



5. PORTS OF ENTRY

INTRODUCTION

The El Paso MPO region is one of the most significant border crossing regions in the United States. Known as the world’s largest international border metroplex, traffic and freight flow between the Texas/New Mexico-Mexico border impacts economies at local, regional, and national scales. Accordingly, Destino 2045 investigates traffic crossing the region’s ports of entry (POEs) and the economic implications of congestion and long wait times at these facilities. The region contains six POEs, listed in Table 5.1 and shown in Figure 5.1. This section looks at general traffic trends, wait times, and congestion at these POEs to determine how well they are performing and to identify potential deficiencies near these facilities. The section will also provide observations of each POE and how they support different multimodal traffic.

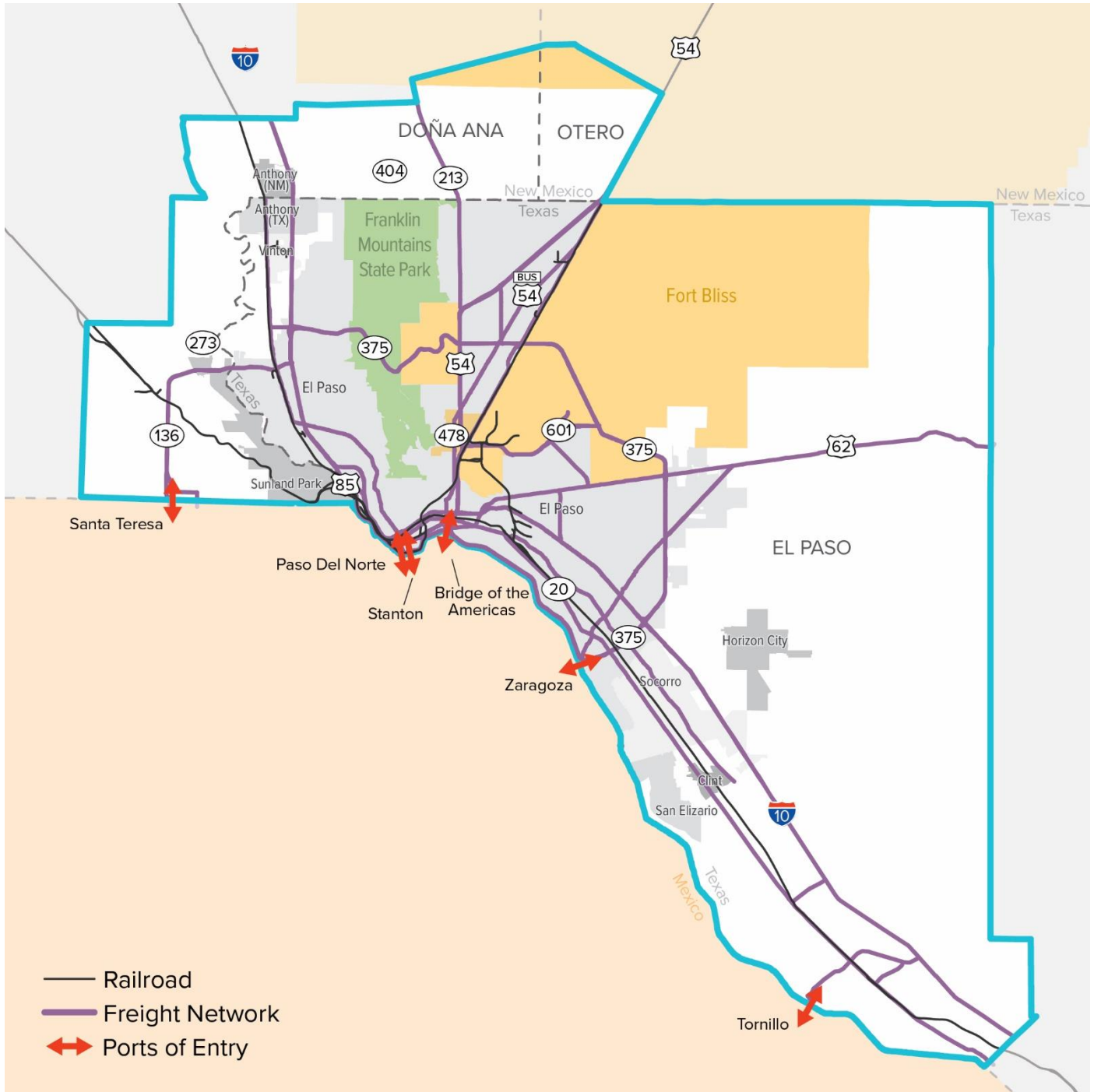
TABLE 5.1: EL PASO MPO REGION PORTS OF ENTRY INFORMATION

POE NAME	MODES	MAX # OF LANES	CONNECTIONS
Santa Teresa	Passenger/Commercial Vehicle; Pedestrian	Passenger: 3 Commercial: 4 Pedestrian: 2	Pete Domenici Memorial Hwy to IH 10
Paso Del Norte (PDN, Santa Fe)	Passenger Vehicle (into the United States only); Pedestrian	Passenger: 12 Pedestrian: 14	El Paso St. to W. Paisano Dr. & IH 10
Stanton Street	Passenger Vehicle; Pedestrian	Passenger: 3 (to Mexico) Passenger: 1 DCL (into US) Pedestrian: 2	Stanton St. to W. Paisano Dr. & IH 10
Bridge of the Americas (BOTA)	Passenger/Commercial Vehicle, Pedestrian	Passenger: 14 Commercial: 6 Pedestrian: 4	IH 110 to US 62 and IH 10
Ysleta-Zaragoza (Zaragoza)	Passenger/Commercial Vehicle, Pedestrian	Passenger: 5 (1 DCL) Commercial: 4 (1 FAST)	Zaragoza Rd. to Loop 375
Tornillo	Passenger Vehicle, Pedestrian	Passenger: 4 Pedestrian: 2	Tornillo Guadalupe Rd. to FM 3380 to IH 10

*DCL – Dedicated Commuter Lane; FAST – Free and Secure Trade lanes



FIGURE 5.1: EL PASO MPO REGION PORT OF ENTRY LOCATIONS





ECONOMIC IMPACT

The El Paso MPO region’s POEs facilitate import/export trade flows between the United States and Mexico, creating jobs and wealth for both Texas and New Mexico, as well as the United States. Texas’ POEs have played a major role in supporting roughly \$356 billion in international trade, and El Paso’s border crossings alone have accounted for nearly 20% of this total (Texas Comptroller, 2015). Additionally, trade activities associated with the region’s POEs create an estimated 128,500 jobs for Texas, further indicating how important these facilities are for the region’s vitality. Table 5.3 through 5.5 break down import and export trade activity values—collected from the Texas Center for Border Economic & Enterprise Development—for El Paso, Tornillo, and Santa Teresa POEs.

TABLE 5.3: EL PASO MPO POE EXPORT VALUES

YEAR	EL PASO	TORNILLO	SANTA TERESA	REGION TOTAL
2014	\$30,988,235,312	\$4,278,975	\$9,875,868,643	\$41,235,248,649
2015	\$30,607,675,201	\$2,319,477	\$10,299,357,659	\$41,247,555,399
2016	\$30,668,623,128	\$163,621,351	\$10,754,393,114	\$41,742,655,783

TABLE 5.4: EL PASO MPO POE IMPORT VALUES

YEAR	EL PASO	TORNILLO	SANTA TERESA	REGION TOTAL
2014	\$35,499,068,213	\$70,322	\$9,521,543,808	\$45,135,404,028
2015	\$38,614,997,856	-	\$11,685,087,941	\$50,383,468,154
2016	\$40,127,488,871	-	\$11,949,149,618	\$52,176,459,045

TABLE 5.5: EL PASO MPO POE TRADE VALUE TOTALS

YEAR	EL PASO	TORNILLO	SANTA TERESA	REGION TOTAL
2014	\$66,487,303,525	\$4,349,297	\$19,397,412,451	\$86,370,652,677
2015	\$69,222,673,057	\$2,319,477	\$21,984,445,600	\$91,631,023,553
2016	\$70,796,111,999	\$163,621,351	\$22,703,542,732	\$93,919,114,828

The POE facilities within El Paso (e.g. Zaragoza and BOTA) facilitate the most trade in the region, with over 75% of total trade activity value being attributed to these POEs. Since reconstruction in 2016, Tornillo POE has experienced a large upswing in export activity, reaching a total value of roughly \$163 million, but still represents a very small value of goods movement compared to the other regional POEs. Santa Teresa POE trade activity was valued at roughly \$22.7 billion in 2016. Regional trade activity value totals have consistently increased over the past three years, growing by 8.7% between 2014 and 2016.



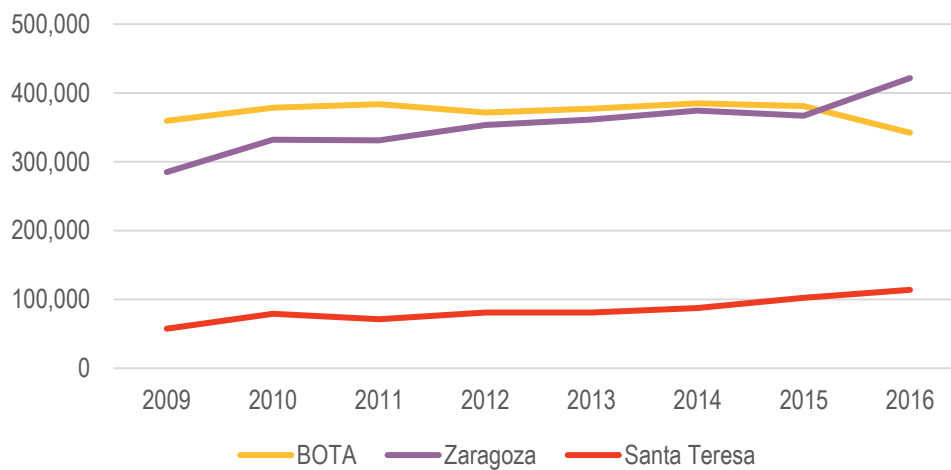
PORT OF ENTRY TRAFFIC

Data compiled from the Bureau of Transportation Statistics, U.S. Customs and Border Protection, and the City of El Paso provides POE traffic information by mode. This information provides a general overview of how much and what type of traffic is experienced at each of the POEs.

COMMERCIAL

Figure 5.2 displays commercial traffic from 2009 to 2016 for the region’s POEs that allow commercial traffic to cross the border, excluding the Tornillo POE which opened in early 2016 but closed its commercial operations due to relatively low demand (authorities have indicated that commercial traffic may resume at any time when demand warrants). Data shows that most commercial traffic occurs at the BOTA (the only toll-bridge in El Paso) and Zaragoza border crossings, with the Zaragoza POE overtaking BOTA in total freight volume handled in 2015. In total, commercial traffic at these POEs increased by 25% (roughly 176,000 vehicles) between 2009 and 2016, with Santa Teresa experiencing the largest percentage increase at 98%.

FIGURE 5.2: PORT OF ENTRY COMMERCIAL TRAFFIC; 2009-2016





PASSENGER

Figure 5.3 displays passenger vehicle traffic for five of the six POEs found in the MPO region—Paso Del Norte (PDN) POE only provides data for pedestrian traffic. BOTA experiences substantial annual passenger vehicle traffic in comparison to the other POEs; in 2016, the BOTA POE had 8.5 million passenger vehicles crossings, which is roughly 3 million more than other POEs combined. Zaragoza POE experiences the second largest amount of traffic annually, with nearly 3-million vehicles passing through the facility in 2016. Stanton, Santa Teresa, and Tornillo POEs display annual passenger traffic fluctuating between the 250,000 to 1-million vehicles a year.

PEDESTRIAN

Figure 5.4 illustrates annual pedestrian traffic volumes for all six of the region’s border crossings. The BOTA and PDN POEs experience the highest levels of annual pedestrian traffic, with 2.6 million and 3.2 million pedestrian crossings in 2016 respectively. Zaragoza (528,802 pedestrian crossings) and Stanton (630,740 pedestrian crossings) POEs make up the second tier in terms of pedestrian traffic. While Stanton POE experiences the third most traffic compared to the other regional POEs, pedestrian crossings at this facility have declined by 53% between 2009 and 2016. Santa Teresa (159,687 pedestrian crossings) and Tornillo (31,957 pedestrian crossings) POEs are located in mostly rural or industrial areas where there is little pedestrian traffic, which is reflected in the relatively low number of pedestrian crossings made at these facilities. While the number of crossings at the Santa Teresa POE is relatively low, this facility has seen a significant increase in the amount of pedestrian traffic using this facility; from 2009 to 2016, pedestrian crossings have increased by 184% or over 100,000 crossings.

FIGURE 5.3: PORT OF ENTRY PASSENGER VEHICLE TRAFFIC

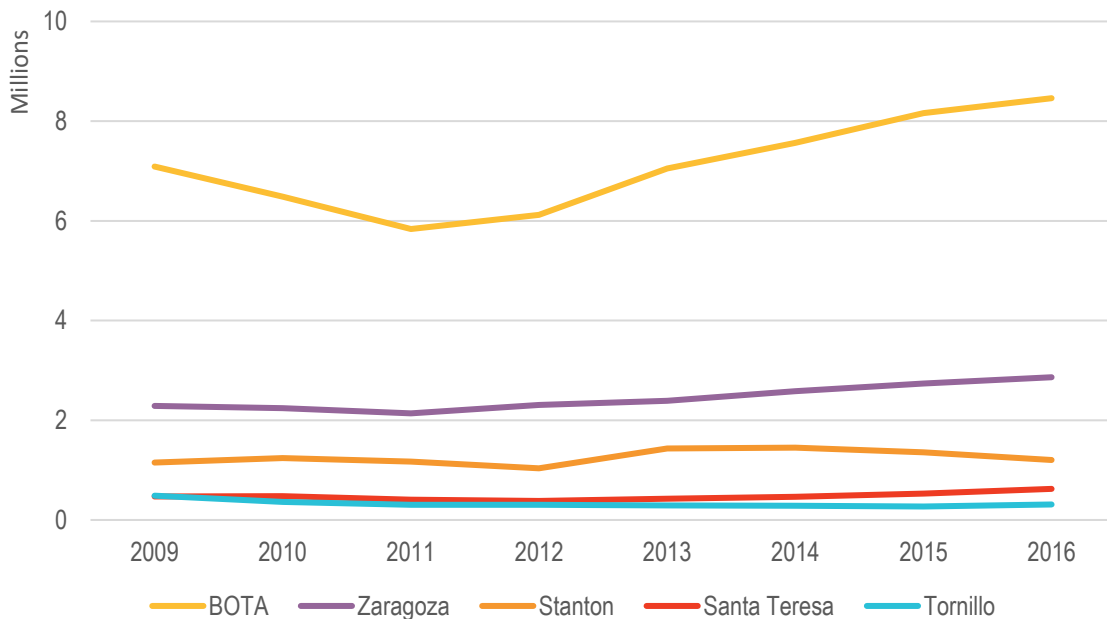
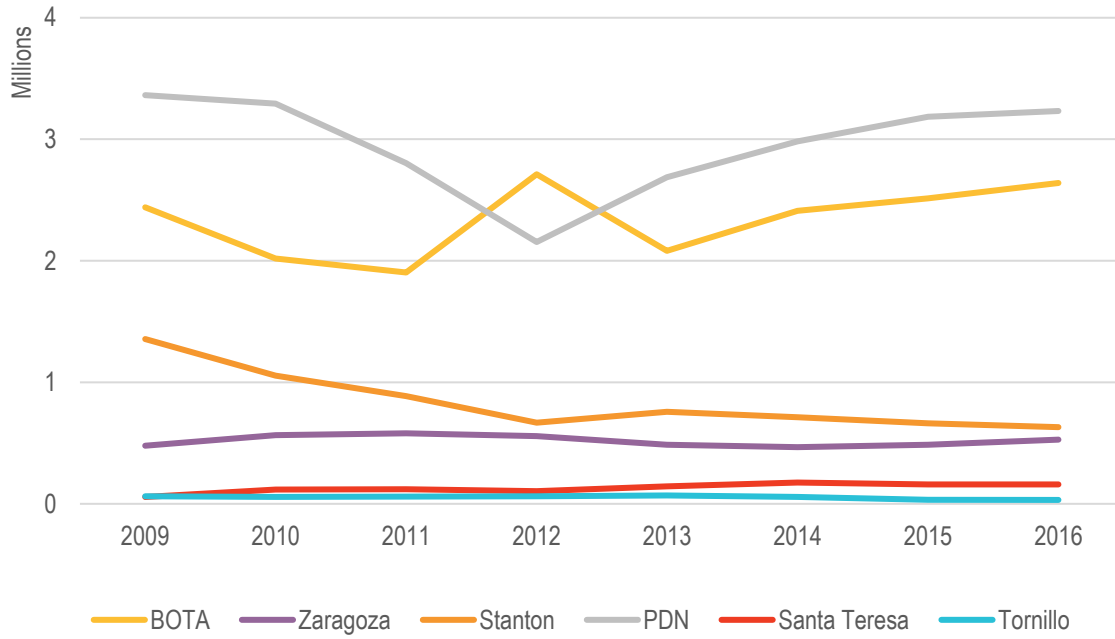




FIGURE 5.4: PORT OF ENTRY PEDESTRIAN TRAFFIC





PORT OF ENTRY ROADWAY ACCESS PERFORMANCE

While traffic to/from the POEs is typically impacted by the wait times for processing at border crossings, the roadways providing access to the POEs are equally as important to consider. For the POEs to operate more efficiently, congestion and delay along the roadways feeding traffic to these facilities must be minimized. As in other roadway analyses performed in this needs assessment, Destino 2045 analyzes forecasted traffic congestion using outputs from the 2045 El Paso Horizon TDM to identify deficiencies in the roadway network providing POE access. Table 5.2 shows which roadway facilities provide access to each POE.

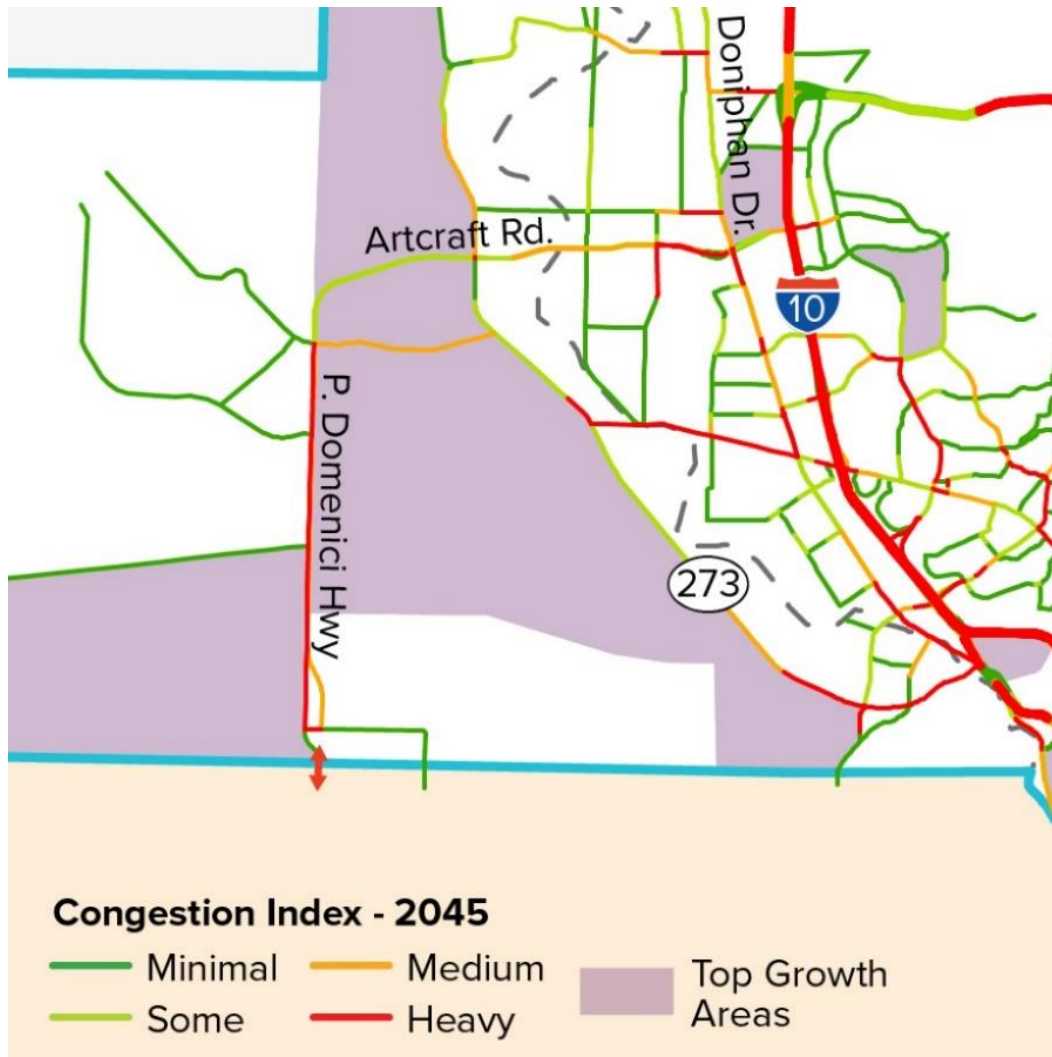
TABLE 5.2: EL PASO MPO REGION PORTS OF ENTRY ACCESS ROADWAYS

POE NAME	ACCESS ROADWAYS
Santa Teresa	Pete Domenici Highway
Paso Del Norte (PDN, Santa Fe)	W. Paisano Dr./US 62 El Paso St.
Stanton Street	W. Paisano Dr./US 62 Stanton St.
Bridge of the Americas (BOTA)	E. Paisano Dr./US 62 IH 110
Ysleta-Zaragoza (Zaragoza)	Zaragoza Rd. Loop 375
Tornillo	Middle Island Rd. M.F. Aguilera Rd.

SANTA TERESA

Figure 5.5 shows 2045 roadway congestion index for the network providing access to the Santa Teresa POE. By 2045, both Pete Domenici Highway and parts of Artcraft Road are expected to experience heavy congestion. Furthermore, IH 10 and Doniphan Drive, which are major regional roadways that provide connection to Pete Domenici Highway are also anticipated to experience medium to heavy congestion. The increased levels of traffic and congestion are likely spurred by increased activity at the POE but also by high population and employment growth in the area. Other major roadways in the area, Country Club Road and McNutt Road, also show heavy congestion for large portions of those roadways.

FIGURE 5.5: SANTA TERESA POE ACCESS CONGESTION INDEX; 2045





DOWNTOWN (PDN, STANTON STREET, BOTA)

Figure 5.6 shows 2045 congestion index for the three POEs located near downtown El Paso: Paso Del Norte (PDN), Stanton Street, and Bridge of the Americas (BOTA). The PDN POE only allows passenger vehicle traffic coming into the United States (northbound) and only has direct connection to Paisano Drive/US 62 via El Paso Street. Stanton Street, which provides direct access to the Stanton Street POE, also directly connects to Paisano Drive/US 62 and provides relatively easy access to IH 10. As a major facility providing access to the PDN and Stanton Street POEs, Paisano Drive/US 62 shows relatively low anticipated levels of congestion in downtown El Paso near these facilities. In fact, much of the local road network in downtown El Paso providing access to these facilities shows relatively little forecasted peak period congestion. IH 10 on the other hand is anticipated to experience heavy peak period congestion in the forecast year (2045), which may impact accessibility and increase delays for those trying to cross the border at these POEs. The same congestion observations are also seen at the BOTA POE—relatively low congestion along Paisano Drive and lower functional class roadways providing POE access and heavy congestion along the major facilities (e.g. IH 10 and US 54). Although there is medium to heavy congestion along Loop 375 near these POEs, the roadways connecting to the POEs do not interchange with Loop 375.

FIGURE 5.6: DOWNTOWN EL PASO POE ACCESS CONGESTION INDEX; 2045

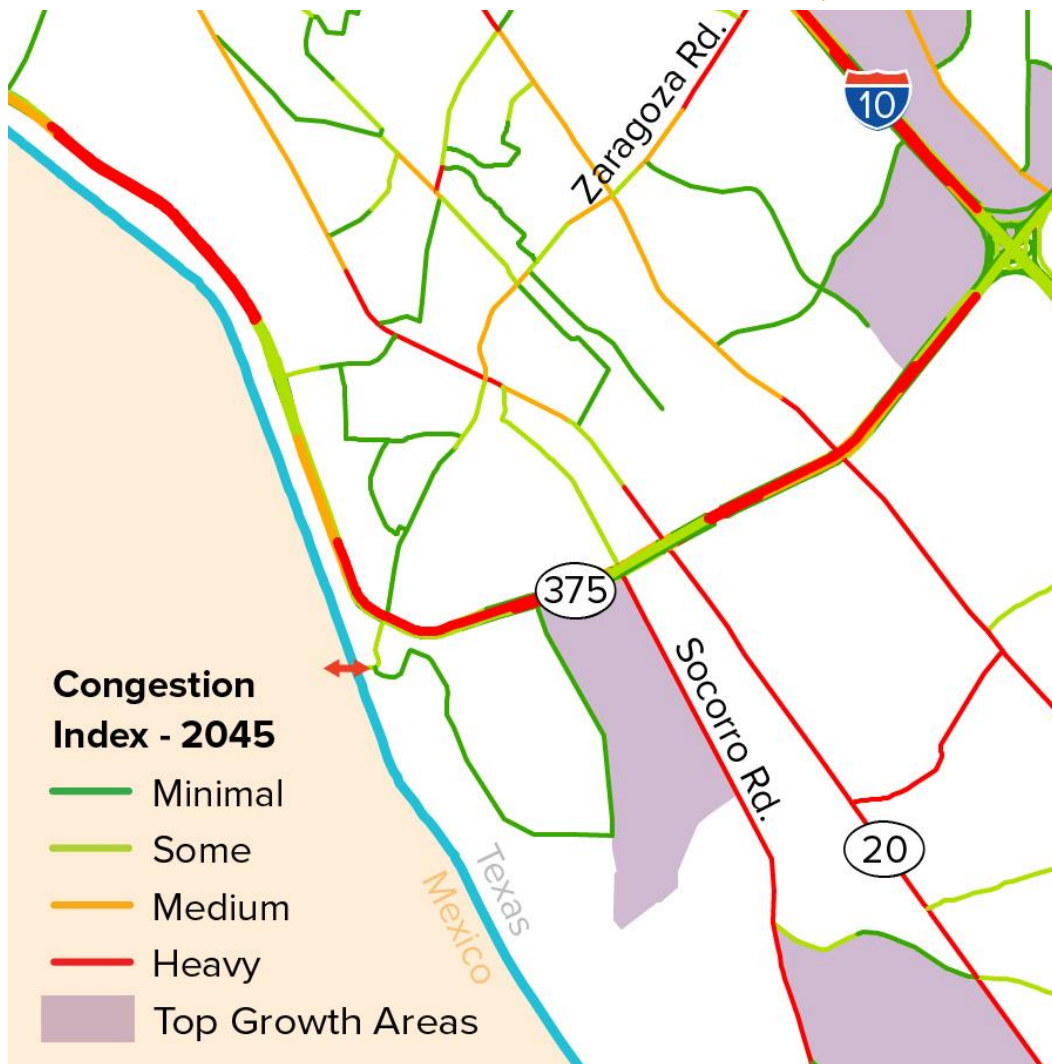




ZARAGOZA

Figure 5.7 shows heavy congestion for major roadways connecting to the Zaragoza POE in 2045. Both Loop 375 and IH 10 have large segments of roadway that are anticipated to experience heavy congestion. As a facility that generates the largest amount of commercial vehicle traffic, it can be assumed that these major regional connectors will be heavily utilized by commercial freight vehicles carrying freight throughout the region and United States. As a result, congestion along Loop 375 and IH 10 could have a significant negative impact on the region’s freight industry. For local access to the POE, the congestion index shows heavy congestion along major corridors in the area. Both Socorro Road and Alameda Avenue are anticipated to experience heavy congestion, particularly south of Loop 375. Zaragoza Road intersections with major roadway facilities also show relatively high levels of congestion.

FIGURE 5.7: ZARAGOZA POE ACCESS CONGESTION INDEX; 2045

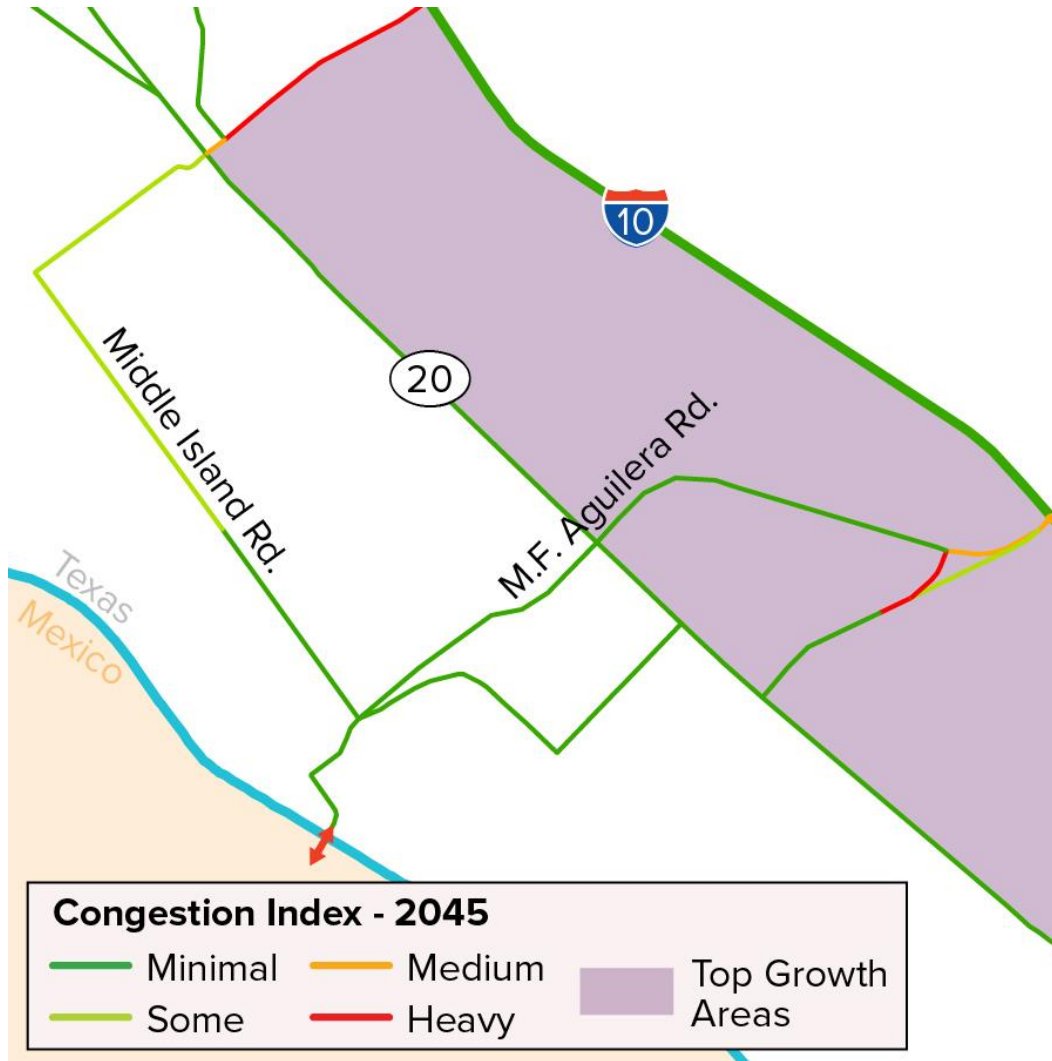




TORNILLO

Figure 5.8 shows that there is relatively little congestion near the Tornillo POE. While some of the roadways connecting to IH 10 (Fabens Rd. and OT Smith Rd.) are expected to experience heavy congestion, the facilities providing direct access to the POE are not expected to be heavily congestion during peak periods in the future.

FIGURE 5.8: TORNILLO POE ACCESS CONGESTION INDEX; 2045





WAIT TIMES

While increased trade activity at the region’s POEs is typically a positive indicator for economic vitality, it also means that congestion and wait times at these facilities are likely to increase if no operational improvements are made. This is especially true as the border crossing process becomes more complicated because of more thorough inspections, particularly for vehicles entering the United States. If delays at the region’s POEs become too long, economic development facilitated by the POEs may stagnate due to decreased competitiveness in moving goods. It is crucial for the region’s economic vitality that these POE facilities operate as efficiently as possible.

Table 5.6 provides average commercial vehicle wait times at two of the major POEs in the region, Zaragoza and BOTA, between 2013 and 2016. Wait times were calculated using TTI’s Border Crossing Information System (BCIS) data query tool. At both POEs vehicle wait times increased every year between 2013 and 2015, until there was a significant decrease in 2016. Over the four-year period, the wait times at the Zaragoza and BOTA POEs increased by 8% and 40% respectively. If this trend continues, the movement of goods throughout the region will be hindered, potentially resulting in additional transportation costs and negative effects on the local economy.

TABLE 5.6: POE AVERAGE COMMERCIAL VEHICLE WAIT TIME (MINUTES); 2013-2016

YEAR	ZARAGOZA	BOTA
2013	36	35
2014	42	45
2015	45	57
2016	39	49

Passenger vehicle and pedestrian wait times are also important to consider when evaluating the performance of POEs, as the POEs provide access across the United States-Mexico border which can lead to additional opportunities for those living and working in the El Paso MPO region. Although the BCIS does not provide detailed data for these wait times, review of historical wait time estimates show that passenger vehicles could expect to wait anywhere from 10 minutes to an hour at some of the region’s POEs. On the other hand, pedestrian wait times were shown to typically not exceed more than a few minutes. Air quality is another important consideration when discussing wait times. As vehicles sit idle in traffic waiting to cross the border, they are releasing emissions. The longer vehicles have to wait at the POEs, the more emissions that are being released into the atmosphere.

In order minimize wait times, El Paso POE operators have begun investing in intelligent transportation and real-time information systems to expedite inspections and traffic. Examples include Dedicated Commuter Lanes (DCL) and the Secure Electronic Network for Travelers’ Rapid Inspection (SENTRI), where designated lanes work in conjunction with an organized network to channel applicable travelers into specified flows of traffic with streamlined inspection processes. The Free and Secure Trade Program (FAST) allows expedited commercial vehicle processing for trusted shippers carrying low-risk shipments. Ultimately, these programs work to achieve more streamlined travel lanes and reduced border wait times.



MULTIMODAL POE ACCESS

For pedestrians crossing the United State-Mexico border at the region’s POEs, transit and bike/ped infrastructure provide accessibility to the rest of the El Paso region. In turn, this provides increased opportunities for those without a vehicle.

TRANSIT ACCESS

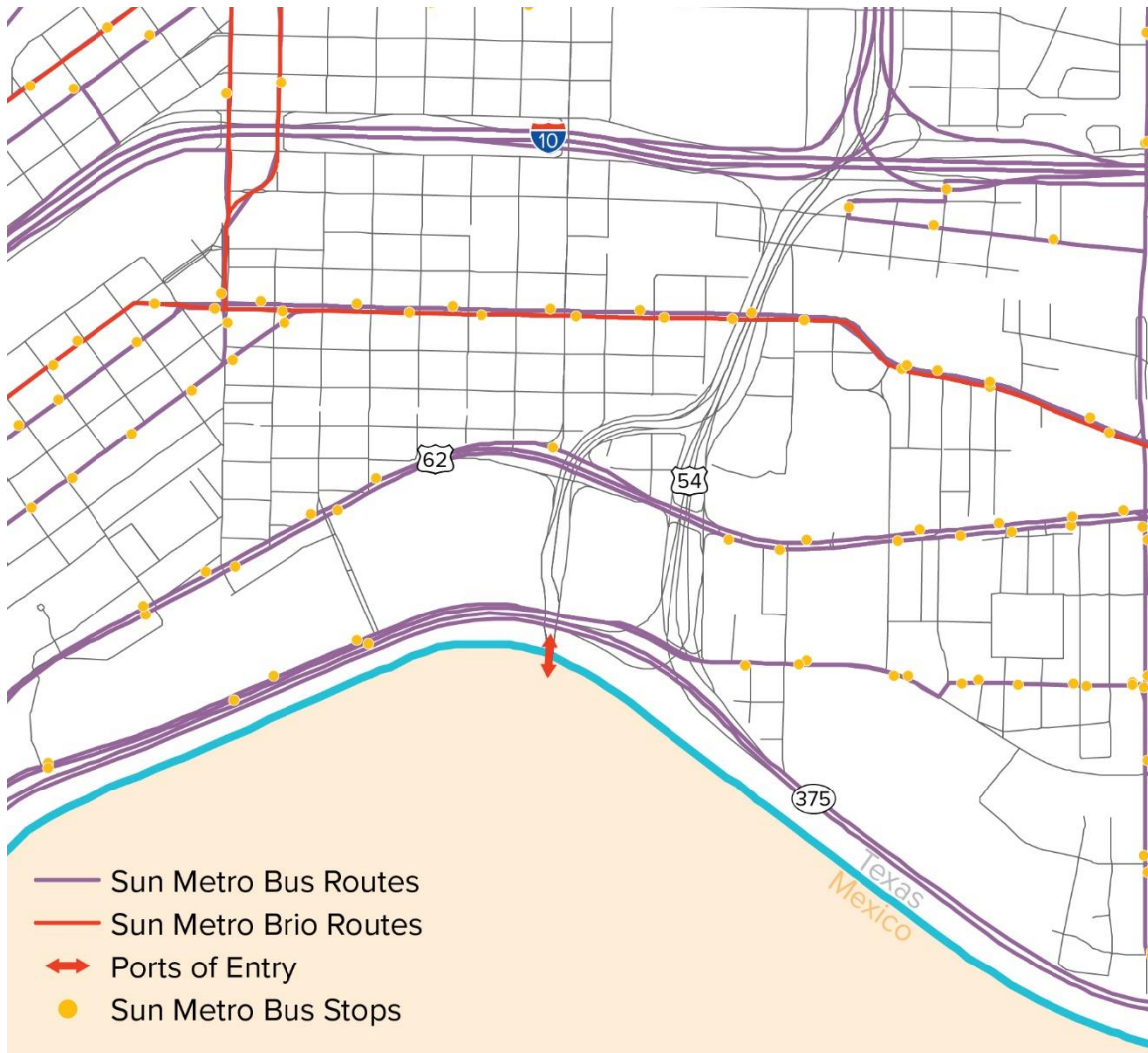
Both the Santa Teresa and Tornillo POEs are located in rural parts of the El Paso MPO region and do not provide access to transit. On the other hand, the PDN and Stanton Street POEs, which are located in downtown El Paso, provide easy access to a variety of high quality transit options. Figure 5.9 shows the location of local transit stops and routes relative to the PDN and Stanton Street POEs. From the PDN POE, the Downtown Santa Fe Transfer Center is only a 0.2 mile (about 5 minutes) walk. This major transfer center provides access to over 26 different Sun Metro bus routes, as well as the Sun Metro Dyer Brio route and future streetcar route. The walk from the Downtown Santa Fe Transfer Center to the Stanton Street POE is 0.5 miles (about 11 minutes). There are also several other bus stops within easy walking distance (less than 5 minutes) from each of these POEs.

FIGURE 5.9: TRANSIT ACCESS AT PDN AND STANTON STREET POES



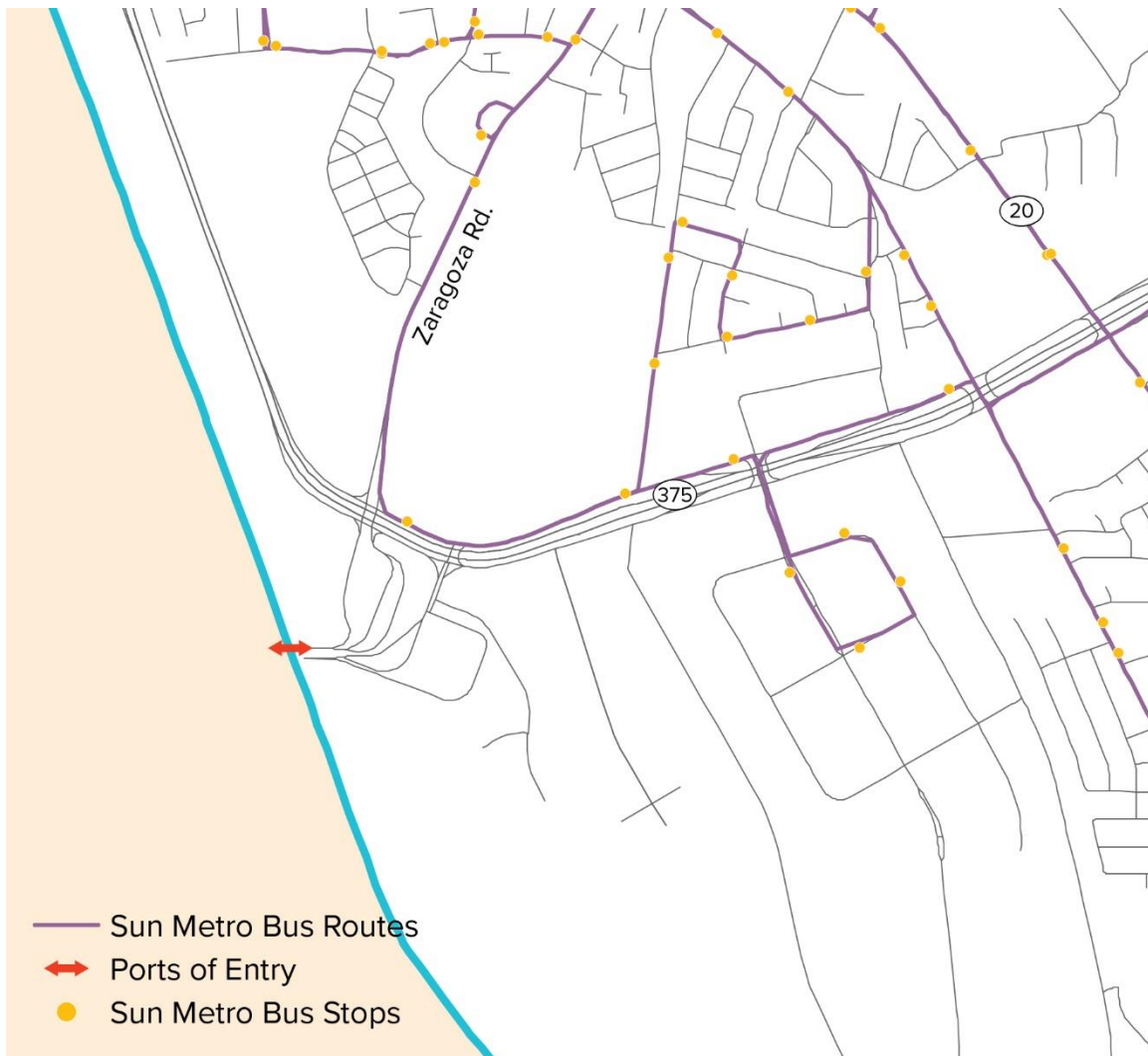
Access to transit is much more difficult at the BOTA POE (Figure 5.10) compared to the other POEs. There are only two transit stops (providing access to two bus routes) within 0.5 miles of the POE entrance/exit and both require pedestrians to walk across and along major highways. Sidewalks and signalized crosswalks are located along the paths to these transit stops, though, which allows for pedestrians to access transit more safely and comfortably. As the POE with the second highest amount of pedestrian traffic, the lack of transit access nearby limits where pedestrians can travel once they cross the border.

FIGURE 5.10: TRANSIT ACCESS AT BOTA POE



Transit access is similar at the Zaragoza POE (Figure 5.11). There is only one bus stop within walking distance that serves two routes. Again, sidewalks and signalized crosswalks are present along the path between the POE and bus station, but it requires pedestrians to cross a major highway (Loop 375).

FIGURE 5.11: TRANSIT ACCESS AT ZARAGOZA POE



Additionally, for both the BOTA and Zaragoza POEs, the closest transit stops to these facilities appear to have few or inadequate amenities. Figure 5.12 and 5.13 show the conditions of the transit stops nearest these two POEs.

FIGURE 5.12 AND 5.13: BOTA TRANSIT STOP AND ZARAGOZA TRANSIT STOP



BIKE/PED INFRASTRUCTURE

Similar to findings discussed in the Transit Access section, the PDN and Stanton Street POEs provide more pedestrian-friendly infrastructure by virtue of being located in a downtown urban environment. However, there is little dedicated active transportation (bicycling or walking) infrastructure at these POEs, mostly sidewalks, pedestrian islands, and non-signalized crosswalks. There also does not appear to be any bike infrastructure (outside basic bike racks) and minimal signage warning drivers of pedestrians crossing. Figure 5.14 shows a street level view of the PDN POE El Paso Street entrance/exit. For the POE that experiences the highest amount of pedestrian traffic (over three million pedestrians a year) in the region, the current infrastructure at this entry point does little to prevent conflict points between vehicles and pedestrians or optimize how vehicle and pedestrian traffic interact with each other.

FIGURE 5.14: BIKE/PED CONDITIONS AT PDN POE EL PASO ST. ENTRY



Figure 5.15 shows a street level view of the PDN POE Santa Fe Street entrance/exit, which provides more active transportation infrastructure and is in general more attractive for pedestrians crossing the border. For example, this access point provides an entrance plaza and flashing beacon signaling to drivers to watch for pedestrians.

FIGURE 5.15: BIKE/PED CONDITIONS AT PDN POE SANTA FE ST. ENTRY



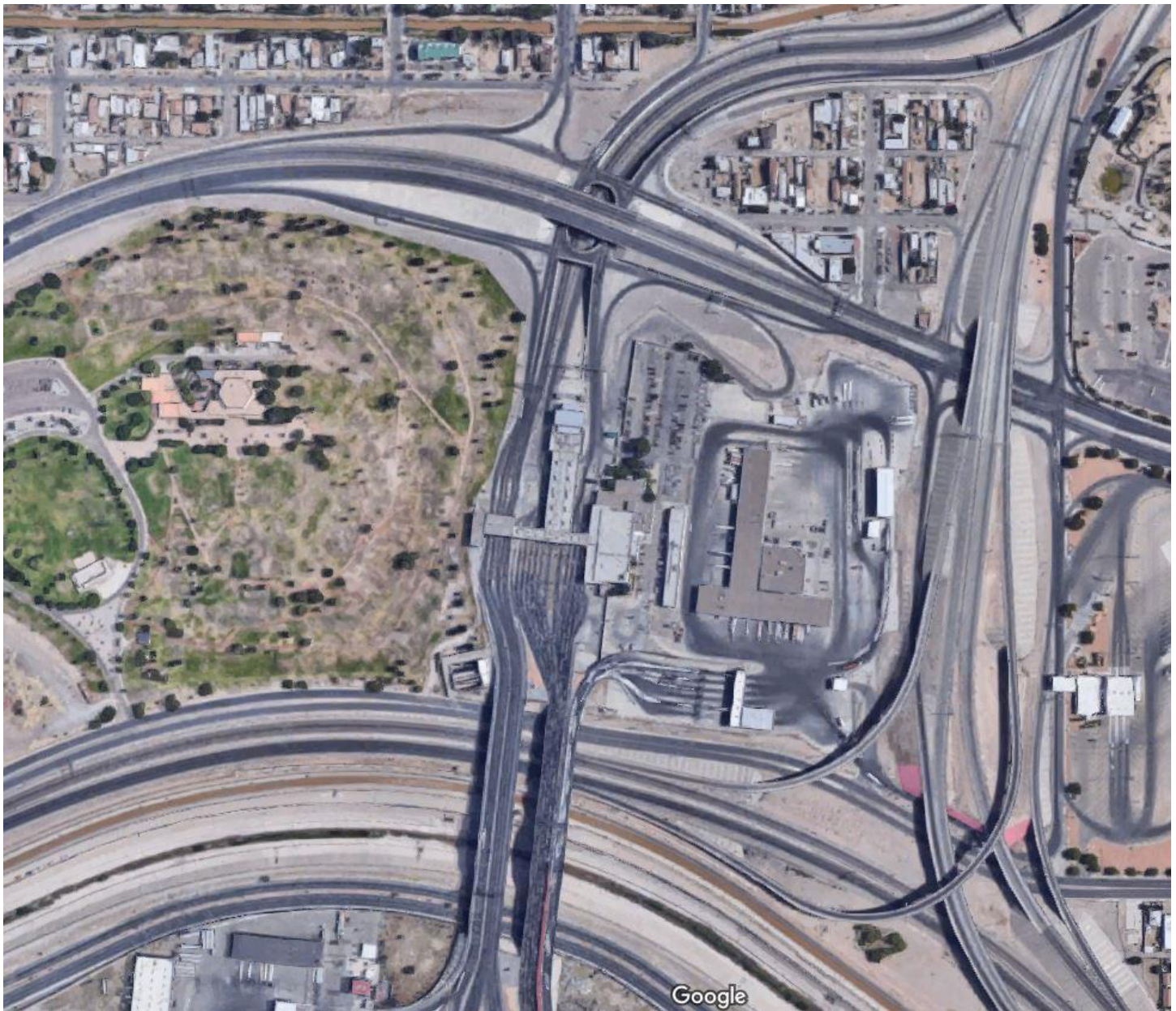
Figure 5.16 shows a street level view of the Stanton Street entrance/exit. This POE access point includes a covered entrance plaza, a pedestrian island, a bike rack, and higher quality pedestrian infrastructure.

FIGURE 5.16: BIKE/PED CONDITIONS AT STANTON STREET POE ENTRY



For the BOTA POE, the biggest issue is that the POE access point for pedestrians and bicyclists is surrounded on two sides (to the north and east) by major highways (US 62 and US 54). While there are sidewalks and crosswalks along these facilities, there are few destinations within a short walking distance as these major roadways and the POE facilities take up much of the space in the area. Also, crossing and walking along high-speed roadways is typically stressful for pedestrians. Conversely, to the west of the POE there is a large park which provides an environment that is more conducive to bicycling and walking and leads to better crossing locations away from the major highway interchanges. Figure 5.17 is an aerial image showing how the major highways separate the POE from more developed, walkable areas.

FIGURE 5.17: BIKE/PED CONDITIONS AT BOTA POE ENTRY



The Zaragoza POE provides basic pedestrian infrastructure (e.g. signalized crosswalks and sidewalks) and no bike infrastructure. Though 500,000 pedestrians cross the border at the POE annually, there are virtually no destinations nearby that would be considered within walking distance. The lack of nearby destinations and review of aerial photography suggest that many of those who cross the border at this location utilize transit or are picked up by someone in a personal vehicle. For example, Figure 5.18 shows a line of cars, which is consistently present in historical photos of the area as well, waiting in a pull-out bay at a sidewalk leading to the POE. Figure 5.19 shows one of the intersections transit riders must cross to access the bus stop at the Zaragoza POE. Though there is a signalized crosswalk, it does not include the high-speed turn lane onto Zaragoza Road and does not appear to be ADA accessible. The sidewalk also ends before reaching the crossing.

FIGURE 5.18: BIKE/PED CONDITIONS AT ZARAGOZA POE ENTRY



FIGURE 5.19: BIKE/PED CONDITIONS AT ZARAGOZA POE BUS STOP





CONCLUSION

Millions of people cross the United States-Mexico border within the El Paso MPO region every year. The POEs that facilitate traffic across the border play a vital role in the economic vitality of the region and quality of life for those living in the region. For the POEs to continue to support movement across the border in the future as traffic levels increase, Destino 2045 must address transportation deficiencies identified at these facilities. These deficiencies include:

- Congestion along major highways (IH 10, P. Domenici Hwy, Loop 375) connecting to roadways that provide direct access to the POEs
- Increasing commercial vehicle wait times
- Minimal transit access, with the exception of the PDN and Stanton Street POEs
- Lack of bike infrastructure and minimal pedestrian infrastructure