

EL PASO METROPOLITAN PLANNING ORGANIZATION  
METROPOLITAN TRANSPORTATION PLAN

EXECUTIVE  
SUMMARY



MAY 2018

# » Acknowledgments & About the MPO

## Transportation Policy Board (TPB)

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Dee Margo (City of El Paso - Mayor)  
Ted Marquez (El Paso - Dept. of Transportation Director)  
Tommy Gonzalez (City of El Paso - City Manager)  
Peter Svarzbien (City of El Paso - District #1 Rep.)  
Cassandra Brown (City of El Paso - District #3 Rep.)  
Michiel Noe (City of El Paso - District #5 Rep.)  
Jay Banasiak (City of El Paso - Dir. Mass Transit Dept.)  
Addam Hernandez (Town of Clint - Commission Member)  
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Mary Gonzalez (Texas State Rep. 75th District)  
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Joe Moody (Texas State Rep. 78th District)  
Joe Pickett (Texas State Rep. 79th District)  
Monica Lombrana (ELP - Dir. of Aviation Development)  
Robert Bielek (TxDOT El Paso District 24 - District Eng.)

### NEW MEXICO:

Diana Trujillo (City of Anthony - Mayor)  
Chuck McMahon (Doña Ana County - Asst. Mgr. of Ops.)  
Javier Perea (City of Sunland Park - Mayor)  
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Joseph Cervantes (New Mexico State Sen. - 31st District)  
Trent Doolittle (NMDOT District 1 - District Engineer)

## Transportation Project Advisory Committee (TPAC)

### TEXAS:

Martin Lerma (Town of Anthony)  
Omar Moreno (City of El Paso)  
Raul Escobedo (Mass Transit Board)  
Addam Hernandez (Town of Clint)  
Michelle Padilla (Horizon City)  
Rene Rodriguez (City of Socorro)  
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Marty Boyd (TxDOT)  
Evaristo Cruz (Ysleta Del Sur Pueblo)  
Greg McNicol (University of Texas at El Paso)

### NEW MEXICO:

Esther Motongo (City of Anthony)  
Hector Rangel (City of Sunland Park)  
Robert Duran (Doña Ana County)  
Harold Love (NMDOT)

## El Paso MPO Staff

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Isela Hooper (Program Administrator)  
Mayela Granados (Administrative Secretary)  
Marisol Enriquez (Administrative Assistant)

When an urban area reaches a population of 50,000 or more, a Metropolitan Planning Organization (MPO) is formed to provide the area with a "continuing, cooperative, and comprehensive" transportation planning process resulting in a Metropolitan Transportation Plan and related programs and projects. The El Paso MPO was formed in 1988 by the Governor of Texas to service the El Paso Metropolitan Planning Area shown in this map. The El Paso MPO has a policy board that acts as the decision-making body for the MPO, an advisory committee that advises the MPO on transportation projects, and a full staff of management, planners, analysts, and administrative support.

Because it has a population greater than 200,000, the El Paso MPO is also designated as a Transportation Management Area (TMA). TMAs incur additional requirements for their planning process to be certified every three (3) years and to implement a Congestion Management System/ Process.



El Paso MPO  
Planning Area

# » What is an MTP?

A Metropolitan Transportation Plan (MTP) is a long range transportation plan for urbanized areas. The MTP development process is designed to coordinate local vision and needs with national transportation performance measures and planning criteria. The plan provides for the long-term travel needs of the community in a balanced and financially responsible manner.

In addition to fulfilling the requirements that keep the El Paso region eligible for federal transportation funding, the MTP:

› *Uses extensive public input to develop a community vision to guide transportation investment for the region.*



› *Combines rigorous technical analysis with local knowledge to identify needs and deficiencies in the current transportation system.*



› *Uses performance-based planning to prioritize strategies and solutions to improve regional mobility.*



› *Prioritizes transportation projects in the region based on community values and the financial capabilities of entities responsible for transportation infrastructure.*



## Project Timeline



# » Destino 2045: Driven by Community Vision

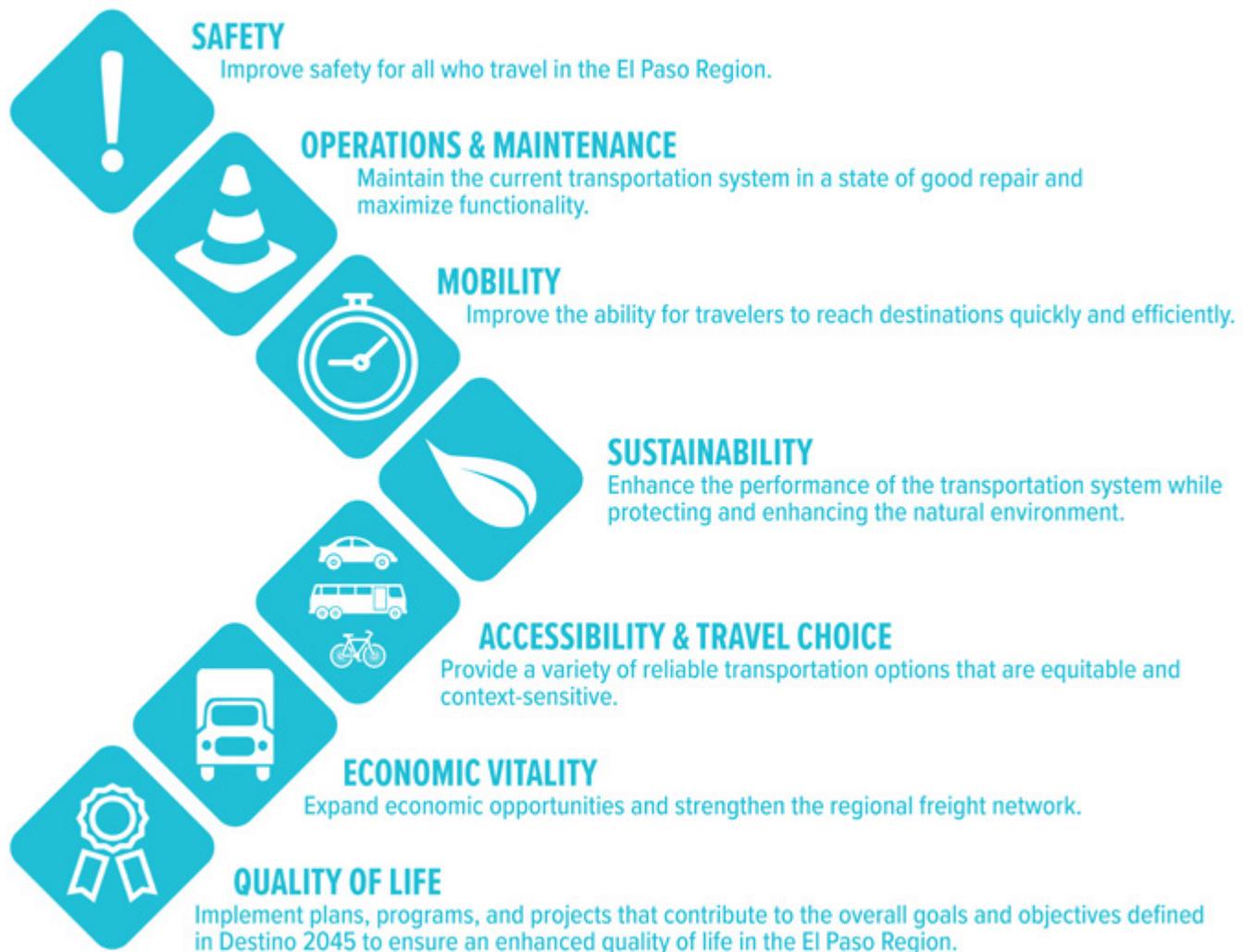
The Vision for Destino 2045 was developed through a combination of the vision from the previous MTP and input from the El Paso community through a series of workshops and online engagement. The Vision Statement below helped guide the development of the Destino 2045 MTP.

## Vision Statement

**“Destino 2045 envisions the El Paso Region being served by a reliable multimodal transportation system which equitably enhances accessibility and connectivity within the region and beyond, ensures safety for all transportation system users, preserves the environment, and promotes high quality of life and economic wellbeing.”**

## MTP Goals & Objectives

Goals and objectives provide the framework to guide decision-making about selecting and prioritizing projects that will address the region's travel needs. The Destino 2045 MTP identifies a set of comprehensive goals and objectives that balance local needs and national priorities. These goals and objectives were created through a combination of public input, goals/objectives identified in previous planning efforts in the region, and the US Department of Transportation's national performance goals.





## Performance Measures

Performance measures are quantifiable indicators of whether policies/projects achieve desired outcomes set in place by the MTP. They create an outcome-based system which allows the MPO to track system performance as Destino 2045 projects are implemented.

## MTP Performance Measures



### SAFETY

- › Number of projects that include safety enhancements located near crash spots.



### OPERATIONS & MAINTENANCE

- › Number of projects that repair or replace deficient bridges or pavements.



### MOBILITY

- › Travel time index (actual travel speed vs. non-congested travel speed).
- › Annual hours of delay.
- › Commute times from lower-income areas.



### SUSTAINABILITY

- › Estimated emissions.
- › Total Vehicle Miles Traveled (VMT) & VMT per capita (regional).



### ACCESSIBILITY & TRAVEL CHOICE

- › Percent of jobs/key destinations and population within 0.5 miles of high quality rapid transit.
- › Percent of non-SOV (single occupancy vehicle) trips.
- › Average trip costs.



### ECONOMIC VITALITY

- › Number of projects that improve operations or multimodal access at current or future points of entry.



### QUALITY OF LIFE

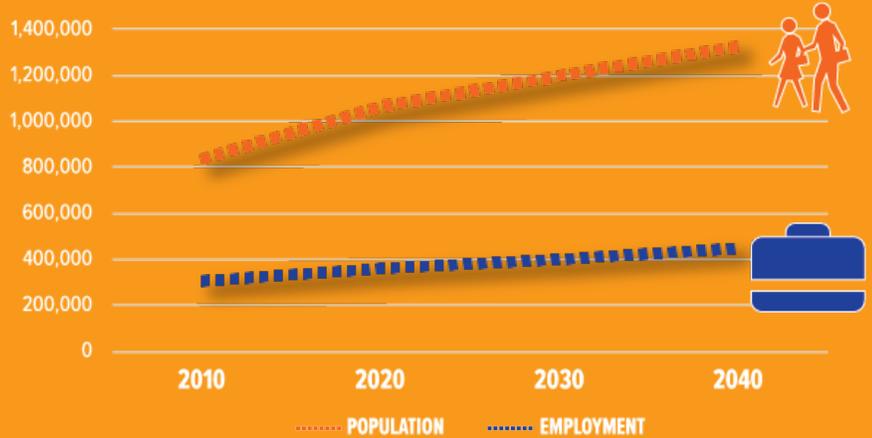
- \* *There are no specific performance measures for this goal. The indicator for this goal is a summary of performance on each goal for each alternative relative to other alternatives.*

# » Identifying Needs

Understanding future population and employment growth is a major component of identifying future transportation needs. Land use and growth patterns directly impact the number of trips people make, the routes they choose to reach destinations, and the mode they choose to accomplish each trip. Destino 2045 updated growth projections originally developed through a collaborative regional process in 2011 to account for recent growth trends and changes in development patterns.

## Demographic Trends

The region's population is anticipated to grow to nearly 1.4 million by 2045. Population growth is expected to take place along major corridors such as Dyer and Zaragoza, in eastern El Paso County, and west of the County in New Mexico and near Vinton. Employment growth is expected throughout the region, with the highest concentrations occurring east of the El Paso International Airport, at the Santa Teresa Port of Entry, near Zaragoza and IH 10, and near UTEP.



 Environmental Justice Zones



## Environmental Justice

Environmental Justice (EJ) is the process by which the MTP considers the needs of those traditionally under-served by existing transportation systems while minimizing the potential harmful effects that infrastructure investments can cause. Destino 2045 identifies EJ communities as areas/zones where more than 35% households are below the poverty line.

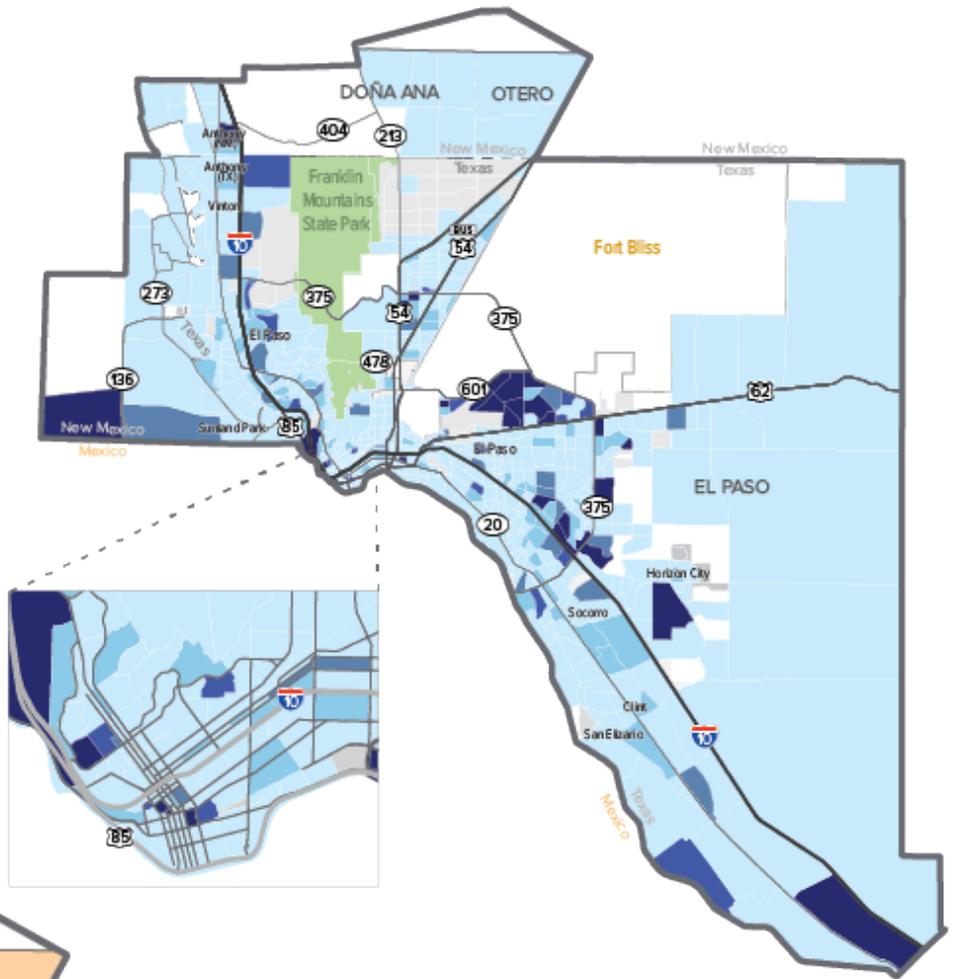


## Employment Growth (2012 - 2045)

- + 1 - 249 Jobs
- + 250 - 499 Jobs
- + 500 - 749 Jobs
- + 750 - 999 Jobs
- + 1,000 or More Jobs

# 34%

## Growth from 2012 to 2045

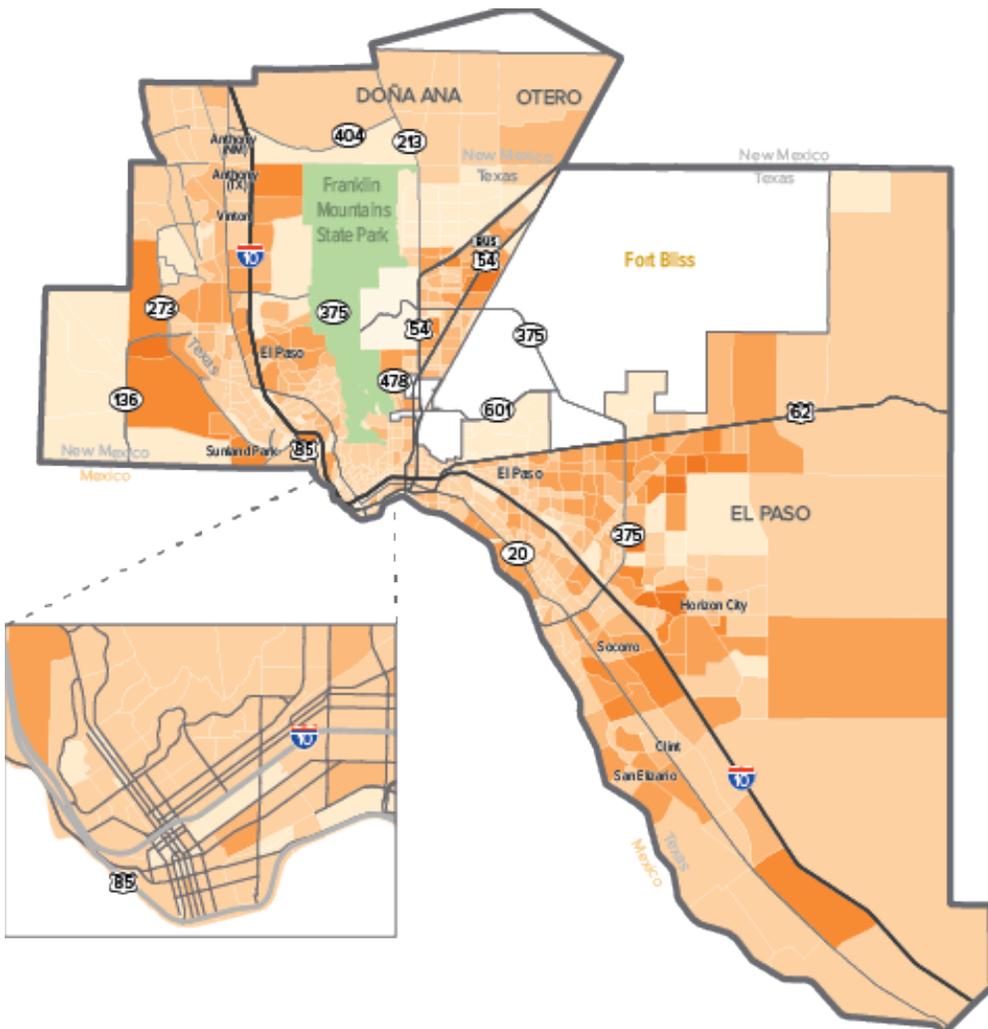


## Population Growth (2012 - 2045)

- + 1 - 499 Persons
- + 500 - 999 Persons
- + 1,000 - 2,499 Persons
- + 2,500 - 4,999 Persons
- + 5,000 or More Persons

# 57%

## Growth from 2012 to 2045



# » Identifying Needs

Transportation needs can be further understood by analyzing the transportation network's ability to accommodate current and future travel demand on a variety of modes. This is done by measuring the capacity or supply of infrastructure that exists (or is currently underway) and comparing it to both existing multi-modal travel demand as well as potential travel demand indicated by regional growth projections.

Eight different categories of transportation-related needs were studied for this assessment:

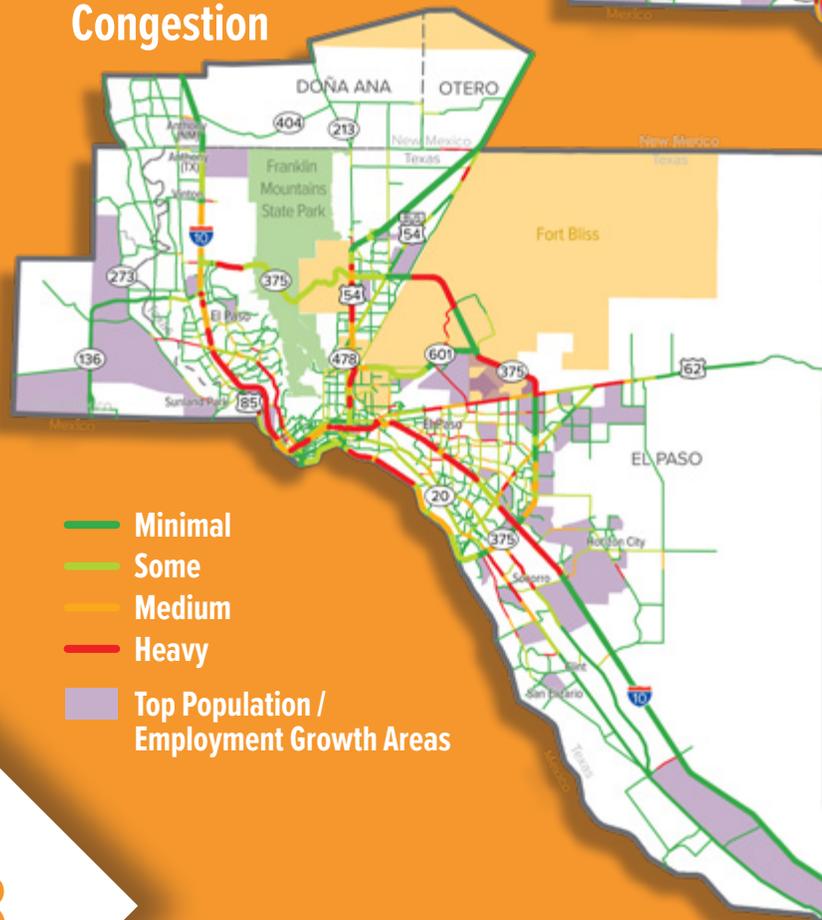
- » Roadways
- » Transit
- » Intl. Ports of Entry
- » Operations & Maintenance
- » Safety
- » Active Transportation
- » Freight
- » Interregional Passenger Travel

For each of these categories, existing and future needs were evaluated with respect to the MTP goals. The graphics on this page provide examples of some of the results of the needs assessment.

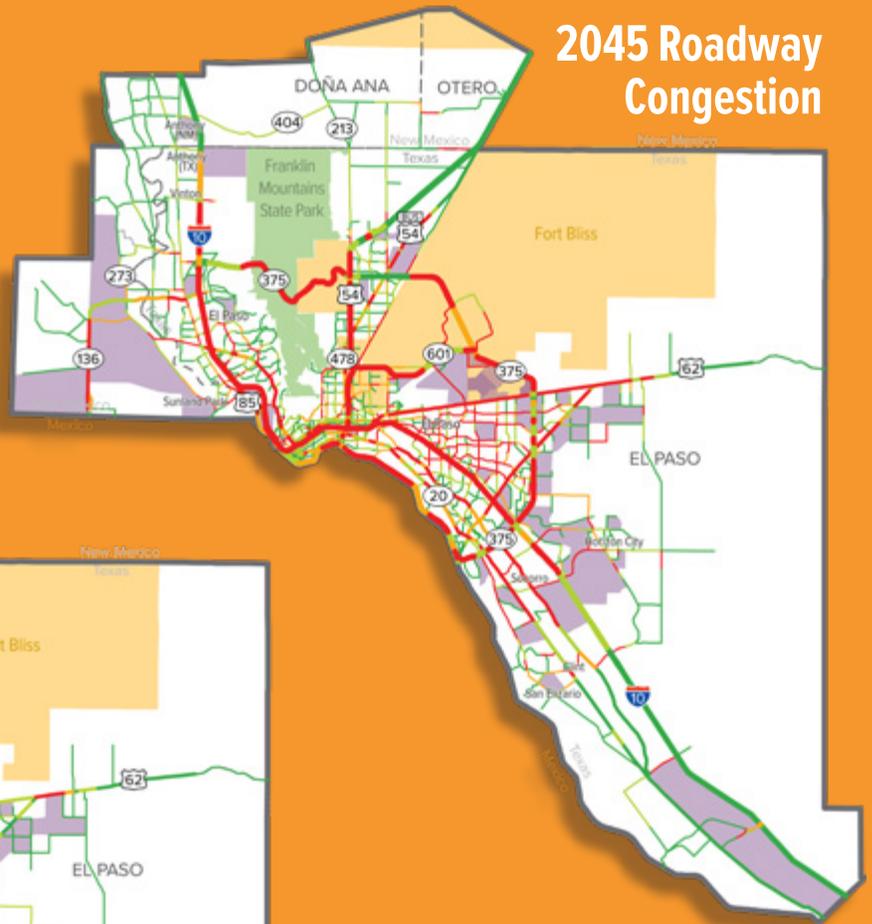
## Top 5 Crash Intersections (2011 - 2015)

1. IH-10/Gateway Blvd. West at Sumac Dr.
2. IH-10/Gateway Blvd. West at George Dieter Dr.
3. IH-10/Gateway Blvd. West at McRae Blvd.
4. IH-10/Gateway Blvd. East at Hawkins Blvd.
5. Loop 375/Woodrow Bean Transmountain Dr. West at Dyer St.

## 2012 Roadway Congestion



## 2045 Roadway Congestion



### Notable Roadways with the Most Congestion

- |                              |                  |
|------------------------------|------------------|
| IH-10                        | Socorro Rd.      |
| Loop 375                     | North Loop Dr.   |
| US-54                        | Global Reach Dr. |
| N. Mesa St./Country Club Rd. | Fabens St.       |
| Montana Ave.                 | Montwood Dr.     |
| Alameda Ave.                 |                  |



# 71%

of survey respondents believed congestion to be the **most important** regional transportation issue for the El Paso area.



Roadway congestion is currently **"AS EXPECTED,"** or adequate on most facilities.

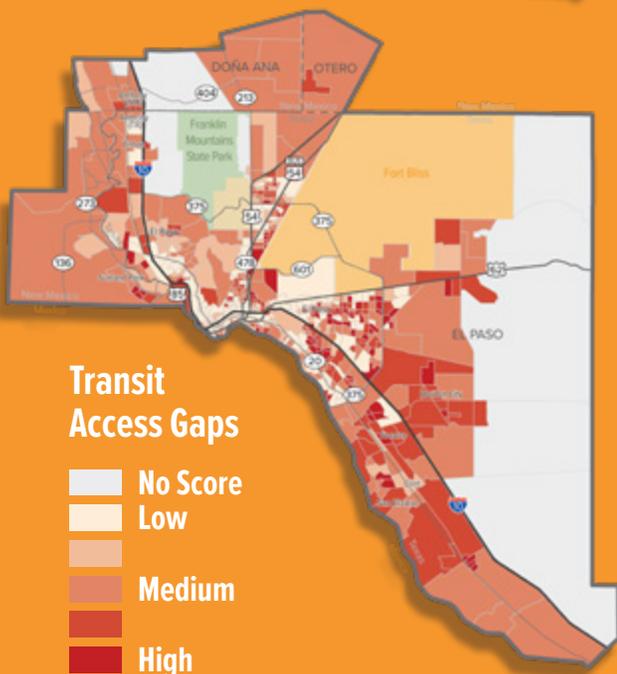
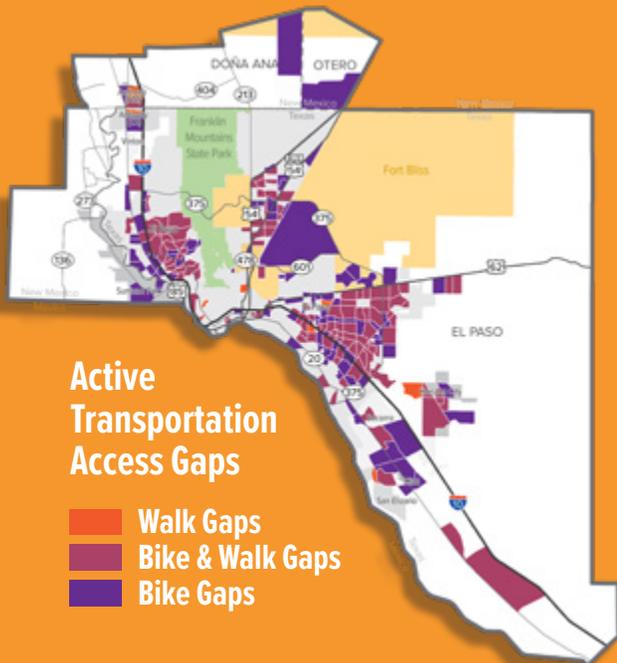


Significant congestion generally occurs on major highways and regional connectors.

"Annual hours of delay" for automobile and truck traffic is expected to **triple** by 2045.\*



\*If no new capacity improvements are added to the currently-programmed list.



# 7 MILLION

hours of vehicle delay per year along the **freight network**. This will increase by 250% by 2045.



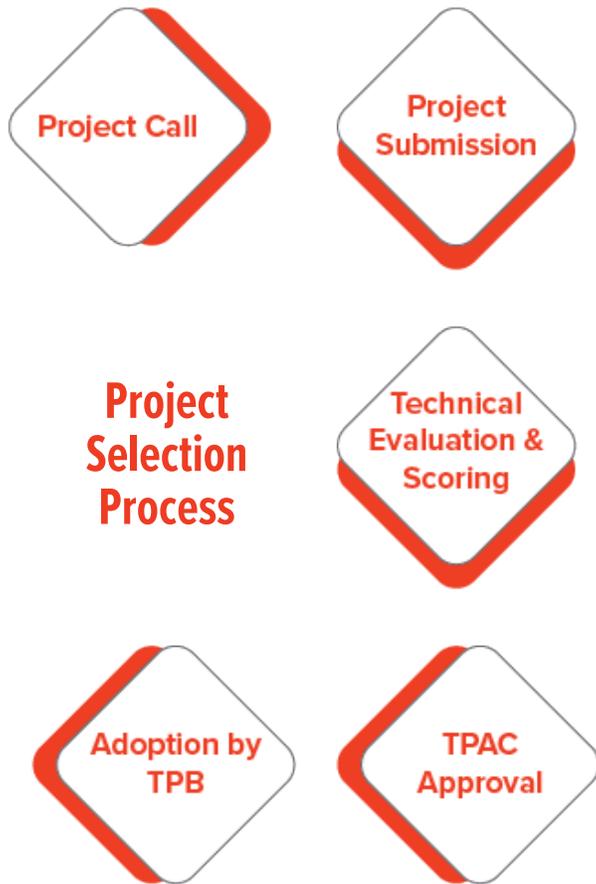
# 34%

of delay on the freight network occurs along **IH-10**.



# » Possible Solutions

The El Paso MPO solicited project proposals from its planning partners that would address the identified transportation needs. The list of projects was further refined based on funding availability. The MPO was able to use the measures identified at the beginning of the planning process to compare the performance of the Existing System, “Do-Nothing” 2045 System, and Destino 2045 System in achieving the adopted goals. Overall, the Destino 2045 Scenario improves on almost every performance measure when compared with the Do-Nothing and Existing Scenarios.



## Performance Measure Comparison

PERFORMANCE MEASURES	DO NOTHING VS EXISTING	DESTINO 2045 VS EXISTING	DESTINO 2045 VS DO NOTHING	PLAN IMPLEMENTATION PERFORMANCE
Travel time index	+ 6%	+ 2%	-3.30%	VERY GOOD ✓
Annual hours of delay	+ 112%	+ 92%	-9.60%	VERY GOOD ✓
Average peak-period commuter minutes in EJ zones	+ 12%	+ 7%	-4.80%	VERY GOOD ✓
% of population within a 1/2 mile of high-quality rapid transit	+ 11%	+ 12%	+1.20%	GOOD ✓
% of jobs within a 1/2 mile of high-quality rapid transit	+ 17%	+ 17%	+0.00%	GOOD ✓
% of non-SOV trips	+ 12%	+ 13%	+0.10%	GOOD ✓
Average trip costs	+ 3%	+ 5%	+1.80%	FAIR ⚪
Max daily CO emissions in delimited area	- 73%	- 72%	+5.00%	FAIR ⚪
Max daily PM10 emissions	+ 15%	- 1%	-14.00%	VERY GOOD ✓
Daily VMT total	+ 43%	+ 60%	+12.40%	FAIR ⚪
Daily VMT per capita	- 9%	+ 2%	+12.50%	FAIR ⚪

## The number of Destino 2045 projects that address...

<p><b>Ports of Entry</b> </p> <p>Border Crossing Improvements <b>8</b></p>	<p><b>Safety</b> </p> <p>High Crash Intersections <b>5</b></p> <p>High Crash Roadway Segments <b>9</b></p> <p>Crash Modification Factors <b>35</b></p>	<p><b>Operations &amp; Maintenance</b> </p> <p>Very Poor Pavement Condition <b>10</b></p> <p>Poor Pavement Condition <b>3</b></p> <p>Fair Pavement Condition <b>11</b></p> <p>Deficient Bridges <b>4</b></p>
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# "No-Build" Strategies



**Policies to Encourage Carpooling**



**Traffic Signal Optimization**



**Transit Enhancements**



**Parking Management**



**Active Transportation Strategies**



**Access Management**



**Smart Growth Strategies**



**Connected and Autonomous Vehicles**



**Electronic Infrastructure**



**Smartphone Applications**



**Advanced Traffic Signal Control**



**Complete Streets**

Given the limited availability of funding to meet every single regional need, Destino 2045 also cataloged "no-build" strategies that could be considered to address travel demand. "No-Build" strategies typically reduce or redirect travel demand to limit the need for building new infrastructure. The plan provides a menu of no-build options that regional planning partners can reference during future transportation and land use studies outside the scope of the MTP.



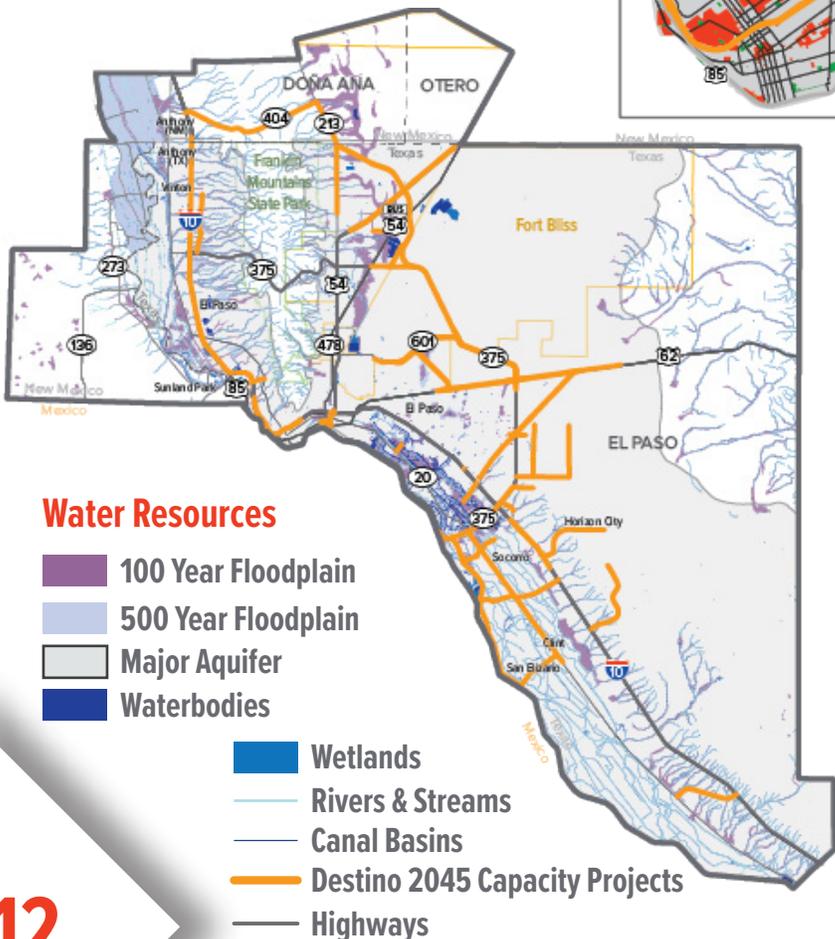
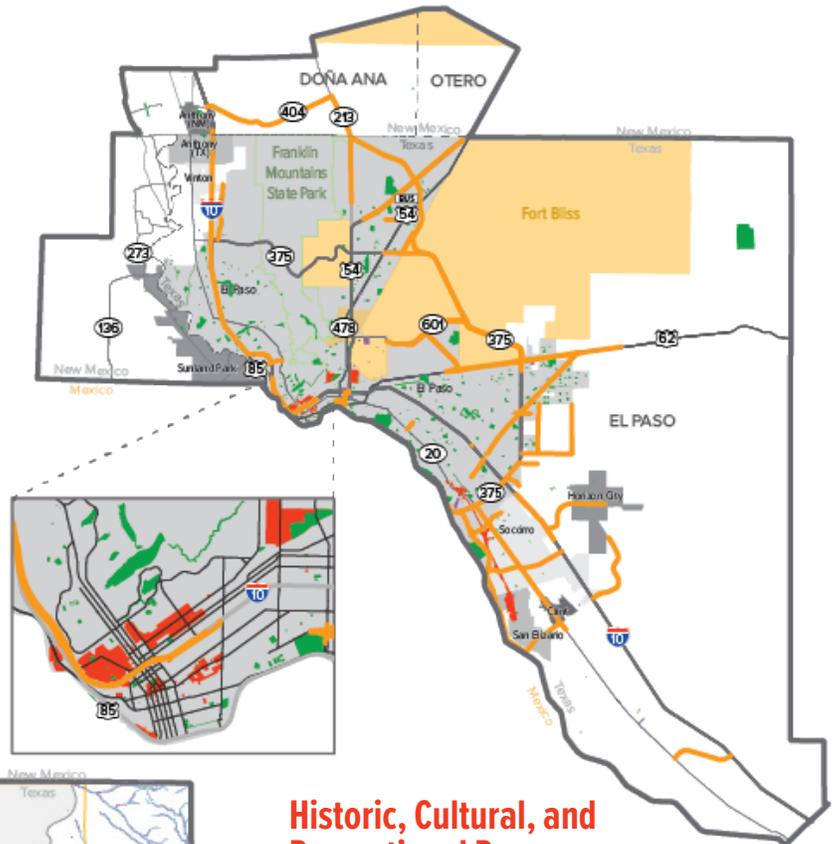
# » Possible Solutions



Destino 2045 further explored the performance of potential projects by studying the interaction of proposed transportation improvements with the natural and human environment. This analysis compared new and expanded capacity projects with the locations of environmental features to flag potential impacts. The plan also used a Motor Vehicle Emission Simulator (MOVES) model to explore impacts on regional air quality resulting from the Destino 2045 projects.

## Environmental Mitigation Analysis

The El Paso MPO region contains natural and cultural resources, including; rivers/streams, wetlands/floodplains, parks, open space, recreational areas, historic sites, and cultural districts. Destino 2045 mapped projects that would expand transportation capacity in relation to these resources to identify possible impacts and recommend mitigation measures



## Historic, Cultural, and Recreational Resources

- Historic Districts
- Cemeteries
- Parks
- Destino 2045 Capacity Projects
- Highways

## Number of Possible Impacts

WATER RESOURCE	Number of Possible Impacts						
	Canal Basin	Flood Hazard/Structure/Levee	Area Water	Flood Hazard Areas	Major Aquifer	Wetlands	Rivers/Streams
NEW ROADWAY PROJECTS (56 TOTAL)	4	6	2	35	52	40	32

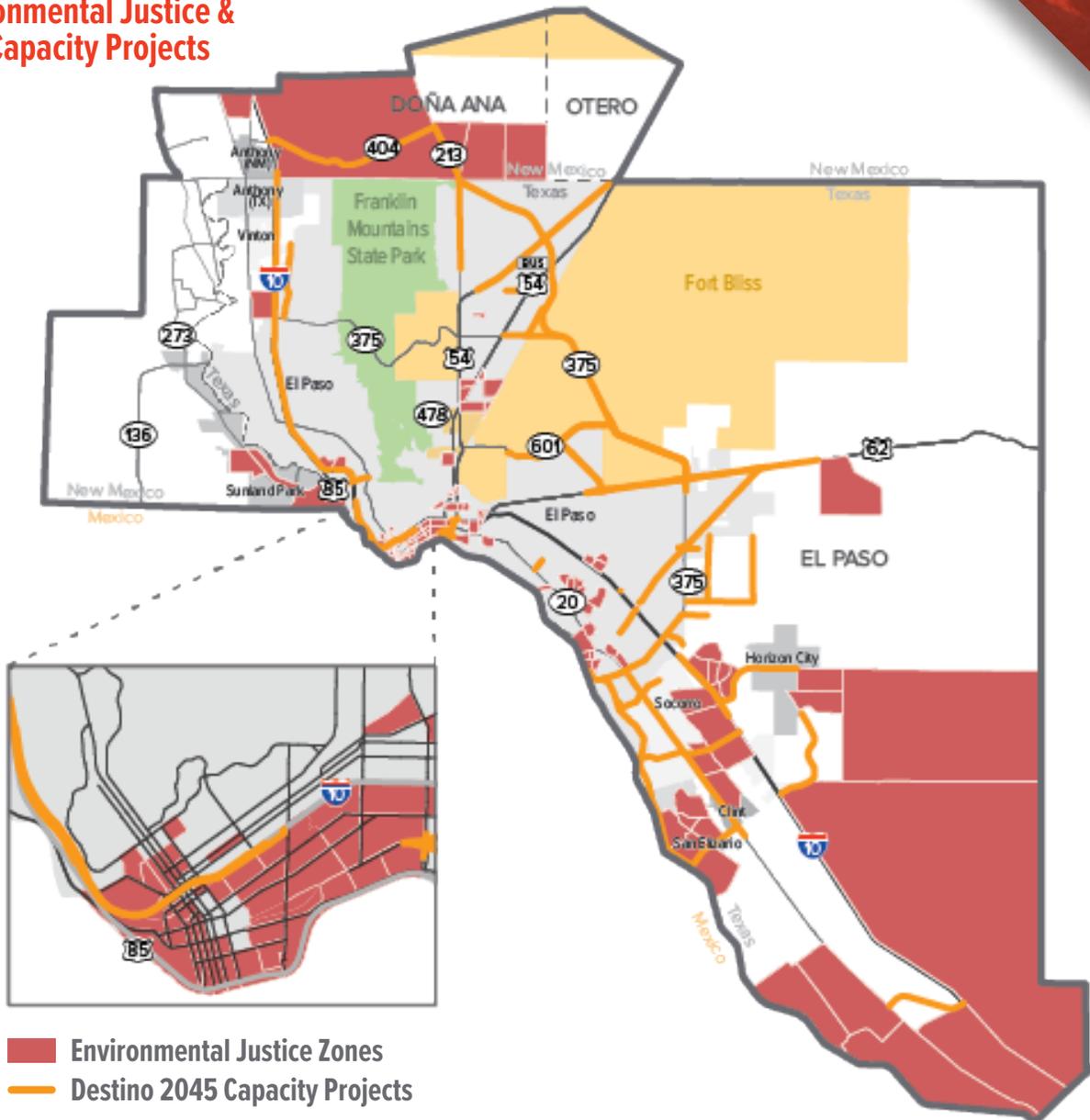
# 72% ↓

## reduction in Carbon Monoxide emissions by building projects

### Environmental Justice Analysis

The environmental analysis also compared the new capacity projects with the Environmental Justice (EJ) zones identified earlier in the process. Although new transportation infrastructure can expand opportunities for low-income populations, large projects can also have negative consequences for vulnerable populations including economic displacement and pollution.

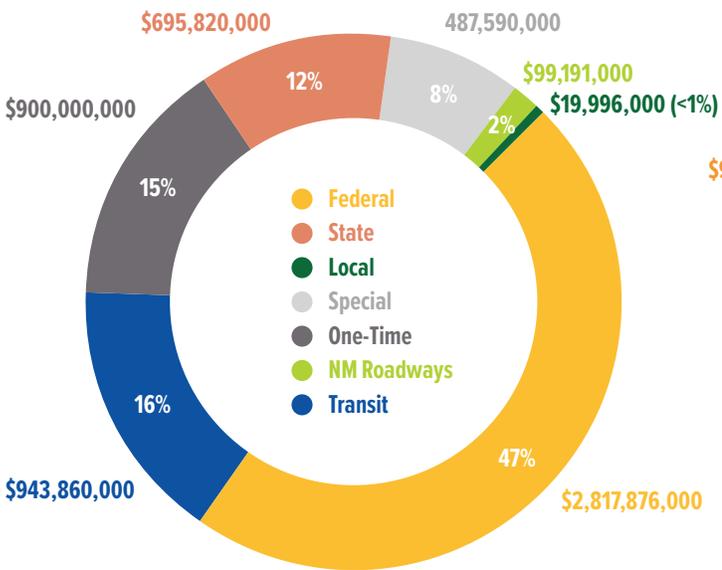
### Environmental Justice & MTP Capacity Projects



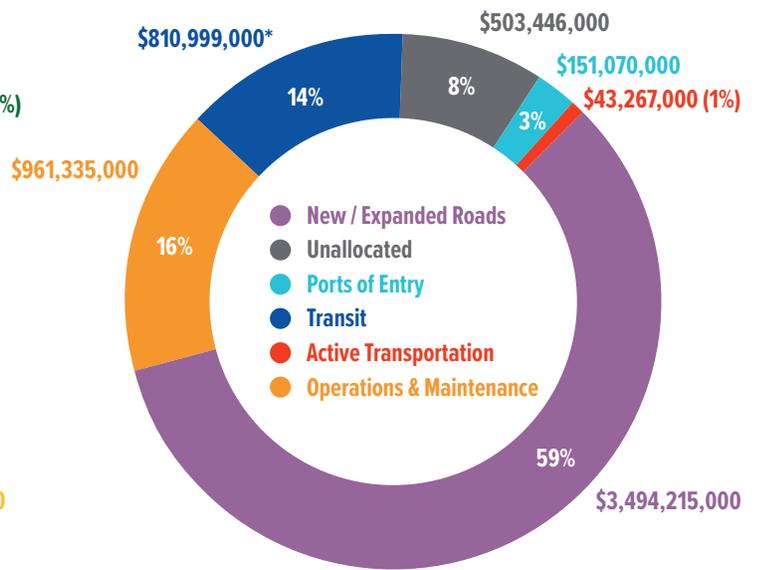
# » Financial Performance

Transportation investments included in the MTP must fall within the financial capabilities of the community. The MPO generated an estimate of potential funding available between 2019 and 2045 based on previous funding trends, and the total cost of projects included in the final plan were constrained to be less than or equal to the funding expected over the next 27 years.

**Funding Breakdown**  
\$5,964,333,000

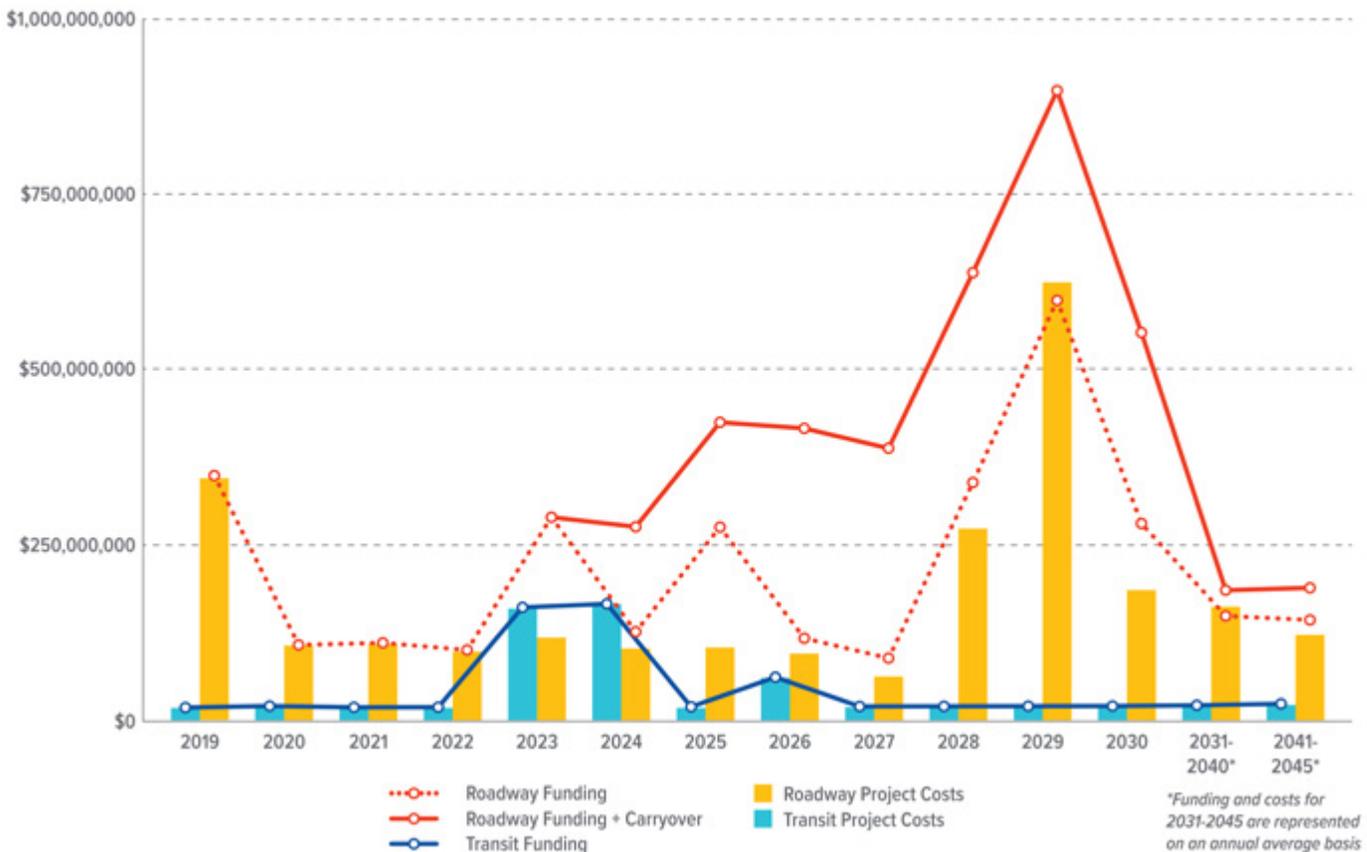


**Project Breakdown**  
\$5,964,333,000\*



\*Excludes \$147M Port of Entry Project Sponsored by Sun Metro

## MTP Financial Performance





## Funding Categories

The funding estimates created for Destino 2045 are based on historic trends and consultation with regional planning partners. Potential funding sources include, but are not limited to:



### Federal Funding

Federal funding categories include funding for things like new roadways, maintenance and rehabilitation, bike and pedestrian projects, and projects to improve air quality. Most of this funding is distributed through formulas that allocate money based on things like regional population.



### Texas State Funding

Texas funding categories supplement the federal funding categories and also include funding for projects of strategic priority as well as funding to provide a match to federal funds.



### Local Funding

Local funding can come from things like property taxes, general sales taxes, user fees, impact fees, special assessments, and bond issues and is usually either used as a local match to state or federal funds or towards specific projects.

### Special Funding (Tolls, Bonds, Etc.)

Special funding comes from sources such as Proposition 12 general obligation bonds. Approved by voters in November 2007, these types of bonds provide funding for highway improvements and are generally backed by the state's general revenue, not by the State Highway Fund.



### One-Time Funds (Props 1 & 7)

Prop 1 and 7 were voter-approved Texas constitutional amendments that divert a certain amount of existing revenue sources to the state highway fund. Prop 1 diverted oil/gas production taxes. Prop 7 diverted sales tax. This funding is prohibited from being used for toll road projects.



### NM Roadway Funding

New Mexico contributes a small amount of mostly federal funding to projects in the NM part of the region.



### Transit Funding

Transit Funding is provided through local funding and Federal funding sources, the latter of which include formula operating assistance funding and capital funding obtained through formulas and/or competitive grants.



**300+ PEOPLE**

were reached directly through the Destino 2045 public involvement efforts.



**18 PUBLIC MEETINGS / EVENTS**

were held in the El Paso community during the Destino 2045 planning process.

## **ONLINE ENGAGEMENT**

was accomplished through the use of a project website and an online survey.



## **Destino 2045 public involvement phases completed:**



### **Development of a Community Vision**

Public Visioning Workshops/1st Round of Public Meetings



### **Consultation on Regional Transportation Needs**

Stakeholder Engagement and Interviews



### **Review of Technical Analysis**

Performed as Part of Plan Development - 2nd Round of Public Meetings



### **Review of the Draft Destino 2045 MTP**

Posted Online and Open for Public Comment During a One-Month Period

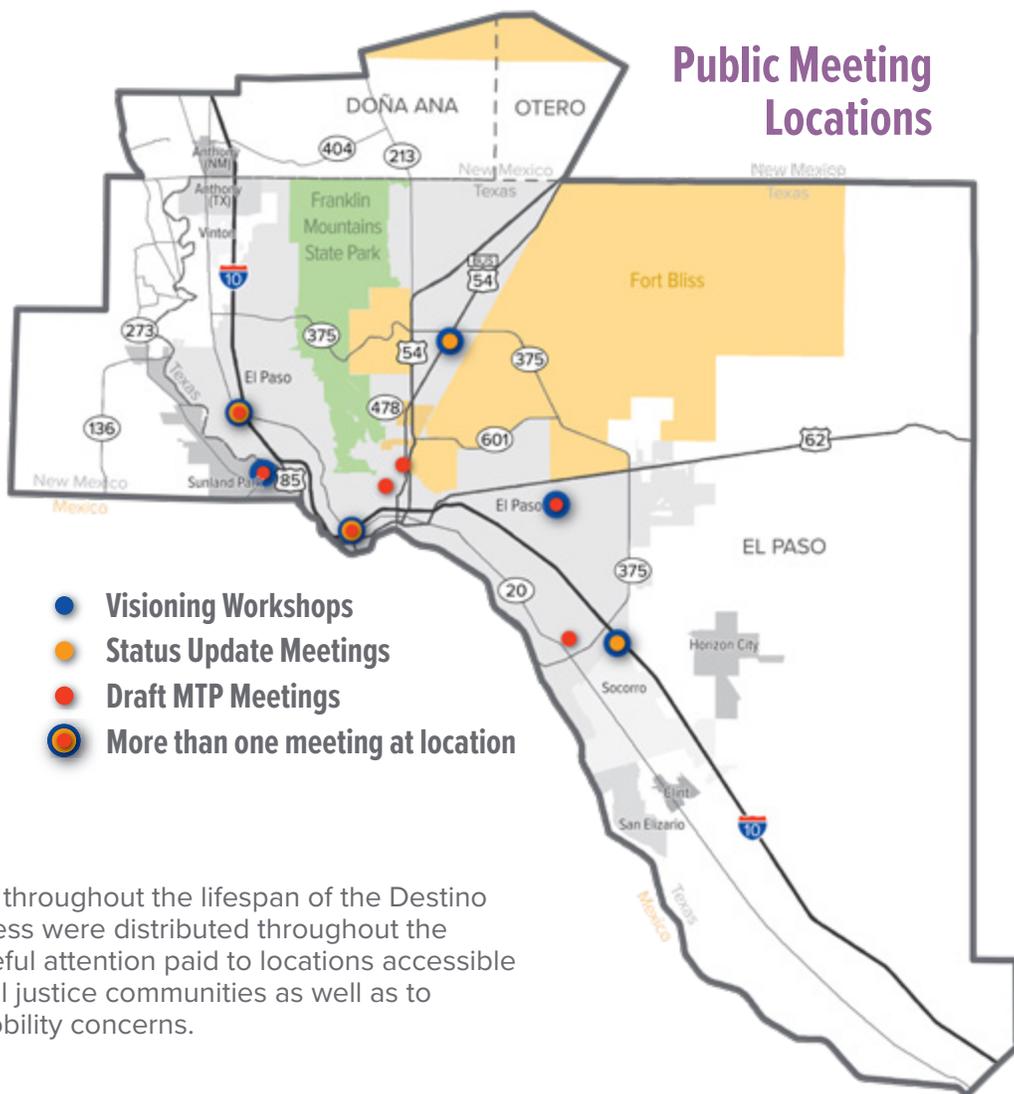
# » It's Your Plan

Public involvement is the heart and backbone of a well-developed Metropolitan Transportation Plan. To support the development of the Destino 2045 MTP, the project team conducted extensive outreach efforts in the El Paso region through a project website and online survey, various public meetings and workshops held in the community, and printed and digital media. The project team also conducted targeted interviews with stakeholders to further enrich the development of the MTP and gain valuable feedback on specific needs for the region.

## Overview of Feedback

In addition to driving the vision for the MTP as mentioned in a previous section, outreach helped the project team fine-tune the final plan and educate the public about the process and results. The following are examples of how public and stakeholder feedback affected the MTP during the plan development process:

- › The public was asked whether they agreed with the Vision Statement developed by the project team, and 100% of respondents said they agreed.
- › "Accessibility and Mode Choice" was added to the list of MTP goals based on public feedback.
- › The public's ranking of the evaluation criteria helped the MPO select projects that demonstrate progress towards the vision outlined by the community.
- › When asked about the El Paso region's needs, the public expressed particular concern about congestion. Therefore, Destino 2045 explored many congestion-related performance measures.

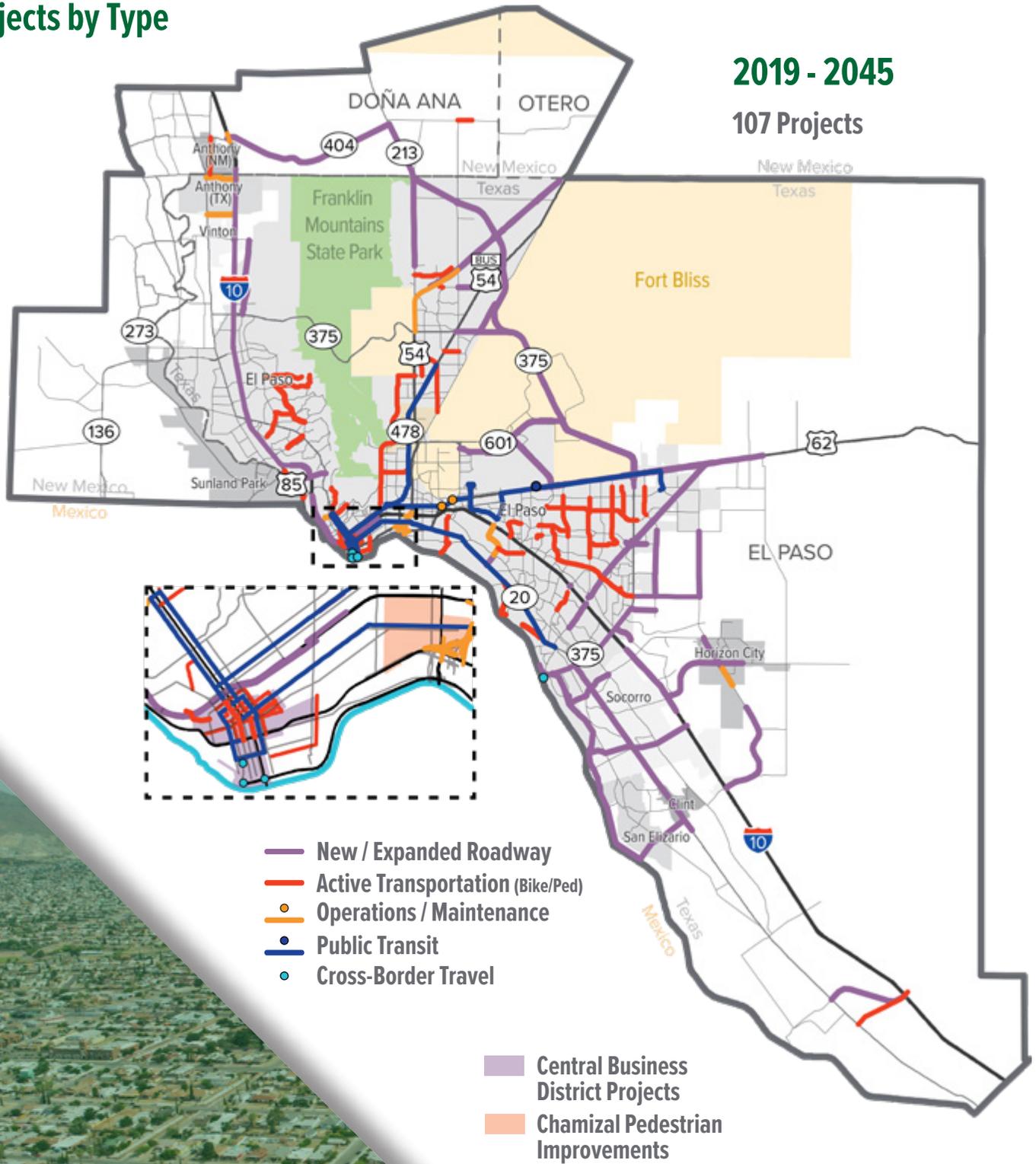


Public meetings throughout the lifespan of the Destino 2045 MTP process were distributed throughout the region, with careful attention paid to locations accessible to environmental justice communities as well as to persons with mobility concerns.

# Projects by Type

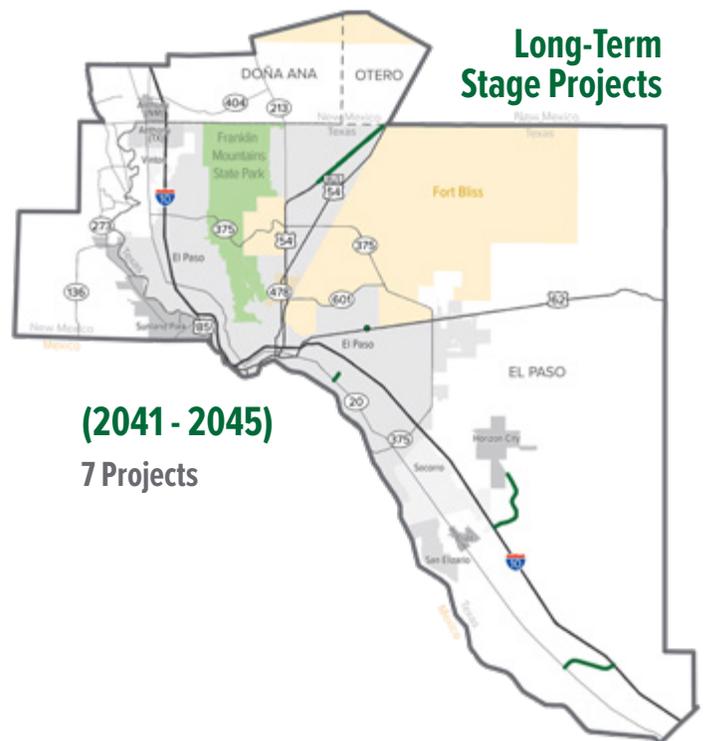
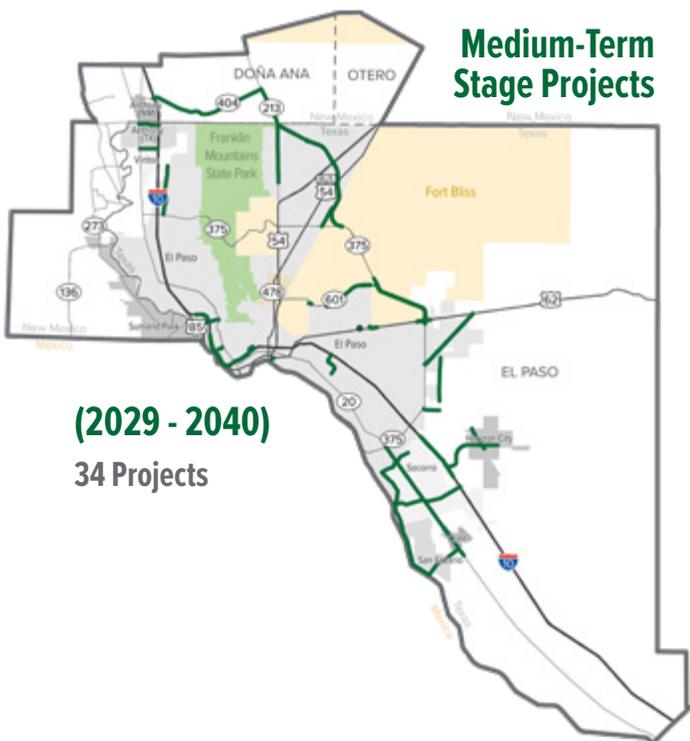
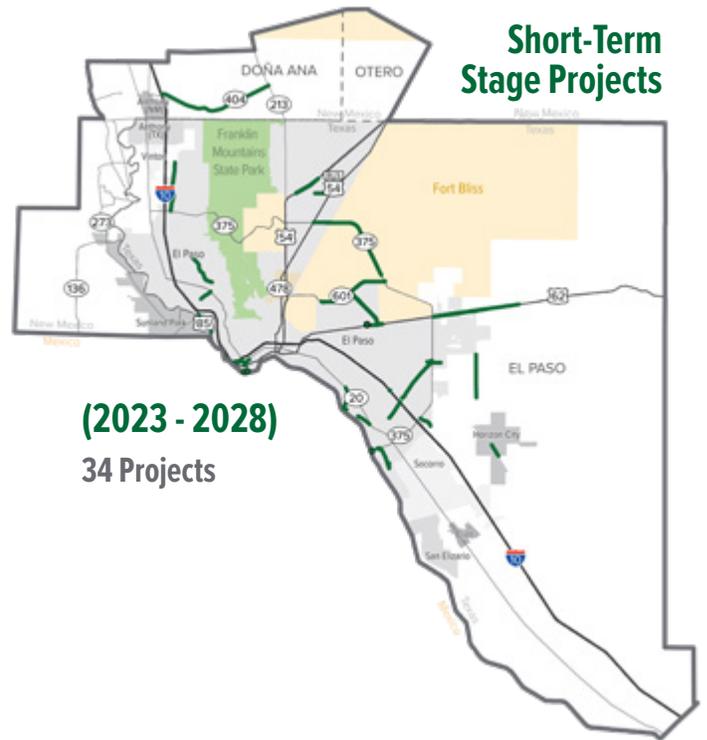
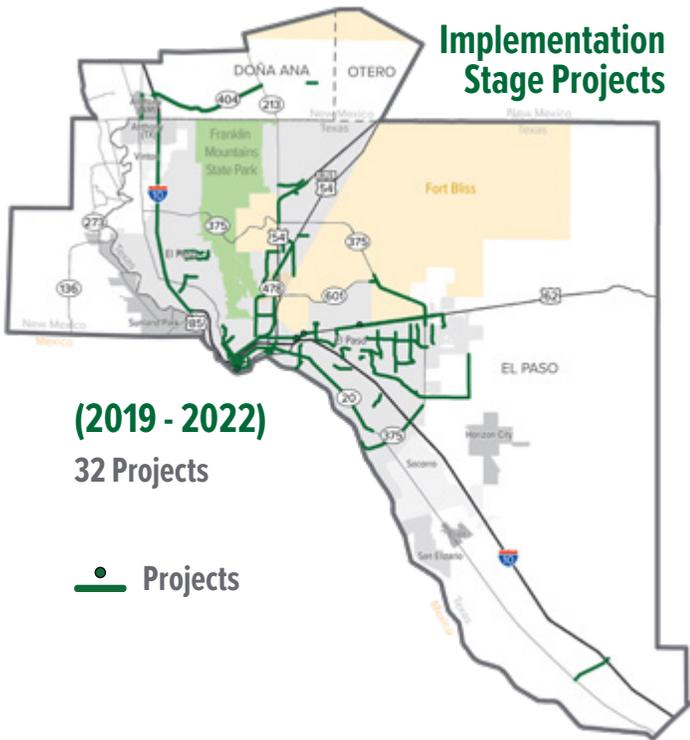
2019 - 2045

107 Projects



» MTP Projects





The projects included in the Destino 2045 MTP are presented here, grouped both by type and by time period:

- › **2019 - 2022 (Implementation)**
- › **2023 - 2028 (Short-Term)**
- › **2029 - 2040 (Medium-Term)**
- › **2041 - 2045 (Long-Term)**

The projects selected for the MTP reflect the community's vision for the future transportation system, address current and future needs for various types of travel, and can be implemented using the funding expected over the next 27 years.

## Alliance Transportation Group

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Rose Warren (Transportation Planner)  
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Arman Rajaeian (Transportation Planning Intern)

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