freight networks is considered less than 16.5 feet. Approximately 19 bridges have less than15-foot clearance and 42 are 15.0 feet to 16.4 feet high, creating routing constraints and bridge-strike risk. Bridges with substandard heights are generally concentrated along IH-10 and US-62 in El Paso.
- **Corridor capacity and last-mile performance**: Projected growth in truck-moved value and tonnage through 2050 is projected to strain PHFS/NMFN corridors and IBC connectors (e.g., Airway, Hawkins, NM-136/TX-178, Strauss/Pete V. Domenici) without targeted capacity, operations, and state of good repair investments.
- **Truck parking and staging**: Consistent with Texas Delivers 2050 and the BTMP, the region needs more truck parking/staging near IBCs and industrial districts to reduce shoulder queuing and improve safety.
- **Binational coordination, data, and resiliency:** Harmonized hours, staffing, inspections, standards, and data with Mexican partners, plus redundancy/diversion planning, are needed to manage disruptions and recover quickly (BTMP; Texas Delivers 2050).

3.3.3. Freight and IBC Recommendations & Strategies

Developing Freight and IBC Recommendations

Recommendations for freight and border crossings were developed to be context-sensitive and responsive to the unique binational context of the El Paso region. Drawing on best practices in border management, freight logistics, and community impact mitigation, each strategy was tailored to local trade patterns, infrastructure constraints, and stakeholder priorities. The recommendations are designed to enhance economic competitiveness while minimizing negative impacts on communities.

Recommendations and Strategies

- **Binational Coordination and Data**
    - Expand real-time wait time monitoring, shared data systems, and performance dashboards across bridges; harmonize hours of operation and inspection protocols; coordinate investment timing with Mexican counterparts.
    - Pilot trusted shipper/Free and Secure Trade (FAST) enhancements, pre-inspection/Appointments, and dynamic lane assignment at BOTA, Ysleta Zaragoza, and Santa Teresa to reduce peaks.
- **Border Operations and Network Reliability**
    - Use lane use control, adaptive queuing, and demand rebalancing (wayfinding, information, and, where feasible, pricing/policy tools) to distribute truck flows more evenly across IBCs.
    - Develop diversion plans and redundancy for disruptive events, with pre-identified alternate IBC routing and corridor priorities.
- **Truck Routing, Neighborhood Compatibility, and Parking**
    - Designate/strengthen preferred truck corridors and last-mile connectors to shift trucks away from residential streets, add signing/enforcement, and access management.
    - Implement mitigations along residential-adjacent segments (buffering/landscaping, quiet pavement, targeted time of day policies).
    - Deliver new truck parking/staging near industrial areas and IBC approaches, with ITS availability feeds and security features.
- **Safety on Freight Corridors**
    - Treat truck crash hotspots with systemic countermeasures: high-friction surfaces, heavy vehicle signal timing, protected turn phasing, illumination, median/barrier treatments, rumble strips, and speed management.
    - Advance rail–highway grade separations at top conflict points to reduce crashes and delays.

- **Bridges and Asset Management**
    - Launch a clearance improvement program for priority structures less than 15 feet and 15.0 to 16.4 feet on high truck- routes; add over-height detection/warning where near-term- raises are infeasible (**Figure 3-17**).
    - Implement a freight-focused bridge and pavement state of good repair program on PHFS/NMFN and IBC connectors, emphasizing lifecycle cost and load capacity.
- **Corridor Capacity, Intermodal Connectors, and ITS**
    - Target capacity/operations upgrades on IH-10, Loop 375, US 54, US 62/SH 20, US 85, and on intermodal connectors (Airway, Hawkins, NM-136/TX-178, Strauss/Pete V. Domenici) to match forecast growth.
    - Deploy border ITS (queue detection, traveler info, lane control) and prepare corridors for connected freight technologies (fiber, power, cabinets).
- **Funding and Delivery**
    - Package projects to leverage NHFP, UTP freight programs, and federal discretionary opportunities (INFRA/MEGA/RAISE, IBC programs).
    - Sequence near-term operations and safety fixes, midterm targeted expansions/grade separations/clearance improvements, and long-term IBC and corridor reconfigurations.

3.4. Transit

Public transportation is a critical component of the El Paso region's multimodal network, providing essential mobility for residents, workers, students, and visitors. Transit connects urban neighborhoods, suburban growth areas, rural communities, and international gateways, supporting economic vitality and equitable access to opportunities. For many households without reliable access to a personal vehicle, transit is not just an option, it is a lifeline for employment, education, healthcare, and daily needs.

The EPMPO region's transit system faces both challenges and opportunities. Ridership has been low for many years , operating costs have risen, and service performance varies across modes and geographies. At the same time, population growth, emerging development corridors, and cross-border travel demand underscore the need for a resilient, integrated, and customer-focused transit network. This section assesses current

conditions, identifies key needs, and outlines strategies to enhance transit's role in delivering safe, reliable, and equitable mobility through 2052.

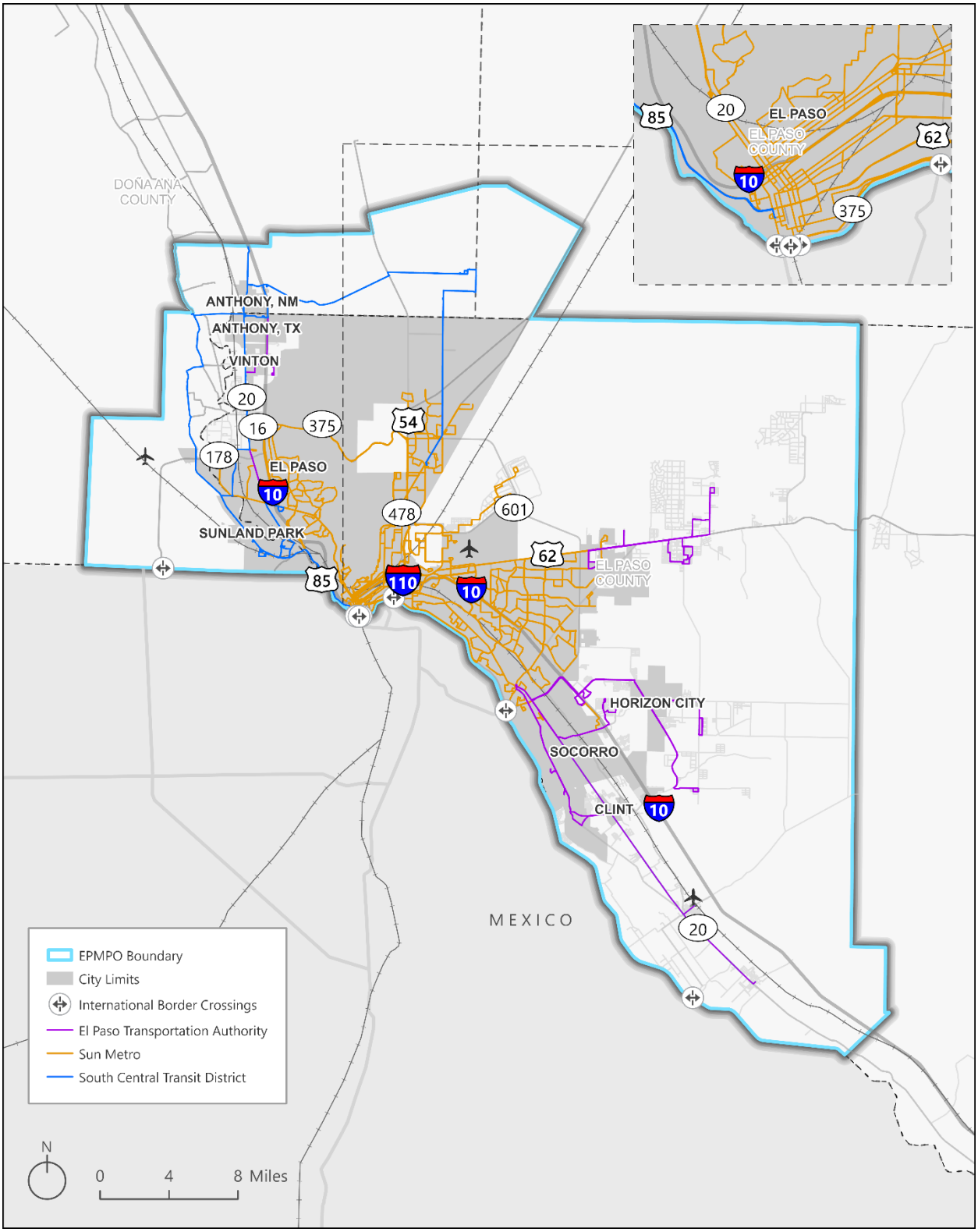
3.4.1. Existing Conditions and Trends

Transit in the EPMPO region is provided by three main agencies: Sun Metro, El Paso Transportation Authority (ETA), and South Central Regional Transit District (SCRTD).

- **Sun Metro**: Sun Metro, operated by the City of El Paso, is the region's largest transit provider. In 2022, it maintained a fleet of 252 revenue vehicles and recorded 5,182,445 annual passengers. Sun Metro's services are primarily focused within the City of El Paso, with limited coverage in the surrounding county. The agency offers a variety of transportation options, including fixed-route, demand-response, and streetcar services.
- **El Paso Transportation Authority (ETA):** El Paso County Transit, operated by the El Paso Area Transportation Services Local Government Corporation, provides service to unincorporated areas of El Paso County, and the smaller municipalities located in the County. In 2022, the agency maintained a fleet of 121 revenue vehicles and served 398,104 annual passengers.
- **South Central Regional Transit District (SCRTD)**: SCRTD serves Doña Ana and Otero Counties, including the communities of Anthony, Chaparral, and Sunland Park, and provides connections into El Paso. In 2022, SCRTD operated a fleet of 14 revenue vehicles and recorded 85,075 annual passengers.

A regional fixed-route map for Sun Metro and SCRTD is provided in **Figure 3-22**.

Figure 3-22: Sun METRO, SCTRD, and ETA Fixed Routes



Source: Sun Metro and South Central Transit District

Ridership Trends

Transit utilization, or ridership, is commonly measured using unlinked passenger trips (UPT) and passenger miles traveled (PMT).

- **Unlinked passenger trips (UPT)** represent the total number of boardings on public transit vehicles, regardless of how many vehicles a passenger uses to complete a single journey. For example, a trip requiring one transfer counts as two unlinked trips.
- **Passenger miles traveled (PMT)** is the cumulative sum of the distances traveled by all passengers. It reflects the total passenger movement across the system and is useful for understanding overall service consumption.

Table 3-9 summarizes the annual UPT for transit services provided by Sun Metro, ETA, and SCRTD. The table show that ridership across all providers declined sharply during the COVID19 pandemic (2019–2021), with Sun Metro experiencing the largest drop in fixed--route service. The streetcar service was suspended for a portion of 2020 and 2021. Recovery began in 2022 but remains below pre-pandemic- levels for most services. Notably, ETA's vanpool program maintained stable ridership through the pandemic and grew significantly in 2022, while SCRTD rebounded strongly, surpassing pre-pandemic ridership levels by 2022.

Table 3-9: Ridership Summary – Unlinked Passenger Trips (2018–2022)

Provider	Mode	2018	2019	2020	2021	2022	% Change 2019-2022
Sun Metro	Fixed Route	12,792,258	10,969,703	5,614,479	3,663,299	4,928,858	–55%
	Streetcar	N/A	222,773	188,757	4,119	47,384	–79%
	Demand Response	323,674	321,393	267,398	182,773	206,203	–36%
El Paso Transportation Authority (ETA)	Commuter Bus	199,194	208,164	144,307	88,221	122,258	–41%
	Vanpool	185,687	235,731	237,756	236,295	275,846	+17%
SCRTD	Bus	30,332	35,124	29,695	64,630	85,075	+142%

Source: U.S. Department of Transportation Bureau of Transportation Statistics

Operating Expenses and Funding

The three primary transit providers – Sun Metro, ETA, and SCRTD – each have distinct service models and funding structures. Together, these agencies provide fixed-route, demand-response, streetcar, commuter bus, and vanpool services across urban, suburban, and rural areas.

Between 2018 and 2022, operating expenses fluctuated due to pandemic-related ridership declines, service adjustments, and inflationary pressures. In 2022, Sun Metro maintained fixed-route operating expenses near $43.7 million, while streetcar costs decreased slightly and demand-response costs rose by about 10%. ETA saw modest growth in commuter bus costs and a sharp increase in vanpool costs, reflecting expanded participation. SCRTD experienced the largest percentage increase, driven by service expansion and strong ridership recovery.

All three transit providers rely heavily on federal funding, but their revenue mixes differ:

- **Sun Metro**: 62% federal, 29% local, 9% fares
- **ETA**: 38% federal, 36% fares, 20% local, 6% state
- **SCRTD**: 53% federal, 48% local, 1% fares

Fare revenues declined sharply during the pandemic and have only partially recovered, underscoring the vulnerability of fare-dependent services and the importance of diversified funding streams.

Table 3-10 provides a high-level view of 2022 operating expenses, fare revenues, funding mix, and key unit cost metrics for each provider. These indicators highlight where cost pressures and efficiency challenges exist.

Table 3-10: Operations and Funding Summary

	Sun Metro	El Paso Transportation Authority (ETA)	SCRTD
2022 Operating Expenses	$53.236 million	$5.114 million	$1.793 million
2022 Fare Revenue	$4.471 million	$1.204 million	$0.023 million
Unit Cost OPEX per VRM	$8.51 (fixed-route)	$4.06 (commuter bus)	$4.10 (bus)
Cost per Trip OPEX per UPT	$8.86 (fixed-route)	$31.11 (commuter bus); $4.75 (vanpool)	$21.07 (bus)
YoY OPEX (2021-2022)	1.70%	16.00%	37.30%
YoY Fares (2021-2022)	39.40%	27.30%	60.60%
Trends	Streetcar operating expenses decreased by about 0.4%; demand/response operating expenses increased by about 10%. Fixed-route productivity recovering but still below 2018 (pre-pandemic $4.21/trip).	Vanpool proved resilient and grew in 2022; consider expanding flexible, employer-oriented options.	Strong post-pandemic rebound; 2022 ridership greater than pre-pandemic; regional connections expanding.

OPEX = Operating Expenses, VRM = Vehicle Revenue Mile, UPT – Unlinked Passenger Trip, YoY = Year-over-Year

Source: U.S. Department of Transportation Bureau of Transportation Statistics

For additional details on operating expenses, fare revenues, and performance metrics, refer to **Appendix B: Existing Conditions**.

Service Performance

Transit service performance measures provide insight into how effectively and efficiently the region's transit systems deliver mobility. These metrics are essential for evaluating system health, identifying cost drivers, and informing strategies for service optimization. Three primary measures are used:

- **Service Effectiveness**: Indicates how well service supply translates into ridership. It is measured as annual unlinked passenger trips (UPT) per vehicle revenue mile (VRM) and UPT per vehicle revenue hour (VRH). Higher values reflect stronger utilization of available service.
- **Service Efficiency**: Reflects the cost of providing service, expressed as operating expense per VRM and per VRH. Lower values indicate more efficient use of resources.
- **Cost-Effectiveness**: Measures the cost per unit of consumption, such as operating expense per passenger trip and, where available, per passenger mile traveled (PMT). Lower values indicate better cost-effectiveness.

Analysis of 2018–2022 data shows that service effectiveness declined sharply during the pandemic as ridership fell faster than service supply. For example, Sun Metro fixed-route effectiveness dropped from 23.2 UPT per VRH in 2018 to 9.7 in 2021, before partially recovering to 13.8 in 2022. Similar patterns occurred for the ETA commuter bus and SCRTD services.

Service efficiency metrics reveal rising unit costs across most modes, particularly during 2020–2021, when operating expenses remained relatively stable but VRM and VRH decreased. In 2022, Sun Metro fixed-route cost per VRM was $8.51, up from $7.42 in 2018, while streetcar and demand-response services posted significantly higher unit costs.

Cost-effectiveness measures underscore these trends. Sun Metro fixed-route cost per trip increased from $4.21 in 2018 to $8.86 in 2022, while demand-response reached $38.57 per trip. El Paso County vanpool remained the most cost-effective option at $4.75 per trip, and SCRTD improved its cost per trip to $21.07 in 2022 as ridership rebounded.

These metrics highlight the need for strategies that improve productivity on core routes, optimize service design in lower-density areas, and manage operating costs. **Table 3-11** provides a high-level summary of 2022 performance indicators by provider, while detailed multi-year data is available in **Appendix B: Existing Conditions**.

Table 3-11: Transit Service Performance Summary, 2022

Provider	Mode	Effectiveness UPT per VRH	Efficiency OPEX per VRM	Cost-Effectiveness OPEX per Trip	Trend (2018-2022)
Sun Metro	Fixed Route	13.8	$8.51	$8.86	Effectiveness rebounding from 2021 low; unit costs remain above 2018 (pre-pandemic ~$4.21/trip).
	Streetcar	12.2	$60.60	$33.57	Lower demand and higher unit cost profile; slight OPEX decrease YoY.
	Demand Response	2.1	$4.60	$38.57	Ridership recovering slowly; cost per trip elevated, typical of DR service.
ETA	Commuter Bus	3.2	$4.06	$31.11	Effectiveness down vs. 2019; modest OPEX growth; opportunity for targeted restructuring.*
	Vanpool	4.4	$0.38	$4.75	Most cost-effective; resilient through pandemic; candidate for employer-focused expansion.
SCRTD	Bus	3.8	$4.10	$21.07	Ridership above pre-pandemic; improving cost per trip with recovery.

Abbreviations: OPEX = Operating Expenses, VRM = Vehicle Revenue Mile, VRH/VRM = Vehicle Revenue Hour/Mile, UPT – Unlinked Passenger Trip, YoY = Year-over-Year

**ETA is the region's newest provider and worked in 2025 to establish agreements with communities in El Paso County.*

Source: U.S. Department of Transportation Bureau of Transportation Statistics

Transit ridership in the El Paso region has marginally increased from the pandemic shock, with service effectiveness turning upward through 2022 and expected to improve as ongoing adjustments emphasize frequency and reliability on core corridors. Sun Metro fixed-route effectiveness rose from the 2021 low (9.7 UPT/VRH) to 13.8 in 2022, with similar recovery trajectories observed for ETA commuter bus and SCRTD services. While unit costs per VRM/VRH and per trip remain elevated versus pre-pandemic baselines, productivity-focused redesigns and employer-oriented options like vanpool, currently the most cost-effective at $4.75 per trip, position the region to capture returning demand. The MTP's recommended strategies (targeted restructuring in lower-density areas, service optimization on high-need corridors, and cross-provider coordination) will help translate this rebound into sustained ridership growth and improved cost-effectiveness.

For additional details on service effectiveness, efficiency, and cost-effectiveness (multi-year values by mode), refer to **Appendix B: Existing Conditions**.

3.4.2. Needs

Determining Transit Needs

Transit needs were identified through a detailed review of ridership trends, service coverage, funding structures, performance metrics, and stakeholder feedback. The analysis considered both quantitative data, such as unlinked passenger trips, operating costs, and service effectiveness, and qualitative insights from transit users and community organizations. This ensures that the needs reflect both system performance and the lived experience of transit-dependent populations.

Identified Needs

- **Transit-Dependent Demand and Spatial Coverage**: The EPMPO area includes significant transit-dependent populations, including households without vehicles, lower-income households, and seniors, served by three operators with different geographies. The 2022 ridership volumes underscore the system's importance.
- **Ridership Recovery and Variability**: COVID-19 depressed ridership (2019-2021). The 2022 recovery was partial at Sun Metro and strong at SCRTD. Vanpool remained resilient through the pandemic, suggesting demand for flexible, commuter-oriented options.
- **Funding Structure and Budget Pressure**: The differing funding portfolios among the transit providers imply uneven sensitivity to fare swings and federal cycles. Rising unit costs, especially on streetcar, some fixed-route segments, and demand-response, create a need for cost optimization and targeted productivity gains.

- **Performance and Cost-Effectiveness**: The metrics point to priorities: raise Sun Metro fixed-route productivity toward pre-pandemic cost-per-trip ($4.21) while tightening cost control (e.g., OPEX/VRM $8.51 in 2022). Preserve vanpool efficiency; continue SCRTD's ridership gains with targeted investments.
- **Transit Gap Analysis**: Spatial overlays (vehicle access, low income, seniors, density) indicate priority geographies:
    - *Downtown El Paso / UTEP area* – High concentrations of vehicle-free and low-income households; good route coverage, but frequency and coverage may be insufficient for need intensity.
    - *Mission Valley corridor (Socorro, San Elizario)* – Moderate no-vehicle rates, higher senior shares, lower incomes, and dispersed density indicate the need for service enhancement and route optimization.
    - *Anthony (TX/NM)* – Moderate no-vehicle and seniors ridership; SCRTD service may need enhancements and stronger center-city connections.
    - *Horizon City / Far East* – emerging growth with moderate no-vehicle and rising senior share indicates the need for proactive service planning and first/last-mile strategies to avoid future gaps.
- **Cross-Border Dynamics**: Demand on the Texas–Mexico multimodal network has outpaced capacity, and residents cite frequency, delay, and wait-time concerns near IBCs which indicate opportunities for binational transit coordination.

3.4.3. Transit Recommendations & Strategies

Developing Transit Recommendations

Transit recommendations were developed to be context-sensitive and tailored to the unique needs of the El Paso region. Drawing on best practices in service planning, regional integration, and comprehensive access-focused transit delivery, each strategy was adapted to local demand patterns, funding realities, and community priorities. The recommendations are designed to improve mobility, accessibility, and cost-effectiveness for all users. It is important to underline that transit ridership will continue to be low and operating costs would need to be heavily subsidized while urban sprawling conditions remain. Joint and coordinated efforts of land-use upzoning and transit planning are essential for efficient transit operation.

Recommended Strategies

- **Service Frequency Enhancements (High-Need Areas):**
    - Increase peak/off-peak frequency and evening/weekend span in central El Paso and other neighborhoods where low-income, high no-vehicle rates, and senior concentrations overlap.
    - Target employer corridors and activity centers to support work and essential trips.
- **Regional Integration Strategy:**
    - Coordinate schedules among Sun Metro, ETA, and SCRTD.
    - Continue to pursue a unified fare system and seamless transfers at key nodes (e.g., Downtown, Mission Valley, Anthony/Sunland Park interfaces).
- **Cost Optimization Strategy:**
    - Use route optimization and stop spacing adjustments where ridership patterns support it.
    - Deploy flexible/on-demand services in lower-density, lower-income zones and demand/response tailored to senior clusters. As a direct recipient of 5310 program funds which support paratransit services for older adults, individuals with disabilities, and veterans, EPMPO allocates these funds to local transit providers and municipalities to enhance mobility for these groups.
    - Manage unit costs with performance targets tied to OPEX/VRM (e.g., $8.51 costs for Sun Metro fixed-route in 2022) and OPEX/APT (e.g., return fixed-route fares from $8.86 to $4.21 pre-pandemic trajectory.
- **Suburban Service Expansion & First/Last-Mile:**
    - Extend coverage in Horizon City and the Far East; strengthen east/west connections and first/last-mile access (sidewalks, crossings, micromobility parking, targeted microtransit).
    - Prioritize areas with low income and high senior presence just outside today's service envelope.

- **Cross-Border Transit Enhancement:**
    - Improve connections to IBCs (stop siting, ped safety, wayfinding); coordinate with Mexican transit providers for schedules/info.
    - Implement bilingual passenger information and real-time data near bridges; prioritize reliability for transborder commuters.
- **Speed, Reliability, and Stops (Toolkit):**
    - Roll out targeted bus priority (queue jumps, Transit Signal Priority), optimize near/far-side stops, and adjust intersection geometry on top delay corridors.
    - Standardize stop/transfer amenities (ADA pads, shelters/shade, lighting, seating, real-time information).
- **Paratransit & Vanpool:**
    - Expand paratransit capacity where eligibility and trip demand increase; protect vanpool as a cost-effective commuter option and integrate it into employer corridors.
- **Funding & Delivery:**
    - Leverage Federal Transit Administration funding opportunities (5307, 5337/State of Good Repair, 5339(b)), Congestion Mitigation and Air Quality (CMAQ)/Carbon Reduction Program (CRP), and discretionary (RAISE, MEGA, Low/No) for fleet/facilities and corridor treatments.
    - Sequence: near-term operations/safety/amenities to midterm corridor priority packages & transfer hubs to long-term network restructures and (if pursued) zero-emission readiness.

Implementation of these strategies will improve mobility and cost-effectiveness across the EPMPO region.

3.5. Active Transportation

Active transportation – walking, bicycling, and other human-powered modes – is a vital part of the El Paso area's mobility, public health, and quality of life. As the region grows, safe and accessible active transportation networks are increasingly important for connecting neighborhoods, supporting transit, reducing congestion, and improving air quality. The EPMPO's vision is to create a connected, safe, and equitable active transportation system that serves both daily commuters and recreational users, while supporting broader goals for sustainability and community well-being.

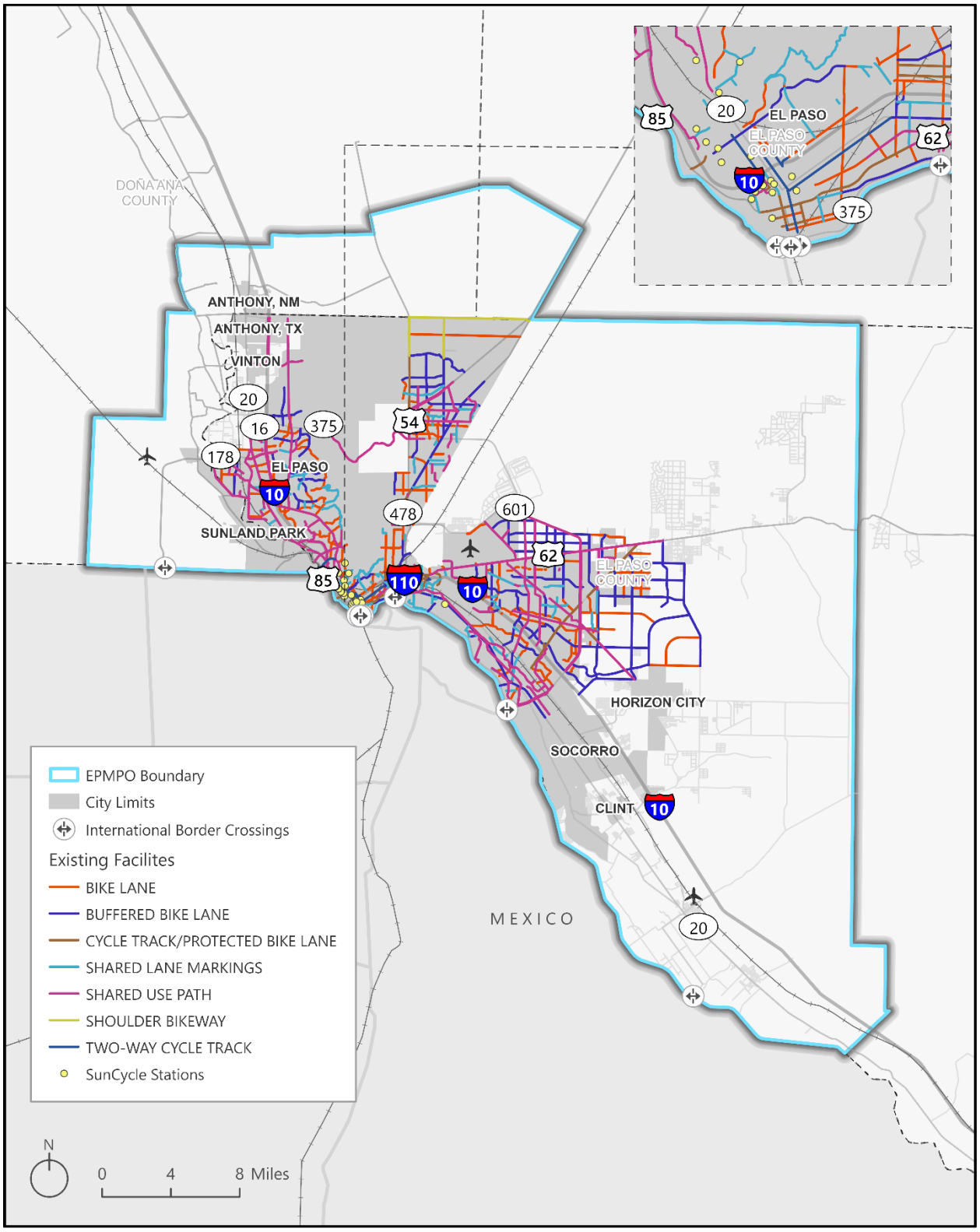
3.5.1. Existing Conditions and Trends

The EPMPO region features a range of active transportation facilities, including standard bike lanes, buffered lanes, protected cycle tracks, shared lane markings, multi-use paths, and two-way cycle tracks. These facilities are primarily clustered in three areas: west of Franklin Mountain State Park, around the University of Texas at El Paso, and southeast of El Paso International Airport (ELP). Loop 375 serves as a key corridor, providing a continuous shared bike lane that connects much of the region and the Franklin Mountain State Park trail network. Additional connectivity is provided by facilities along major routes like FM 20 (northwest) and FM 76 (southeast). **Figure 3-24** shows the bicycle network for the EPMPO area.

Despite these assets, the network is fragmented with limited connectivity in outlying areas such as Horizon City and southern communities like Socorro and San Elizario. Most facilities are owned and maintained by the City of El Paso, resulting in gaps outside city limits. According to recent Census data, about 2.3% of El Paso County residents commute by taxicab, motorcycle, or bicycle, 1% use public transit, and 1.5% walk. Private vehicles remain the dominant mode (95% of commutes), but active transportation is a critical option for those without access to a car.

Figure 3-23. Bike Path Road Marking

Figure 3-24: Bicycle Network



Source: City of El Paso

A GIS analysis found that 28% of transit stops and 37% of parks and recreational facilities are directly connected to the active transportation network, while 40% of transit stops and 60% of parks are within 500 feet of a facility. However, many bus stops, especially in outlying areas, lack bicycle or pedestrian connections, creating first/last-mile challenges for multimodal users. **Figure 3-25** shows the spatial relationship between active transportation facilities and transit stops.

Crash data reveal that bicycle and pedestrian crashes are concentrated in areas with existing infrastructure, particularly on bike lanes, buffered lanes, and shared-use paths, highlighting both high utilization and safety concerns, as displayed in **Figure 3-26**.

3.5.2. Active Transportation Needs

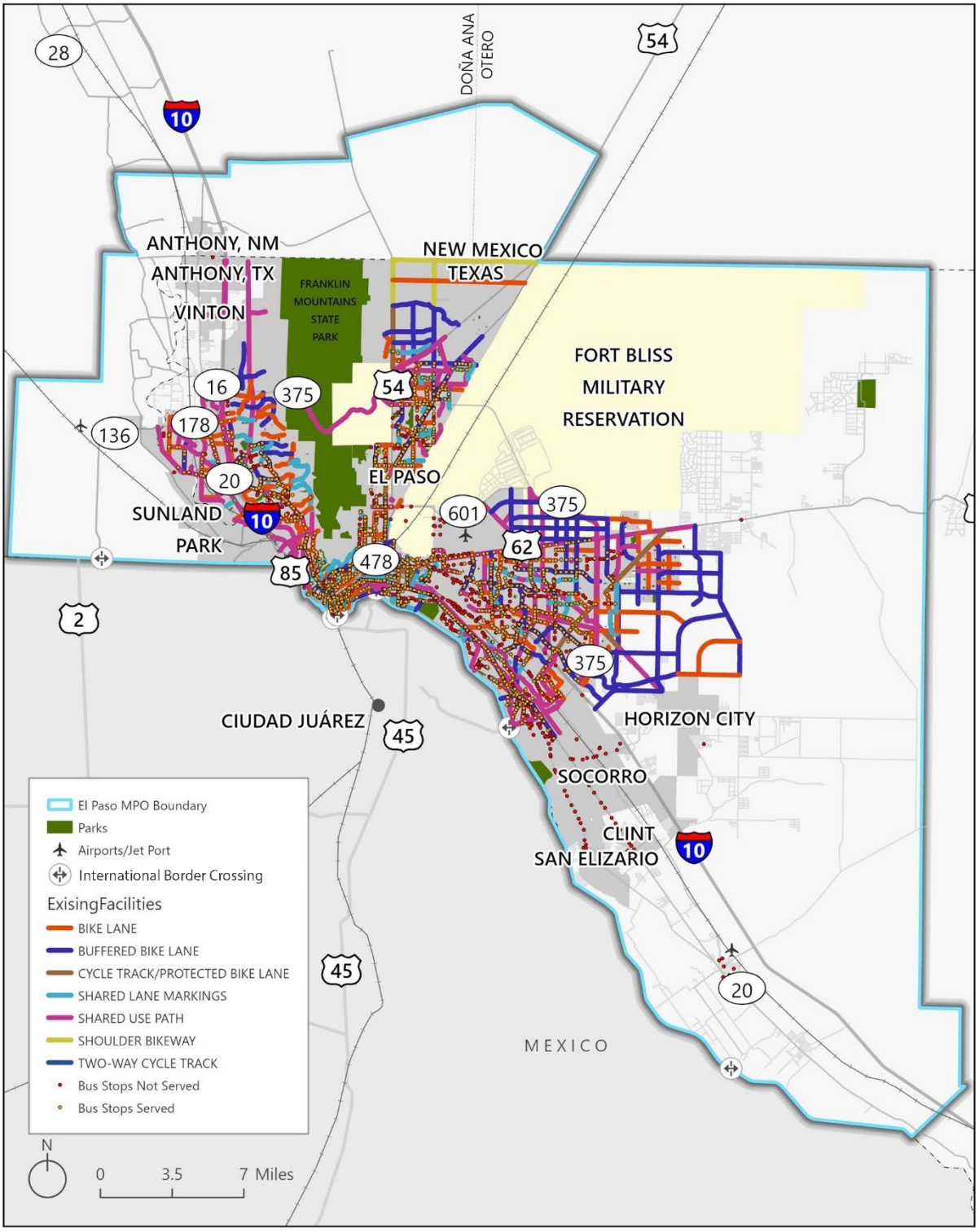
Determining Active Transportation Needs

Active transportation needs were identified through analysis of facility inventory, connectivity metrics, crash data, and user feedback. The process combined quantitative measures, such as facility mileage, proximity to transit and parks, and crash rates, with qualitative insights from community members and advocacy groups. This ensures that the needs reflect both the physical gaps in the network and the safety and accessibility concerns of users.

Identified Needs

- **Network Connectivity**: The current system is fragmented, with major gaps in east-west and north-south corridors, especially outside the City of El Paso. Outlying communities like Anthony, Socorro, and Horizon City have limited or no direct connections to the regional network.
- **First/Last-Mile Access**: Many transit stops and community destinations lack safe, direct pedestrian or bicycle access, limiting the effectiveness of multimodal travel and reducing transit ridership potential (**Figure 3-25**).
- **Safety**: Crash data reveal high concentrations of bicycle and pedestrian crashes on existing facilities, particularly in urban areas. There is a need for targeted safety improvements at high-crash locations, including protected intersections, upgraded facilities, and traffic calming (**Figure 3-26**).
- **Comprehensive Access**: Populations with limited access, including low-income residents, seniors, and those without vehicles, are disproportionately affected by gaps in the active transportation network. Expanding access in these areas is critical for equitable mobility.

Figure 3-25: Transit Accessibility by Active Transportation



Source: Texas Department of Transportation Crash Record Inventory System and the New Mexico Department of Transportation Statewide Traffic Records System; City of El Paso

- **Facility Quality and Maintenance**: Many existing facilities lack low-stress design features, clear pavement markings, or adequate maintenance, making them less attractive or safe for less experienced users.
- **Integration with Planning and Policy**: Recent plans (El Paso Bike Plan 2016, Complete Streets Policy 2022, Vision Zero Action Plan 2023) call for a more comprehensive, coordinated approach to active transportation, but implementation remains incomplete.

3.5.3. Active Transportation Recommendations & Strategies

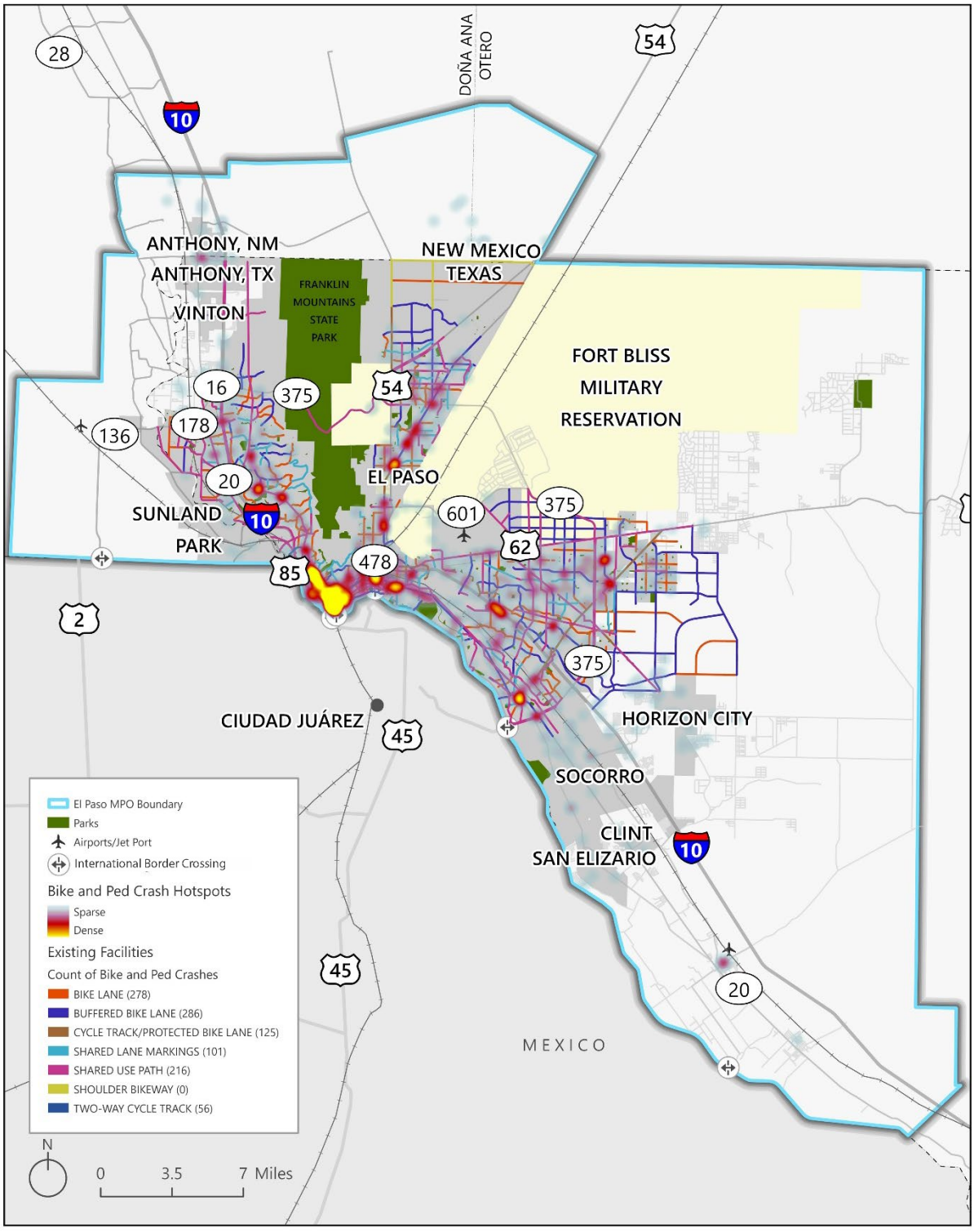
Developing Active Transportation Recommendations

Recommendations for active transportation were developed to be context-sensitive and responsive to the unique urban and suburban context of the El Paso region. Drawing on best practices in network design, safety engineering, and multimodal integration, each strategy was tailored to local land use patterns, travel demand, and community priorities. The recommendations are designed to create a safer, more connected, and more accessible active transportation network.

Recommended Strategies

- **Expand Regional Connectivity:**
    - Develop continuous east-west and north-south bicycle corridors to connect outlying communities (Anthony, Socorro, Horizon City) to El Paso City.
    - Prioritize safe routes parallel to and across major highways (IH-10, US 54) that currently act as barriers.
- **Integrate Active Transportation with Transit:**
    - Implement complete bicycle facilities (e.g., lanes, racks, storage) at all major transit stops and stations.
    - Create protected bicycle lanes along key bus routes to support first/last-mile connections.
    - Develop secure bike parking at major transfer centers and park-and-ride facilities.

Figure 3-26: Bike and/ or Pedestrian Crash Locations Around Existing Facilities



Source: Texas Department of Transportation Crash Record Inventory System and the New Mexico Department of Transportation Statewide Traffic Records System; City of El Paso

- **Improve Safety at High-Crash Locations:**
    - Install protected intersections and bicycle signals at locations with high crash concentrations (**Figure 3-26**).
    - Upgrade existing bike lanes to buffered or protected facilities in areas with documented safety issues.
    - Implement traffic calming measures along corridors with frequent bicycle-vehicle conflicts.
- **Enhance Facility Quality and Maintenance:**
    - Upgrade pavement markings, signage, and wayfinding along existing bikeways.
    - Expand end-of-trip facilities, including bike parking and repair stations, especially at transit stops and community destinations.
    - Establish regular maintenance schedules and standards for all active transportation facilities.
- **Advance Comprehensive Access:**
    - Target investments in neighborhoods with high concentrations of low-income residents, seniors, and households without vehicles.
    - Ensure all new projects incorporate ADA-compliant design and address barriers for people with disabilities.
- **Leverage Planning and Policy Initiatives:**
    - Implement the El Paso Bike Plan 2016's vision for a low-stress, interconnected system of bikeways. The City of El Paso will be updating the 2016 Bike Plan to integrate first/last mile and schools/parks access infrastructure.
    - Apply Complete Streets and Vision Zero principles to all new roadway and retrofit projects.
    - Hire a dedicated Bicycle/Pedestrian Coordinator and update design standards to reflect best practices.

- **Regional Trail Network:**
    - Build trail connections between parks and major destinations throughout the region, supporting both recreation and utilitarian trips.
    - Continue the ongoing extension of the Paso del Norte Trail to create a countywide trail network in El Paso County that promotes active transportation, celebrates regional culture, supports economic development, and fosters healthy living through community-driven planning and partnerships.

Figure 3-27. Traffic Light in Downtown El Paso