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Acknowledgements

MPO Staff would like to thank former MPO Policy Committee member Councilor Jack Eakman, City of Las Cruces, and former Technical Advisory Committee member Bill Childress, BLM, as well as former MPO Staff member Debra Fuller for their contributing work in the development of *Mobility 2045*. MPO Staff would also like to thank Steve Newby, Ceci Vasconcelos, City of Las Cruces, and Adrian Guzman, City of Las Cruces, Joseph Vargas III, Doña Ana County, and Felipe Scobell, Doña Ana County for their assistance with the public meeting process.



Common Acronyms and Abbreviations

Acronyms	Definitions					
AADT	Average Annual Daily Trips					
AASHTO	American Association of Highway Transportation Officials					
AAWDT	Average Annual Week Day Traffic					
ADA	Americans with Disabilities Act					
BLM	Bureau of Land Management					
BNSF	Burlington Northern Santa Fe					
BPAC	Bicycle and Pedestrian Facilities Committee					
DACC	Dona Ana Community College					
EBID	Elephant Butte Irrigation District					
EPA	Environmental Protection Agency					
FAA	Federal Aviation Administration					
FAST Act	Fixing Americas Surface Transportation Act					
FHTF	Federal Highway Trust Fund					
FHWA	Federal Highway Administration					
FTA	Federal Transit Administration					
HSIP	Highway Safety Improvement Program					
HUD	Housing and Urban Development					
ISTEA	Intermodal Transportation Efficiency Act					
ITS	Intelligent Transportation Systems					
JPA	Joint Powers Agreement					
LCPS	Las Cruces Public Schools					
LGTPF	Local Government Transportation Project Fund					
MAP-21	Moving Ahead for Progress in the 21st Century Act					
MOU	Memorandum of Understanding					
MPO	Metropolitan Planning Organization					
MSA	Metropolitan Statistical Area					
MTP	Metropolitan Transportation Plan					
MVITT	Mesilla Valley Intermodal Transit Terminal					
NACTO	National Association of City Transportation Officials					
NASA	National Aeronautics and Space Administration					
NHPP	National Highway Performance Program					
NHS	National Highway System					
NHTSA	National Highway Traffic Safety Administration					
NMDOT	New Mexico Department of Transportation					
NMSU	New Mexico State University					
NTD	National Transit Database					
0 & M	Operation and Maintenance					
PM	Performance Measure					
PUD	Planned Unit Development					
ROW	Right of Way					



Acronyms	Definitions					
RTD	Reginal Transit Districts					
SAFETEA-						
LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users					
SCRTD	South Central Regional Transit District					
SHSP	Strategic Highway Safety Plan					
STIP	State Transportation Improvement Program					
STP	Surface Transportation Program					
TAC	Technical Advisory Committee					
TAM	Transportation Asset Management					
TAP	Transportation Alternatives Program					
TASM	Transportation Asset and Safety Management Plan					
TAZ	Traffic Analysis Zones					
TEA-21	Transportation Equity Act for the 21st Century					
TIP	Transportation Improvements Program					
TOD	Transit Oriented Development					
TSMT	Traffic Safety Management Team					
UNM-DGR	University of New Mexico Division of Government Research					
VBC	Volume By Classification Data					
VMT	Vehicle Miles Travelled					
WSMR	White Sands Missile Range					
YOE	Year of Expenditure Dollars					





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MESILLA VALLEY METROPOLITAN PLANNING ORGANIZATION RESOLUTION NO. 20-06

A RESOLUTION ADOPTING THE 2020 METROPOLITAN TRANSPORTATION PLAN (MOBILITY 2045)

The Mesilla Valley Metropolitan Planning Organization (MPO) Policy Committee is informed that:

WHEREAS, the Mesilla Valley Metropolitan Planning Organization (MPO) is the transportation planning agency responsible for the planning and financial reporting of all federally funded and regionally significant projects for the City of Las Cruces, the Town of Mesilla, and the urbanized area for Doña Ana County; and

WHEREAS, Title 23 CFR §450.322 requires that all MPO's throughout the country adopt a minimum 20-year Metropolitan Transportation Plan for their respective jurisdictions; and

WHEREAS, the Mesilla Valley MPO previously adopted a long range transportation plan in 2015 and has conducted extensive review and involved the public and other governmental agencies to prepare this 2020 Metropolitan Transportation Plan, entitled *Mobility 2045*; and

WHEREAS, the 2020 Metropolitan Transportation Plan represents a continuous, cooperative, and comprehensive transportation planning effort through identified goals, objectives and policies for all modes of transportation and being financially constrained within the 25-year planning horizon; and

WHEREAS, the MPO Staff following the requirements of the Mesilla Valley MPO Public Participation Plan (PPP), held public input hearings in three phases from October 26, 2018 to June 19, 2020 in order to solicit input about the 2020 Metropolitan Transportation Plan, entitled Mobility 2045; and

WHEREAS, on June 16, 2020 the Bicycle and Pedestrian Facilities Advisory Committee recommend approval of *Mobility 2045* with additional recommendations to the Policy Committee; and

WHEREAS, on July 2, 2020 the Technical Advisory Committee recommended approval of *Mobility 2045* to the Policy Committee; and

NOW, THEREFORE, be it resolved by the Policy Committee of the Mesilla Valley Metropolitan Planning Organization:

(I)

THAT the Mesilla Valley Metropolitan Planning Organization hereby adopts the 2020 Metropolitan Transportation Plan, known as *Mobility 2045* as shown in Exhibit "A" attached to this Resolution.

(II)

THAT the documented public comments received by the MPO prior to the conclusion of the public comment period on June 19 regarding *Mobility 2045* are included in the Metropolitan Transportation Plan.

(III)

THAT the MPO Staff and the Committees of the MPO are hereby directed to utilize *Mobility 2045* for the continuous implementation of transportation plans and projects, including the Transportation Improvement Program (TIP) and Unified Planning Work Program (UPWP) and all ongoing or new plans and projects identified within the 2020 Metropolitan Transportation Plan.

(IV)

THAT Mobility 2045 contains the federally required performance standards listed in 23 CFR §450 and Mobility 2045 will be amended to document progress on these performance standards. Additionally, Mobility 2045 may be amended to document additional performance standards that may be required by the federal government in future.

(V)

THAT Mobility 2045 will remain the in-force Metropolitan Transportation Plan for the



Mesilla Valley MPO until superseded by the next federally required Metropolitan Transportation Plan update.

(VI)

THAT the MPO Staff is hereby authorized to administratively update the 2020 Metropolitan Transportation Plan for spelling and grammatical errors, mapping errors or updates, the removal of identified projects as they are implemented and/or completed, or to reflect the implementation of projects on various data, graphics, maps, and charts contained within the *Mobility 2045*.

(VI)

THAT the MPO Staff is hereby authorized to do all deeds necessary in the accomplishment of the hereinabove.

DONE and APPROVED this 15th day of July , 2020.

APPROVED:

Chair

Motion By:	Mayor Barraza
Second By:	Trustee Garcia
VOTE:	
Chair Johnson-Burick	Yes
Vice-Chair Sorg	Yes
Mayor Barraza	Yes
Councilor Bencomo	Yes
Dist. Eng. Doolittle	Yes
Trustee Garcia	Yes
Commissioner Gonzalez	Abs
Commissioner Sanchez	Abs
Commissioner Solis	Yes
Councilor Vasquez	Abs



ATTEST:	APPROVED AS TO FORM:
andrew Wrang	
Recording Secretary	City Attorney



Table of Contents

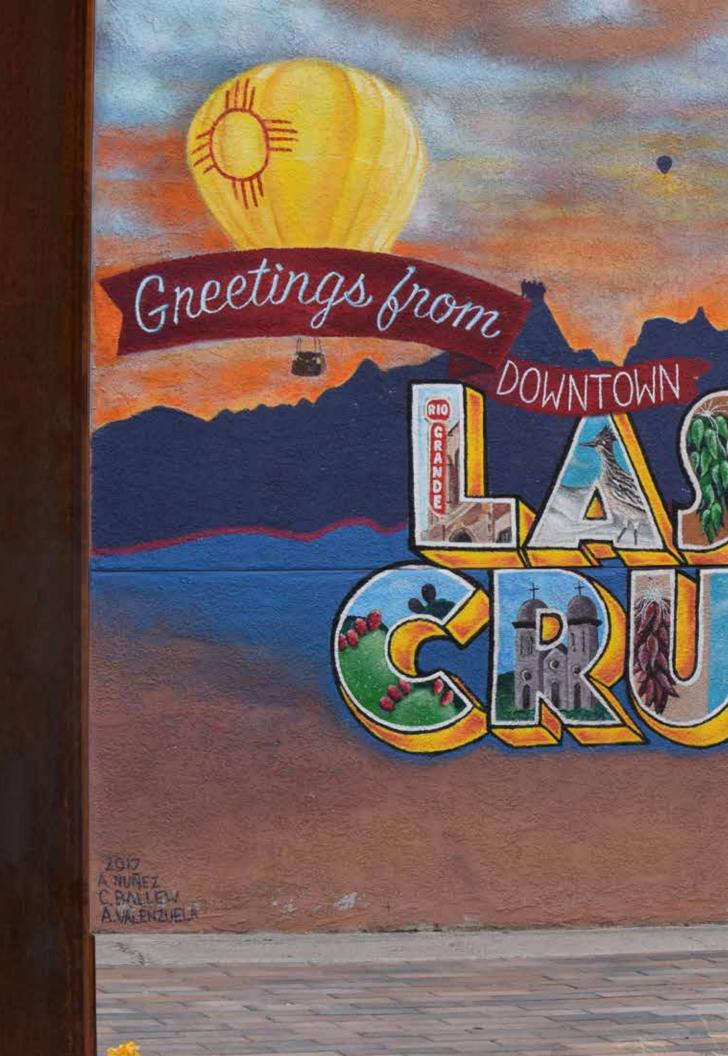
Chapters	
Chapter 1: MPO Introduction	Page 13
Chapter 2: Performance Management	Page 19
Chapter 3: Current Conditions	Page 27
Chapter 4: Vision and Implementation	Page 49
Chapter 5: Plans and Funding	Page 59
Figures	
Figure 1-1 MPO Committee Organization	Page 17
Figure 3-1 Dona Ana County Population Projections	Page 32
Figure 3-2 2019 Employment Statistics for the Las Cruces MSA	Page 33
Figure 3-3 USDOT Fatal Traffic Crash Data	Page 36
Maps	
Map 1-1 Mesilla Valley MPO Region	Page 16
Map 3-1 2017 Crash Rates by Intersections	Page 38
Map 3-2 RoadRUNNER Transit System	Page 41
Map 3-3 South Central Regional Transit District Routes	Page 43
Map 3-4 2017 Pedestrian Crashes	Page 45
Map 3-5 2017 Bicycle Crash Densities	Page 46
Tables	
Table 2-1 Federal Highway Administration Performance Measurement Goals	Page 23
Table 2-2 Federal Transit Administration Performance Measurement Goals	Page 25
Table 3-1 Mesilla Valley MPO Vehicle Miles Traveled	Page 48
Table 5-1 Asphalt Treatment Schedule City of Las Cruces	Page 71
Table 5-2 Mesilla Valley MPO Operations and Maintenance	Page 72
Table 5-3 Mobility 2045 Projects: 2020-2025	Page 74
Table 5-4 Mobility 2045 Projects: 2026-2035	Page 75
Table 5-5 Mobility 2045 Projects: 2036-2045	Page 75





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The current transportation authorization legislation is Fixing America's Surface Transportation Act (FAST Act); it was signed into law by President Obama on December 4, 2015. The bill authorized transportation funding for Federal Fiscal Years 2016-2020. The total appropriations for the FAST Act are approximately \$305 billion. The FAST Act added new federal planning factors and requires MPOs to adopt performance targets to measure the outcomes of implemented transportation projects.

The Mesilla Valley MPO

The Mesilla Valley MPO encompasses central Dona Ana County, extending from Radium Springs in the north to Chamberino and Berino in the south, and is centered upon the Las Cruces Urbanized Area. The Mesilla Valley MPO includes the City of Las Cruces, the Town of Mesilla, and the communities in Doña Ana County such as Organ, Mesquite, and Vado.

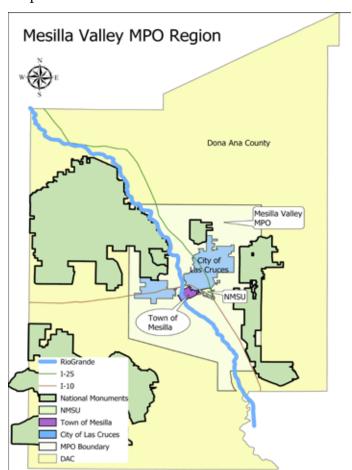
A Joint Powers Agreement (JPA) between the State of New Mexico, the City of Las Cruces, Doña Ana County, and the Town of Mesilla created The Mesilla Valley MPO. The current JPA was adopted in July 2013.

The Mesilla Valley MPO consists of the New Mexico Department of Transportation (NMDOT) District One Engineer and nine elected officials: three City of Las Cruces Councilors, three Doña Ana County Commissioners, and three Town of Mesilla Trustees. The chairs of each entity, the Mayor of Las Cruces, the Mayor of Mesilla, and the Chair of the Doña Ana County Commission, appoint members from their respective boards to serve on the MPO. The MPO governing body is also referred to as the MPO Policy Committee. The MPO makes decisions on the regional transportation planning and project priorities. A permanent full-time staff supports the MPO. This staff consists of the Metropolitan Planning Manager, two planners, one associate planner, and two part-time co-ops.

The MPO is supported by two advisory committees: the Technical Advisory Committee (TAC) and the Bicycle and Pedestrian Facilities Advisory Committee

(BPAC). The TAC members are staff members from the various agencies, including public transit providers, in the MPO area. These staff members are appointed by their agencies to the TAC. The BPAC is made up of two groups: citizen representatives and staff representatives. As with the TAC, the staff representatives are appointed by their agencies. Citizen representatives apply for and receive their appointment through the MPO Policy Committee.

Map 1-1



Core MPO Functions

There are five core functions of an MPO. Federal transportation regulations detail the framework to carry out these functions:

- Establish a Setting: Establish and manage a fair and impartial setting for effective regional decision making in the metropolitan planning area.
- Identify and evaluate alternative transportation



improvement options: Use data and planning methods to generate and evaluate alternatives.

- Prepare and maintain the Metropolitan Transportation Plan (MTP): Develop and update a long-range transportation plan for the metropolitan statistical area covering a planning horizon of at least twenty years. The objectives are to foster mobility and access for people and goods, provide efficient system performance, preserve the existing system, and contribute to a good quality of life.
- Develop a Transportation Improvement Program (TIP): Develop a short-range program of transportation improvements based on the long-range transportation plan. The TIP should be designed to achieve the area's goals, using regulating, operating, management, and financial tools.
- Involve the Public: Actively engage the general public and other affected stakeholders in the four essential functions listed above.

Federal Planning Requirements

The Federal Government, via the FAST Act, requires

that each MTP address specific national planning factors. These factors are:

- 1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- 2. Increase the safety of the transportation system for motorized and non-motorized users.
- 3. Increase the security of the transportation system for motorized and non-motorized users.
- 4. Increase the accessibility and mobility of people and freight.
- 5. Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
- 6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- 7. Promote efficient system management.

Figure 1-1

Policy Committee

3 City of Las Cruces Councillors 3 Town of Mesilla Trustees 3 Doña County Commissioners NMDOT District One Engineer

Technical Advisory Committee

CLC - Public Works
CLC - Traffic Engineering
CLC - RoadRUNNER Transit
DAC - Engineering
DAC - Flood Commission
DAC - Planning
Mesilla - Public Works
Mesilla - Planning
Elephant Butte Irrigation Dist.
NMSU
Bureau of Land Management
NMDOT Engineering and Planning
Las Cruces Public Schools

Bicycle and Pedestrian Facilities Advisory Committee

CLC - Citizen rep.
DAC - Citizen rep.
Mesilla - Citizen rep.
Bicycling Community rep.(2)
Pedestrian Community rep.
Town of Mesilla - staff
CLC - Public Works staff
DAC - Planning staff
NMSU - staff
NMDOT - staff

- 8. Emphasize the preservation of the existing transportation system.
- 9. Improve resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation.
- 10. Enhance travel and tourism.

Additionally, the FAST Act requires the Metropolitan Planning process to develop and implement performance targets in the areas of Safety, State of Good Repair, System Performance, and Transit Asset Management. Future performance targets may be forthcoming in future transportation authorization legislation.

Metropolitan Transportation Plan Development Process

Mesilla Valley MPO Staff initiated development of what became Mobility 2045 in the first half of 2018 by preparing for the public engagement process. The first public process for Mobility 2045 commenced with a public meeting on October 26, 2018. This first round of public comment lasted until April 2019. During this initial engagement process, MPO Staff engaged with our member jurisdictions to establish the regional transportation needs. MPO Staff also hosted and presented at multiple public meetings to listen to the public and regarding their transportation concerns. The MPO also had an online survey available to the public throughout this process.

MPO Staff commenced the second round of public comment in October 2019. In this second round MPO Staff solicited project proposals and requested network changes from the MPO member jurisdictions and to the public. MPO also presented initial analysis to the member jurisdictions and to the public.

The final round of public engagement launched in March 2020. In this final round MPO Staff presented the final draft of Mobility 2045 to the MPO member jurisdictions and to the public for their final comment. MPO Staff presented the final draft and the Policy Committee adopted Mobility 2045 on May 13, 2020.

Mobility 2045 went into effect on July 15, 2020.

Mobility 2045 Goals and Objectives

Mobility 2045 has the following objectives as regional priorities:

- Provide safe travel for all transportation users
- Prioritize system maintenance
- Provide for equitable transportation choice for all users
- Provide improved connectivity within the transportation network and improved connectivity between the modes.
- Promote system efficiency, reliability, resiliency, and effectiveness
- Support economic vitality and competitiveness
- Adapt to changing technology
- Enhance the environment
- Support health and wellness
- Support community character and context

The vision established by Mobility 2045 are designed to meet and support these goals.









Mobility 2045 must comply with national transportation goals and address the required federal planning factors to be eligible to receive federal funding. Since 2012, the US Department of Transportation has changed to a performance-based planning approach for our national transportation systems, with the development of MAP-21 and then with the FAST Act. Under the current transportation authorization legislation, States and MPOs are now required to develop performance measure targets.

The Moving Ahead for Progress in the 21st Century Act (MAP-21) addressed a broad range of issues such as climate change, enhancement of rail transportation, and land use with transportation coordination. The bill included recommendations to simplify funding and

by MAP-21 was the creation of the Transportation Alternatives Program (TAP), which consolidated bicycle and pedestrian funding into a single broad program. A significant change made by MAP-21, is the emphasis the bill placed on performance measures as a means of accountability for spending. MAP-21 requires that state Departments of Transportation coordinate with MPOs, local agencies, and public transportation providers when setting performance targets, Metropolitan Planning Organizations (MPOs), to the extent practicable, are required to coordinate with relevant State and public transportation providers when setting regional targets.

The national policy which directs performance management:



"Performance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federalaid highway program, and improving project decision-making through." (1203; 23 USC 150(a))

The Fixing America's Surface Transportation (FAST) Act was signed into law by President Barak Obama on December 4, 2015. Long-term funding provided by FAST Act is being utilized for surface transportation, infrastructure planning, and investment. The FAST Act authorizes \$305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. The FAST Act emphasizes increased focus on safety, keeps intact the established structure of the various highway programs, continues

efforts to streamline project delivery, and provides a dedicated source of federal dollars for freight projects. With the enactment of the FAST Act, states and local governments are now moving forward with critical transportation projects with the confidence that they will have a federal partner over the long term.

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) require performance measures for the following areas: Safety, State of Good Repair, Transit Asset Management, and System Performance. After each Final Rule was issued, each state is required to develop targets for each performance measure. Subsequent to this, the FAST Act requires MPOs to also adopt performance targets for these same measures. Additional performance measures may come from the federal government in future transportation authorization legislation. Mobility 2045 will emphasize the attainment of performance targets.





FHWA Performance Management

Federal Highway Administration Performance Measurement Goals

Table 2-1

FHWA Goal	Performance Area	Performance Measure	CFR		
Safety (PM 1)	Injuries & Fatalities	 Number of fatalities Fatality rate (per 100 million vehicle miles traveled) Number of serious injuries Serious injury rate (per 100 million vehicle miles traveled) Number of non-motorized fatalities and non-motorized serious injuries 	23 CFR §150(b)		
Infrastructure Condition (PM 2)	Pavement Condition Bridge Condition	 % of pavements on the non-Interstate NHS in Good condition % of pavements on the non-Interstate NHS in Poor condition 			
Performance of the National Highway System Performance Of the NHS, Freight, And CMAQ Measures (PM 3) Environmental Sustainability		 % of person miles traveled on the Interstate System that are reliable % of person miles traveled on the non-Interstate NHS that are reliable Truck Travel Time Reliability Index Annual hours of peak-hour excessive delay per capita % of non-single-occupant vehicle travel On-Road Mobile Source Emissions reduction 	23 CFR §150(b)		

(Source: http://crcog.org/wp-content/uploads/2018/10/2018_04-Performance-Measures-Oct-25.pdf)

Safety (PM 1): The goal is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

Infrastructure Condition (PM 2): The goal is to maintain the highway infrastructure asset system in a state of good repair.

Performance of the NHS, Freight, and CMAQ Measures (PM 3): The goal is to improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

Congestion Reduction: The goal is to achieve a significant reduction in congestion on the National

Highway System.

Environmental Sustainability: The goal is to enhance the performance of the transportation system while protecting and enhancing the natural environment.

Reduced Project Delivery Delays: The goal is to reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

Federal Guidelines

Federal Planning Factors

Intermodal Surface Transportation Efficiency Act (ISTEA) created eight federal planning factors. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A legacy for Users (SAFETEA-LU) expanded the planning factors. The FAST Act created two new planning factors for a total of ten. These ten factors must be considered during the planning process:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

Improving connectivity to regional, national, and international markets will support economic vitality as the connection to major markets will attract significant economic investment. Strengthening the regional freight network will tie directly to this objective and create the potential to link to global opportunities.

2. Increase the safety of the transportation system for motorized and non-motorized users.

Constructing and maintaining well-designed facilities will decrease the number of fatalities and serious injury crashes. Transportation networks must be multimodal when planned and constructed with safety for all users being the top priority. The transportation network must support improved response times for police and first responders.

3. Increase the security of the transportation system for motorized and non-motorized users.

It is critical to prioritize possible security risks identified in the transportation system and increase security planning to minimize future incidents. Maintaining a partnership with regional and state law enforcement entities will foster collaboration in preventative security measures.

4. Increase the accessibility and mobility of people and freight.

Providing a variety of transportation options that accommodates all users improves the ability for travelers to reach destinations quickly and efficiently. Improving and maintaining the regional freight network enhances the speed of freight between destinations.

5. Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.

Explore new methods for addressing environmental and cultural impacts and encourage sustainable and energy efficient designs and applications. Promote multi-modal transportation options which can offer households better quality of life and improved personal mobility. Consult with state and federal land use agencies and stakeholder organizations before projects are designed and implemented.

6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

Promote multi-modal transportation options for all users to offer households a better quality of life and improved personal mobility. Promote a safe and efficient transportation network for regional and national freight movement.

7. Promote efficient system management.

Develop system management techniques that will ensure efficient performance of existing and new transportation network systems.

8. Emphasize the preservation of the existing transportation system.

Mobility 2045 supports the preservation of the existing transportation system by prioritizing "Fix It First" with regard to the transportation network within the Mesilla Valley MPO. This means that



- area jurisdictions should prioritize maintenance projects over new construction or capacity expansion projects.
- 9. Improve resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation.
 - Mobility 2045 encourages the Mesilla Valley MPO member jurisdictions to consider how to mitigate weather impacts to the transportation network for all modes. It is critical that the transportation network be reliable for all users.
- 10. Enhance travel and tourism.

Central Doña Ana County has a unique and vibrant culture and travel and tourism are keystones of the regional economy. Mobility 2045 supports the economic vitality of the region.

FTA Performance Management

It is the Transportation Asset Management (TAM) Final Rule which defines the term 'state of good repair' along with changes to the National Transit Database (NTD) reporting requirements, that changed the reporting requirements for transit agencies. Under the new FTA performance-based management program, transit agencies are required to submit asset inventory, condition assessments, performance targets, and a narrative report to the NTD annually in addition to developing a Transit Asset Management (TAM) plan.

Table 2-2

Federal Transit Administration Performance Measurement Goals

FTA Goal	Performance Area	Performance Measure	CFR
	Rolling Stock	% of revenue vehicles (by type) exceeding ULB NTD divides vehicles into 23 types	
Transportation Asset Management	Equipment	% of non-revenue service vehicles (by type) exceeding ULB Equipment is reported only if it is a road-worthy, self-propelled maintenance or construction vehicle	49 CFR §625
	Facilities	 % of facilities (by group) rated under 3.0 on the Transit Economic Requirements Model (TERM) scale The TERM Scale assigns numerical ratings based on condition 	
	Infrastructure	• % of track segments under <u>performance restriction</u> (see below)	

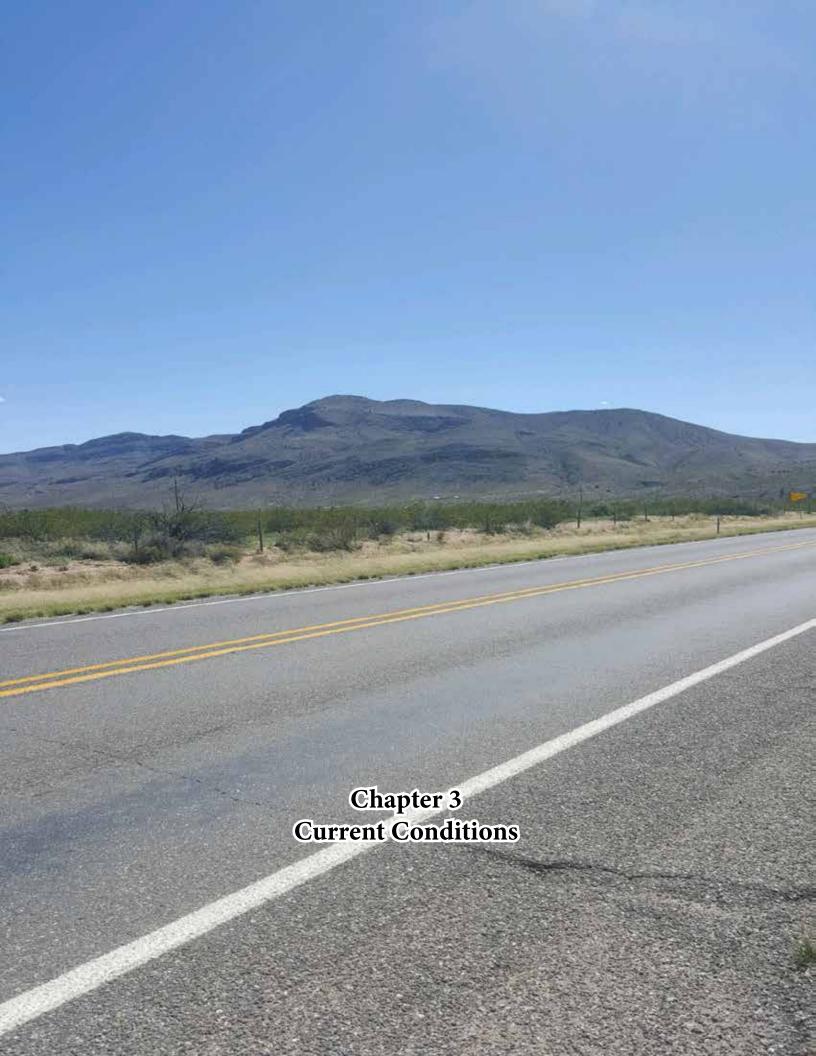
(Source: FTA Performance Management)

A *performance restriction* is defined as a segment of guideway track miles where the maximum permissible speed of transit vehicles is set to a value that is below the guideway's full-service speed. Restrictions can be caused by issues with rail fixed guideway, track, power and signal systems.





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Introduction

Transportation and land-use policies, codes, and practices have a major impact on the creation of healthy, livable, and safe communities, and thus contribute to these state mandates. These overarching goals aside, transportation related issues also have a direct impact on people's daily lives, from air quality and traffic safety to economic development and mobility to jobs, services, and shopping.

Gathering information on existing conditions is one of the first steps in the transportation plan development process. It is imperative to understand the existing socio-economic, land use, environmental, and transportation conditions of a region before forecasting potential future conditions and deriving implementation strategies. In this chapter, current characteristics and future scenarios in the Mesilla

Valley are covered as they relate to the following topics:

- Geographic Location, Environmental Characteristics, and Population Characteristics
- Location Efficiency and Economic Conditions
- Health and the Transportation System
- Safety
- NMDOT Safety Planning and MVMPO Safety Statistics
- Mobility Conditions
- Modeling

The discussion of the above topics will include a brief examination of national and state-wide studies and trends and amore detailed discussion of the potential impacts of existing local and regional conditions.



Geographic Location

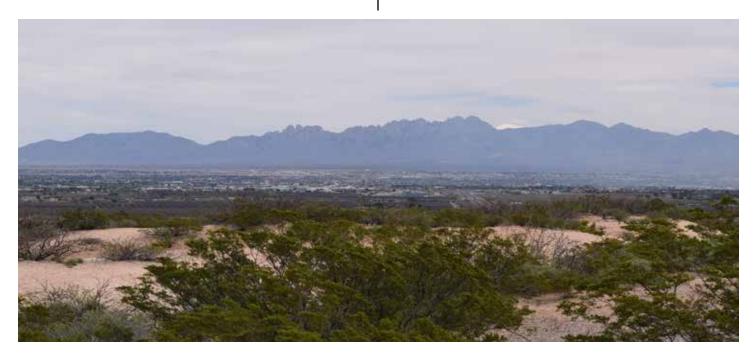
The transportation system must be examined on a regional level because the MPO planning area covers the Town of Mesilla, the City of Las Cruces, and Doña Ana County. One of the unique characteristics of this region is its proximity to the border with Mexico. The demographics, characteristics, and culture of the region reflect the proximity to the border. The border crossing at Santa Teresa in recent years has been a spur for growth in the southern portion of the County. The MPO area contains the junction of two interstates (I-25 and I-10). Interstate 10 is a major east-west corridor and the only one that is open year-round due to weather conditions on other east-west corridors. Interstate 25, which begins in Las Cruces, is a major north-south corridor that connects the Western States of the U.S. with Mexico and Canada.

One of the chief characteristics of New Mexico in general and Dona Aña County specifically, is the presence of the Federal Government as a considerable part of the economy and one of the largest landholders. Near Las Cruces is White Sands Missile Range, large areas owned by the Bureau of Land Management (BLM) and NASA facilities. The major geographic feature is the Organ Mountains, which are a national monument and a significant destination for tourists.

Environmental Characteristics

The MPO region is in the Chihuahuan Desert and contains a unique agricultural community adjacent to the Rio Grande. The Rio Grande bisects the Mesilla Valley and currently traverses just west of the incorporated City of Las Cruces. Culturally, the region has its roots dating back to civilizations from the early 1000s. The historic El Camino Real, which runs parallel to the Rio Grande through the area, has been utilized as a key transportation corridor for over 400 years.

Desert grasslands extend from the edges of the city to the lower slopes of the nearby Organ and Robledo Mountains. The arroyos separate the desert grasslands during rainy seasons. These arroyos also serve as wildlife corridors. Preserving the cultural heritage and aspects of the unique desert environment are integral parts of maintaining the community's natural and cultural resources. In the desert environment, water can be a scarce resource; therefore, water conservation is a high priority for the region. There is a considerable amount of concern for the protection of the natural environment and views of the mountains. Other issues related to the natural environment include the need for shade due to the number of sunny days, and the wind's impact on health and air quality. Though the MPO is not currently required to address air quality concerns,





it is possible that this will become a requirement in the future.

The Mesilla Valley MPO transportation planning process includes the identification of natural and cultural resources, a robust public engagement process to determine potential impacts to the resources, and an evaluation to mitigate or eliminate potential negative impacts. The process protects these resources and provides for enhanced urban and rural environments. Appropriate land use densities and planned developments that encourage the use of all modes should receive high priorities. While land use decisions are not made by the MPO, the MPO can consider land use development when making transportation decisions. Continuing to facilitate better coordination between local entities and regional and state agencies by the MPO will help to ensure sound transportation investments are made.

During the development of Mobility 2045, the MPO considered environmental concerns, such as the location of arroyo crossings and wilderness areas. Some of the roadway alignments pass through steep topography and near recreational areas maintained by the Bureau of Land Management (BLM). The BLM is particularly interested in improving access to the Organ Mountains - Desert Peaks National Monument. Additionally, the federal government also maintains the Prehistoric Trackways Park located west of the Rio

Grande and north of Picacho Peak. These areas are important economic assets to the region. However, the existence of the Desert Peak National Monument impacts the future thoroughfare network of the Mesilla Valley MPO. These impacts are reflected in the Future Thoroughfare Plan of Mobility 2045.

Transportation is a major contributor to local air pollution and smog. These outcomes, in turn, have a significant impact on health conditions such as asthma and cancer. The six criteria air pollutants monitored by the Environmental Protection Agency (EPA) are: nitrogen oxides, carbon monoxide, volatile organic compounds, PM10, PM2.5, sulfur dioxide, and ammonia. Per the EPA 2017 Air Quality Report, concentrations of the criteria air pollutants have dropped significantly since 1990. Also, from 1990 to 2014, emissions of air toxins declined by 68%, largely driven by federal and state implementation of stationary and mobile source regulations and technological innovations. However, southern Doña Ana County outside the Mesilla Valley MPO is designated as nonattainment for Ozone in the 2014-2016 reporting period.

Finally, considerable input is needed from environmental and cultural resource agencies and economic development organizations to ensure the integration of these issues into the transportation planning process.

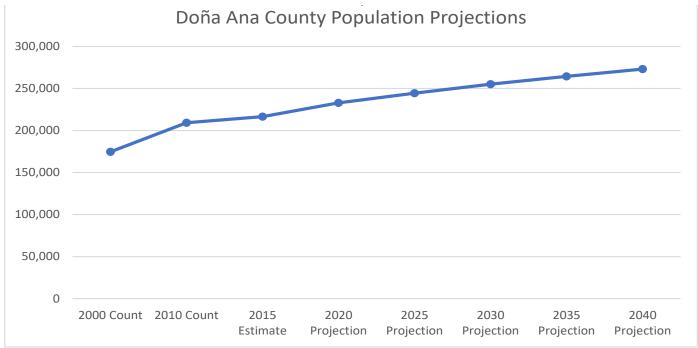




Population Characteristics

Each person in a region contributes to the overall demand for travel, whether traveling to and from work, school, running errands, shopping or for recreation and entertainment. In the 2010 census the total population for Doña Ana County was 201,603. This represents a 22.2% increase from the 2000 census population of 174,682. Currently Dona Ana County has slow but steady growth. By 2040, over 273,074 people are projected to live in Doña Ana County.





County	2000 Count	2010 Count	2015 Estimate	2020 Projection	2025 Projection	2030 Projection	2035 Projection	2040 Projection
Doña Ana	174,682	209,233	216,577	232,946	244,455	255,070	264,537	273,074
% Change		19.8%	3.5%	7.6% 11.3%	4.9%	4.3% 9.5%	3.7%	3.2% 7.1%

Location Efficiency

Housing location and transportation options can have a significant impact on a household budget. Housing costs are the largest household expense, yet transportation costs can also dramatically impact the household budget. Transportation costs can include purchase of a vehicle

or bicycle, fuel, short and long-term maintenance, registration, insurance, and other fees. The largest indicator of current and future transportation costs is urban form (particularly proximity to employment centers and regional destinations) and access to public transportation. These costs can vary considerably



across a metro area depending upon development patterns and transportation system connectivity. For example, widely dispersed retail shops, employment centers, and service providers can increase the impact of transportation costs on a household budget.

There are two main hospitals, Memorial Medical Center and Mountain View Regional Medical Center, in the Mesilla Valley region, as well as a variety of medical clinics, retirement and assisted living centers, nursing agencies, and specialty hospitals. The location of hospitals and medical clinics are significant destinations that must be easily accessible by all residents. In the Las Cruces metropolitan area, RoadRUNNER Paratransit services and RoadRUNNER bus routes provide residents with access to health care facilities. The South Central Regional Transit District (SCRTD) also provides access to additional medical facilities in El Paso, Texas, by providing daily round trip bus routes from Las Cruces to El Paso. Emergency services need uncongested and well-connected routes to hospitals.

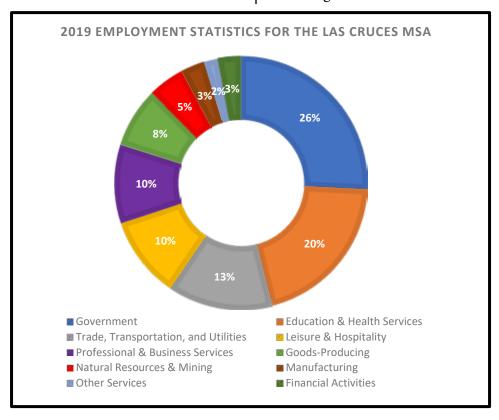
Economic Conditions

The New Mexico Department of Workforce Solutions statistics showed that approximately 75,100 individuals were employed in the Las Cruces Metropolitan Statistical Area (MSA) in December 2019. Figure 3-2019 Employ stats has a comprehensive breakdown of the employment statistics for central Doña Ana County in December 2019.

Different employment sectors result in different transportation needs. For example, retail and hospital jobs have more dispersed and non-traditional hours than traditional 8 to 5 jobs. Identifying the distribution of jobs across employment sectors can be useful for understanding and predicting traffic congestion as well as planning service hours for public transportation. The location of employment centers, employment types, and workforce size are factors to consider in order to understand the current transportation conditions and plan for future needs.

In this region, education and health services employ the

Figure 3-2





highest percentage of people. The location of hospitals, clinics, and educational institutions are significant destinations that must be easily accessible. In addition to the two main community hospitals, Memorial Medical Center and Mountain View Regional Medical Center, there are a variety of retirement and assisted living centers, nursing agencies, and specialty hospitals in the region. The location of health services is important because hospitals, in particular, have a large number of employees who work different shifts during 24 hours. Finally, emergency services need uncongested and well-connected routes to hospitals.

Large educational employment centers consist of Las Cruces Public Schools (LCPS), Gadsden Independent Schools, New Mexico State University (NMSU), and Doña Ana Community College (DACC). NMSU is a hub of activity because of daytime and nighttime classes, and special events held at the campus.

The local, state, and federal governments are also significant employers in the Mesilla Valley MPO area. Large numbers of employees work at the Doña Ana County Government Center, the Las Cruces City Hall, the Federal Court House, and White Sands Missile Range. These jobs are generally day jobs, they contribute significantly to AM and PM peak hour traffic volumes.

The MPO region has some specific areas of heightened economic activity. One of these areas is the West Mesa Industrial Park, located south of the Las Cruces International Airport and I-10. The park area consists of 1,820 acres of land. The main goal for this industrial park is for the use of light industry, general manufacturing, and aviation-related technology-based industries. As of 2019, there are 40 companies holding business permits at the West Mesa Industrial Park.

Another area of significant regional economic investment is the Las Cruces Downtown. The Main Street Downtown Plan is the guiding document of the Las Cruces Downtown revitalization process. The City of Las Cruces is striving to make the Las Cruces Downtown a vital cultural corridor by boosting museums, art galleries, theaters, local shops, local

restaurants, and the Farmer's and Crafts Market. Automobile traffic returned to Main Street when it reopened in November 2012. The City completed the Downtown Plaza in 2016 and completed the Downtown Two-Way Conversion project in 2019 to restore two-way traffic on Church and Water Streets in Downtown Las Cruces.

NMSU is an additional area of economic activity in the region. The main campus is located at the intersection of Interstate 10 and Interstate 25. NMSU is therefore strategically located to impact both the region and the state. The university in striving to expand its academic, research, and medical programs to become one of the top tier research institutions in the United States. NMSU also operates the Arrowhead Research Park. The main goal of this research park is to enhance technology transfer and to provide private enterprises with access to academic and technical resources, including state of the art communications networks.

Present on the NMSU campus is the Burrell College of Osteopathic Medicine. Burrell College represents a significant investment and is the first osteopathic medical school in New Mexico. Burrell College is one of the most significant economic developments in central Dona Ana County over the last decade.

Lastly, the geographic center of Las Cruces is roughly at the intersection of Lohman Avenue and Telshor Boulevard. The Mesilla Valley Mall, the largest mall in the region, is located at this intersection. It is flanked by a variety of commercial services including; restaurants, a grocery store, various retail outlets, office buildings and a hotel. Lohman Avenue serves as one of the main crossings of I-25 between central Las Cruces and the East Mesa. It is thus a major destination and activity center in the MPO region.





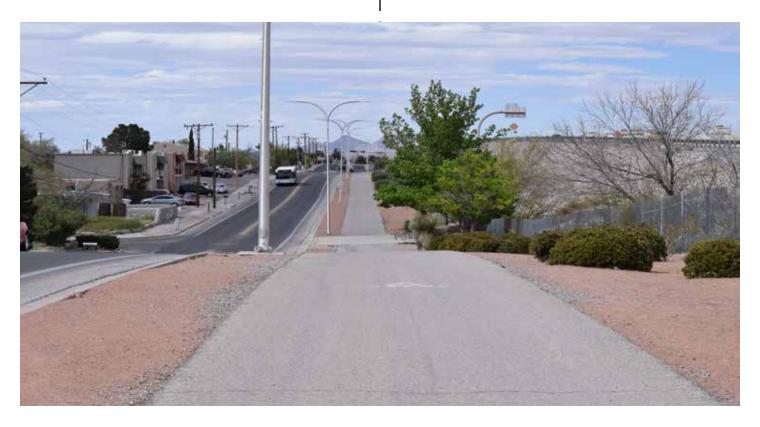
Health and The Transportation System

Health related issues linked to transportation planning include changes in air quality, which affects respiratory health. A poorly designed built environment may encourage driving while discouraging physical activity, which contributes to obesity and weight-related diseases. Transportation can pose significant health risks through injuries or fatalities resulting from crashes. Mobility and accessibility for children, the elderly, and persons with disabilities are critical issues for a region.

Over the past 20 years, there is evidence that the built environment has contributed to a decrease in the health of U.S. citizens. In the United States, obesity among adults and children is at epidemic levels and is the fastest growing public health problem. A poorly connected transportation system can promote a sedentary lifestyle that contributes to obesity. The built environment contributes to health- related issues such as heart disease, certain cancers, and arthritis.

Many experts now believe there is a connection between decreased physical activity and the design of our towns and cities. Associations between Urban Sprawl and Life Expectancy in the United States was written by Shima Hamidi, Reid Ewing, Zaria Tatalovich, James B. Grace, and David Berrigan and published online on April 26, 2018, in the International Journal of Environmental Research and Public Health 15(5). In this article, the authors evaluated numerous studies regarding how urban sprawl contribute to increasing obesity and other health issues. The authors suggest that obesity is lower in compact counties compared to sprawling counties. Urban sprawl is known to be associated with the environmental, as well as behavioral factors which directly relate to life expectancy statistics. Limited accessibility to essential services leads to an increasing dependence on automobiles, which in turn, potentially reduces physical activity and a more sedentary lifestyle (Hamidi S., Ewing R., Tatalovich Z., Grace J.B., & Berrigan D., 2018).

Additional studies have shown that people living in areas with increased opportunities for active transportation can experience improvements in overall health. Ultimately, appropriate changes to our transportation and land use policies may be necessary.



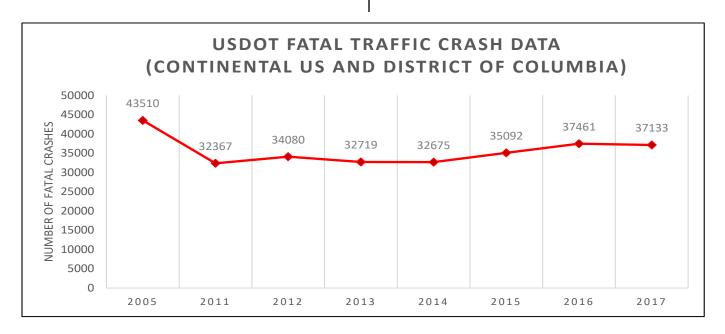


Safety

Planning, designing, and constructing safe transportation facilities and corridors is the top priority for every governmental agency responsible for public transportation. This guiding priority does not guarantee that crashes, injuries, and fatalities will be eliminated, but provides the impetus to identify and mitigate dangerous routes and intersections and to reduce property damage and loss of life. Improving safety throughout the transportation system also reduces the economic impacts to the region by reducing the number of costly crash incidents and the associated congestion. Direct and indirect costs of

Figure 3-3

traffic crashes include property damage, emergency services, medical bills, loss of time at work, and loss of life. Nationally, motor vehicle crashes are by far the leading cause of accidental death. According to the National Highway Traffic Safety Administration (NHTSA), fatal crash incidents decreased from 2005 through 2011, decreased from 2012 through 2014, and fatal crash incidents slightly decreased in 2017. Fatal crashes increased slightly from 2011 through 2012, and from 2014 through 2016, there was a substantially greater increase. Motor vehicle safety is one of the most significant issues in transportation planning. The State of New Mexico has the highest pedestrian fatality rate in the nation.







NMDOT Safety Planning

The New Mexico Transportation Plan 2040 and the NMDOT Strategic Highway Safety Plan (SHSP) address safety issues on a state level. The New Mexico Transportation Plan addresses issues such as safety in construction zones, increasing pedestrian and bicycle safety, public awareness, and Intelligent Transportation Systems (ITS) solutions. The plan also supports Livable Communities and Complete Streets concepts that promote designing communities to facilitate walking, biking, and using public transit as alternatives to dependence on private vehicle usage. The 2016 edition of the SHSP includes a program to reduce fatalities and serious injuries on New Mexico's roadways.

In conjunction with the SHSP, NMDOT's transportation safety planning program has been designed to orient the planning process to more effectively integrate safety. NMDOT created a Traffic Safety Management Team (TSMT) to guide safety implementation. It includes the Secretary of Transportation and senior leadership from NMDOT's planning, traffic safety, engineering (design, construction, operations, and maintenance), transit, rail, research, and public information divisions. The TSMT meets monthly to track implementation progress, create initiatives, and address barriers to safety improvements.



MPO Region Crash Data

Mesilla Valley MPO Staff monitors crash statistics for the Mesilla Valley MPO region. The University of New Mexico Division of Government Research (UNM-DGR) provides the crash statistics. The NMDOT Traffic and Safety Bureau collects the data from local law enforcement and furnishes the data to UNM-DGR. This data, along with the information available from the NMDOT District 1 Community Reports, provides a comprehensive look at potential safety issues in the MPO area.

The intersections with the highest crash rates for motor vehicles in the MPO region in 2017 are Camino del Rex & Main, Bataan Memorial West & Rinconada, and Telshor & Lohman. The highest crash densities for bicycle-involved crashes are around the area of NMSU, the area along Motel between Picacho and Amador, and the Missouri and Don Roser intersection. The highest crash densities for pedestrian-involved crashes are around the areas of NMSU, the El Paseo and Idaho intersection, the Madrid and Solano intersection, and the Motel and Picacho intersection.

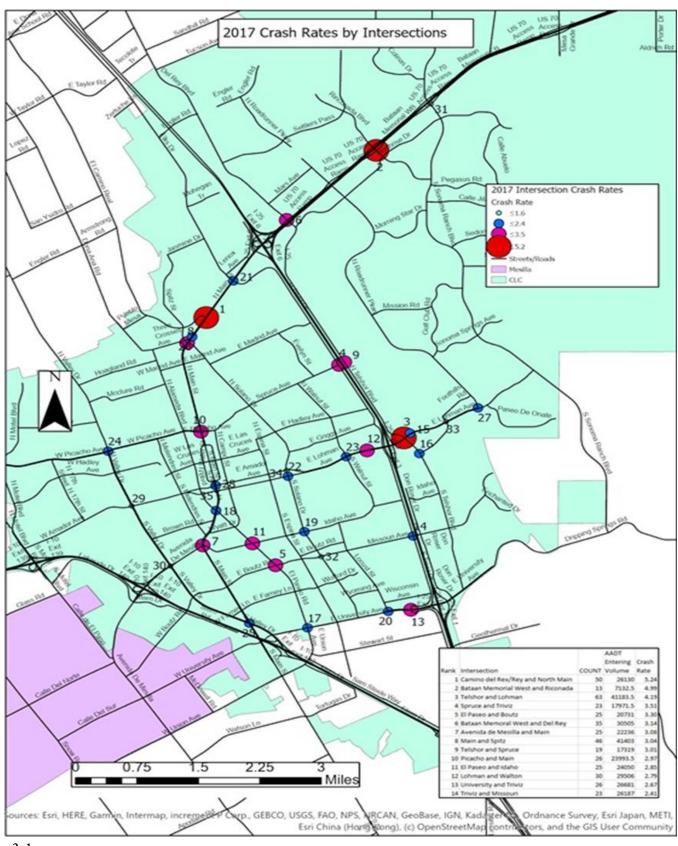
See Map 3

The map indicates key locations where crash rates are high and further crash analyses are needed to determine cause and potential countermeasures. These locations are mostly at intersections of thoroughfares, but sometimes entire corridors need to be evaluated.

These intersections should be a top priority for future studies and funding to identify and implement safety countermeasures. Further studies should also include a more thorough examination of crash types, time of day, and other behavioral and physical crash factors.

For further information on crash data in the MPO area, consult the annual Mesilla Valley MPO Safety Report.





Map 3-1



Multimodal Mobility Conditions

Mobility is the physical movement from one place to another and relates to the different modes or options that are available to move from point A to point B. Shifting trips to a wider variety of modes can alleviate congestion. The transit, bicycle, and pedestrian systems need to be convenient and well-connected to reduce congestion on roadways. In some areas, particularly rural areas of Doña Ana County, the most vital mobility issues are that public transportation is not available, and street system connectivity is lacking. These issues significantly impact many people's ability to get from home to work or school.

Connectivity is a necessary component of a well-functioning transportation system in order to provide accessibility and mobility for all users. This requires the integration of all transportation modes throughout the system.

Accessibility is the ability to leave the transportation network at a desired destination. Improvement is made by diversifying land use in addition to increasing transportation options. Land-use planning is important because non-residential land uses in closer proximity to residential areas decreases the length of trips and provides more opportunities for modal choice. Transportation planners and decision- makers must consider the impacts of infrastructure investments and land development on mobility for all modes, and safe connections to a variety of destinations. The smooth transition from one mode to another is essential for a well-functioning multi-modal system. Connections between bicycle facilities and transit create a safe and complete transportation network. For community cohesiveness and safety for children, neighborhoods should be people-oriented by providing safe streets for both motorized and non-motorized transportation. Streets are public spaces in which all users should be safe and comfortable.

Freight Conditions

The NMDOT Multimodal Freight Study (Phase One Final Report) highlights the safety needs of trade corridors and intermodal access routes that traverse

disadvantaged neighborhoods. The study also identifies the need to address health and environmental concerns. Detailed information on freight is in the NMDOT Multimodal Freight Study section on Regional Movement, Freight Corridors, and Security.

Two vital cross-country routes are in Doña Ana County. These routes facilitate the movement of goods from major US seaports and international manufacturing to regional distribution. Major roadways and rail lines connect the Mesilla Valley MPO area to national and international facilities, such as the Santa Teresa Port of Entry, Foreign Trade Zones located at the Las Cruces and Santa Teresa Airport, White Sands Missile Range, NASA, the future Spaceport, El Paso, and Ciudad Juárez. Because of this location, the Mesilla Valley MPO region has several transportation facilities that are important to regional, national, and international security. These include:

- Interstate Highway 10
- Interstate Highway 25
- U.S. Highway 70
- Las Cruces International Airport
- Burlington Northern Santa Fe (BNSF) rail line, rail yard
- Union Pacific Intermodal Center and
- Santa Teresa Port of Entry

There is significant potential for future development at the City of Las Cruces West Mesa Industrial Park to take advantage of the economic activity ongoing along the U.S., Mexican Border. This potential is dependent upon the further improvement of the freight connections between Santa Teresa and central Doña Ana County. MPO Staff supports the creation of a rail connection to the West Mesa Industrial Park or the creation of an industrial zone near the existing railroad to take advantage of the regional economic activity and secure this area's future economic security.



Interstate 10

Interstate 10 passes through the MPO region, connecting the area to the southern tier of US states from Florida to California. Traffic volumes along Interstate 10 range from approximately 18,000 Average Annual Daily Trips (AADT) west of Las Cruces to approximately 40,000 AADT south of the junction with Interstate 25. Interstate 10 is the only US cross-continental freight corridor located in a frost-area. Interstate 10 also has connections to the Santa Teresa Port of Entry and ultimately to Mexican Highway 2.

Interstate 25

Interstate 25 begins at the interchange with I-10 in southern Las Cruces and terminates in Wyoming. The average daily traffic on this facility ranges from ~16,000 AADT in the metro area to ~6,000 AADT north of Las Cruces. I-25 creates a transportation spine through the State of New Mexico, connecting Las Cruces with Albuquerque and Santa Fe.

US Highway 70

Within the MPO area, US Highway 70 diverges from I-10 at the Jackrabbit Interchange west of Las Cruces. US 70 is the only roadway that traverses the MPO area from east to west. In Las Cruces, Picacho Avenue and North Main Street make up US 70 through the city. East of I-25, the roadway becomes a controlled-access highway with frontage roads. US 70 continues east to White Sands and Alamogordo. The average daily traffic on this facility ranges from ~11,000 AADT west of Las Cruces to ~37,000 AADT in the metro area, to ~24,000 east of Las Cruces.

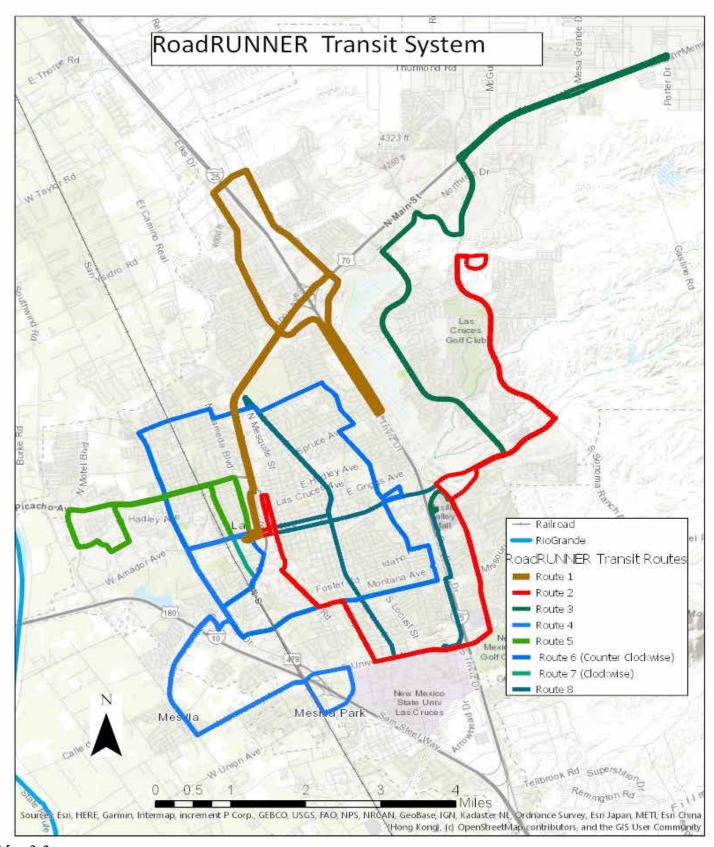
RoadRUNNER Transit Conditions

RoadRUNNER Transit is a division of the City of Las Cruces that provides fixed-route bus service and Diala-Ride paratransit service. RoadRUNNER fixed-route service began operating in 1986 under the City of Las Cruces Public Services Department. Since then, the system has grown from 4 routes to 8. RoadRUNNER also administers an internal transit service for NMSU when it is in session. Several changes were made to

the RoadRUNNER system in March 2008 to improve route directness and reduce customer travel time. In November 2013, the Mesilla Valley Intermodal Transit Terminal (MVITT) opened in downtown Las Cruces. This facility serves at the primary transit hub in Las Cruces by providing customers with a safe and convenient off-street transfer location for local and regional transit services. RoadRUNNER Transit began using several new downtown bus stops on June 17, 2019. The completion of the two-way conversion of Water and Church Streets allowed for the creation of the new bus stops. On July 1, 2019, RoadRUNNER Transit Dial-a-Ride began charging \$1.00 per trip for all users. RoadRUNNER Transit will continue furnishing single runs to and from City of Las Cruces senior program sites. RoadRUNNER Transit extended its hours for its fixed route and Dial-a-Ride paratransit service on May 13, 2019. Saturday Service hours will remain the same. There is no Sunday service. The extended service hours has resulted in increased ridership.

RoadRUNNER Transit completed its Short-Range Transit Plan in 2016. The initial phase of the study included a comprehensive evaluation of the entire transit system and service area. Socio-economic, employment, and demographic characteristics of the Las Cruces area were analyzed to identify concentrations of high transit demand. Reviewing each bus route through extensive fieldwork was part of the evaluation process. The evaluation of the system by measuring the ridership for each route, trip, and bus stop is how system performance is determined. The existing condition report created service recommendations from the findings of the service evaluation and outreach. There are two categories of service recommendations: System Route Restructuring and System Service Expansion. RoadRUNNER staff is beginning work on the next Short-Range Transit Plan. Transit plans are usually scheduled on a five-year basis.





Map 3-2



System expansion recommendations require additional funding to increase the number of service hours and number of vehicles. The expansion recommendations build upon the restructuring recommendations. Further information on the transit system can be found on the City of Las Cruces and Mesilla Valley MPO websites.

Curb-to-curb demand-response paratransit service, also known as Dial-a-Ride, was established along with the fixed route service in 1986. Originally operated within a ¾ mile radius of the fixed-route service and was available to citizens who meet the qualifications of the Americans with Disabilities Act (ADA). The ADA requires the service in any area that offers fixed-route service.

South Central Regional Transit District Conditions

In 2003, Governor Bill Richardson signed into law Senate Bill 34, the Regional Transit District Act, which authorized the creation of regional transit districts (RTDs) within the State of New Mexico and outlined their powers and duties. The law permits voters to decide how much to fund a regional transit service by allowing an increase in gross receipt tax by one-sixteenth to one-half percent. The RTDs are eligible to receive Federal transportation funds because they can use their local funds for Federal match.

The South Central Regional Transit District (SCRTD) was formed in September 2006 when ten cities, towns, villages, and counties signed an intergovernmental contract. The contract signees were the cities of Alamogordo, Las Cruces, Sunland Park, Truth or Consequences, Elephant Butte, the Town of Mesilla, the villages of Hatch and Williamsburg, and Doña Ana and Sierra Counties.

In the spring of 2014, the SCRTD established starter routes in the counties of Sierra and Doña Ana. Ridership on the starter routes rose steadily from 204 passengers the first week of service to 477 passengers during the final weeks of service. The SCRTD then developed and adopted a Five-Year Service and

Financial Plan in May of 2015. On February 22 of 2016, the SCRTD began operating regular routes that link rural areas, unincorporated communities, and municipalities where public transit services had not existed in southern and central Doña Ana County, with connections to El Paso. Phase One has been a success, with ridership rising 160% during the first Fiscal Year of service. During the first year of operation from October 2016 through September 2017, 18,846 passenger trips rode SCRTD buses. Its success is also demonstrated in the SCRTD's cost per passenger trip dropping from \$49.65 in October of 2016, to \$19.75 in October of 2017. Its cost per vehicle mile dropped from \$2.96 to \$1.94 in its first full year of operation.

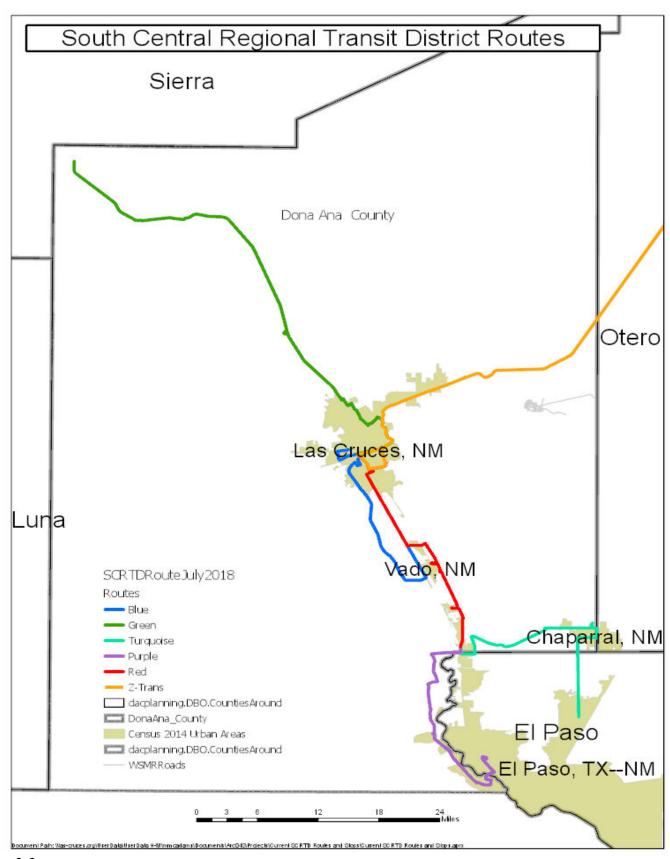
The SCRTD's success is also due in part to its connections with Las Cruces RoadRUNNER Transit, NMDOT Park and Ride, El Paso Sun Metro, and Z-Trans. SCRTD now provides connections with transit services in three counties: Otero, Doña Ana, and El Paso. In addition to curbside stops, the SCRTD now uses the Mesilla Valley Intermodal Transit Terminal (MVITT), in Las Cruces, and three transit terminals in El Paso.

The current membership of the SCRTD includes elected representatives from: The City of Sunland Park, The Town of Mesilla, The City of Las Cruces, The Village of Williamsburg, The County of Doña Ana County, The Village of Hatch, The City of Elephant Butte, and The City of Anthony.

Even though Otero County no longer belongs to the SCRTD, Z-Trans, a private not-for-profit transportation provider that contracts with the City of Alamogordo and Otero County, continues to partner with the SCRTD and is coordinating both the schedule and the route with the SCRTD on its service between Otero County and Las Cruces.







Map 3-3



SCRTD is located within District One of the New Mexico Department of Transportation (NMDOT) and connects the Las Cruces and El Paso urban areas. The El Paso Urbanized Area, primarily located in Texas, is included because there are four New Mexico communities that are part of their urbanized area: Sunland Park, Santa Teresa, Anthony, New Mexico, and Chaparral. While the SCRTD has a potential service area of over 11,000 square miles, current services are primarily focused on operating in Doña Ana County, with a service area stretching from Hatch to Texas. Sierra County currently does not have a designated urban area; however, the combined populations of Elephant Butte, Truth or Consequences, and Williamsburg, along with expected expansion in that area may result in a future urbanized area.

The SCRTD will receive \$50,000 from the New Mexico Department of Transportation (NMDOT) to support a SCRTD Short Range Transit Plan. Both RoadRUNNER Transit and SCRTD will make every effort to coordinate the two plans for their mutual interests.

NMDOT Commuter Service Conditions

The MPO Area has two commuter routes, Gold and Silver, operated by NMDOT, which connects Las Cruces, El Paso, and White Sands Missile Range. These routes have been in operation since 2012. The Gold Route provides eleven eastbound trips and nine westbound trips between Las Cruces and El Paso, also serving Anthony. The Silver Route provides two round trips between Las Cruces and White Sands Missile Range.

Pedestrian Conditions

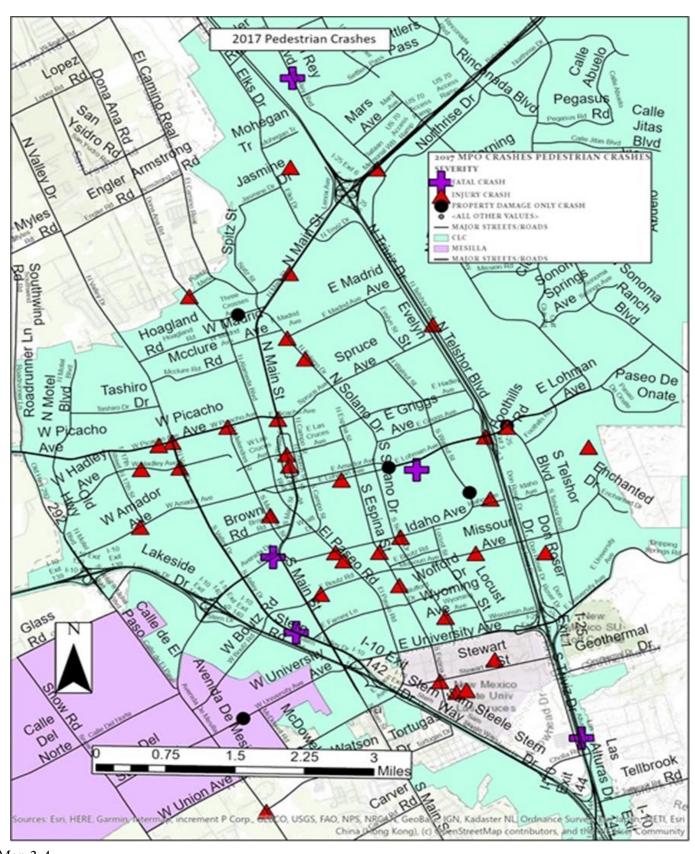
Developers are required to build sidewalks in all new developments within the City of Las Cruces. Doña Ana County requires the developer to build road shoulders; however, sidewalks are required in areas that have urban-type zoning. There are areas where the sidewalks are discontinuous or are not compliant with the Americans with Disabilities Act (ADA), and this has contributed to a reduction of non-motorized transportation opportunities.

It is the responsibility of local jurisdictions and the NMDOT to ensure that pedestrian facilities are constructed or upgraded as part of transportation projects. Potential improvements are contingent upon the local jurisdictions developing a comprehensive infrastructure inventory, which is a function served by the MPO Transportation Asset and Safety Management Initiating neighborhood assessments of the of the pedestrian environment could further assist in compiling these inventories. This type of data collection will help prioritize the future improvement of pedestrian facilities. Finally, another component of improving the pedestrian environment is to establish retail areas or activity centers throughout the county that are of high priority for improving the walking environment.

Unfortunately, in New Mexico, the number of serious pedestrian injuries and fatalities is increasing. In 2018 New Mexico had the worst Pedestrian Crash Rate in the United States. The high Pedestrian Crash Rate is one of the top issues that to be addressed.

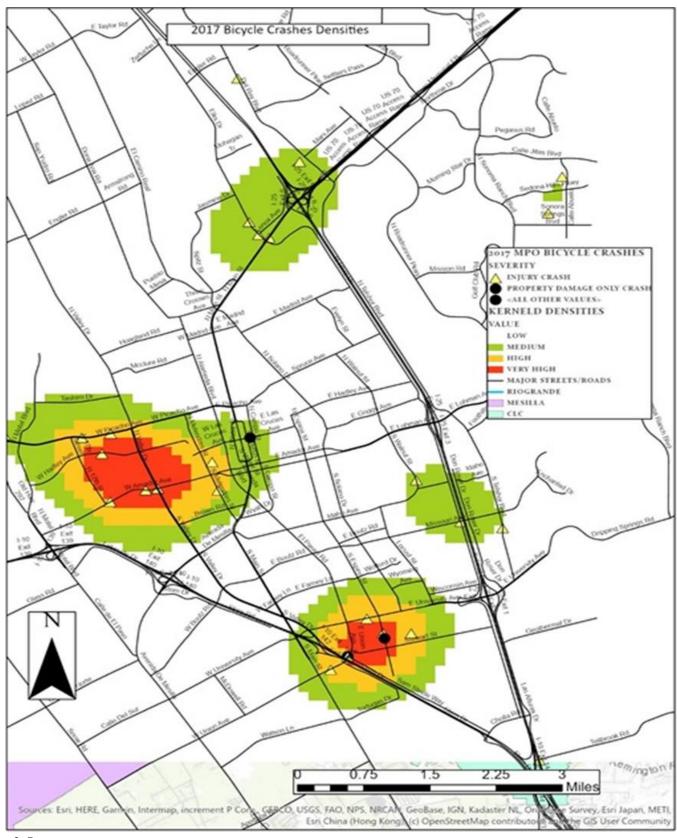






Map 3-4





Map 3-5



Bicycle Conditions

The Mesilla Valley MPO has a warm and sunny climate, which allows for year-round bicycling. Building a comprehensive network of bicycle facilities is one of the most important needs facing a developing multimodal transportation system in the MPO region. Without a complete system of bicycle facilities, bicycle riders are either forced to take a less direct and more time-consuming route to get to their destination or choose another form of transportation. Some bicyclists prefer using in-road bicycle facilities that provide movement with the flow of automobile traffic and direct access to destinations. These facilities include bicycle lanes and wide curb lanes. Bicyclists are to be treated as vehicles in the road and are expected to follow the same traffic rules as per New Mexico state law.

Improving bicycle safety is a priority. Bicycle users should feel comfortable and safer on regional facilities. The planning, design, and construction of new and more safe bikeways In Las Cruces, will encourage increased ridership and will decrease bicycle crashes. Map 3-5 shows the 2017 bicycle crash hot spots. Similar to the pedestrian crashes, there is a current trend within the State of New Mexico of increasing bicycle crashes with an associated increase in bicyclist serious injuries and fatalities. Addressing bicycle safety is a top priority. However, it is important that the factors leading to increased bicycle crashes be analyzed separately from pedestrian factors as the two modes have different characteristics.

According to the City of Las Cruces Active Transportation Plan, there are 73 miles of in-road bike lanes and paved shoulders. There are 27 miles of shared streets in which, some of the streets have shared lane markings.

Trail Conditions

Multi-use paths on independent rights-of-way can provide expansion of existing non-motorized facilities and unique connections to many destinations such as schools, parks, recreational facilities, and open spaces. The American Association of Highway Transportation Officials (AASHTO) recommends the use of multi-use paths in locations that minimize intersection conflicts. A variety of both paved and unpaved paths are available in the MPO area. Some of the paved multi-use include the Outfall Channel, Triviz Multi-Use Trail, La Llorona, Sonoma Ranch Multi-Use Path, the Union Multi-Use Trail, and the University Multi-Use Path.

The City of Las Cruces updated their Memorandum of Understanding (MOU) with Elephant Butte Irrigation District (EBID) in March 2017 to continue developing a regional trail network along EBID laterals and drains. The MOU addresses liability issues, special use permits, and maintenance and operations. The MPO encourages Doña Ana County and the Town of Mesilla to enter into similar MOUs with EBID to create a complete regional trail network. Trails in the MPO area could potentially become part of the proposed state-wide Rio Grande Trail System.

Automobile Traffic Conditions

The MPO operates a traffic count program that provides data utilized by the public and a variety of stakeholders. MPO staff conducts counts on functionally classified roadways throughout the MPO region on a 3-year cycle and does special counts for specific concerns that arise. The MPO Staff updates the Interactive Traffic Flow map yearly. The map includes historical traffic counts. The entire history of the traffic flow maps is available on the MPO website.

MPO staff also collect Volume by Classification data (VBC) as part of the traffic count program. This data shows the different types of vehicles that utilize the road network in the MPO area. This data is especially useful in monitoring freight movement. Speed data collected indicates vehicles traveling over the speed limit by 5 or 10 mph.



Table 3-1 Mesilla Valley MPO Vehicle Miles Travelled

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019
VMT	984.12	966.92	927.43	1011.58	1329.69	1368.41	1472.11	1571.86	1671.60

Nationally, VMT steadily increased from 1960 to 2008. There was a decrease in VMT until approximately 2014 due to the Great Recession. However, there could be other facts that may cause the VMT increase to remain low such as aging Baby Boomers, Millennials not driving, and on-line commerce. The VMT for the Las Cruces Urbanized Area shows a stagnation from 2001 to 2014. Included in that is a slight decrease from 2008 to 2013 related to the "Great Recession." There was a dramatic increase in 2015 and then a drop in 2017. The projections for 2020 show that there will be an increase in VMT. However, with the volatility of the local economy and the stagnation of housing growth, the trend could be lower.

Aviation Conditions

Three airports serve the City of Las Cruces and Doña Ana County. Cargo, charter, and general aviation services are available via the Las Cruces International Airport and the Dona Ana County International Jetport at Santa Teresa, NM. El Paso International Airport provides commercial passenger air service.

The Las Cruces International Airport was constructed in 1942 as a military training facility. It serves as the main airport in the Mesilla Valley MPO. The Las Cruces International Airport is zoned M-3C, heavy industrial with conditional use. There exists a Foreign Trade Zone within the West Mesa Industrial Park, which is immediately south of the Las Cruces International Airport. Special overlay zones exist to limit encroachment of Non-Aviation Compatible uses in the vicinity of the Airport.

For further information on the Las Cruces International Airport, please refer to the Las Cruces International Airport Master Plan.

Spaceport Conditions

Spaceport America is an FAA-licensed launch complex located north of Upham, in Sierra County. The spaceport site provides for flight testing, aeronautical and astronautical testing, educational research, and spaceport leasing. This site may have a significant impact on the Mesilla Valley MPO area in the future. There is anticipation that Spaceport employees will live in the region, and aerospace engineering and construction firms may locate in and around Las Cruces to support the spaceport operations.

Potential Commuter Rail

With a growing population of more than a million New Mexico and Texas residents, the Las Cruces – El Paso corridor has a more than adequate demographic and economic base to support a commuter rail service. In 2017 the Center for Neighborhood Technology conducted a Passenger Rail Feasibility Study on behalf of the South Central Regional Transit (SCRTD). According to this study, residents of Doña Ana County on average pay more than 60% of their income towards housing and transportation costs. The region has an economic need as well as an opportunity for a new





transportation service that might reduce user costs.

The proposed commuter rail service would operate on a 43-mile long segment of the BNSF Railway's "El Paso Subdivision" track. The BNSF's volume of freight movement on this line is currently light by any standard, which may incline the railroad to reach a shared-use agreement of the rail infrastructure. However, this rail segment ends in the only rail crossing of the US-Mexican border that BNSF owns. If the railroad plans a strategic initiative to capture freight movement to and from Mexico, its price to share infrastructure with a passenger rail service may be significantly higher. BNSF's position will be made clear in negotiations with SCRTD and other public sector partners, and its stance will have an impact on capital requirements to establish the rail service. It is essential to have close coordination with the El Paso MPO to move a commuter rail project forward.

The ultimate conclusions of the 2017 study were the Las Cruces – El Paso region has sufficient population and economy to support and benefit from a commuter rail service. There is substantial public support that exists for the establishment of the proposed rail service in Doña Ana County.

To date, bus-based transit services in the region does not have enough patronage to indicate a market for commuter rail. Successful implementation of a rail connection requires that rail service be differentiated from bus service and the integration of transit-oriented development (TOD) around rail stations to improve the economic viability of the connecting rail line. Analyses based on an applicable sketch model to which local data is applied and ten comparable commuter rail services project daily ridership for the proposed passenger rail line between 5,500 and 9,200 passengers on an average working day.

A schedule that would serve and encourage the projected ridership would require 8 to 10 round trip train movements per day, with average headways of 30 to 45 minutes during morning and evening rush hours and headways of 120 minutes during midday. The rolling stock required to serve this schedule, for the

higher ridership estimate consists of four train sets, each of which includes a locomotive and three passenger cars. The capital investment to acquire this rolling stock is approximately \$76.8 million for new equipment and \$13.86 million for used equipment. Analyses based on 12 comparable rail services estimate the costs to operate the proposed service once established, at \$15.61 to \$18.68 per one-way trip, \$26.87 to 27.46 per service mile.

The establishment of the passenger rail service will require successful negotiations with BNSF regarding costs for rights of use or, costs to upgrade the rail infrastructure to passenger standards, and terms of joint use. Regarding external support to fund the proposed rail service, the State of New Mexico is currently disinclined to make further investments in railroad ownership or operations. Federal programs to support passenger rail are in flux.

Strategic recommendations:

- Develop a partnership with authorities of metropolitan El Paso, especially the El Paso MPO, for rail service funding, BNSF negotiations, and operations.
- Recruit a short line railroad as the service operator and a negotiating partner.
- With El Paso authorities, create an action plan for improved transit connections and TOD around terminal rail stations.

Additionally, discussions have been held regarding a potential rail connection between Las Cruces and Albuquerque. There are no studies or plans for implementation of such a rail connection. The Mesilla Valley MPO will continue to monitor this topic.

Travel Demand Modeling

A travel demand model is useful to evaluate a variety of existing conditions and future scenarios for the transportation system and identify potential infrastructure needs. For example, the change of land use and roadway network parameters can simulate the impact of different transportation improvements and



land use assumptions. The travel demand model, called VISUM, also Vehicle Miles Traveled (VMT) analyses for roadways in the MPO region, among other datapoints. Mesilla Valley MPO Staff developed he parameters for the model in coordination with the NMDOT, other MPOs in New Mexico, and the El Paso MPO. The basis for travel behavior parameters in the model is the 2001 Las Cruces Household Travel Survey. VISSIM is an extension of VISUM that provides traffic simulations for a particular area, corridor, or intersection.

The VISUM model uses a schematic of major roadways and land uses to predict travel. The network also contains some generalized local roadways to offer a few access points into the system. The land uses are also generalized and located in Traffic Analysis Zones (TAZ). Each TAZ in VISUM is populated with housing and jobs. The model is calibrated by historic traffic counts conducted by the MPO.









Chapter Two discussed the new federal performance measure requirements that are part of the Fixing America's Surface Transportation (FAST Act). Chapter Three discussed the current transportation and land use conditions in the MPO region. Additionally, MPO Staff conducted three rounds of public engagement in the development of this Metropolitan Transportation Plan. These conditions, combined with the public input received during our engagement process, form the foundation for Mobility 2045.

• Pursuing strategies that include: safety first for the most vulnerable modes, increased connectivity of the street system, improved walking and bicycling conditions, enhanced employment if Intelligent Transportation Systems (ITS), and preservation of arroyos and trails can be steps to providing healthier more sustainable options for the MPO region as a whole.

Core Vision

The core policy keeps *Mobility 2045* simple and active by setting the framework for the main goals. The core policy is a statement emphasizing the necessity of coordinating land use and transportation to achieve sustainable communities. It provides a direct connection between the MPO and the planning efforts of the City of Las Cruces, Doña Ana County, and the Town of Mesilla.

The core policy of *Mobility 2045* is as follows:

Serve all transportation users by planning, implementing, and maintaining a transportation system that coordinates land use and transportation planning.

Chapter Four of *Mobility 2045* serves as the narrative expansion of the goals discussed in Chapter One.



Mobility 2045 Core Vision

Serve all transportation users by planning, implementing, and maintaining a transportation system that coordinates land use and transportation planning.

Provide Safe Travel for all Transportation Users

The ability for all users to travel safely by all modes is one of the primary goals of the Mesilla Valley MPO. Crashes involving injuries or fatalities are often preventable through various actions, for example, enforcement activities, geometric adjustments, or education. It is often non-motorized users, such as bicyclists and pedestrians, who are most at risk in an automobile-oriented environment.

Some strategies that can reduce crashes include:

- 1. Data collection and monitoring is an important method to determine the location and causes of crashes. The Mesilla Valley MPO has started the compilation of an Annual Safety Report to document trends and problem spots in the MPO area. The Annual Safety Reports are available on the Mesilla Valley MPO website.
- 2. Conducting detailed analysis of intersections and corridors that historically have high crash numbers is another strategy to prioritize safety projects. Jurisdictions should prioritize projects that address problems in dangerous areas. The MPO now requires all TIP projects to specify how they address the adopted Safety Targets.
- 3. Reducing Vehicle Miles Travelled (VMT) by encouraging walkability, bicycling, and public transit use. Jurisdictions can use the link between land use and transportation to encourage mixed-use development to reduce demand on the transportation system. These factors tend to reduce both pollution and exposure for crashes to occur.
- 4. A comprehensive approach based on the Vision Zero process looks at reduction of crashes using a

holistic approach of methodologies and perspectives such as law enforcement and technology. Building upon the foundation laid by the Vision Zero model, transportation planners and engineers must learn to encapsulate wider and non-traditional data sources and methods for transportation facility planning and implementation.

Prioritize System Maintenance

It is essential to preserve the existing transportation system as the most cost-effective means of serving the mobility needs of the residents of the MPO area. This is in keeping with the eighth federal planning factor. This process may consist of traditional maintenance activities such as resurfacing and reconstructing roadways, improving pedestrian access with repaired sidewalks, or rebuilding bridges. Additionally, preservation of the existing system also requires applying transportation systems management and operations to improve safety, decrease travel delays, and provide traveler information. Systems management and operations may include upgrading traffic signal systems for better coordination, applying Intelligent Transportation Systems (ITS) technology for improved transit and emergency services, and using dynamic message signs for special event and traffic incident management.

The existing infrastructure should be the target for growth in the region. However, even the new links of a growing network will not function well without maintaining the existing transportation system. The expansion of the regional transportation network must be accomplished in a cost-effective manner to reduce the strain on needed resources from the existing system.

Strategies for improved system maintenance could include:

1. A comprehensive program by all MPO member jurisdictions for monitoring the condition of their transportation facilities.



- 2. Jurisdictions should dedicate consistent funding for maintenance of their existing transportation networks.
- 3. All jurisdictions should create a preventative maintenance program.
- 4. Jurisdictions should optimize existing facilities by use of ITS.
- 5. Accepting Level of Service D for peak hours in lieu of expansion of capacity.

Provide for Equitable Transportation Choice for All Users

Providing equitable transportation choices for all users is important for those who have limited use of motorized vehicles, whether due to income or disability, must rely on using a bicycle, walking, or using public transportation for mobility. Additionally, many transportation users choose to utilize alternative means of transportation. The lack of bicycle facilities, pedestrian facilities, or limited public transportation options puts these individuals at a distinct disadvantage for access to jobs, shopping, medical, and other trips. It is important to provide equitable transportation options to all system users.

Some strategies to promote equity include:

- 1. Constructing quality bicycle and pedestrian facilities when reconstructing streets.
- 2. Developing an integrated network of on and offroad bicycle facilities.
- 3. Supporting improved public transit systems, which allow easy access to destinations.
- 4. Making all sidewalks and curb cuts ADA compliant.
- 5. Providing safe crossings of arterials and at activity centers for pedestrians, bicycles, and public transit users.
- 6. All jurisdictions should provide reliable and consistent funding sources for pedestrian and bicycle facility construction and improvement.
- 7. The adoption and implementation of National Association of City Transportation Officials (NACTO) guidelines by local jurisdictions is another method to improve transportation choice.
- 8. As all local member jurisdictions of the Mesilla Valley MPO have already adopted Complete Streets Policies, implementation of these policies is encouraged.





Provide Improved Connectivity within the Transportation Network and Between Modes

Connectivity is a key component in developing a robust transportation system. A well-connected transportation network reduces the distance traveled to reach destinations and can facilitate pedestrian and bicycle networks. Effective multimodal networks have the characteristics of direct routing, accessibility, few dead-ends, and efficient bicycle and pedestrian Understanding the link between infrastructure. land use and transportation is key in the creation of a well-connected network as the location of places of employment, retail, schools, medical care, and recreational facilities dictate the shape and use of the transportation network. Effectively placing these amenities reduces the need for vehicular transportation.

Some strategies to aid connectivity are:

- 1. Encourage development that reflects traditional grid patterns, which provide more numerous connections and avoid dead ends.
- 2. Create an integrated network of bicycle and pedestrian facilities.
- 3. Create effective transit networks that are internally connected and have connections to surrounding transit providers.
- 4. Encourage the construction of bus shelters, with bicycle facilities, safely connected to the pedestrian network, at all transit stops in the MPO area.

Promote System Efficiency, Reliability, Resiliency, and Effectiveness

Transportation system users should be able to get to their destinations without undue delays. Transportation efficiency reduces congestion on roads; increasing an individuals quality of life and reducing pollution put into the environment by idling vehicles. Improving system efficiency also applies to non-motorized modes of transportation. System Reliability is a federally required adopted performance metric of this MPO,

and our member jurisdictions must take this into consideration when advancing projects through the MPO process.

The following are possible strategies for improving system efficiency:

- 1. Monitoring by the MPO and member jurisdictions of delays and travel times at intersections and along corridors in the MPO planning area.
- 2. MPO Staff will maintain the MPO Travel Demand Model to assess future delays and potential alternatives.
- 3. Another option is utilizing ITS and geometric improvements to reduce travel delay at peak times.
- 4. Continue the ongoing vehicular count program and add non-motorized counts to the traffic network data set.
- 5. Encourage the implementation of Sunday service by RoadRUNNER Transit.
- 6. Encourage the expansion of the geographic service area of RoadRUNNER Transit and the SCRTD.
- 7. Encourage the coordination between RoadRunner Transit and the SCRTD.
- 8. Facilitate walking and biking by prioritizing techniques such as green bike lanes, bicycle boxes, and prioritization of signals.
- 9. Encouraging jurisdictions to provide bus rapid transit or light rail in critical corridor.
- Encourage the development of commuter rail or light rail connections between Las Cruces and El Paso.



Support Economic Vitality and Competitiveness

Having an effective multimodal transportation system is crucial for the economic wellbeing of a community. Additionally, supporting economic vitality is a federally required planning factor. Without such a transportation network that serves the movement needs of people and freight, a community will be at a disadvantage for attracting and retaining workers and industry.

Some strategies to promote economic vitality include:

- 1. Enhance freight movement by improving designated freight facilities.
- 2. Extend rail connections to the West Mesa Industrial Park.
- 3. Improve facilities at the Las Cruces International Airport to better accommodate freight and establish Las Cruces as a regional air freight hub.
- 4. One more strategy is developing a robust public transit system and an integrated non-motorized transportation network as amenities to attract industry and workers to the MPO area.

Adapt to Changing Technology

The United States and the world at large are amid technological innovations that could change many aspects of the current transportation network. At the forefront of these potential technological changes, is the potential development of automated passenger and freight vehicles. There is the possibility that these vehicles will reduce congestion, crashes, and parking requirements on the transportation network. However, the implementation of these innovative technologies must be responsibly managed for these promises to come to fruition. An ill-managed technological implementation process will not solve these problems but may instead make them worse. Additionally, changes in retail practices, specifically the continuing trend toward online shopping have the potential to reduce the number of "brick and mortar" stores in existence which may cause a dramatic paradigm shift in land-use patterns across the nation.

There are some strategies by which the MPO can prepare for dynamic technological change:

- 1. Anticipate the potential transportation impacts of developments such as automated vehicles, shifts in retail development, public transit, and artificial intelligence.
- 2. Improvement of internet applications as they related to transportation or ITS functions.
- 3. Investigate adaptation of non-traditional traffic data sources, for example, aggregated cell phone data, for higher quality traffic flow data.
- 4. Adjust the land-use regulations to accommodate technological and commercial changes.

Enhance the Environment

The pollutants generated by motorized vehicles are a significant contributor to global warming and several serious chronic illnesses. There are efforts to address the impacts of mobile pollution sources at all levels of government. Also, there are economic and political consequences related to the continued reliance on fossil fuels. To have a sustainable future, all communities must develop appropriate plans to reduce the use of non-renewable energy.

The following are some strategies to promote environmental sustainability:

- 1. Encourage the use of electric vehicles by providing incentives and charging stations.
- 2. Promote compact development, which reduces VMT, particularly by promoting mixed-use development or Transit Oriented Development that will bring work, retail, and residential areas closer together, reducing the need for long car trips.
- 3. Encourage the use of electric vehicles by public and private entities.
- 4. Make public transit a priority as a means of encouraging more choice ridership.



5. Jurisdictions should coordinate signal timing to reduce idling.

Support Health and Wellness

Automobile dependence can encourage an unhealthy sedentary lifestyle, which can promote obesity, leading to a variety of health problems. Vehicle crashes are also a significant contributor to medical issues. Additionally, poor access to food and medical facilities is a continuing problem for those with mobility problems.

Some strategies to promote health and wellness are:

- 1. Provide for safe pedestrian and bicycling facilities to work and recreational facilities.
- 2. Work to reduce VMT.
- 3. Continue to implement safety projects to make the transportation network safe for all users.

Support Community Character and Context

Quality of life, which includes community culture and character, has become a key factor for the attraction and retention of people to an area. Businesses and potential residents are keenly interested in the amenities and culture of communities when making decisions to locate in an area. The unique culture of the region can be a valuable asset in terms of economic development and quality of life.

Some strategies to promote community character include:

- 1. Encourage mixed-use or transit-oriented development.
- 2. Encourage the redevelopment of blighted or abandoned areas of the community to be a culturally and economically vibrant area.
- 3. Develop quality transit systems with high frequency and beneficial coverage area for all users.

Plan Implementation

The implementation of the Core Vision and supporting strategies of Mobility 2045, as well as the implementation of the performance measures required by the FAST Act, takes a variety of methods that provide the means for evaluating performance and set the stage for developing future projects. Tracking performance can be a difficult challenge. Many of the activities undertaken by the Mesilla Valley MPO are qualitative rather than quantifiable. Additionally, as a small MPO, Mesilla Valley is limited in its ability to impact outcomes on the ground. Developing accessible, connected regional networks and to maximize the impact of MPO efforts the implementation strategies of Mobility 2045 must focus on collaboration and cooperation with our member jurisdictions to bring this into fruition.

Land Use and Design Elements

Promoting effective land-use patterns and design is an integral part of supporting an efficient and sustainable transportation system. Transportation patterns are affected by land use diversity, density, and distribution. The MPO does not have land-use authority and cannot enforce land-use and transportation coordination. However, one of the main functions of the MPO is to provide a forum for better coordination of land-use planning and transportation planning, particularly long-range planning and comprehensive planning. The MPO will continue to work closely will all our member jurisdictions supporting the development of a sustainable transportation network.

Land-use diversity, exemplified by a pattern of interspersed land uses, promotes shorter trips for daily services and results in more transportation options by making non-motorized trips more viable. Land-use diversity promotes a mix of employment, housing, and service activities and can result in residents spending less time and money on transportation needs. Higher density, of both residential and commercial uses, provides a variety of housing choices, supports transit, and enables a more sustainable transportation network. The concept of Transit Oriented Development (TOD) brings many of these land-use and design



concepts together to create a pedestrian-friendly built environment that efficiently supports transit and provides mobility and accessibility for all users. The center of a TOD is surrounded by a relatively high-density development spreading outward from the center. TODs are generally located within a radius of one-quarter to one-half mile from a transit hub with an integrated sidewalk network, as this is the scale that is best suited to pedestrians.

Context-Sensitive Design Solutions

Context-Sensitive Design Solutions seek transportation options that improve mobility and safety while complementing and enhancing community values and objectives. The considerations for Context-Sensitive Solutions is twofold. First, the broad context created by the surrounding neighborhood, district, or corridor. Second, the immediate physical context created by buildings and activities. An examination of these contexts through a robust, collaborative public input process will result in design parameters for the context, roadway, and intersections. The examination should include maintaining safety and mobility, as well as aesthetic, social, economic, and environmental values.

Complete Streets

Complete Streets are streets that are designed and operated to enable safe access for all users. These users include children, seniors, and those with disabilities. Complete Streets address both policies and design standards requiring consideration of all users in planning, design, construction, and maintenance. The Town of Mesilla, the City of Las Cruces, and Doña Ana County have all adopted Complete Streets resolutions. Complete Streets include design elements such as bicycle lanes, pedestrian buffers, curb extensions, narrow residential roadways, and improved signal timing.

Right of Way (ROW) Preservation

The Mesilla Valley MPO, through the development of the Future Thoroughfare Plan, identifies the functional classification and alignment of arterials and collectors in the region, particularly future alignments. This process provides regional functionality and preserves ROW for future development. In most cases, right of way preservation will be determined based on the adopted design standards of the City of Las Cruces and Doña Ana County.

There are some exceptions, for example, the ROW request may vary based on an MPO or local jurisdiction's study corridor report, or a determination of a constrained ROW (explained below). Also, if a parcel of land is adjacent to a water conveyance facility rather than a roadway, additional ROW is not requested. The City of Las Cruces and Doña Ana County may ask for additional ROW at intersections to ensure better traffic flow management.

Constrained Right of Way

Constrained ROW are roads where there exist restrictions from adding through lanes to meet current or future capacity or other enhancements due to physical, environmental, or policy constraints. A roadway may have physical constrains by immediately adjacent development, topography, or when a facility has reached the maximum motor vehicle lane per design standards. Policy constraints can also come into play when considering the impacts of roadway expansion on the environment, neighborhoods, and or local communities. For example, MPO Staff has conducted study corridor reports of which the outcome consists of a recommendation to constrain the ROW for the area based on existing conditions and community input.

Usually, constrained ROWs exist in built-out areas of the City of Las Cruces and in historic centers of unincorporated communities. However, rural areas may also have constrained ROWs due to environmental factors and topographic concerns. MPO Staff will not recommend the acquisition of additional ROW in those cases. The MPO recommends prioritizing strategies such as traffic signal optimization, access management,

parking and loading restrictions, and parallel facilities improvement for ROW with constraints.

The development review process should use the following processes to determine if and the amount of constraint on a ROW:

- Analyze the entire ROW segment between two thoroughfare intersections to average existing ROW;
- Analyze the entire ROW segment between two thoroughfare intersections to determine percentage of build-out;
- Analyze the entire ROW segment between two thoroughfare intersections to determine the potential for future subdivision;
- Determine if MPO Staff has conducted a study corridor report for the segment;
- If 80% of the segment is built-out, then the average existing ROW is used to determine the amount of ROW required;
- Additional ROW at the intersection could be requested regardless of the percentage of build-out;
- All determinations of constrained ROW should consider current and future land use context and associated traffic impacts as determined by MPO Staff.

Thoroughfare Alignments

The process of identifying the location of existing thoroughfares and locating new alignments for proposed thoroughfares includes studying land uses and topography, as well as providing for a connected roadway system. The thoroughfare alignments have spacing requirements outlined in the Federal Functional Classification Guidelines. The placement of thoroughfares, whenever possible, is on a shared property or section line to evenly distribute property acquisition for public right-of-way. Occasionally land-use changes and other issues are identified that require revisions to the alignments. The MPO has a process

to evaluate thoroughfare alignments depending on the degree of change proposed and the impact a change would have on property owners.

When an applicant is seeking to realign an MPO thoroughfare, the following criteria must be included and addressed:

- Description of the proposed change(s), including the extent of right-of-way realignment, map of proposed realignment, and identification of applicable topographic, drainage, cultural, historical, or environmental issues;
- Explanation of the reason for the proposed change(s);
- Indication of whether the request does or does not shift the responsibility of right-of-way preservation on any current or new property owners;
- If a shift in the responsibility of right-of-way preservation occurs, the applicant must obtain a signed, written agreement regarding the new alignment by all parties;
- If the realignment is not significant, less than 300 feet, and all parties agree on the shift of responsibility of right-of-way preservation the request will be processed administratively by MPO Staff;
- If the realignment is significant, more than 300 feet, or parties are not in agreement on the shift of responsibility of right-of-way preservation, the request will be taken through the entire Metropolitan Transportation Plan amendment process as outlined in the Mesilla Valley MPO Public Participation Plan;
- MPO Staff determines the intended location of the original alignment centerline.



Area Plans and Study Corridors

Area plans and study corridors are undertaken in corridors or areas that are in need of intensive study to determine potential transportation needs. These are conducted on an as-needed basis. Studies can be initiated by written request of an MPO member jurisdiction, when a proposed Transportation Improvement Program (TIP) project is not in compliance with the MTP, or if the MPO Policy Committee requests a specific study.

The Public Participation Plan outlines the process for these types of studies. Some of the items in this process include determining the target audience, study area size, identifying alternative options through public input, and determining preliminary cost estimates, benefits, and potential issues to address issues through the National Environmental Policy Act (NEPA) process. The NMDOT Location Study Procedures provides a set of guidelines by which to analyze some of these items and are utilized in the study process.

Development, Construction, and Zoning Review

The City of Las Cruces and Doña Ana County both have review processes for new development and redevelopment. Development reviews may include new subdivisions, infill development, and lot line adjustments. The MPO participates in the development review processes as a reviewer for both agencies listed above and is a voting member on the Design Review Committee (City of Las Cruces).

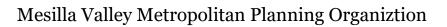
The MPO is interested in:

- Creating a multi-modal and well-connected roadway network;
- Accounting for land use and transportation impacts on traffic generation and accessibility for all users;
- Encouraging traffic calming techniques;
- Encouraging access management;
- Supporting Transit Oriented Development and

- encouraging direct connection between bicyclists, pedestrians, and transit facilities;
- Encouraging increased pedestrian access, MPO Staff may request increased pedestrian access between subdivisions;
- Encouraging greater connectivity between trails;
- Preserving airport reserve areas around the Las Cruces International Airport; the MPO is opposed to any zone changes that provide the opportunity for incompatible land uses in the designated Airport Overlay Zone.

During the construction review process, MPO Staff may provide comments concerning context-sensitive solutions, roadway cross-sections, parking, lighting, and signage as they relate to MPO goals and principles. The MPO also recommends design that minimizes conflict between modes and provides access for all users at appropriate speeds. The MPO's policy calls for bicycle lanes on the construction of all new thoroughfares. In constrained ROWs, the MPO recommends providing for all modes as best possible using Complete Streets principles. The MPO does not support cross-sections that do not include bicycle lanes or shoulders.

During the zoning review process, MPO Staff may provide comments on the effect of proposed land uses on the transportation system due to traffic generation. During this process, the MPO also provides information to the local jurisdiction about traffic counts, roadway function, and location of public transportation facilities. The zone review process reviews Planned Unit Development (PUD). PUDs provide public benefits in exchange for the consideration of multiple variances from the zoning code. The MPO comments on land use and transportation issues for PUDs because of the flexible nature and intent of the PUD process. The MPO may recommend public benefits. Sometimes the MPO will ask for anticipated traffic generation and connectivity measures.





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- Promote efficient system management.
- Emphasize the preservation of the existing transportation system.
- Enhance travel and tourism.

The following system priority plans guide on identifying, developing, and implementing projects, as well as a system for evaluating projects for inclusion in the Transportation Improvement Program (TIP). Typically, a project will get more points if it is identified on multiple priority plans. Also, to preserve and maintain the existing transportation infrastructure, the MPO supports new and innovative funding mechanisms for implementing these priorities and expanding the current unfunded illustrative project list. Each system priority plan consists of a map identifying important components of the priorities plan and informational text on the sidebar. These maps are readily available on the web and will be emailed or printed by request.

Transportation Projects Priorities Plan

The Transportation Projects Priorities Plan is a map that brings together projects for all modes that are part of the regional vision. The map illustrates the following types of projects:

- Projects funded in the 2020-2025 TIP
- Prioritized illustrative unfunded projects
- Corridors that would benefit from Intelligent Transportation Systems (ITS) applications
- Transit capital and operations projects that cannot be illustrated on the map.

Active Mobility Priorities Plan

The Active Mobility Priorities Plan identifies crucial pedestrian corridors, intersections, and regional area destinations that need infrastructure; current and future in-road bicycle facilities throughout the MPO area, and current and potential future trail locations, within the MPO area. The emphasis on pedestrian safety is due to all modes having a pedestrian component.

Associated Tasks:

- Provide for safe pedestrian and bicycling facilities to work and recreational facilities.
- Work to reduce VMT.
- Continue to implement safety projects to make the transportation network safe for all users.

Public Transit Priorities Plan

The Public Transportation Priorities Plan is a depiction of the future transit system. It envisions that the future transit system will be better coordinated with activity centers to support Transit-Oriented Development (TOD) opportunities. The future transit system should be based on establishing bi-directional express service corridors to encourage regional trips and provide neighborhood circulator systems that feed into the stations along those express corridors.

The connection of the urban system to both the rural and regional systems is paramount to the success of the transit system. Connecting to regional partners such as the New Mexico Department of Transportation Gold Route, which connects Las Cruces-Anthony-El Paso and the Silver Route, which connects Las Cruces-Anthony-White Sands are vital to the success of public transportation in the region. A proposed commuter rail link between Las Cruces and El Paso is being discussed.

Associated Tasks:

- Continue to assist with the implementation of the RoadRUNNER 5-Year Strategic Plan
- Continue to support SCRTD.





Future Thoroughfare Plan

The Future Thoroughfare Plan establishes the vision for the future thoroughfare network for the region. It describes future roadway functional classification, preliminary roadway alignments, and current functional classification to preserve right-of-way for MPO member jurisdictions. The basis for the determination of final Right-of-Way widths is local jurisdictions' design standards and complete streets policies.

Collectors serve specific functions within the hierarchical road system, distributing traffic between neighborhoods and arterials and providing increased access across shorter distances and at slower speeds. To achieve these functions, the MPO has set parameters and templates for the build-out of collectors rather than indicating their exact alignment on the related map. These parameters will provide enhanced alignment flexibility.

The development of the Future Thoroughfare Plan is in conjunction with the Federal Highway Administrations Functional Classification Guidelines. The map contains the desired functional classification for existing and proposed roadways, a summary of the functional classification guidelines, and parameters for aligning collectors.

Associated Policies:

 Collectors within approximately 1 square mile of planned arterials shall maintain a connection to arterials in every cardinal direction and each other.



- A collector should not directly continue for more than 1.5 miles in any given direction.
- A collector should contain 2 or 3 vehicle lanes, bicycle lanes in each direction, and pedestrian facilities on both sides appropriate to the roadway context.
- Recommend maintaining existing routes and connections where feasible.

Functional Classification Map

The Functional Classification Map illustrates the current roadway functional classification. It is not the intention of this map to determine right-of-way widths. The local jurisdictions is responsible for final right-of-way width, the design standards and the application of there complete streets polices. MPO Staff developed the Functional Classification Map using the Federal Highway Administration Functional Classification Guidelines.

Associated Policies:

- This map provides the basis for determining federal aid eligibility within the MPO region.
- The current functional classification may not match the classification identified on the Future Thoroughfare Map. Developing projects should consult the Future Thoroughfare Map.

Truck Route Map

The Truck Route Map identifies preferred corridors for commercial truck movement within the MPO area. Many roadways within the MPO carry significant commercial vehicle volumes. The public has expressed concern regarding the high volume of truck traffic on US 70 and its associated environmental impacts. During 2013 the completion of the Interstate 10 and Interstate 25 interchange lead to safer conditions. Previously, truck drivers chose not to use the I-10 and I-25 interchange because the ramp geometry led to truck turnovers. The interchange improvements have led to more trucks utilizing the I-10 and I-25 interchange, thus relieving some of the truck traffic on

US 70 through the urban core of Las Cruces.

During the development process for Mobility 2045, a new freight corridor is currently in discussion. This new corridor, the High Mesa Road, is proposed to directly connect the Las Cruces West Mesa Industrial Park to Santa Teresa to take advantage of the dynamic economic activity currently ongoing in that area.

Financial Plan Overview

Federal transportation bills fund and regulate all federal transportation activities. One requirement found in federal transportation bills is that the Metropolitan Transportation Plan (MTP), Transportation Improvement Program (TIP), and the State Transportation Improvement Program (STIP) must be financially constrained. 23 U.S.C.450.104 defines financial constraint and fiscal constraint "the metropolitan transportation plan, TIP, and STIP includes sufficient financial information for demonstrating that projects in the metropolitan transportation plan, TIP, and STIP can be implemented using committed, available, or reasonably available revenue sources, with reasonable assurance that the federally supported transportation system is being adequately operated and maintained." The purpose of this requirement is twofold. The first is to ensure the identification of funding sources for investments. Second to demonstrate a reasonably reliable means to maintain and operate the existing federally funded transportation system.

NMDOT will provide the total federal, state, and local funding revenues for the 25-year planning horizon of Mobility 2045. Total capital expenditures for roadways are estimated to be \$131,552,735. Operation and Maintenance (O & M) expenditures for roadways are estimated to be \$553,982,765. Capital expenditures for RoadRUNNER Transit for Mobility 2045 are programmed in the Statewide Transportation Improvement Program (STIP) as of 2020 to be \$24,704,927. Operation and Maintenance costs for RoadRUNNER Transit for Mobility 2045's 25-year planning horizon are estimated at \$369,348,414.

RoadRUNNER Transit estimates total capital and O & M expenditures for the 25-year planning horizon of Mobility 2045 are estimated to be \$394,053,341.

There are funding sources available to construct new transportation projects and keep the existing transportation system operating and maintained. Funding sources include federal and state programs, such as fuel and sales taxes, as well as local and private funds. This chapter documents the financial strategies used to fund regional projects, programs, and activities covered in Mobility 2045. Potential revenue sources are summarized, and future revenues from these sources are estimated. The expenditures to meet the projected transportation needs for the Mesilla Valley region through the year 2045 are estimated. The expenditures include those required to meet general administrative, the operation, and maintenance needs of the existing transportation system.

Proposed Revenues

Proposed Federal Revenues

NMDOT receives federal funding for New Mexico from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Funds are specifically allocated to various statewide programs and to the six NMDOT districts. The Mesilla Valley MPO is entirely within the New Mexico Department of Transportation (NMDOT) District 1.

Primary sources of revenue for the Federal Highway Trust Fund (FHTF) are:

Fuel taxes

- 18.4 cents per gallon for gasoline
- 24.4 cents per gallon for diesel

Heavy vehicle fees

- Heavy vehicle use tax for trucks over 55,000 pounds
- 12 percent sales tax on new trucks over 33,000 pounds
- Tire tax for tires over 40 pounds



Increases to federal fuel tax rates were last authorized in 1993, and therefore the purchasing power of federal funding sources has decreased by nearly 40% since 1993. Rising construction costs along with the increasing need for maintenance of an aging highway system has placed a strain on the Federal Highway Trust Fund (FHTF) which, is causing recurring funding shortfalls. Due to the current funding levels, the Federal Government may need to reexamine and cultivate new revenue sources for the FHTF.

The majority of monies spent in the MPO area are typically from the National Highway Performance Program (NHPP) and the Surface Transportation Program (STP). Construction of improvements is a use for NHPP monies on urban and rural roads that are part of the National Highway System (NHS), Major Highways, and Principal Arterials. The STP funds provide discretionary funding used for planning, the Transportation Alternatives Program (TAP), bridge projects on public roads, transit capital projects, and

intra-city and intercity bus terminals and facilities. The National Highway System and all federal-aid highways on the Functional Classification Plan can use STP funds. TAP funds are for creating or improving walking and bicycling facilities, other safety improvements, or for preserving rail corridors for conversions into walking/biking trails. The Safe Routes to School program, which contributes to the improvement of walking and bicycling facilities, is funded through TAP.

Agencies may use uses Highway Safety Improvement Program (HSIP) funds which, are part of the STP funds, on projects that improve Safety or mitigate dangerous conditions on roadways, at intersections, or for walks and bicyclists. The amount of STP programmed for the Las Cruces area can vary widely based on NMDOT priorities. In small to medium MPOs with a population less than 200,000, such as the Mesilla Valley MPO, the NMDOT allocates STP funds in the area based on a collaborative process between the NMDOT, MPO, and public transportation providers.





Proposed State Revenues

In addition to the federal apportionment, major transportation sector funding sources in New Mexico include the state gasoline tax, special fuel tax, weightdistance tax, vehicle registration fees, motor vehicle excise tax, leased vehicle gross receipts, surcharges, trip tax, and driver's license fees other. The current state gasoline tax is 19.0 cents per gallon, and the diesel fuel tax is 23.0 cents a gallon. NMDOT administers these funds. The State Transportation Commission determines the allocation of state revenues. In 2019, the New Mexico State Legislature created the Local Government Transportation Project Fund. The Legislature intends the fund to be a source for local agencies to plan and implement transportation projects. The anticipation is for the LGTPF to be a significant funding source for local infrastructure improvements. However, in 2020 the Legislature allocated all of the LGTPF funds and was no call for projects. As mentioned above, the Mesilla Valley MPO is entirely within NMDOT District 1. District 1 has a representative on the New Mexico Transportation Commission. The MPO must work with our representatives and the Transportation Commission to receive as large a portion as possible of the federal and state transportation funding allocated to New Mexico.

Proposed Local Revenues

Each jurisdiction's share of the gross receipts tax, property tax, and gas tax is the source for funding capital projects and street operations and maintenance for the City of Las Cruces, Dona Ana County, and the Town of Mesilla. The largest source of funding is from gross receipts tax. The funds received from these taxed are fluid since they are determined based on local economic conditions and each jurisdiction's priorities. Because each jurisdiction is required to have a balanced budget, revenue shortfalls usually manifest themselves in delayed projects.

Proposed Transit Revenues

Currently, the City of Las Cruces under the Quality of Life Department operates a transit system called RoadRUNNER Transit. Primary revenue sources for RoadRUNNER Transit are federal grants, user fees (fares and passes), and a transfer from the City of Las Cruces general fund. Federal grant amounts vary year to year due to earmarks related to the fleet replacement schedule. Total funding for City Fiscal Year 2020 is anticipated to be \$6,404,415.

Proposed Other Funding

Private funding is a significant source of road building in the MPO area. New local roadways are constructed as new developments are constructed. Additionally, both Doña Ana County and the City of Las Cruces subdivision ordinances require that developers are responsible for building half of the improvements for adjacent thoroughfares and 100 percent of thoroughfares within their boundaries. The MPO's Future Thoroughfare Plan determines the location of the future thoroughfares. The lack of requirement to report the costs of the improvements makes it difficult to estimate their value. The construction of these roadways relies on the real estate market to bear the cost. The High Mesa Road is a potentially significant facility discussed in Mobility 2045. One of the possible alternatives for the construction of the High Mesa Road is for it to be a privately funded facility for truck use only. New roadways can also increase the maintenance obligation for public entities. The MPO recommends that the three MPO members request an analysis of life-cycle costs before accepting new maintenance commitments.

Projected Expenditures

Federal Regulations require the MTP to demonstrate that the region can maintain and operate the transportation system. This section will examine the details of all costs, federal, state, local, and private, associated with building, maintaining, and operating the transportation system. To more accurately estimate costs over a long-term planning horizon, the federal



regulations require the application of an inflation factor called Year of Expenditure Dollars (YOE). The MPO has applied a 2% YOE factor to all cost projections, as determined in cooperation with the NMDOT and other New Mexico MPOs.

The MPO is continuing the development of its Transportation Asset and Safety Management Plan (TASM). One of the core arguments or principles of the TASM is that streets shouldn't be allowed to deteriorate to the point where they require costly replacement. Further, timely maintenance can extend the life of a roadway. Filling potholes and periodically re-surfacing existing streets to protect the investment already made should always be the top priority. Favoring capacity expansion over routine maintenance is a common issue. Mobility 2045 articulates a "fix it first" philosophy. New capital projects should be limited to those that improve connectivity to existing uses, aid in providing more transportation choices, or can reduce overall maintenance and operations costs.

Asphalt Treatment

The Mobility 2045 places emphasis on maintenance for the transportation system. The City of Las Cruces has invested in a pavement management software that serves as a systematic and scientific tool to evaluate city streets. The software determines the need, priority, and appropriate pavement maintenance treatment (Table 5-1). Using this software, the Public Works Department implemented a Pavement Management Program. That focuses on keeping streets in good condition while providing the most efficient use of available and limited resources. The Pavement Management Program is the sum of all actions the Public Works and Transportation Departments undertake to maintain and provide functional, safe, and reliable streets for the traveling public. The program consists of three maintenance functions the first is routine maintenance which, can be pothole patching, localized repairs. The second function is preventive maintenance which, is micro-surfacing, crack sealing. The third function is rehabilitation which, is mill & overlay, pavement replacement, and full reconstruction. These actions extend the useful life of the pavement and lower overall life-cycle costs.

Table 5-1 Asphalt Treatment Schedule for the City of Las Cruces

Asphalt Treatment Schedule							
Year		Cost per Lane-					
Applied	Treatment Type	mile					
0 (Initial Construction)		N/A					
10	Crack Seal	\$5,000.00					
10	Micro-surfacing	\$35,000.00					
20	Mill/Overlay	\$200,000.00					
25	Crack Seal	\$5,000.00					
27	Micro-surfacing	\$35,000.00					
35	Pavement Rehabilitation	\$275,000.00					
Total Life Cos	\$550,000.00						
Annualized C	\$15,714.29						

Source: City of Las Cruces Public Works Department



Capital

Capital costs for roadways were estimated by looking at current infrastructure Capital Improvement Programs for the City of Las Cruces and Dona Ana County. Most major capital projects consist of new facility construction or rehabilitation of existing roadways. The projects included for Mobility 2045 are in Figure 5-3, Figure 5-4, and Figure 5-5. The total cost for these projects is \$131,552,735 (\$51,052,735 in 2020-2025; \$51,000,000 in 2026-2035; and \$29,500,000 in 2036 to 2045). The funding comes from a combination of federal capital and operating funds, farebox revenue, and local government support. The anticipation is that the funding will remain steady. There is an understanding that the project prices include the Year of Expenditure Dollars (YOE) Factor.

Table 5-2

Operations and Maintenance

Evaluating the ownership of mileage for each jurisdiction allows the determination of Operations costs for each entities portion of the transportation system. An inflation factor of 2% was then applied yearly throughout the 25-year plan horizon. Total estimated operations and maintenance costs are \$553,982,765 in the MPO area. The estimation of the annual maintenance cost for streets is at \$15,714 per lane mile for Mobility 2045. Based on the city, town, and county location, the total annual maintenance requirement in the MPO area amounts to \$16,452,862. (Table 5-2)

MESILLA VALLEY MPO OPERATIONS AND MAINTENANCE								
		Annualized	Mobility 2045					
Jurisdiction	Approx. Miles Owned	Maintenance Cost	Total					
ТОМ	16	\$251,429	\$8,465,842					
CLC	503	\$7,904,288	\$266,144,536					
DAC	403	\$6,332,859	\$213,233,098					
NMDOT	125	\$1,964,286	\$66,139,289					
MVMPO (total TOM, CLC,								
unincorporated)	1,047	\$16,452,862	\$553,982,765					
RoadRUNNER operating	N/A	\$6,404,415	\$369,348,414					
Maintenance and Operations 1	\$1,477,313,944							





Public Transportation

The estimation of RoadRUNNER Transit's capital cost comes from the CLC RoadRUNNER Strategic Plan. The largest single capital expense for Transit through Mobility 2045's horizon year, will be the construction of the new operations and maintenance facility currently in the Mesilla Valley MPO Transportation Improvement Program (TIP) for \$16,500,000. Additionally, purchasing replacement vehicles could be approximately 16 to 20 million. The operating budget for RoadRUNNER in City Fiscal Year 2020 is \$6,404,415. This funding comes from a combination of federal operating funds, farebox revenue, and local government support. The anticipation is that the funding will remain steady. There is an understanding that the project prices include the Year of Expenditure Dollars (YOE) Factor.

South Central Regional Transit District

The South Central Regional Transit District (SCRTD) consists of Sierra and Doña Ana county and most of the municipalities within their boundaries. The SCRTD seeks to connect the communities within the district and coordinate public transit service. The funding for the SCRTD comes from a combination of federal and local funding with additional state monies.

NMDOT Gold and Silver Route

The NMDOT Transit and Rail Division provides weekday Park and Ride bus service between downtown Las Cruces, downtown El Paso and White Sands Missile Range. The funding for the service comes through NMDOT public transportation funds, user fees, and a Federal Transit Administration (FTA) grant managed through El Paso County. The service, including capital and operations and maintenance costs, are currently contracted out to All Aboard America. The yearly cost is \$1,201,015.03.

Total Expenditures

Capital expenditures for roadways and transit are estimated to be \$156,257,662 for Mobility 2045. Total expenditures for capital projects and system operations and maintenance for the plan horizon year, 2045, are estimated to be \$1,079,588,841.





Table 5-3

Mobility 2045 Projects: 2020-2025

Project	Description	Cost
		(existing facility captured in Annualized Maintenance Costs)
Dripping Springs	Roadway Improvements	\$6,750,000
Elks Dr. Multi-Use Trail	Trail Along Elks Dr.	\$985,699
I-25 Capacity Study	Study	\$2,000,000
Las Cruces Lateral Trail	Trail Along Las Cruces Lateral	\$595,080
City of Las Cruces	Multimodal Improvements on	\$1,170,000
Multimodal	various Las Cruces Streets	
Improvements		
Berino Bridge	Replacing bridge 2814	\$1,850,000
Replacement		
University Bridge	Preservation work on I-10	\$2,902,956
Preservation	Bridge 9267 over University	
Crawford Bridge	Preservation work on I-10	\$500,000
Preservation	Bridge 8581 over Crawford	
US 70 Bridge	US 70 Bridge 5724 Bridge	\$11,000,000
Replacement	Replacement and Roadway	
	Reconstruction This Bridge is	
	over the Outfall Channel	
University Ave.	Multimodal and Roadway	\$5,000,000
Multimodal Project	Improvements	
US 70 Maintenance	Crack Seal	\$399,000
I-10 Maintenance	Crack Seal	\$700,000
Paso del Norte Trail	New Trail	\$700,000
Extension		
RoadRUNNER Transit	New Maintenance and	\$16,500,000
Maintenance and	Operations Center	
Operations Center		
Total 2020-2025		\$51,052,735



Table 5-4 *Mobility 2045* Projects: 2026-2035

Project	Description	Cost (existing facility captured in Annualized Maintenance Costs)
Arrowhead Interchange	Design and Construct an interchange at I-10 and Arrowhead Research Park	\$20,000,000
I-10 Bridge Replacement	Multiple Bridge Replacements along I-10	\$15,000,000
US 70 Pavement Preservation	US 70 Pavement Preservation	\$15,000,000
US 70 Study	Study of Capacity Needs on US 70	\$1,000,000
Total 2026-2035		\$51,000,000

Table 5-5 *Mobility 2045* Projects: 2036-2045

Project	Description	Cost (existing facility captured in Annualized Maintenance Costs)
Mesa Grande	Construct 4 lane principal arterial	\$3,500,000
Madrid grade separation	At potential I-25 crossing	\$10,000,000
I-10 Rehabilitation Project	Rehabilitation of I-10 between the I-25 interchange and the	
	MPO boundary	\$16,000,000
Total 2036-2045		\$29,500,000
Grand Total 2020-2045		\$131,552,735



Financial Plan Conclusion

As the MPO developed Mobility 2045, there was a great deal of uncertainty at the financial support for the transportation system at the national level. Several factors were influencing these changing national demographics that affect driving rates. The factors cause changes in revenue collection, the continued national debate on system priorities, an increased need to focus on maintenance as much of our infrastructure embarks on its second Life Cycle, and many other topics. The focus or the national and state dialog is on ways of building new revenue for the transportation system. Reducing the infrastructure cost receives little publicity. We need to:

- Support ITS systems that help use roads more efficiently (under Transportation Projects Priority Plan)
- Invest in public transportation that can move greater numbers of people on the same infrastructure
- Invest in walking and biking facilities, low-cost improvements that can increase an area's value
- Reduce roadway widths so that our transportation system is safer and less expensive to maintain

The Mesilla Valley MPO is committed to projects that support the Livability Principles as articulated by USDOT, EPA, and HUD. The Mesilla Valley MPO can influence which projects are built in the MPO area. MPO staff supports reform in future transportation authorization so that capacity expansion is not the first choice. The emphasis should be on maintenance, efficiency, safety, and treating all modes of transportation equally.







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Appendix A Preformance Targets





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New Mexico Metropolitan Planning Organizations

Performance Based Planning and Programming & Target Reporting

The New Mexico Planning Procedures Manual (PPM) was amended March 13, 2019 to include a new chapter NMDOT Planning Procedures Manual: Performance Based Planning and Programming/Target Setting Procedures. This reporting format will provide consistency and assure implementation of federal reporting requirements.

MPO: Mesilla Valley Metropolitan Planning Organization, Las Cruces, NM

Target Report - Performance Measure #1 Safety

Target for FFY 2020

Preamble: Long Term Goals vs. Annual Federal Safety Targets

Safety Improvement: Efforts to improve safety include encouraging capital construction projects to eliminate hazardous infrastructure features, studies, roadway safety audits, signalization improvements, retrofitting existing infrastructure to provide intermodal improvements, public education and awareness endeavors, and increased enforcement of existing laws.

Implementation: Since MVMPO is not an implementing agency for these strategies, the region relies on state, municipal, county, and tribal government agencies to undertake such projects. MVMPO works closely with those agencies to identify problem areas, develop strategies to address deficiencies, and program available funding for implementation. All agencies work cooperatively to reduce crashes, fatalities, and injuries which is a common goal for all.

HSIP: NMDOT retains full programming authority of the federal Highway Safety Improvement Program (HSIP) funding. Agencies submit project proposals to NMDOT which reviews proposals on a competitive statewide basis and determines which projects receive HSIP funds. Further information on this process is available from NMDOT.

PM #1 Safety Target: This document addresses the federal requirement to establish annual targets for five specific safety performance measures. For the PM #1 safety target the MPO chose to adopt the state target developed by NMDOT. NMDOT used various methodologies and assumptions to develop the targets to conform to federal requirements. Although these targets may not seem to be aggressive enough to improve safety, it must be noted that these are annual targets and there is little time to implement projects and strategies over a one-year period which would show any significant improvement in the target from year to year. NMDOT, MVMPO and all local agencies are committed to improving safety for all transportation modes and are committed to long-range comprehensive improvement plans and strategies to address safety issues.

Target for Number of Total Fatalities: 401.9

MPO adopted **NMDOT target** – <u>Yes</u>

For MPOs adopting the NMDOT target, the annual reporting shall be undertaken by NMDOT as part of their Highway Safety Improvement Program (HSIP) submitted to FHWA annually (due August 31st).

MPO adopted separate target – <u>No</u>



For MPOs adopting a separate target, the following information is required: the estimated Vehicle Miles Traveled (VMT) used for rate targets and the methodology used to develop the estimate. The MPO must report annually to NMDOT and provide the report to FHWA upon request. MPO methodology, if applicable:

MPO Progress Report if adopting separate target:

Target for Number of Serious Injuries: 1,074.2

MPO adopted **NMDOT target** – <u>Yes</u>

For MPOs adopting the NMDOT target, the annual reporting shall be undertaken by NMDOT as part of their Highway Safety Improvement Program (HSIP) submitted to FHWA annually (due August 31st).

Target for Rate of Fatalities: 1.429

MPO adopted **NMDOT target** – <u>Yes</u>

For MPOs adopting the NMDOT target, the annual reporting shall be undertaken by NMDOT as part of their Highway Safety Improvement Program (HSIP) submitted to FHWA annually (due August 31st).

Target for Rate of Serious Injuries: 3.820

MPO adopted NMDOT target - Yes

For MPOs adopting the NMDOT target, the annual reporting shall be undertaken by NMDOT as part of their Highway Safety Improvement Program (HSIP) submitted to FHWA annually (due August 31st).

Target for Number of Nonmotorized Fatalities and Serious Injuries: 204.0

MPO adopted **NMDOT** target – <u>Yes</u>

For MPOs adopting the NMDOT target, the annual reporting shall be undertaken by NMDOT as part of their Highway Safety Improvement Program (HSIP) submitted to FHWA annually (due August 31st).

New Mexico Metropolitan Planning Organizations



Performance Based Planning and Programming & Target Reporting

The New Mexico Planning Procedures Manual (PPM) was amended March 13, 2019 to include a new chapter NMDOT Planning Procedures Manual: Performance Based Planning and Programming/Target Setting Procedures. This reporting format will provide consistency and assure implementation of federal reporting requirements.

MPO: Mesilla Valley Metropolitan Planning Organization, Las Cruces, NM

Target Report - Performance Measure #2 Infrastructure and System Performance

National Highway System (NHS) Pavement and Bridges 2-Year & 4-Year Targets

Per federal law, NMDOT is required to establish 2-year and 4-year targets for each performance area. MPOs are required to adopt only 4-year targets. The 2-year targets adopted by NMDOT are shown here for informational purposes.

Percentage of Bridges on the NHS in "Good" Condition:

4yr Target for 2021 is 30.0%

MPO adopted NMDOT 4-year target – Yes

For MPOs adopting the NMDOT target, the Mid-Performance Period Progress Report shall be undertaken by NMDOT and submitted to FHWA biennially (due October 1st of even years).

MPO Mid-Term Progress Report on 4-Year Target Due October 1, 2020

The bridge condition information report for the bridges within the MPO area for the mid-term period, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for remaining 2-years).

Mid-Term Progress Report:

MPO Progress Report on 4-Year Target Due October 1, 2022

The bridge condition information report for the bridges within the MPO area for the 4th year, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for next 4-year target).

4-Year Progress Report:

Percentage of Bridges on the NHS in "Poor" Condition:

4yr Target for 2021 is 8.0%

MPO adopted **separate 4-year target** – <u>Yes</u>

MPOs adopting a separate 4-year target must commit to their own quantifiable target.

MPO Mid-Term Progress Report on 4-Year Target Due October 1, 2020

The bridge condition information report for the bridges within the MPO area for the mid-term period, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for remaining 2 yrs).

Mid-Term Progress Report:

MPO Progress Report on 4-Year Target Due October 1, 2022

The bridge condition information report for the bridges within the MPO area for the 4th year, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for next 4-year target).

4-Year Progress Report:

Percentage of Interstate Pavement on the NHS in "Good" Condition:

4yr Target for 2021 is 59.1%

MPO adopted NMDOT 4-year target - Yes

For MPOs adopting the NMDOT target, the Mid-Performance Period Progress Report shall be undertaken by NMDOT and submitted to FHWA biennially (due October 1st of even years).

MPO Mid-Term Progress Report on 4-Year Target Due October 1, 2020

The pavement condition information report for the Interstate highways within the MPO area for the mid-term period, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for remaining 2-years).

Mid-Term Progress Report:

MPO Progress Report on 4-Year Target Due October 1, 2022

The pavement condition information report for the Interstate highways within the MPO area for the 4th year, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the



target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for next 4-year target).

4-Year Progress Report:

Percentage of Interstate Pavement on the NHS in "Poor" Condition:

4yr Target for 2021 is 5.0%

MPO adopted NMDOT 4-year target – Yes

For MPOs adopting the NMDOT target, the Mid-Performance Period Progress Report shall be undertaken by NMDOT and submitted to FHWA biennially (due October 1st of even years).

MPO Mid-Term Report on 4-Year Target Due October 1, 2020

The pavement condition information report for the Interstate highways within the MPO area for the mid-term period, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for remaining 2-years).

Mid-Term Progress Report:

MPO Progress Report on 4-Year Target Due October 1, 2022

The pavement condition information report for the Interstate highways within the MPO area for the 4th year, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for next 4-year target).

4-Year Progress Report:

Percentage of Non-Interstate Pavement on the NHS in "Good" Condition:

4yr Target for 2021 is 10%

MPO adopted separate 4-year target – Yes

MPOs adopting a separate 4-year target must commit to their own quantifiable target.

MPO Mid-Term Report on 4-Year Target Due October 1, 2020

The pavement condition information report for the non-Interstate NHS highways (regardless of ownership) within the MPO area for the mid-term period, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for remaining 2 years).

Mid-Term Progress Report:

MPO Progress Report on 4-Year Target Due October 1, 2022

The pavement condition information report for the non-Interstate NHS highways (regardless of ownership) within the MPO area for the 4th year, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for next 4-year target).

4-Year Progress Report:

Percentage of Non-Interstate Pavement on the NHS in "Poor" Condition:

4yr Target for 2021 is 17.0%

MPO adopted separate 4-year target – Yes

MPOs adopting a separate 4-year target must commit to their own quantifiable target.

MPO Mid-Term Report on 4-Year Target Due October 1, 2020

The pavement condition information report for the non-Interstate NHS highways (regardless of ownership) within the MPO area for the mid-term period, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for remaining 2 years).

Mid-Term Progress Report:

MPO Progress Report on 4-Year Target Due October 1, 2022

The pavement condition information report for the non-Interstate NHS highways (regardless of ownership) within the MPO area for the 4th year, will be provided by NMDOT. The MPO's report should include: whether the target was met/progress on achieving the target, extenuating circumstances (if any) relating to the target, investment strategies, applicable target achievement discussion (for next 4-year target).

4-Year Progress Report:



Performance Measures for Transit Asset Management (TAM)

Preamble: Transit Asset Management

The Federal Transit Administration (FTA) issued the Transit Asset Management (TAM) rule (49 CFR 625) in July 2016. TAM plans are developed to assist with monitoring and maintaining a state of good repair for transit assets. The first TAM plans were due October 1, 2018 and must be updated every four years. The FTA rule establishes two tiers of TAM planning responsibilities; in the Mesilla Valley MPO all transit agencies are Tier II.

Transportation Asset Management Plan (TAMP) Elements

Tier I and Tier II Agency TAMPs must include:

- 1. An inventory of assets.
- 2. A condition assessment of inventoried assets.
- 3. Description of a decision support tool such as an analytic process or tool that either assists in capital asset investment and/or estimates capital needs over time (not necessarily software).
- 4. A prioritized list of investments (projects or programs) to manage or improve the State of Good Repair (SGR) of capital assets.

Performance Measure Target: Rolling Stock

Rolling stock performance is measured by the percentage of revenue vehicles (by type) that meet or exceed the useful life benchmark. (Revenue vehicles are those that transport passengers.)

MPO adopted **RoadRUNNER Transit target** – <u>Yes</u>

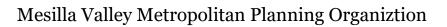
Goal 1: Have 0% of the heavy duty bus fleet older than 14 years for heavy duty buses and 0% of the fleet older than 10 years for light duty buses and paratransit vehicles.

Performance Measure Target: Equipment

Equipment performance is measured by the percentage of non-revenue service vehicles (by type) that meet or exceed the useful life benchmark.

MPO adopted **RoadRUNNER Transit target** – <u>Yes</u>

Goal 2: Have the average fleet age not exceed 7 years for heavy duty vehicles and 5 years for light duty buses and paratransit vehicles.

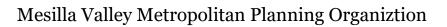




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Appendix B Public Comment





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Public Comments on Final Moblity 2045 Draft

Comments:

Wayne L. Savage

When our Master Plan update is finished, I'll copy you on the document, but in particular you can add the revised Park "interior" trail/bike path to your Trails document

No mention of SWRTD? Only Roadrunner Transit? Maybe I missed.....

I agree that, with the Arrowhead interchange in the 2026-2035 projects list, Arrowhead Drive from Wells to Sam Steele / I-10 should be included in the functional thoroughfare classification

It's puzzling to me that, from an NMSu standpoint, Wells is not identified in the same classification.....Stewart, though they are building the new "gates" to the campus there, will be a walking / transit path only...and Arrowhead Drive at Triviz will be closed off upon completion of the new I-25 / University work

If Geothermal rates the functional classification, seems Wells should, too, especially as it connects the new campus "entrance" and Geothermal to Arrowhead Drive

But I guess that's an internal NMSU thing

Appreciate the Arrowhead interchange in the 2026-2035 window....working to get that done

MPO Response:

We will get the interior trails added to our Active Mobility Plan.

We mostly discuss the RTD in Chapter 3. Unlike RoadRUNNER, the RTD did not give us any project priorities they have to include in the MTP.

What we can do is list Wells as a proposed collector.

Comments:

Stella Telles

I would follow suggest following the layout of the Phoenix Metropolitan area.

MPO Response:

The goal of Mobility 2045 is to serve all transportation users by planning, implementing, and maintaining a transportation system that coordinates land use and transportation planning. As part of this the MPO has studied the planning and implementation efforts of communities in the surrounding region and across the country to determine best practices.

This, however, has to be done in a manner appropriate to the unique geography and community character of the Mesilla Valley.



Comments:

Mary Armstrong

I am writing to comment on the MPO.

I want to reiterate as I have in the past that we should be planning for an eventual interstate type connector from U.S. 70 to I-25 east of town and then on to I-10 near the airport. We also should be analyzing the potential need for a similar road from the intersection of I-25 and I-10 to U.S. 70. I understand the local angst over what is known as "by-passes" as was done at Alamogordo, but it wouldn't be wise to compare Alamogordo to Las Cruces. I think if you look at other cities where growth beat planning of this type you will see that it is best to be prepared. Planning doesn't necessarily mean implementing, but it does mean achieving efficient and cost effective solutions when they are needed.

I also understand the the Commission is placing agriculture over growth. I think this is an important decision about the character of the Las Cruces Metro area and I agree with the intent of retaining our agricultural identity. I don't agree that it precludes infrastructure that growth requires and unless the City/Country/Metro Area are planning to restrict growth in the entire area (not just agricultural lands) the strain on the developed areas of the region will grow to the point that the City's reputation will suffer. I think taking this issue on directly will allow us to look at solutions other cities have implemented and perhaps lead in the area of creating an agri-urban metro area.

I also think this road network will improve access for a potentially growing Las Cruces Airport. Personally, I would rather see a metro airport located between Las Cruces and El Paso and while El Paso isn't interested now, they may in the future and we should be ready to act on it.

Thank you for taking my comments. I spent a number of years working as a planner in Public and private positions. I hope you will seriously consider my thoughts.

MPO Response:

The possibility of an interstate connection around the north side of the urban core of Las Cruces was only briefly discussed during the first two public engagement phases of Mobility 2045. However, at this time there is little support for such an option and no desire on the part of our member jurisdictions to see such an option included in Mobility 2045.

Balancing growth with open space and agricultural preservation is always difficult. The input given to the MPO by the City of Las Cruces, also echoed in the recently adopted comprehensive plan Elevate Las Cruces, is that the City wishes to prioritize growth within the urban core of Las Cruces by increasing density and with targeted areas for growth. This vision is reflected in Mobility 2045.

Improved connections to the Las Cruces International Airport have been a prominent topic of discussion during the development of Mobility 2045. However, the existence of property belonging to the Organ Mountains – Desert Peaks National Monument and the topography of the area significantly constrain potential alignments connecting to the Airport from the north or east. It is the intention of the MPO to further study potential connecting corridors to the Airport after the adoption of Mobility 2045.

As of this time, there has been no discussion that MPO Staff is aware of regarding either relocating the Las Cruces International Airport or the construction of a new airport. As such we cannot include it in Mobility 2045.



Comments:

Richard Gehring

Anthem road and Airport Rd

The idea of having a road through the Picacho Hill/Mountain to the local airport and other bypasses routes to facility that are not sustainable (Airport)does not make economic sense!

Our neighborhood brought the land for the peace and quiet and what this proposal is doing is enticing a frivolous fantasy that the airport will provide economic boom!

How about focusing on the motel Blvd blight and Valley road economic revival as the City of LC and DAC need to prioritize what make economic sense vice fantasy projects that are not sustainable or make economic senses. Then revisit those road proposals when the above suggestion are completed. Take what

I would like to have your organization give us a survey or a vote to at least give us the opportunity to record our opposition to this part of the proposed frivolous suggestion for the road to nowhere to this airport and bypasses.

I understand that making decisions are not easy but politic need to justify with conviction that every decision they make has a value added economic returns that favors the heart of Las Cruces/Dona Ana and not for the sheer lip service and getting votes!

Decisions by our government local/state/national have clearly gone loco with biases on partisan tribes and have lost track of what can they do for our country, communities, and pride of helping build something that meaningful and beneficial to all.

Thank you for your time.

MPO Response:

After the conclusion of this MTP process, the Mesilla Valley MPO, in coordination with Dona Ana County, will conduct a public outreach process in the Picacho Hills area as part of studying the various potential alignments to connect to the Las Cruces International Airport from the north and east.

However, increasing connections to and fostering growth at the Airport have been identified as top priorities by the City of Las Cruces and as such we must include their priorities as topics and potential corridors in Mobility 2045. Additionally, this is a topographically challenging area with the escarpment leading up to the West Mesa.

It remains to be seen what the consensus of the City, County, and residents will be with regard to these connections.

Comments

Kenny Larsen

I think there is a very important throughfare being missed that would reduce traffic accidents at Telshor and Lohman. That intersection is so crowded and busy because Roadrunner Parkway is dumped onto Lohman. Telshor is crowded because that is the easiest route from University to Lohman.

What about extending Roadrunner Parkway to Dripping Springs Road to allow an alternative route from University and Roadrunner which avoids both Telshor and Lohman completely?

Looking at maps it looks like there is already a ROW established and ready to be utilized.

Thank you.

MPO Response:

The biggest issue with Roadrunner Parkway south of Lohman is that area is particularly challenging from a topographical standpoint as there are very steep slopes along that proposed alignment, which would make the extension of Roadrunner Parkway south of Lohman very expensive.

While we do have a proposed alignment on the Future Thoroughfare Plan, an alignment that has been there for the past several MTPs, the City does not own the ROW along the entirety of the proposed alignment so ROW acquisition would need to happen in order for a project to go forward.

In the near term, I do not believe the City has a project in process to extend Roadrunner Parkway south of Lohman, but this may change and become a priority for the City as time passes.

Comments:

Sharon Thomas

I have recently read the MTP draft. Thank you for such a comprehensive document. And, thank you for including SCRTD routes in the City of Las Cruces and, also, the possibility of passenger rail between Las Cruces and El Paso.

I did not see much on the High Mesa Road. Some years ago, County Commissioner Billy Garrett proposed an alternate to that plan. His fear was that running a road up on the west mesa that cut off traffic in Las Cruces as well as communities in southern Doña Ana County (Anthony, Sunland Park) would harm those communities. I don't know where to find information about that alternative, but I think that there should be a discussion of alternatives before the West Mesa road is designed and implemented.

MPO Response:

I also want to thank you for providing input in the development of Mobility 2045. I know that as a former member of our Policy Committee you appreciate how important this kind of engagement is to the MPO process.

I'm afraid MPO Staff doesn't have a copy of the specific recommendations that Commissioner Garrett made during the past discussions of potential High Mesa facilities. I'm not sure his specific recommendations were ever written down and if they were we don't have a copy of it.

We do have the Phase B Study that was done by Molzin-Corbin on behalf of NMDOT and the preferred alignment from that study is the alignment we have proposed for Mobility 2045 going into Crawford at the West Mesa Industrial Park.



We have been trying this week to figure out a way to get a copy of the Molzin-Corbin study to you, but the file is far too large to transmit through email and we haven't yet been able to find an effective means of doing so. I didn't want to delay my response to you any longer on that basis, but we are still working on figuring out a way to get a copy of that study to you.

MPO Staff absolutely agrees that more study on potential alternatives is required before any project can be implemented. From the MPO Staff perspective, we have that alignment on the map listed as a corridor more as a statement of intent to further study the potential impacts of a roadway than a statement that the roadway will be built in the near future.

I will add that over the past year, the City of Las Cruces has become more interested in the development of a freight corridor connecting the West Mesa Industrial Park to the activity going on at Santa Teresa. This is one of the reasons why the High Mesa Road developed into being a significant item of discussion in the last phases of this MTP process. The MPO also included in Mobility 2045 discussion of enhanced rail connections between Santa Teresa and the West Mesa Industrial Park, although the means of doing do would also require significant study.

Comments:

Zack Libbin

Please understand that trails on EBID property will require approval of EBID's Board of Directors in the form of a Special Use Permit. Discussion with EBID staff and EBIDs Board should take place sooner rather than later, prior to finalizing preferred routes. Some of your preferred alignments discussed tonight on EBID property are not a good idea and will require discussion.

MPO Response:

MPO Staff will work closely with EBID on potential trail alignments on EBID facilities.

June 19, 2020

Councilor Johana Bencomo City of Las Cruces 700 N Main Las Cruces, NM 88001

Andrew Wray, Acting MPO Officer Mesilla Valley MPO P.O. Box 20000 Las Cruces, NM 88001

Dear Councilor and Mr. Wray:

This letter and the attached petition requests that the City of Las Cruces amend the Draft Metropolitan Transportation Plan, *Mobility 2045*, by adding safety and multi-modal improvements to the section of South Melendres Street located between Amador Avenue and South Main Street. In addition, please see the post-script to this letter. We are specifically asking that the City add the following: a consistent and lower speed limit; traffic calming structures; signage improvements including stop signs; improved striping; and, appropriate bicycle and pedestrian safety infrastructure.

We believe our request is reasonable for the following reasons:

- a. The Street's current construction and improvements are not consistent with its classification as a Minor Collector which contributes to excessive motor vehicle speeds and traffic levels on it. Those contributing factors include: the roadway's unusual width; the lack of traffic calming devices; the lack of major bicycle and pedestrian safety infrastructure; the lack of stop-signs between Amador Avenue and South Main Street; and, the fact that there are two speed zones one of them 35 mph in that distance.
- b. The improvements we are requesting are consistent with the primary use of the street as a Minor Collector and are consistent with the City's standards for a Minor Collector.
- c. The changes will create an improved quality of life in the area since approximately 40 homes front or side onto that section of South Melendres Street, approximately one-hundred and seventy five residences have direct walking and biking access to it, and the Street is entirely residential between El Molino and South Main.
- d. The Street's width allows for the types of improvements we are requesting.
- e. The improvements are consistent with and will contribute to the success of the City's planned bicycle and pedestrian enhancements to South Main Street.
- f. The improvements will conform to the City's Master Plan by creating a consistent and appropriate street environment for the entire length of South Melendres between Picacho Avenue and South Main Street: These types of improvements have already been made to South Melendres Street north of Picacho.
- g. The improvements we are requesting will improve pedestrian and bicycle access from our neighborhood to Pioneer Park, which is consistent with the intent of the Active Transportation Plan.



All of the attached petition's signatories reside or own property in the area of South Melendres Street between Amador Avenue and South Main Street in Las Cruces.

With Kind Regards,

Your Constituents

Stan Engle

445 El Prado Avenue Las Cruces NM, 88005

(575) 571-0354

Greg White

360 El Prado Avenue Las Cruces NM 88005

(505) 231-2432

PS:

The signatures on the attached petition include approximately 80% of the occupied residences which front or have side yards bordering South Melendres. We were not able to collect signatures at some homes due to no one being home or due to the occupants not answering their door bells.

We learned during our conversations with our neighbors that multiple traffic safety issues exist on the streets that intersect with South Melendres and we received numerous requests to communicate their needs for traffic calming improvements on El Molino, Las Colonia, El Prado, and Brown in our correspondence with the City. Please accept this post-script to be an addendum to our request.

All of the signatures on the attached petition were gathered in a period of approximately six hours. Our neighbors are overwhelmingly concerned about traffic issues in our community and we will be continuing to engage in conversations with the City to create a safer street environment in our neighborhood.

Finally, the letter and petition were written before my conversation with Mr. Wray this morning. We appreciate his clarification on how the system works and his directing us to Interim Deputy Director of Public Works Tony Trevino. We look forward to continuing our dialog with the City.

Greg White

ADDRESS



NAME (Print)

Petition For Improvements to South Melendres Between Amador Avenue and South Main Street

We, the residents in the area of South Melendres Street between Amador Avenue and South Main Street in Las Cruces, hereby request that the City of Las Cruces amend the Draft Metropolitan Transportation Plan, *Mobility 2045*, by adding improvements to the section of South Melendres Street located between Amador Avenue and South Main Street. We are specifically asking that the City add the following: appropriate bicycle and pedestrian safety infrastructure; stop signs between Amador Avenue and South Main; a consistent and lower speed limit; and, traffic calming structures and signage improvements designed to reduce vehicle speeds and traffic loads.

Adda La Miller	20 5. Melerdres
Sasa Guidetti	1025 organion due.
MIKE fluerta	370 El PRADO St.
Alex Stewart Prisma Bencomo	455 El Prado Aux. 504 El TVADAVE.
C Sois Weekleger	8535. Melendres
Dan Prodos	560.5 Melenchies
Ryan Cairns	891 S. Mclendocs
Chydal) Lopez	641 Sunset Done
Estrella Bilbao	641 Sunget Drive

Petition For Improvements to South Melendres Street Between Amador Avenue and South Main Street



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NAME (Print)	ADDRESS
Low Luke Folst	641 Sin Set Dr.
Millubio	610 SUNSET DR.
Clockwood	620 SUNSET DR
Corner purchas	275 sunse et
CEARS PLITLIA	670 Savser DR
CARLA CLOUSER	66/ SUNSET DR.
Alex Hallwyles	906 S Melandres St
James FloyD	495 La Colonia
Derise Cerang	480 La Colonia
Philip marlil	400 LA Colonia
Danice Madrice	How In Colonia



Petition For Improvements to South Melendres Street Between Picacho Avenue and South Main Street

We, residents in the area of South Melendres Street between Amador Avenue and South Main Street in Las Cruces request that the City of Las Cruces amend the Draft Metropolitan Transportation Plan, *Mobility 2045*, by adding improvements to the section of South Melendres Street located between Amador Avenue and South Main Street. We are specifically asking that the City add the following: appropriate bicycle and pedestrian safety infrastructure; stop signs between Amador Avenue and South Main; a consistent and lower speed limit; and, traffic calming structures and signage improvements designed to reduce vehicle speeds and traffic loads.

NAME (Print)	ADDRESS
GWW. FLOYD	355 EL PRADO AX 88009
CARLA L. FLOYD	355 EL PRADO AVE 88005
David Coopla	350 EL Probation
Justin Harman	350 El PRADO 88005
Sudith Lail	340 El Prado 88005
Peggy Wood	385 El Prado 88005
Ph. Benson	395 El Prado 88005
Grant Delahon	509 El Prado
Cundy Rowling	509 El Prado Ave.
Taver SC	545 El Prado Ave
Voncalyn	545 El Crado 38005

NIABAE (D. L. L.)



Petition For Improvements to South Melendres Between Amador Avenue and South Main Street

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NAME (Print)	ADDRESS
Amelia Garcia	440 El Prado LC NM 88005
Tim Wozniak	470 El Prado LL N m 88005'
SBan Schultz	470 EL Prado LE NH 88005
Erik Yuld Ethan Henry	449 El Prudo Au NM 8800 5
Ethan Henry	100 Brown 22. CC, NM 88005
Elizabeth Schirmor	881 Stelendrer.
Gabriel Rodriguez	585 BrownRd.
Ann Sananiego	937 S. Melendres
Mike Parge	941 5 Melandras
Jeffie houares	960 S. MeLendres
Petition For Improvement	s to South Melendres Street

Mobility 2045

Between Amador Avenue and South Main Street



1/

We, the residents in the area of South Melendres Street between Amador Avenue and South Main Street in Las Cruces, hereby request that the City of Las Cruces amend the Draft Metropolitan Transportation Plan, *Mobility 2045*, by adding improvements to the section of South Melendres Street located between Amador Avenue and South Main Street. We are specifically asking that the City add the following: appropriate bicycle and pedestrian safety infrastructure; stop signs between Amador Avenue and South Main; a consistent and lower speed limit; and, traffic calming structures and signage improvements designed to reduce vehicle speeds and traffic loads.

ADDRESS
204 S. Me fendres St.

Cas Craces, nun 88205

Doverh Olega

SSS La Colonia St.

IERRANCE KROUM

1171 FT SUN NER

WAY

Sol S Me lances

325 El Molino

Michael Busher

Cos y Webster

Pot fly

1441 El Molino Blud.

Elizabeth Orvantic

Address

421 El Molino Blud

421 El Molino Blud

Abigail Escalera

421 El Molino Blud

Petition For Improvements to South Melendres Street Between Amador Avenue and South Main Street

NAME (Print)



We, the residents in the area of South Melendres Street between Amador Avenue and South Main Street in Las Cruces, hereby request that the City of Las Cruces amend the Draft Metropolitan Transportation Plan, *Mobility 2045*, by adding improvements to the section of South Melendres Street located between Amador Avenue and South Main Street. We are specifically asking that the City add the following: appropriate bicycle and pedestrian safety infrastructure; stop signs between Amador Avenue and South Main; a consistent and lower speed limit; and, traffic calming structures and signage improvements designed to reduce vehicle speeds and traffic loads.

ADDRESS

CHRISTINA ANCHONDO	SIDEL PRADO LENM 88005
Sue Hennaman	615 El Prado Ave.
Waney Chuth	660 EL PRADO AVE
Sherry Carter Ruben 3 Charries	700 El Prado Ave
Ruber 3 Charrie	460 EL PRADO
Patrick Dominguez	960 S. Melandnes
Laura Auzenne	943 S. Melendres St.
Dean Mattyn	955 S. Melendres St.
Katie Tomicek	1036 S. Wain St.
Madison Caballer	600 El Prado Ave

ADDRESS



NAMF (Print)

Petition For Improvements to South Melendres Street Between Picacho Avenue and South Main Street

We residents in the area of South Melendres Street between Amador Avenue and South Main Street in Las Cruces request that the City of Las Cruces amend the Draft Metropolitan Transportation Plan. *Mobility 2045*. by adding improvements to the section of South Melendres Street located between Amador Avenue and South Main Street. We are specifically asking that the City add the following: appropriate bicycle and pedestrian safety infrastructure: stop signs between Amador Avenue and South Main: a consistent and lower speed limit: and. traffic calming structures and signage improvements designed to reduce vehicle speeds and traffic loads.

Reyes Duran	445 El Prado Ave



MPO Response:

The referenced portion of Melendres is classified as a major collector in the current MTP, Transport 2040 and is proposed to remain a major collector in Mobility 2045.

The current draft of Mobility 2045 states that collectors should have 2 or 3 vehicle lanes, bicycle lanes in each direction, and pedestrian facilities on both sides appropriate to the roadway context.

The MPO Policy Committee is scheduled to review Mobility 2045 for adoption at a special meeting on July 15.

The City of Las Cruces through the implementation of their adopted design standards is responsible for the actual cross-section and the installation and maintenance of safety features and traffic control on the roadway. For specific implementation of the adjustments requested in the petition, you will have to work with the City of Las Cruces directly.



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Appendix C Definitions



Acronyms	Definitions
AADT	Average Annual Daily Trips
AASHTO	American Association of Highway Transportation Officials
AAWDT	Average Annual Week Day Traffic
ADA	Americans with Disabilities Act
BLM	Bureau of Land Management
BNSF	Burlington Northern Santa Fe
BPAC	Bicycle and Pedestrian Facilities Committee
DACC	Dona Ana Community College
EBID	Elephant Butte Irrigation District
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAST Act	Fixing Americas Surface Transportation Act
FHTF	Federal Highway Trust Fund
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HSIP	Highway Safety Improvement Program
HUD	Housing and Urban Development
ISTEA	Intermodal Transportation Efficiency Act
ITS	Intelligent Transportation Systems
JPA	Joint Powers Agreement
LCPS	Las Cruces Public Schools
LGTPF	Local Government Transportation Project Fund
MAP-21	Moving Ahead for Progress in the 21st Century Act
MOU	Memorandum of Understanding
МРО	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MTP	Metropolitan Transportation Plan
MVITT	Mesilla Valley Intermodal Transit Terminal
NACTO	National Association of City Transportation Officials
NASA	National Aeronautics and Space Administration
NHPP	National Highway Performance Program
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NMDOT	New Mexico Department of Transportation
NMSU	New Mexico State University
NTD	National Transit Database
0 & M	Operation and Maintenance
PM	Performance Measure
PUD	Planned Unit Development
ROW	Right of Way



Acronyms	Definitions
RTD	Reginal Transit Districts
SAFETEA-	
LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SCRTD	South Central Regional Transit District
SHSP	Strategic Highway Safety Plan
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
TAC	Technical Advisory Committee
TAM	Transportation Asset Management
TAP	Transportation Alternatives Program
TASM	Transportation Asset and Safety Management Plan
TAZ	Traffic Analysis Zones
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvements Program
TOD	Transit Oriented Development
TSMT	Traffic Safety Management Team
UNM-DGR	University of New Mexico Division of Government Research
VBC	Volume By Classification Data
VMT	Vehicle Miles Travelled
WSMR	White Sands Missile Range
YOE	Year of Expenditure Dollars

