# El Paso Metropolitan Planning Organization

# 2013 Congestion Management Process

















#### **ACKNOWLEDGEMENTS**

The staff expresses its appreciation to all individuals and agencies that participated in the development of this document. A special thank you is extended to members of the Transportation Policy Board (TPB), the Transportation Project Advisory Committee (TPAC), and the MTP workgroup members, and to other public or private agencies who contributed comments.

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#### **Section 1 - Introduction**

The El Paso Metropolitan Planning Organization is the policy body responsible for cooperative, comprehensive regional transportation planning and decision making for the El Paso Metropolitan Planning Area as designated by the Governor of the State of Texas under federal law and regulations.

The goal of the MPO planning process is to build a regional agreement on transportation investments that will balance roadways, public transit, bicycles, pedestrians, and other transportation needs and also support regional land use, economic, and environmental goals and plans.

The El Paso MPO is required to maintain a Congestion Management Process (CMP) as part of its ongoing transportation planning process. The CMP is required to be developed and implemented as an integral part of the metropolitan planning process in all Transportation Management Areas (TMAs) - urbanized areas with a population over 200,000. The CMP is intended to address congestion based on a cooperatively developed and implemented region-wide strategy that provides for the safe and effective management and operation of its multimodal transportation system. Strategies and projects are to be reflected in the MPO's long-range Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP). Strategies that manage travel demand, reduce Single Occupant Vehicle (SOV) travel, and improve transportation system management and operations are all to be considered, as well as those that address bicycling and walking.

The El Paso MPO has maintained a CMP, but it has mostly focused on using the regional travel demand model to project 20+ year future traffic volumes and to identify major roadway capacity expansion needs. There has not been an ongoing coordinated, systematic inter-agency process in place for examining congested corridors and intersections where travel demand management (TDM) strategies and lower cost targeted transportation system management (TSM) improvements could enhance operation of the current transportation system. There also has not been a coordinated process in place for assessment of the effectiveness of implemented strategies and projects.

#### Federal Requirements

The current El Paso MPO CMP was adopted in 2008 and is being updated to meet current Federal requirements. This requires the CMP to include the following:

- 1. Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of recurring and non-recurring congestion, and identify and evaluate alternative strategies;
- 2. Definition of congestion management objectives and performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of

people and goods. The measures and the system performance deemed acceptable are to be cooperatively developed by the State, MPO, and local transportation officials.

- 3. Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions;
- 4. Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use, and improved safety of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combinations of strategies, are some examples of what should be appropriately considered for each area:
  - Demand management measures
  - Traffic operational improvements,
  - Public transportation improvements,
  - ITS technologies as related to the regional ITS architecture, and
  - Where necessary additional system capacity.
- 5. Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation; and
- 6. Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures.

It should be noted that a CMP does not require an MPO to change its process for identifying priority projects or TIP project development selection process. CMP's do not require that specific federal performance measures or targets be adopted, but that performance goals are supposed to reflect local conditions and transportation system goals. CMP's do not require MPO's to set aside a portion of their project funds for congestion mitigation other than what they normally identify as part of their TIP process. A CMP does not require MPO member agencies to change their internal processes.

#### CMP Participants

The development of this CMP template was led by the CMP subcommittee established by the Transportation Planning Board (TPB) of the MPO in October 2012. The subcommittee consisted of the following members:

Ernesto Carrizal III, Public Works Director, El Paso County (*Chair*) Trent Doolittle District Engineer, NMDOT- District 1 Jane Shang, Deputy City Manager, City of El Paso

#### El Paso MPO staff:

Mike Medina, Interim Executive Director Sonia Perez, Regional Transportation Planner Roger Williams, Transportation Planner

The CMP template was developed through a collaborative process between subcommittee members, MPO staff, and researchers with the Texas A&M Transportation Institute.

# Section 2 – Regional Goals and Objectives for Congestion Management

The CMP subcommittee developed a set of regional goals and objectives for congestion management through discussion and consensus. Goals and objectives adopted previously by the MPO in the MTP served as the foundation for current CMP goals and objectives. They are:

- 1. Provide a transportation system that serves the public with mobility choices including pedestrians and bicycles
  - a. Increase and improve bicycling options and facilities in the region
  - b. Increase and improve pedestrian facilities in the region
  - c. Increase and improve transit system and facilities
  - d. Improve the reliability and efficiency of buses
  - e. Continue Intelligent Transportation System (ITS) improvements in the region
- 2. Identify and mitigate congestion on the transportation system
  - a. Identify, diagnose, and address highway bottlenecks and travel delays
  - b. Reduce travel delays on major arterial roads for all alternative modes
  - c. Reduce travel delays at traffic signals
  - d. Increase and improve the regional incident management program
  - e. Enhance border crossing road operations to improve facilitation of truck traffic
  - f. Increase efforts to reduce crash rates and improve safety on the system
  - g. Enhance partnerships between regional transportation system providers
- 3. Minimize air quality impacts of congestion
  - a. Create and enhance shared ride programs in the region (e.g., carpools, vanpools)

- b. Promote transit options to citizens in the region
- c. Promote travel demand management programs in the region
- 4. Promote accessibility to an efficient transportation system for all citizens
  - a. Improve connectivity between all modes in the system
  - b. Improve border crossing activities for all users of the system (pedestrian, automobile, trucks)

The goals and objectives provide the MPO a "lens" through which it can evaluate the potential of each transportation project in the region for congestion management. The CMP becomes a foundational planning document from which the MTP and TIP can begin to be constructed.

#### **Section 3 - CMP Network Definition**

The CMP roadway network for the El Paso MPO Study Area was defined for congestion analysis and monitoring and focuses primarily on major roadway segments in the region (Figure 3.1). EPMPO staff recommended CMP network includes all roadways currently functionally classified as principal arterials and above. This is based on the recent MAP-21 USDOT/FHWA guidance that considers all principal arterial routes in a region as potentially eligible for inclusion on the National Highway System (NHS).

The CMP sub-committee recommended additions to the proposed network that did not fall within the principal arterial and above criteria. These roadways included three rural state highways and two roads not classified as principal arterials but are of regional importance.

The CMP analysis boundary corresponds with the current MTP and includes all of El Paso County and the City of Sunland Park, and Berino in New Mexico in the northwestern MPO Study Area, and the Town of Chaparral and Otero County in the northeastern Study Area. The network is comprehensive for the region capturing all major corridors with potential congestion and includes roadways in all subareas of the MPO planning area.

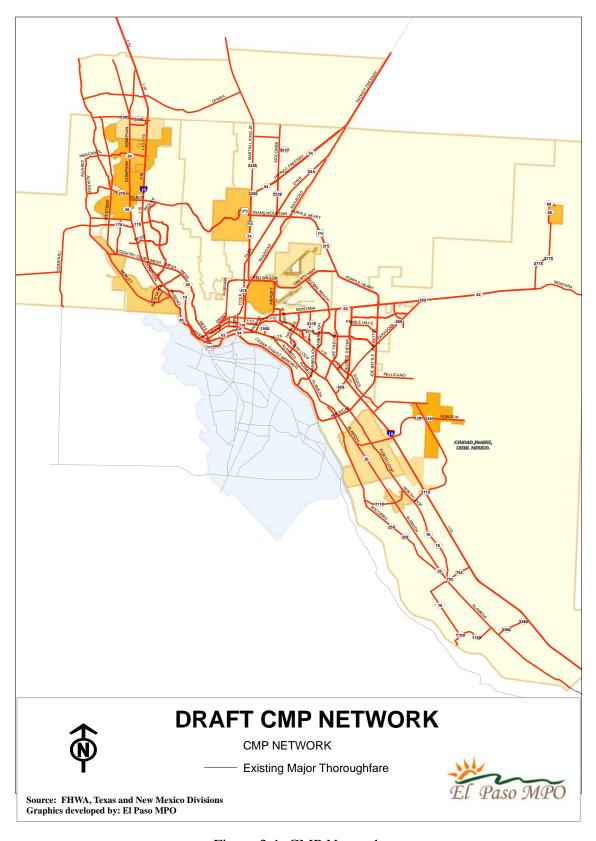


Figure 3-1. CMP Network

#### Section 4 - Congestion Issues in the El Paso MPO Planning Area

#### Definition of Congestion

This CMP update uses a series of performance measures to evaluate the current congestion level of our roadway network. The performance measures used in the congestion identification analysis are limited to roadway congestion due to reliable data constraints. Congestion solutions, however, will include all modes. There are four performance measures proposed. These Performance measures are: (1) Level of Mobility, (2)Density, (3) Modeled Speed, (4) Intersection Level of Service.

#### **Level of Mobility**

Level of mobility will be used as an initial performance measure to identify congested locations; Level of Mobility (LOM) is a ratio of the roadway capacity and traffic volume (v/c). LOM is based upon travel demand model estimated 24 hour volumes from the El Paso MPO travel demand model. The 2035 Amended Mission MTP networks will be used for this CMP update.

Table 4-1. Level of Mobility Thresholds

Critical Volume-to-Capacity Ratio	Level of Mobility
<0.85	Good
0.85-1.00	Moderate
1.00-1.25	Serious
>1.25	Severe

#### **Density**

Density is defined as the average number of vehicles that occupy one mile or one kilometer of road space, expressed in vehicles per mile or per kilometer. According to the Highway Capacity Manual (HCM), delay can be used to visualize where congestion exists.

Table 4-2. Vehicle Density by Level of Service

LOS	Density (veh/mile/lane)
A	Under 11
В	11-17
С	17-25
D	25-35
Е	35-45
F	Over 45

Density will be obtained from DynusT (Dynamic Urban Systems in Transportation) which is an hourly mesoscopic simulation-based dynamic traffic assignment (DTA) software.<sup>1</sup> Density is measured in vehicles per mile per lane.

#### **Modeled Speed**

Modeled Speed is the estimated average speed obtained from a forecast model. Speed is also recommended by the HCM as a roadway congestion indicator on freeways. Below is a table showing the HCM criteria to be followed. Speed data will also be obtained from DynusT model. In future CMP updates, this measure can be used with actual measured speeds instead of modeled speeds

Table 4-1. Speed Threshold by LOS

LOS	Speed (miles/hr)
A	Over 90
В	90-80
С	80-70
D	70-60
E	60-50
F	Under 50

#### **Intersection Level of Service**

According to the Highway Capacity Manual 2000, Level of Service (LOS) is defined in terms of the average total vehicle delay of all movements through an intersection. Similar to the speed and flow along highways, LOS criteria for signalized intersections is given a grade from A to F depending on the intersection performance:

Table 4-6. Level of Service at Signalized Intersections

LOS	Average Control Delay (sec/veh)	General Description	
Α	≤10	Free Flow	
В	>10 - 20	Stable Flow (slight delays)	
С	>20 - 35	Stable flow (acceptable delays)	
D	>35 - 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)	
Е	>55 - 80	Unstable flow (intolerable delay)	
F	>80	Forced flow (jammed)	

<sup>&</sup>lt;sup>1</sup> See: <a href="http://dynust.net/">http://dynust.net/</a>, and U.S. Department of Transportation FHWA Office of Operations <a href="http://ntl.bts.gov/lib/37000/37800/37801/3780

#### Identification of Congested Corridors and Roadways

EPMPO staff used the latest TxDOT-approved version of the regional travel demand model to analyze the CMP network for current and future levels of mobility. The current year data was 2010. Future congestion was analyzed for the year 2020.

The 2010 TDM level of mobility is presented in Figure 4-1 below. Using the thresholds developed, there are 11 roadway segments identified as serious (VC >1.00-1.25) and/or severe (VC> 1.25) in the region. The segments are presented in the table below:

Table 4-4. 2010 EPMPO Roadway Segments ≥1.00, Amended Mission MTP

	ROADWAY	FROM	то	V/C
1	PELLICANO DR	BERRYVILLE	AMERICAS AVE	1.73
2	SOCORRO RD	BUFORD	AMERICAS AVE	1.27
3	COUNTRY CLUB RD	WESTSIDE RD.	DONIPHAN DR	1.26
4	AIRPORT RD	TROWBRIDGE DR	AIRWAY BLVD	1.09
5	EASTLAKE DR	ROJAS DR	DARRINGTON RD	1.08
6	MONTWOOD DR	VISCOUNT BLVD	GEORGE DIETER	1.02
7	MONTANA AVE	ZARAGOZA AVE	MARK JASON (ASENCION)	1.02
8	IH-10 FRONTAGE	AIRWAY BLVD	HAWKINS BLVD	1.02
9	ALAMEDA AV	PASSMORE	AMERICAS AVE	1.02
10	NORTH LOOP DR	FM1110	AMERICAS AVE	1.00
11	VISCOUNT BLVD	AIRWAY BLVD	MONTWOOD DR	0.99

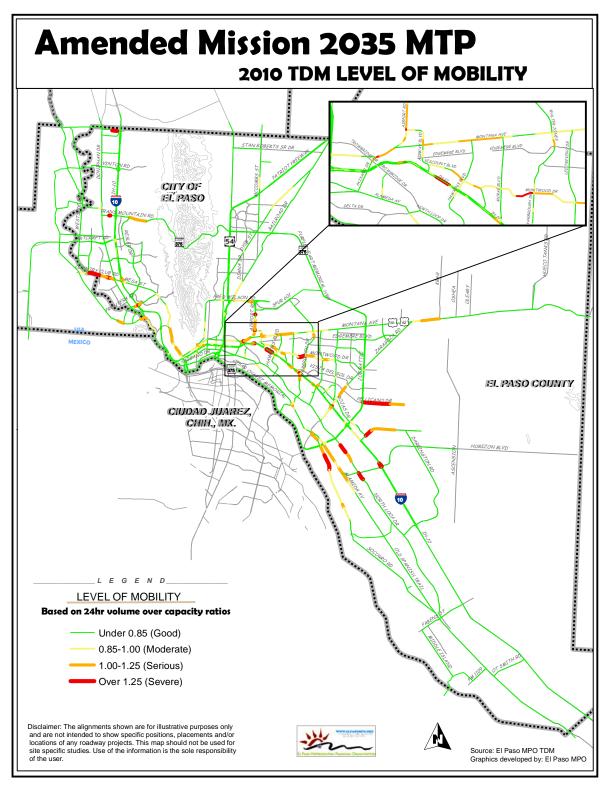


Figure 4-1. 2010 TDM Levels of Mobility

The 2020 levels of mobility derived from the regional travel demand model are presented in the figure below:

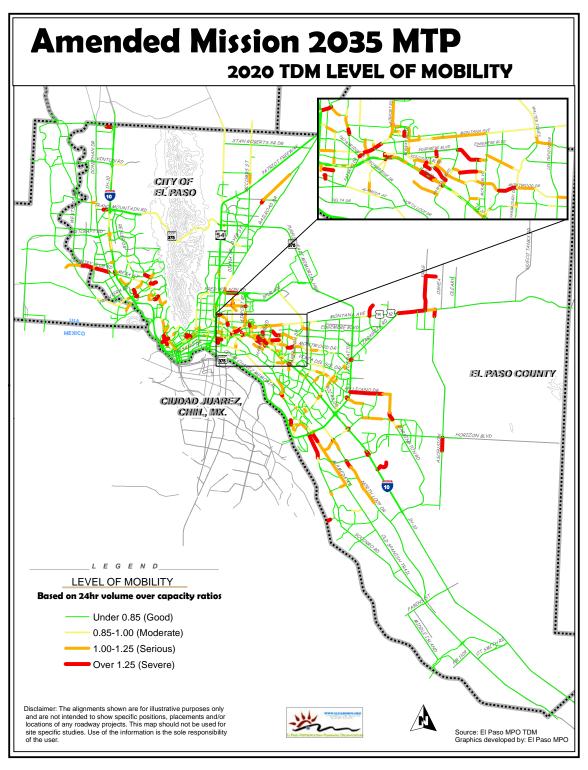


Figure 4-2. 2020 TDM Level of Mobility

It is noted that current and future congested roadways are scattered throughout the region. Congestion in El Paso is a regional issue.

The same 11 roadway segments are identified as future serious (VC >1.00-1.25) and/or severe (VC > 1.25) in the region, however in slightly different order. The segments are presented in the table below:

Table 4-5. 2020 EPMPO Roadway Segments ≥1.00, Amended Mission MTP

ROADWAY	FROM	ТО	V/C
1 PELLICANO DR	BERRYVILLE	AMERICAS AVE	1.55
2 MONTANA AVE	ZARAGOZA AVE	MARK JASON (ASENCION)	1.4
3 COUNTRY CLUB RD	WESTSIDE RD.	DONIPHAN DR	1.38
4 SOCORRO RD	BUFORD	AMERICAS AVE	1.32
5 ALAMEDA AV	PASSMORE	AMERICAS AVE	1.23
6 AIRPORT RD	TROWBRIDGE DR	AIRWAY BLVD	1.21
7 IH-10 FRONTAGE	AIRWAY BLVD	HAWKINS BLVD	1.1
8 MONTWOOD DR	VISCOUNT BLVD	GEORGE DIETER	1.08
9 VISCOUNT BLVD	AIRWAY BLVD	MONTWOOD DR	1.08
10 NORTH LOOP DR	FM1110	AMERICAS AVE	1.02
11 EASTLAKE DR	ROJAS DR	DARRINGTON RD	0.98

These 11 roadway segments and corridors will provide focus to the TPB and regional transportation agencies as they evaluate projects for congestion management benefits. Expanded traffic data collection efforts can start with these local areas. Specific projects within category types (demand management, operational improvements) may receive higher priority for programming.

Based on the criteria for intersection Level of Service and utilizing a Dynamic Traffic Assignment (DynusT) model, the EPMPO staff identified the most congested intersections at the morning-peak hour (7:00 am).

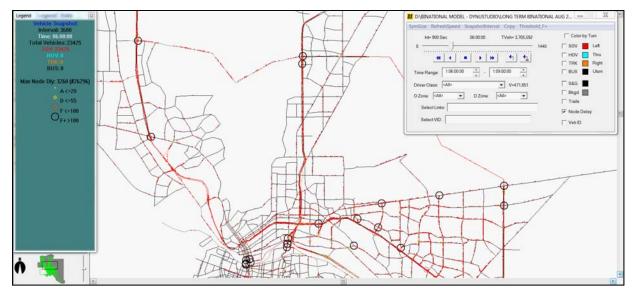


Figure 4-3. Most Congested Intersections, Morning Peak Hour

These intersections were also identified in the CMP network previously defined by the CMP technical subcommittee. With an additional map of all the Video Detection Count (VDT) locations reported by the City of El Paso (Department of Transportation), the EPMPO selected those intersections that followed both criteria: showing severe delay and having data available (counts) for the LOS analysis. As a result, six intersections were identified for the analysis as shown in Figure 4-4 below.

Using the methodology of the HCM 2000 and the timings sheets reported by the City of El Paso, the level of service at those six intersections were calculated. The results are summarized in following table:

Table 4-7. LOS for Six Intersections

Intersection	LOS
Mesa and Desert South	С
Airway and Viscount	В
Hawkins and Viscount	Е
Joe Battle South and Pellicano	С
Montwood Dr and Joe Battle South	D
Edgemere Blvd and Joe Battle South	D

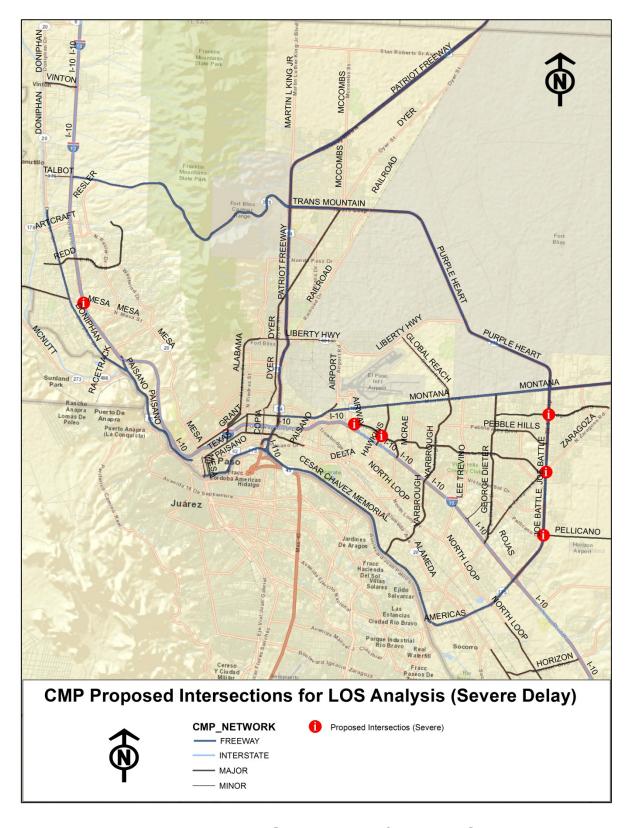


Figure 4-4. Proposed Intersections for LOS Analysis

### Section 5 - Identification and Evaluation of Congestion Management Strategies

FHWA guidance on CMP development emphasizes that identification and assessment of appropriate congestion mitigation strategies is a key component of the CMP. The MPO turns the data and analysis into a set of recommended solutions to effectively manage congestion and achieve congestion management objectives.

El Paso MPO has a CMP strategy evaluation process in place. The steps are described below:

- 1. EPMPO staff provides necessary project information to help stakeholders come into agreement on what strategies should be recommended and which strategies should be selected for evaluation. Examples of information provided include but is not limited to:
  - Maps and list of congested roads from system performance evaluation
  - List of travel reduction and operational strategies from conforming TIP and MTP plans
  - List of added-capacity projects from conforming plan
  - CMP strategies available for the roadway or corridor
- 2. Possible travel reduction and operational alternative strategies are discussed and a list of recommended strategies is developed by key stakeholders.
- 3. MPO staff develops analysis of recommended strategies at current conditions, no build, Transportation Improvement Program (TIP) level, and/or horizon network year.
- 4. Evaluation of recommended strategies by key stakeholders. Key stakeholders review and discuss the analysis results and select strategies for implementation. Based on the analysis results provided by MPO staff, key stakeholders prioritize projects/strategies according to what they believe will be feasible within their jurisdiction.
- 5. Develop funding schedule by key stakeholders. Key stakeholders identify possible funding sources for strategy implementations and a list of commitments is developed.

#### CMP Strategy Types

There is a wide range of strategies available to the MPO for consideration. These strategy types include: travel demand management, traffic operational improvements, public

transportation, and roadway capacity projects. The *Horizon 2040* MTP contains an extensive list of individual transportation projects in the El Paso region. The full list is provided in Appendix A.

#### **Travel Demand Management Strategies**

Travel demand management (TDM) strategies promote nonautomotive travel modes, land use management, any project that provides travelers with more options and reduces the number of vehicles or trips during congested periods. These include strategies that substitute communication for travel, or encourage regional cooperation to change development patterns and/or reduce sprawl. Other examples include programs that encourage transit use and ridesharing, such as marketing/outreach for transit and TDM services, also pedestrian and bicycle improvements.

Listed below are the current demand management projects planned and programmed for the El Paso region:

Table 5-1. Demand Management StrategiesCity Area	Project ID	Project Name	Project Description
EAST	E400X	FM 1281 HORIZON BLVD. WALK/BIKE PATH	INSTALL APPROXIMATELY 3 MI OF PATHWAY TO ACCOMMODATE BIKES AND PEDESTRIANS.
EAST	T402B	FAR EASTSIDE TRANSFER CENTER	PE, ROW, AND CONSTRUCT TRANSIT TERMINAL
EAST	T408	PARK AND RIDE MONTWOOD	PARK AND RIDE MONTWOOD
EAST	T409	FAR EAST PARK AND RIDE	CONSTRUCT PARK AND RIDE LOT
MISSION VALLEY	T070X	ZARAGOZA INTERNATIONAL BRIDGE PARK-N-RIDE	PROJECT DESIGNED TO PROMOTE THE USE OF MASS-TRANSIT WITH TRANSIT STATION, TAXI STAND AT THE ZARAGOZA BORDER SAFETY INSPECTION FACILITY (BSIF) STATION FOR CROSS-BORDER TRAVEL TO IMPROVE AIR QUALITY

City Area	Project ID	Project Name	Project Description
MISSION VALLEY	X501	FREIGHT SHUTTLE SYSTEM (FSS)	THE FSS IS AN INNOVATIVE TECHNOLOGY, THE SYSTEM IS AN AUTOMATED, ZERO-EMISSION, LOWER-COST AND HIGHER-PERFORMING OPTION FOR SHIPPERS THAT ARE INCREASINGLY CONSTRAINED BY THE GROWING CONGESTION IN MANY CRITICAL FREIGHT CORRIDORS. THE SYSTEM WILL INCREASE THE SECURITY OF THE BORDER WHILE FACILITATIONG INTERNATIONAL TRADE, IMPROVING AIR QUALITY AND PROMOTING REGIONAL ECONOMIC DEVELOPMENT.
NE	T203B	NORTHEAST TRANSIT TERMINAL	CONSTRUCT/EXPAND NORTHEAST TRANSIT TERMINAL
NE	T204	NORTHEAST PARK AND RIDE	NORTHEAST PARK AND RIDE IN CONJUCTION WITH NEW TERMINAL AT EXISTING NORTHPARK MALL LOCATION
NM	M630X	PAVEMENT PRESERVATION AND DESIGN/CONSTRUCTION OF MULTIUSE PATH ON NM 136 (PETE DOMINICI HIGHWAY)	PAVEMENT PRESERVATION AND DESIGN/CONSTRUCTION OF MULTIUSE PATH ON NM 136 (PETE DOMINICI HIGHWAY); AND INCLUDING DRAINAGE AND EROSION CONTROL ON VARIOUS LOCATIONS OF EXISTING MULTIUSE PATH ALONG NM 273 (MCNUTT ROAD) FROM MILEPOST 7.5 TO MILEPOST 8.4
REGIONAL	T011	ELDERLY AND DISABLED TRANSPORTATION PROGRAM	TRANSP. FOR ELDERLY /DISABLE PROVIDE BY LCL NONPROFIT ORG
REGIONAL	T021X	ADA PARATRANSIT SERVICE	PROVIDE ADA PARA TRANSIT SERVICE
REGIONAL	T052X	CARPOOL PROGRAM	CARPOOL PROGRAM
REGIONAL	T052X	CARPOOL PROGRAM	CARPOOL PROGRAM
REGIONAL	T054X	VANPOOL PROGRAM	VANPOOL PROGRAM
REGIONAL	T054X	VANPOOL PROGRAM	VANPOOL PROGRAM

City Area	Project ID	Project Name	Project Description
REGIONAL	T067X	MESA RTS PEDESTRIAN ENHANCEMENTS	PEDESTRIAN ENHANCEMENTS INCLUDING INSTALLATION OF SIDEWALKS, LANDSCAPING, STREET FURNITURE, AND SIGNAGE.
REGIONAL	T069X	MONTANA RTS PEDESTRIAN ENHANCEMENTS	PEDESTRIAN ENHANCEMENTS INCLUDING INSTALLATION OF SIDEWALKS, LANDSCAPING, STREET FURNITURE, AND SIGNAGE.
REGIONAL	T071X	BRIDGE OF THE AMERICAS PARK-N-RIDE, TRANSIT STATION	PROJECT DESIGNED TO PROMOTE THE USE OF MASS-TRANSIT WITH TAXI STAND DIRECTLY NORTH OF PAISANO OVERPASS FOR CROSS-BORDER TRAVEL TO IMPROVE AIR QUALITY
REGIONAL	T073X	CARPOOL PROGRAM	CARPOOL PROGRAM
REGIONAL	T074X	CARPOOL PROGRAM	CARPOOL PROGRAM
REGIONAL	T075X	CARPOOL PROGRAM	CARPOOL PROGRAM
REGIONAL	T076X	VANPOOL PROGRAM	VANPOOL PROGRAM
REGIONAL	T077X	VANPOOL PROGRAM	VANPOOL PROGRAM
REGIONAL	T078X	VANPOOL PROGRAM	VANPOOL PROGRAM
REGIONAL	T082X- 2	PUBLIC OUTREACH FOR THE EL PASO REGIONAL TRANSPORTATION ONE- CALL/ONE-CLICK	PUBLIC OUTREACH FOR ONE-CALL/ONE-CLICK OR SINGLE ENTITY THAT CAN PROVIDE INFORMATION ABOUT ALL THE PUBLIC TRANSPORTATION SERVICES AVAILABLE IN THE REGION TO INCLUDE VETERAN COMMUNITY
WEST	E100X	UNIVERSITY CENTENNIAL PEDESTRIAN/BIKE TRAIL - PHASE 1	CONSTRUCTION OF A PEDESTRIAN/BIKE SYSTEM FROM THE SUN METRO GLORY ROAD TRANSIT CENTER FOLLOWING FLOW PATH 23 UNTIL IT REACHES RIM ROAD. FROM RIM ROAD THE TRAIL TURNS EAST TO HAWTHORNE STREET AND FROM HAWTHORNE STREET IT PROCEEDS SOUTH TO YANDELL DRIVE.

City Area	Project ID	Project Name	Project Description
WEST	E101X	UNIVERSITY CENTENNIAL PEDESTRIAN/BIKE TRAIL - PHASE 2	CONSTRUCTION OF A PEDESTRIAN/BIKE SYSTEM FROM THE SUN METRO GLORY ROAD TRANSIT CENTER FOLLOWING FLOW PATH 23 UNTIL IT REACHES RIM ROAD. FROM RIM ROAD THE TRAIL TURNS EAST TO HAWTHORNE STREET AND FROM HAWTHORNE STREET IT PROCEEDS SOUTH TO YANDELL DRIVE.
WEST	E102X	UTEP TRANSPORTATION IMPROVEMENTS: SUN BOWL NORTH PROJECT SEGMENT 3 OF 3	THE PROJECT SCOPE INCLUDES: CONSTRUCTING SIDEWALKS, CROSSWALKS, A MEDIAN WITH LEFT TURN LANES, A BICYCLE LANE, LIGHTING, BUS STOPS, LANDSCAPING, FURNISHINGS, AND SIGNAGE.
WEST	T106	FAR WEST PARK AND RIDE	CONSTRUCT PARK AND RIDE LOT

#### **Traffic Operations Strategies**

These strategies focus on improving efficiency of the system, focusing on operation of the existing network of roads. Many of these operations-based strategies are supported by the use of enhanced technologies and ITS. Examples at the arterial level include: optimizing the timing of traffic signals, restricting turns at key intersections, geometric improvements to roads and intersections, converting streets to one-way operations, transit signal priority, and access management policies

Listed below are proposed and programmed traffic operations improvements for managing congestion in the El Paso region:

**Table 5-2. Traffic Operations Strategies** 

City Area	Project ID	Project Name	Project Description
CENTRAL	M305X	BATAAN BRIDGES	BRIDGE RECONSTRUCTION IN THE VICINITY: SANTA FE, EL PASO, CAMPBELL, OREGON, STANTON, KANSAS, AND MESA STREETS
CENTRAL	R307D	CENTRAL BUSINESS DISTRICT PHASE 4 (CBD 4)	RECONSTRUCTION OR RESURFACING OF CITY'S DOWNTOWN STREETS. STREETS INCLUDE OREGON, MESA, CAMPBELL & KANSAS FROM PAISANO TO BORDER HIGHWAY AND SIXTH FROM CAMPBELL TO EL PASO. ALSO INCLUDES CONVERSION OF KANSAS AND CAMPBELL FROM ONE-WAY TO TWO-WAY.
CENTRAL	M306X	CONVERTING ARIZONA FROM ONE WAY TO TWO WAY ROADWAY	RECONSTRUCT TO 2-LANE DIVIDED
CENTRAL	M307X	CONVERTING GRANT/RIO GRANDE FROM ONE WAY TO TWO WAY ROADWAY	RECONSTRUCT TO 2-LANE DIVIDED
CENTRAL	P313E- 2	SH 20 (ALAMEDA AVE)	INTERSECTION IMPROVEMENTS AND REHABILITATION PHASE 2
CENTRAL	\$301C	TRAFFIC MANAGEMENT CENTER UPGRADE	COMMUNICATION UPGRADE HARDWARE- SOFTWARE SUPPORT TO ITS / RETIME SIGNALS
CENTRAL	S301D	TRAFFIC MANAGEMENT CENTER UPGRADE	COMMUNICATION UPGRADE HARDWARE- SOFTWARE SUPPORT TO ITS / RETIME SIGNALS (PURCHASE OF SOFTWARE AND HARDWARE)
CENTRAL	S301E	TRAFFIC MANAGEMENT CENTER UPGRADE	COMMUNICATION UPGRADE HARDWARE- SOFTWARE SUPPORT TO ITS / RETIME SIGNALS (DESIGN)
CENTRAL	\$301F	TRAFFIC MANAGEMENT CENTER UPGRADE	COMMUNICATION UPGRADE HARDWARE- SOFTWARE SUPPORT TO ITS / RETIME SIGNALS (PURCHASE OF SOFTWARE AND HARDWARE)

City Area	Project ID	Project Name	Project Description
EAST	M405X	FM 659 - FIBER INTERCONNECT FOR ZARAGOZA ROAD	FM 659 - FIBER INTERCONNECT FOR ZARAGOZA ROAD
EAST	1058X	I-10 WESTBOUND BRAIDED RAMPS INTERCHANGE IMPROVEMENTS	I-10 AT LOOP 375 INTERCHANGE IMPROVEMENTS WESTBOUND BRAIDED RAMP
EAST	M077X	INTERSECTION IMPROVEMENTS (remaining 8 of 15 intersection improvements)	RECONSTRUCT 8 INTERSECTIONS INCLUDING LEFT TURN LANES AND ADDING RIGHT TURN LANES. MESA/RESLER; VISCOUNT/HAWKINS; MESA/SUNLAND PARK; SAUL KLEINFELD/MONTWOOD; SAUL KLEINFELD/PEBBLE HILLS; VISCOUNT/MONTWOOD; AIRPORT/FOUNDERS; AIRPORT/CASSIDY
EAST	P449X- CAP	SPUR 601/LOOP 375 INTERCHANGE IMPROVEMENTS	INTERCHANGE IMPROVEMENTS
EAST	P446X	US 62/180 (MONTANA AVE)	IMPROVEMENTS INCLUDING GRADE SEPARATION
MISSION VALLEY	A513C	CAROLINA AVE RR OVERPASS	RECONSTRUCT OVERPASS (2 LANE UNDIVIDED)
MISSION VALLEY	P515B	FM 659 ZARAGOZA RD RR OVERPASS	GRADE SEPARATED OVERPASS
MISSION VALLEY	P531X	HAWKINS BLVD	REHABILITATION AND INTERSECTION IMPROVEMENTS WITH RIGHT TURN LANES
MISSION VALLEY	P533X	HAWKINS BLVD. OVERPASS DESIGN/CONTRUCTION	STREET IMPROVEMENTS TO INCLUDE DESIGN AND CONSTRUCTION OF ROADWAY ELEMENTS AND OVERPASS.
MISSION VALLEY	P532X	SH 20 (ALAMEDA AVE)	CORRIDOR IMPROVEMENTS
MISSION VALLEY	P519C- 15A	SH 20 (ALAMEDA AVE.)	INTERSECTION IMPROVEMENTS AND REHABILITATION
MISSION VALLEY	A506B- 05A	SH 20 ALAMEDA AVE. (RECONSTRUCT)	RECONSTRUCT INTERSECTION AT HORIZON BLVD/BUFORD RD SOCORRO
NM	M629X	INTERSECTION IMPROVEMENTS	GRADE SEPARATION AT NM 136/NM 273
REGIONAL	T015A- 2	ALAMEDA CORRIDOR RTS	RAPID TRANSIT SYSTEM (RTS) SYSTEM INCLUDING BUSES (CONSTRUCTION)

City Area	Project ID	Project Name	Project Description
REGIONAL	T017C	DYER CORRIDOR RTS	DESIGN AND CONSTRUCTION BRT/ITS/SIGNAL PRIORITIZATION / DIAMOND STRIPED LANES (THIS PROJECT IS COVER IN TRANSIT AND HIGHWAY PROJECT LISTS. USING \$9.168M FHWA CAT2 FUNDS, \$15,237,058 FTA 5309 AND \$10,889,276M LCL FUNDS, ROW USING LCL FUNDS \$222,724 IN FY 2012, FOR TOTAL OF \$35.51M)
REGIONAL	T015C	MESA CORRIDOR RTS	DESIGN AND CONSTRUCTION FOR RAPID TRANSIT SYSTEM (RTS) (THIS PROJECT IS COVER IN TRANSIT AND HIGHWAY PROJECT LISTS. USING \$2M FHWA CAT5 FUNDS, \$6.13M FHWA CAT2 (FTA TRANSFER \$2,686,629 IN 12/2012), \$13.55M FTA 5309, AND \$5.420M LCL FUNDS FOR TOTAL OF \$27.1M)
REGIONAL	T017D	MONTANA CORRIDOR RTS	DESIGN AND CONSTRUCTION FOR RTS/ITS/SIGNAL PRIORITIZATION/DIAMOND STRIPED LANES. (THIS PROJECT IS COVER IN TRANSIT AND HIGHWAY PROJECT LISTS. USING \$24.53M FTA 5309, \$8.558M LCL FUNDS AND \$9.702M FHWA CAT2 FUNDS FOR TOTAL OF \$42.79M )
REGIONAL	T017C	DYER CORRIDOR RTS	DESIGN AND CONSTRUCTION RTS/ITS/SIGNAL PRIORITIZATION / DIAMOND STRIPED LANES (THIS PROJECT IS COVER IN TRANSIT AND HIGHWAY PROJECT LISTS. USING \$9.168M FHWA CAT2 FUNDS, \$15,237,058 FTA 5309 AND \$10,889,276M LCL FUNDS, ROW USING LCL FUNDS \$222,724 IN FY 2012, FOR TOTAL OF \$35.51M)
REGIONAL	T015C	MESA CORRIDOR RTS	DESIGN AND CONSTRUCTION FOR RAPID TRANSIT SYSTEM (RTS) (THIS PROJECT IS COVER IN TRANSIT AND HIGHWAY PROJECT LISTS. USING \$2M FHWA CAT5 FUNDS, \$6.13M FHWA CAT2 (FTA TRANSFER \$2,686,629 IN 12/2012), \$13.55M FTA 5309, AND \$5.420M LCL FUNDS FOR TOTAL OF \$27.1M)

City Area	Project ID	Project Name	Project Description
REGIONAL	T017D	MONTANA CORRIDOR RTS	DESIGN AND CONSTRUCTION FOR RTS/ITS/SIGNAL PRIORITIZATION/DIAMOND STRIPED LANES. (THIS PROJECT IS COVER IN TRANSIT AND HIGHWAY PROJECT LISTS. USING \$33.088 FTA 5309/LCL FUNDS AND \$9.702 FHWA CAT2 FUNDS FOR TOTAL OF \$42.79M)
REGIONAL	M054X	ALTERNATE ROUTES (ON-SYSTEM) PHASE 2	ALTERNATE ROUTES (ON-SYSTEM) PHASE 2
REGIONAL	M068X	BORDER TRAVELER AND CARGO INFORMATION SYSTEM	REGIONAL CROSS-BORDER TRAVEL INFORMATION TO LOCAL TRAVELERS, COMMERCIAL VEHICLES, FLEET MANAGERS, MANUFACTURERS, MAQUILADORAS AND OTHERS.
REGIONAL	M069X	GEOMETRIC IMPROVEMENTS CITY OF EL PASO	GEOMETRIC IMPROVEMENTS MAY INCLUDE CONSTRUCTION OF CURB AND GUTTER, LEFT/RIGHT TURN BAYS, SIGNALIZATION, ROUNDABOUTS, PEDESTRIAN/BICYCLE AMENITIES, TRAFFIC CONTROL DEVICES.
REGIONAL	M070X	GEOMETRIC IMPROVEMENTS CITY OF EL PASO	GEOMETRIC IMPROVEMENTS MAY INCLUDE CONSTRUCTION OF CURB AND GUTTER, LEFT/RIGHT TURN BAYS, SIGNALIZATION, ROUNDABOUTS, PEDESTRIAN/BICYCLE AMENITIES, TRAFFIC CONTROL DEVICES.
REGIONAL	M071X	GEOMETRIC IMPROVEMENTS CITY OF EL PASO	GEOMETRIC IMPROVEMENTS MAY INCLUDE CONSTRUCTION OF CURB AND GUTTER, LEFT/RIGHT TURN BAYS, SIGNALIZATION, ROUNDABOUTS, PEDESTRIAN/BICYCLE AMENITIES, TRAFFIC CONTROL DEVICES.
REGIONAL	M050X	HIGHWAY ADVISORY RADIO SYSTEM	HIGHWAY ADVISORY RADIO SYSTEM ON I-10 FM 1905 (ANTHONY) TO RM793, US 54 LOOP 375 BORDER HWY TO US-54 STATE LINE, & LOOP 375 US 62/180 (MONTANA) INTERCHANGE

City Area	Project ID	Project Name	Project Description
REGIONAL	1007E	I-10 AT LOOP 375 (AMERICAS AVE) DIRECT CONNECTOR: WB TO SB AND EB TO SB	INTERCHANGE IMPROVEMENTS INCLUDE CONSTRUCTION OF REMAINING DIRECT CONNECTORS WB TO SB AND EB TO SB
REGIONAL	I007F	I-10 AT LOOP 375 (AMERICAS AVE) DIRECT CONNECTOR SB TO EB AND NB TO EB	INTERCHANGE IMPROVEMENTS INCLUDE CONSTRUCTION OF TWO (2) REMAINDER DIRECT CONNECTOR SB TO EB AND NB TO EB
REGIONAL	I034X- MOD	I-10 EASTBOUND EXIT RAMP	RECONSTRUCT EXIT RAMP, EASTBOUND
REGIONAL	1006X- 15A	I-10 OVERPASS AT PENDALE	CONSTRUCT OVERPASS (4-LANE)
REGIONAL	1404X	I-10/LOOP 375 AMERICAS INTERCHANGE CLOVERLEAFS	CLOVERLEAF EXPANSION
REGIONAL	M072X	ITS MESSAGE BOARDS	ITS MESSAGE BOARD FOR POE TRAFFIC
REGIONAL	F048X	LOOP 375 (AMERICAS) RAMPS & FRONTAGE ROADS	RAMP RECONFIGURATION AND FRONTAGE ROAD EXTENSION WITH GRADE SEPARATION AT RAIL ROAD CROSSING
REGIONAL	F044X	LOOP 375 INTERCHANGE AT SERGEANT MAJOR BLVD.	INTERCHANGE LOOP 375 AT SERGEANT MAJOR BLVD.
REGIONAL	M061X	SH 178 (ARTCRAFT) INTELLIGENT TRANSPORTATION SYSTEM EXPANSION	INSTALL FIBER OPTIC CABLE, CLOSED CIRCUIT TELEVISION CAMERAS DYNAMIC MESSAGE SIGNS, LANE CONTROL SIGNALS AND VEHICLE DETECTION.
REGIONAL	M051X	US 54 DYNAMIC MESSAGE SYSTEM BOARDS INSTALLATION PROJECT	DYNAMIC MESSAGE SYSTEM BOARDS INSTALLATION PROJECT - US 54
REGIONAL	M025B	VIDEO SURVEILLANCE AND COUNT STATIONS PHASE 2	VIDEO SURVEILLANCE AND COUNT STATIONS PHASE 2

City Area	Project ID	Project Name	Project Description
REGIONAL	C027X	ZARAGOZA POE TOLL COLLECTION FACILITY	CONSTRUCT A STATE OF THE ART TOLL COLLECTION FACILITY. THE STATE OF THE ART FACILITY WILL USE DYNAMIC TOLLING TO INCREASE TRAFFIC EFFICIENCY
REGIONAL	T017C	DYER CORRIDOR RTS	DESIGN AND CONSTRUCTION RTS/ITS/SIGNAL PRIORITIZATION / DIAMOND STRIPED LANES (THIS PROJECT IS COVER IN TRANSIT AND HIGHWAY PROJECT LISTS. USING \$9.168M FHWA CAT2 FUNDS, \$15,237,058 FTA 5309 AND \$10,889,276M LCL FUNDS, ROW USING LCL FUNDS \$222,724 IN FY 2012, FOR TOTAL OF \$35.51M)
REGIONAL	T015C	MESA CORRIDOR RTS	DESIGN AND CONSTRUCTION FOR RAPID TRANSIT SYSTEM (RTS) (THIS PROJECT IS COVER IN TRANSIT AND HIGHWAY PROJECT LISTS. USING \$2M FHWA CAT5 FUNDS, \$6.13M FHWA CAT2 (FTA TRANSFER \$2,686,629 IN 12/2012), \$13.55M FTA 5309, AND \$5.420M LCL FUNDS FOR TOTAL OF \$27.1M)
REGIONAL	T017D	MONTANA CORRIDOR RTS	DESIGN AND CONSTRUCTION FOR RTS/ITS/SIGNAL PRIORITIZATION/DIAMOND STRIPED LANES. (THIS PROJECT IS COVER IN TRANSIT AND HIGHWAY PROJECT LISTS. USING \$33.088 FTA 5309/LCL FUNDS AND \$9.702 FHWA CAT2 FUNDS FOR TOTAL OF \$42.79M )
REGIONAL	B001X	BRIDGE REPLACEMENT/ REHABILITATION	REPLACE OR REHABILITATE BRIDGES
REGIONAL	M016C	FREEWAY MANAGEMENT SYSTEM MAINTENANCE	MAINTAIN FREEWAY MANAGEMENT SYSTEM
REGIONAL	R008X	ON STATE REHABILITATION TXDOT	FOR MAJOR RECONSTRUCTION BUT ALSO INCLUDES SIGNS, STRIPING, PAVEMENT MARKINGS, AND SIGNALS
REGIONAL	M036X	ON STATE RR OVERPASSES	CONSTRUCT ON STATE SYSTEM RR OVERPASSES

City Area	Project ID	Project Name	Project Description
WEST	F045X	FRANKLIN MTN. STATE PARK ENTRANCE IMPROVEMENTS	DEVELOP ADESIGN AND CONSTRUCT A NEW ENTRANCE FOR THE FRANKLIN MTN STATE PARK (LOOP 375 TRANSMOUNTAIN WEST) AND LOOP 375
WEST	A128X	I-10/PASEO DEL NORTE INTERCHANGE OPERATIONAL IMPROVEMENTS	INTERCHANGE OPERATIONAL IMPROVEMENTS TO INCLUDE: RIGHT TURN LANES, CONTINOUS ILLUMINATION, INTERSECTION IMPROVEMENTS, SIGNAL WORK, AND LANDSCAPING.
WEST	A127X	UTEP TRANSPORTATION IMPROVEMENTS: GLORY ROAD SEGMENT 1 OF 3 PROJECTS	RECONSTRUCT THE OREGON STREET TO SUN BOWL DRIVE SEGMENT OF GLORY ROAD AND AN EXTENSION OF RANDOLPH ROAD FROM THE REAILIGNED GLORY ROAD TO SUN BOWL DRIVE.

#### **Public Transportation Strategies**

These are projects that improve transit operations, improve access to transit, and expand transit service and help reduce the number of vehicles on the road by making transit more attractive or accessible. These strategies may be closely linked to strategies in the previous two categories (demand management and traffic operations). As with traffic operations, transit operations are often enhanced by ITS.

The public transportation strategies currently available to the MPO are listed below.

**Table 5-3. Public Transportation Strategies** 

City Area	Project ID	Project Name	Project Description
CENTRAL	T305- CAP	OREGON STREET CAR PROJECT	DESIGN AND CONSTRUCT ROADWAY AND PEDESTRIAN ELEMENTS REQUIRED TO INTEGRATE STREET CAR PROJECT TO INCLUDE PURCHASE OF STREETCARS; ROUTES CONSISTS OF 2 LOOPS DESCRIBED IN LIMITS
REGIONAL	T041X-3	BUS SHELTERS	BUS SHELTERS CITYWIDE
REGIONAL	T041X-4	BUS SHELTERS	BUS SHELTERS CITYWIDE

City Area	Project ID	Project Name	Project Description
REGIONAL	T081X	FAR EAST CONNECTOR	ZARAGOZA, ALAMEDA, MONTANA CONNECTION (BUS AND ROADWAY IMPROVEMENTS) WITH FTA FUNDS
REGIONAL	T013B-2	INTERNATIONAL MASS TRANSIT (BRT/LRT) JUAREZ & EL PASO	INTERNATIONAL MASS TRANSIT (BRT/LRT) JUAREZ & EL PASO (FTA FUNDS)
REGIONAL	T304	TRANSIT CENTER FOR INTERCITY AND INTERNATIONAL TRANFER CENTER	BUILD/REHAB. SITE FOR INTERNATIONAL TERMINAL FOR ALL PRIVATE BUS HAULERS AND SUN METRO

#### **Road Capacity Strategies**

This category of strategies addresses adding more base capacity to the road network, such as adding additional lanes and building new highways, as well as redesigning specific bottlenecks (such as interchanges and intersections) to increase their capacity. Given the expense and possible adverse environmental impacts of new single-occupant vehicle capacity, management and operations strategies should be given due consideration before additional capacity is considered.

The road capacity projects currently available to the region are provided in the tables below.

**Table 5-4. Road Capacity Strategies** 

City Area	Project ID	Project Name	Project Description
CENTRAL	A306X-MOD	AIRWAY EXTENSION	BUILD 2-LANE UNDIVIDED
CENTRAL	A308X-MOD	SUN BOWL DR. CENTRAL	WIDENING FROM 2 TO 4-LANES UNDIVIDED
CENTRAL	P326X-MOD	AIRWAY BLVD.	BUILD 4-LANE DIVIDED
EAST	A415X-MOD	ALBERTON AVE. EXTENSION	BUILD 4-LANE DIVIDED

City Area	Project ID	Project Name	Project Description
EAST	A418X-MOD	DARRINGTON RD	WIDENING TO 4-LANE DIVIDED
EAST	A407X-25A	DARRINGTON RD.	WIDEN TO 4-LANES DIVIDED
EAST	P439X-MOD	EASTLAKE BLVD.	WIDEN 4-LANE DIVIDED TO 6-LANE DIVIDED
EAST	P456X-CAP	FM 1110 AT I-10 INTERCHANGE IMPROVEMENTS	WIDENING FM 1110 BRIDGE FROM 2 TO 4- LANES UNDIVIDED INCLUDING OPERATIONAL IMPROVEMENTS
EAST	P431X-MOD	FM 1281 (HORIZON BLVD.)	WIDEN TO 6 LANES DIVIDED
EAST	A522D-CAP	FM 3380 - MANUEL F. AGUILERA HWY PHASE III	WIDENING FROM 2 LANE UNDIVIDED TO 4 LANE DIVIDED. INCLUDING OVERPASS WIDENING AT SH 20 (ALAMEDA AVE.)/UP RAILROAD
EAST	P428X-MOD	FM 659 (ZARAGOZA ROAD)	WIDEN 4 LANE TO 6 LANES DIVIDED
EAST	M404B-15A	GEORGE DIETER	RESTRIPE TO 6 LANES
EAST	P451X-CAP	GREG DR./EDGEMERE EXTENSION	STRIPE FROM 4 TO 6-LANE DIVIDED WITHIN EXISTING ROW
EAST	P450X-CAP	GREG DR./EDGEMERE EXTENSION	BUILD 6-LANE DIVIDED
EAST	A422X-CAP	JOHN HAYES ST./BERRYVILLE RD.	STRIPE FROM 4 TO 6-LANE DIVIDED WITHIN EXISTING ROW
EAST	F403X-CAP	LOOP 375 (AMERICAS/JOE BATTLE)	WIDEN FROM 4 TO 6 LANES DIVIDED
EAST	P443X-CAP	MONTWOOD DR. CONVERSION	STRIPE FROM 4 TO 6-LANE DIVIDED WITHIN EXISTING ROW
EAST	A421X-CAP	PEBBLE HILLS BLVD.	STRIPE FROM 4 TO 6-LANE DIVIDED WITHIN EXISTING ROW
EAST	P410X-15A	PELLICANO DR	WIDENING/BUILD TO 6-LANES DIVIDED
EAST	A424X-CAP	PENDALE RD.	WIDEN TO 4-LANE UNDIVIDED
EAST	M407X	PENDALE RD.	RECONSTRUCT 4-LANE DIVIDED
EAST	P446X-CAP	RICH BEEM	STRIPE FROM 4 TO 6-LANE DIVIDED WITHIN EXISTING ROW
EAST	P447X-CAP	ROJAS DR.	STRIPE FROM 4 TO 6-LANE DIVIDED WITHIN EXISTING ROW

City Area	Project ID	Project Name	Project Description
EAST	P440X-MOD	ROJAS DR.	WIDEN 4-LANE DIVIDED TO 6-LANE DIVIDED
EAST	P448X-CAP	SPUR 601 DIRECT CONNECT (NORTHBOUND TO WESTBOUND)	DIRECT CONNECT ON SPUR 601 AT LOOP 375 (NORTHBOUND TO WESTBOUND)
EAST	P402X-05A	SPUR 601 WIDENING	WIDEN TO 6-LANES EXPRESSWAY
EAST	P455X-CAP	TIERRA ESTE RD.	STRIPE FROM 4 TO 6-LANE DIVIDED WITHIN EXISTING ROW
EAST	P444X-CAP	US 62/180 (MONTANA AVE)	WIDEN 4 TO 6 LANE
EAST	P445X-CAP	US 62/180 (MONTANA AVE)	UPGRADE TO 6-LANE EXPRESSWAY W/ UNDERPASS @ LOOP 375
EAST	F404A-CAP	US 62/180 (MONTANA AVE) EXPRESSWAY	UPGRADE TO EXPRESSWAY AND WIDEN FROM 6 TO 8 LANES
EAST	F404B-CAP	US 62/180 (MONTANA AVE) EXPRESSWAY	UPGRADE TO EXPRESSWAY AND WIDEN FROM 4 TO 8 LANES AND BUILD 2 LANE FRONTAGE ROADS
EAST	F404C-CAP	US 62/180 (MONTANA AVE) EXPRESSWAY	UPGRADE TO EXPRESSWAY AND WIDEN FROM 4 TO 8 LANES AND BUILD 2 LANE FRONTAGE ROADS
EAST	P457X-CAP	US 62/180 (MONTANA AVE) FRONTAGE ROADS	BUILD 2 LANE FRONTAGE ROADS
EAST	P424A-25A	ARTERIAL E-1 or TIERRA DORADA DR.	BUILD 2-LANE DIVIDED
EAST	D001X-MOD	ARTERIAL E-2 (PEYTON RD)	BUILD 4-LANES UNDIVIDED
EAST	D002X-MOD	ASCENSION ST. EXTENSION	BUILD 4-LANES UNDIVIDED
EAST	P454X-CAP	BOB HOPE DR. EXTENSION	BUILD 6-LANE DIVIDED
EAST	P438X-MOD	EASTLAKE DR.	BUILD 4-LANE DIVIDED
EAST	F405X-CAP	GLOBAL REACH EXPRESSWAY	UPGRADE TO EXPRESSWAY AND BUILD 2 LANE FRONTAGE ROADS AND INTERCHANGES
EAST	P453X-CAP	HORIZON MESA BLVD	BUILD 6-LANE DIVIDED

City Area	Project ID	Project Name	Project Description	
EAST	I401X-CAP	I-10 EASTBOUND FRONTAGE ROAD AT O.T. SMITH	EASTBOUND 2-LANE FRONTAGE RD. AT O.T. SMITH INCLUDING ENTRY RAMP TO IH-10	
EAST	F401X-CAP	LOOP 375 (PURPLE HEART) FRONTAGE ROADS	BUILD 2-LANE FRONTAGE RDS	
EAST	A425X-CAP	MONTWOOD DR EXTENSION	BUILD 4-LANE DIVIDED	
EAST	P452X-CAP	PEBBLE HILLS EXTENSION	BUILD 6-LANE DIVIDED WITH BIKE LANES	
EAST	D011X-MOD	RENE DR. EXTENSION	BUILD 4-LANES DIVIDED	
MISSION VALLEY	A507X-15A	BELEN RD (SOCORRO)	BUILD 2 LANES UNDIVIDED	
MISSION VALLEY	A502X-15A	BETEL RD	BUILD 4-LANES UNDIVIDED	
MISSION VALLEY	A520X-MOD	BILLY THE KID	BUILD 4-LANE UNDIVIDED	
MISSION VALLEY	A513D-MOD	CAROLINA AVE RR OVERPASS WIDENING	WIDEN OVERPASS TO 4 LANES	
MISSION VALLEY	A513B-MOD	CAROLINA AVE WIDENING	WIDEN AND REALIGN FROM 2 LANE TO 4 LANE DIVIDED	
MISSION VALLEY	P520A-15A	FM 1110 - CLINT CONNECTION RD.	BUILD 2-LANES FROM BORDER HIGHWAY EXTENSION TO RIVERSIDE RD. AND UPGRADE/REHABILITATE THE EXISTISTING HERRING RD. FROM RIVERSIDE RD TO ALAMEDA AVE. (SH 20)	
MISSION VALLEY	P520B-15A	FM 1110 - CLINT CONNECTION RD.	BUILD 2-LANES FROM ALAMEDA AVE. (SH 20) TO NORTH LOOP DR. (FM 76) AND UPGRADE/REHABILITATE THE EXISTING CLINT CUTOFF RD. FROM NORTHLOOP DF (FM 76) TO IH-10	
MISSION VALLEY	A506X-05A	FM 1281 HORIZON BLVD/ BUFORD RD. WIDENING	WIDEN TO 4 LANES DIVIDED WITH STRIPED MEDIAN.	
MISSION VALLEY	A522C-MOD	FM 3380 - MANUEL F. AGUILERA HWY PHASE II	BUILD 2-LANES UNDIVIDED INCLUDING OVERPASS AT SH 20/UPRR	
MISSION VALLEY	P530X-MOD	FM 659 (ZARAGOZA RD.)	WIDEN TO 6-LANES DIVIDED	
MISSION VALLEY	P518X	FM 793 (FABENS ST)	UPGRADE 2-LANE STREET	

City Area	Project ID	Project Name	Project Description	
MISSION VALLEY	A521X-MOD	LEE TREVINO DR EXTENSION	BUILD 4- LANES DIVIDED	
MISSION VALLEY	P505E-MOD	LOOP 375 BORDER HIGHWAY EAST	BUILD 2-LANE DIVIDED	
MISSION VALLEY	P505D-MOD	LOOP 375 BORDER HIGHWAY EAST	BUILD 2-LANES DIVIDED	
MISSION VALLEY	P509X-05A	OLD HUECO TANKS RD (SOCORRO)	BUILD 4 LANES DIVIDED TO EXTEND EASTLAKE BLVD TO FM 76	
MISSION VALLEY	A523X-MOD	STATE SPUR 1966 (FORMER SCHUSTER EXTENSION AND REALIGNMENT)	CONSTRUCTION 4-LANE DIVIDED ARTERIAL WITH ROUNDABOUT CONNECTION TO SCHUSTER AVE.	
MISSION VALLEY	P512X-15A	TIWA BLVD (SOCORRO)	BUILD 2-LANES	
MISSION VALLEY	P517A-15A	TIWA BLVD (SOCORRO)	BUILD 2-LANES	
MISSION VALLEY	P517B-15A	TIWA BLVD (SOCORRO)	BUILD 4-LANE. THIS PROJECT WOULD BE A CONTINUATION OF THE TIWA BOULEVARD FROM ALAMEDA AVE. (SH 20) TO CREATE AN ADDITIONAL CONNECTION TO GATEWAY BLVD. EAST (IH-10).	
MISSION VALLEY	A524X-CAP	ZARAGOZA POE, PAN AMERICAN DR. & WINN RD. BUILD/IMPROVEMENTS PHASE 1	BUILD/RECONSTRUCT 2 LANE DIVIDED ROAD FOR INTERNATIONAL TRUCK TRAFFIC CROSSING AT THE ZARAGOZA PORT OF ENTRY TO LOOP 375 TO INCLUDE SIGNAGE AND LIGHTING	
MISSION VALLEY	A524B-CAP	ZARAGOZA POE, PAN AMERICAN DR. & WINN RD. BUILD/IMPROVEMENTS PHASE 2	WIDEN FROM 2 TO 4 LANE DIVIDED FOR INTERNATIONAL TRUCK TRAFFIC CROSSING AT THE ZARAGOZA PORT OF ENTRY TO LOOP 375 TO INCLUDE LANDSCAPING, MEDIAN, SIDEWALK AND PARKWAY IMPROVEMENTS (4 LANE RD AT COMPLETION OF BOTH PHASES)	
NE	P206B-15A	FM 3255 (MARTIN LUTHER KING)	WIDEN TO 4 LANES DIVIDED	
NE	P217X-CAP	MCCOMBS RESTRIPE	RESTRIPE FROM 4 TO 6 LANES DIVIDED	
NE	P201A-MOD	NORTHEAST PARKWAY PHASE 1 TOLL LANES	BUILD 2-LANES WITH PASSING LANES AND OVERPASSES (SUPER 2) - TOLL LANES	
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City Area	Project ID	Project Name	Project Description	
NE	A218X-MOD	PAINTED DUNES	BUILD 4-LANES UNDIVIDED	
NE	P213X-MOD	SEAN HAGGERTY DR.	BUILD 4-LANES UNDIVIDED	
NM	P613X-CAP	MCNUTT RD (NM 273) CENTER LANE ADDITION	ADDITION OF CENTER TURN LANE ON MCNUTT RD (NM 273) AND WIDEN FROM 2 LANES TO 4 WHERE IT'S NOT 4 LANES NOW.	
NM	A603X-CAP	NM 9 EXTENSION FROM NM 136 TO NM 273	EXTEND NM 9 FROM NM 136 TO NM 273	
NM	P610X-MOD	SUNLAND PARK DR. EXTENSION	CONSTRUCT 4-LANE DIVIDED PRINCIPAL ARTERIAL WITH GRADE SEPARATED OVERPASS AT RAILROAD TRACKS	
NM	M619X	SUNLAND PARK POE FACILITY	CONSTRUCT SUNLAND PARK POE FACILITY	
NM	A601X-MOD	AIRPORT ROAD	WIDEN TO 4-LANE DIVIDED PRINCIPAL ARTERIAL	
REGIONAL	C029X	BRIDGE OF THE AMERICAS (BOTA) FAST SECURE LANE	IMPROVE SHOULDERS AND ADD 1 SOUTHBOUND DEDICATED LANE FOR FAST SECURE LANE (FSL) COMMUTERS	
REGIONAL	I011X-05A	I-10 (COLLECTOR DISTRIBUTOR LANES (CD LANES))	2-LANE EXPRESSWAY IN EACH DIRECTION FROM 1.7 MILES NORTH OF EXECUTIVE CENTER BLVD. TO MESA ST. AND CONSTRUCT DIRECT CONNECTORS @ US 85/NM 273, AND INTERCHANGE IMPROVEMENTS AT MESA ST. AND EXECUTIVE CENTER BLVD.	
REGIONAL	I403X-CAP	I-10 FRONTAGE ROADS WIDENING	ON I-10 WIDEN EASTBOUND AND WESTBOUND FRONTAGE ROADS FROM 2 TO 3 LANES	
REGIONAL	I055B-MOD	I-10 WIDENING	ADD 1 LANE EACH DIRECTION - OPERATIONAL IMPROVEMENTS (STRIPING AND SHOULDERS)	
REGIONAL	I055A-MOD	I-10 WIDENING	ADD 1 LANE EACH DIRECTION BETWEEN MCRAE TO FM 659 (ZARAGOZA RD.) - OPERATIONAL IMPROVEMENTS (STRIPING AND SHOULDERS). SCOPE INCLUDES TRANSITION WORK ONLY BETWEEN MCRAE AND VISCOUNT OT MATCH LANES AND NO CAPACITY IS ADDED.	

City Area	Project ID	Project Name	Project Description	
REGIONAL	I402X-CAP	I-10 WIDENING	UPGRADE TO 8 LANE SECTION	
REGIONAL	1053X-MOD	I-10 WIDENING	ADD 1 LANE EACH DIRECTION (STRIPING AND SHOULDERS)	
REGIONAL	I059X-CAP	I-10 WIDENING	ADD 1 LANE EACH DIRECTION (STRIPING AND SHOULDERS)	
REGIONAL	1047X-MOD	I-10 WIDENING TOLL LANES	WIDEN TO 8-LANES (ADDITIONAL LANES - TOLL LANES)	
REGIONAL	I010X-15A	I-10 WIDENING TOLL LANES	WIDEN TO 6-LANES DIVIDED (ADDITIONAL LANES - TOLL LANES) & WIDEN FROM 2 TO 3 LANE FRONTAGE ROADS	
REGIONAL	I009X-15A	I-10 WIDENING TOLL LANES	WIDEN TO 6-LANES DIVIDED (ADDITIONAL LANES - TOLL LANES) & WIDEN FROM 2 TO 3 LANE FRONTAGE ROADS	
REGIONAL	F040X-MOD	LOOP 375 (AMERICAS AVE.) TOLL LANES	WIDEN TO 6 LANES DIVIDED (ADDITIONAL LANES - TOLLED)	
REGIONAL	F040X-PE	LOOP 375 (AMERICAS AVE.) TOLL LANES PE PHASE	WIDEN TO 6 LANES DIVIDED (ADDITIONAL LANES - TOLLED) PE DESIGN	
REGIONAL	F032X-MOD	LOOP 375 (JOE BATTLE BLVD.)	WIDEN TO 6 LANES	
REGIONAL	F052X	LOOP 375 (PURPLE HEART) OPERATIONAL IMPROVEMENTS	AUXILIARY LANES	
REGIONAL	F047X-CAP	LOOP 375 BORDER HIGHWAY WEST - TOLL LANES	CONSTRUCT 4-LANE EXPRESSWAY - TOLL LANES (BETWEEN RACETRACK AND SANTA FE ST.) BUILD NEW INTERCHANGE AT COLES ST./PAISANO/LOOP 375	
REGIONAL	F402X-CAP	LOOP 375 FRONTAGE ROADS	WIDEN LOOP 375 FRONTAGE ROADS FROM 2 TO 3 LANES	
REGIONAL	F053A-CAP	LOOP 375 PURPLE HEART	WIDENING 4 TO 6 LANES	
REGIONAL	F053B-CAP	LOOP 375 PURPLE HEART	WIDENING 4 TO 6 LANES	
REGIONAL	C022X	NEW PORT OF ENTRY (POE)	BUILD NEW POE	
REGIONAL	P201B-CAP	NORTHEAST PARKWAY PHASE 2 (4 TOLL LANES)	WIDEN TO 4 LANES (TOLL LANES)	

City Area	Project ID	Project Name	Project Description	
REGIONAL	F039X-MOD	US 54 (PATRIOT FREEWAY)	WIDEN TO 6-LANES	
REGIONAL	F001B-15A	US 54 (PATRIOT FREEWAY)	CONSTRUCTION OF 4 MAINLANES & GRADE SEPARATIONS	
REGIONAL	F002B-15A	US 54 (PATRIOT FREEWAY)	WIDEN TO 6-LANES	
REGIONAL	C023X	ZARAGOZA RD POE WIDENING	WIDENING ZARAGOZA RD POE MAIN LANES (6 ADDITIONAL LANES - 2 REGULAR LANES IN EACH DIRECTION AND A FAST LANE IN EACH DIRECTION)	
REGIONAL	P001X-CAP	ARTERIAL 1	BUILD 6-LANE DIVIDED WITH BRIDGE	
REGIONAL	P002X-CAP	ARTERIAL 1/TIERRA ESTE	BUILD 6-LANE DIVIDED	
REGIONAL	P003X-CAP	GREG DR./EDGEMERE EXTENSION	BUILD 6-LANE DIVIDED WITH BIKE LANES	
REGIONAL	P004X-CAP	JOHN HAYES/BERRYVILLE EXTENSION	BUILD 6-LANE DIVIDED WITH BIKE LANES	
REGIONAL	P010X-CAP	PEBBLE HILLS BLVD. EXTENSION	BUILD 6-LANE DIVIDED WITH BIKE LANES	
REGIONAL	P009X-CAP	PELLICANO DR. EXTENSION	BUILD 6-LANE DIVIDED WITH BIKE LANES	
REGIONAL	P005X-CAP	RICH BEEM EXTENSION	BUILD 6-LANE DIVIDED WITH BIKE LANES	
REGIONAL	P006X-CAP	ROJAS DR. EXTENSION	BUILD 6-LANE DIVIDED WITH BIKE LANES	
REGIONAL	P007X-CAP	VISTA DEL SOL DR. EXTENSION	WIDEN FROM 2 TO 6-LANE DIVIDED	
REGIONAL	P008X-CAP	VISTA DEL SOL DR. EXTENSION	BUILD 6-LANE DIVIDED WITH BRIDGE	
WEST	P131A-MOD	COUNTRY CLUB RD.	RECONSTRUCTION AND WIDENING OF COUNTRY CLUB ROAD TO A 3 LANE ROADWAY WITH A CONTINUOUS LEFT TURN LANE, BIKE LANES/PATH, SIDEWALKS, AND BUS STOPS FROM DONIPHAN TO RIVER RUN. ROADWAY IMPROVEMENTS CONSIST OF A NEW 3 LANE ROADWAY WITH VARYING SECTIONS.	

City Area	Project ID	Project Name	Project Description	
WEST	A123X	ISELA RUBALCABA DRIVE	BUILD 4-LANE DIVIDED	
WEST	A124X-MOD	REDD RD. EXTENSION	BUILD 2-LANE DIVIDED	
WEST	A104X-25A	ARTERIAL W-19	BUILD 6-LANES DIVIDED WITH BIKE LANES	
WEST	A114X-05A	DESERT PASS	BUILD 4-LANE DIVIDED	
WEST	A125X-CAP	DESERT PASS	RESTRIPING 2 TO 4-LANE UNDIVIDED	
WEST	A107B-15A	HELEN OF TROY DR	BUILD 4-LANES UNDIVIDED	
WEST	A126X-CAP	MESA PARK DR	BUILD 4-LANE DIVIDED	
WEST	P106D-25A	PASEO DEL NORTE DR	BUILD 4-LANES DIVIDED	
WEST	P103E-MOD	PASEO DEL NORTE DR (SH 178)	CONSTRUCT 4-LANE DIVIDED ROADWAY	
WEST	A105X-15A	RANCHO NORTE DR (HOOVER EXT.)	BUILD 4-LANES UNDIVIDED	
WEST	P112X-25A	RESLER DR	BUILD 4-LANES DIVIDED	
WEST	A110X-15A	UPPER VALLEY RD	WIDEN TO 2-LANES DIVIDED	

# Non-CMP Strategies

Several projects listed in the MTP are not considered CMP projects. These are listed below in Table 5-5.

**Table 5-5. Non-CMP Strategies** 

City Area	Project ID	Project Name	Project Description
CENTRAL	T3C	CAPITAL MAINTENANCE	CAPITAL MAINTENANCE
CENTRAL	T3D	CURB CUTS / ADA IMPROVEMENTS	CURB CUTS / ADA IMPROVEMENTS
CENTRAL	ТЗВ	OTHER CAPITAL PROGRAM ITEMS	COMPUTERS HARDWARE & SOFTWARE

City Area	Project ID	Project Name	Project Description	
CENTRAL	T3A	PLANNING	SHORT RANGE PLANNING	
CENTRAL	T3E	SECURITY EQUIPMENT	SECURITY EQUIPMENT	
CENTRAL	P310X- 05A	AIRPORT RD	RECONSTRUCT ROADWAY	
MISSION VALLEY	A506X- ROW	FM 1281 HORIZON BLVD/ BUFORD RD. ROW	ROW FOR WIDEN TO 4 LANES DIVIDED WITH STRIPED MEDIAN.	
MISSION VALLEY	P515- ROW	FM 659 ZARAGOZA RD OVERPASS-ROW	ROW ACQUISITION	
MISSION VALLEY	P506X- ROW	HAWKINS BLVD. ROW	ROW ACQUISITION	
NM	T609X	BUS PURCHASE FOR SERVICE SUNLAND PARK NM	BUS PURCHASE FOR SUN METRO SO BUS SERVICE CAN BE PROVIDED BY SUN METRO TO SUNLAND PARK NM	
NM	M631X	DRAINAGE IMPROVEMENTS IN ANTHONY, NM	DRAINAGE AND ADA IMPROVEMENTS ALONG NM 460	
NM	M626X	PAVEMENT PRESERVATION ON SUNLAND PARK DR.	PAVEMENT PRESERVATION	
REGIONAL	T072X	BUS PURCHASE WITH STATE OF GOOD REPAIR GRANT (SGR GRANT)	REPLACEMENT OF 1991 MILLENNIUM BUSES	
REGIONAL	T061X	PARATRANSIT VAN REPLACEMENT	PARATRANSIT VAN REPLACEMENT	
REGIONAL	T083X	PARATRANSIT VEHICLE REPLACEMENT	PARATRANSIT VEHICLE REPLACEMENT	
REGIONAL	T064X	ALAMEDA RTS OPERATION	START-UP RTS OPERATING ASSISTANCE	
REGIONAL	T065X	DYER RTS OPERATION	START-UP RTS OPERATING ASSISTANCE	
REGIONAL	T056X	FORTY FOOT BUS PURCHASE 2 (DTC TO FIVE POINTS TO MISSION VALLEY)	FORTY FOOT BUS PURCHASE 2 (DTC TO FIVE POINTS TO MISSION VALLEY)	
REGIONAL	T059X	FORTY FOOT BUS PURCHASE 5 (DTC TO ALAMEDA & ZARAGOZA)	FORTY FOOT BUS PURCHASE 5 (DTC TO ALAMEDA & ZARAGOSA)	

City Area	Project ID	Project Name	Project Description	
REGIONAL	T066X	MESA RTS OPERATION	START-UP RTS OPERATING ASSISTANCE	
REGIONAL	T068X	MONTANA RTS OPERATION	START-UP OPERATING ASSISTANCE	
REGIONAL	T073X	BUS REPLACEMENT	BUS REPLACEMENT	
REGIONAL	T005	EP COUNTY RURAL TRANSIT	BUS PURCHASE AND OPERATIONS 2010-2035	
REGIONAL	T010	JOB ACCESS AND REVERSE COMMUTE (JARC)	WELFARE TO WORK, ACCESS TO JOBS	
REGIONAL	T022X	NEW FREEDOM	PROVIDE PUBLIC TRANSPORTATION SERVICES BEYOND THOSE REQUIRED BY ADA	
REGIONAL	T079X	PARATRANSIT VANS	PARATRANSIT VANS	
REGIONAL	T004	SUN METRO OPERATIONS	OPERATION AND ADMINISTRATION	
REGIONAL	T007	TRANSIT ENHANCEMENTS	ENHANCEMENTS FOR BUSES/ TRANSIT FACILITIES	
REGIONAL	C020X	FEASIBILITY STUDY FOR SOCORRO POE	CONDUCT A FEASIBILITY STUDY FOR SOCORRO PORT OF ENTRY	
REGIONAL	E004	I-10 AESTHETICS	AESTHETIC IMPROVEMENTS ALONG I-10	
REGIONAL	E003C	I-10 AT AIRWAY AESTHETICS	AESTHETICS AT AIRWAY INTERSECTION TO INCLUDE FENCING, LANDSCAPING AND TREATMENTS ON STRUCTURES	
REGIONAL	M064X	I-10 AT US 54 MAINTENANCE AND AESTHETICS	MAINTENANCE AND AESTHETICS	
REGIONAL	C028X	LIGHT RAIL STUDY AT PDN POE	STUDY FOR TOLL FIXED RAIL SYSTEM THAT TRANSPORTS PRE-CLEARED INTERNATIONAL COMMUTERS IN A SECURE CAPSULE IN BETWEEN DOWNTOWN EL PASO AND DOWNTOWN CIUDAD JUAREZ.	
REGIONAL	M074X	RAILROAD CROSSING IMPROVEMENTS	QUIET ZONES (MEDICAL CENTER AND FIVE POINTS INCLUDES CONSTRUCTION OR RECONSTRUCTION OF RAILROAD CROSSINGS TO INCLUDE GATES, APPROACHES, SIGNALS, PEDESTRIAN CROSSINGS. ENHANCE THE SAFETY ELEMENT.	

City Area	Project ID	Project Name	Project Description	
REGIONAL	M067X	RESURFACE EXISTING ROADS, PARKING LOTS AND RV CAMPSITE PULL OUTS	RESURFACE EXISTING ROADS, PARKING LOTS AND RV CAMPSITE PULL OUTS	
REGIONAL	M075X	TEENS IN THE DRIVER SEAT PROGRAM	PEER TO PEER PUBLIC OUTREACH PROGRAM FOR TEENS THAT FOCUSES ON TRAFFIC SAFETY AND MAJOR RISKS FOR THIS AGE GROUP. GEARED TOWARD HIGH SCHOOL AND JUNIOR HIGH/MIDDLE SCHOOL STUDENTS.	
REGIONAL	M076X	TORNILLO ISD BUS PURCHASE (2- PROPANE BUSES)	2-PROPANE SCHOOL BUSES FOR TORNILLO ISD	
REGIONAL	T064X	ALAMEDA RTS OPERATION	START-UP RTS OPERATING ASSISTANCE	
REGIONAL	T065X	DYER RTS OPERATION	START-UP RTS OPERATING ASSISTANCE	
REGIONAL	T056X	FORTY FOOT BUS PURCHASE 2 (DTC TO FIVE POINTS TO MISSION VALLEY)	FORTY FOOT BUS PURCHASE 2 (DTC TO FIVE POINTS TO MISSION VALLEY)	
REGIONAL	T059X	FORTY FOOT BUS PURCHASE 5 (DTC TO ALAMEDA & ZARAGOZA)	FORTY FOOT BUS PURCHASE 5 (DTC TO ALAMEDA & ZARAGOSA)	
REGIONAL	T066X	MESA RTS OPERATION	START-UP RTS OPERATING ASSISTANCE	
REGIONAL	T068X	MONTANA RTS OPERATION	START-UP OPERATING ASSISTANCE	
REGIONAL	M065X	ARTERIAL LIGHTING	ARTERIAL LIGHTING TO INCLUDE DESIGN AND CONSTRUCTION. CONTINUOUS LIGHTING WILL ENHANCE SAFETY.	
REGIONAL	E002X	ENHANCEMENTS	ENHANCEMENT PROJECTS SUBMITTED ON COMPETITIVE BASIS	
REGIONAL	M021X	INSTALL PROTECTIVE RR CROSSING DEVICES	INSTALL 10 RAILROAD X-ING DEVICES PER YEAR	

City Area	Project ID	Project Name	Project Description	
REGIONAL	M073X	MEDIAN LANDSCAPING	DESIGN, REMOVAL AND REPLACEMENT OF EXISTING ROADWAY STRUCTURES, CONSTRUCTION OF ADA ACCESSIBLE FACILITIES, ILLUMINATION, RELOCATION AND UPDATING OF UTILITIES, SIDEWALKS, PARKWAY TREATMENTS.	
REGIONAL	M038X	ON STATE ROADWAY FEASIBILITY STUDIES	CONDUCT FEASIBILITY STUDIES FOR ON STATE SYSTEM ROADS	
REGIONAL	R021X	PREVENTIVE MAINTENANCE TXDOT	MAINTENANCE PROJECTS	
REGIONAL	R023X	REHABILITATION CITY OF EL PASO	REHABILITATION PROJECTS	
REGIONAL	M020X	REPLACE RR PLANKING	REPLACE RR X-INGS WITH RUBBER/CONCRETE PLANKING	
REGIONAL	R016X	ROUTINE MAINTENANCE TXDOT	POTHOLE REPAIR, CRACK-SEALING, MOWING, ROADSIDE MAINT.	
REGIONAL	M066X	SAFETY LIGHTING	INTERSECTION/CURB LIGHTING TO INCLUDE DESIGN AND CONSTRUCTION	
REGIONAL	M028B	SAFETY PROJECTS	SAFETY LIGHTING, SIGNALS, INTERSECTIONS, ETC.	
REGIONAL	M030B	SIGN REPLACEMENT PROGRAM	REPLACE REGULATORY AND STREET NAME SIGNS	
REGIONAL	R022X	STREET RESURFACING - CITY OF EL PASO	REHABILITATION PROJECTS	
REGIONAL	R017X	STREET RESURFACING AND MAINTENANCE - EL PASO COUNTY	STREET RESURFACING AND MAINTENANCE - EL PASO COUNTY	
WEST	T107	SUN METRO MAINTENANCE FACILITY	CONSTRUCTION OF FUEL AND MAINTENANCE FACILITY (TO BE BUILT IN WEST EL PASO) TO COINCIDE LOGISTICALLY DUE TO NEW MONTANA FACILITY	

The total number of projects is listed below by project responsibility and type. The region currently has 263 projects in its regional plan, 47 percent identified as road capacity projects.

**Table 5-6. Number of CMP Projects** 

	Number of Projects				
CMP Strategy Category	TX Hwy	TX Transit	New Mexico	Developer	Total
DEMAND MANAGEMENT	16	10	1	0	27
TRAFFIC OPERATIONS	49	4	1	0	54
PUBLIC TRANSPORTATION	0	6	0	0	6
ROAD CAPACITY	84	0	4	36	124
NOT A CMP STRATEGY - N/A	33	16	3	0	52
Total	182	36	9	36	263

The amount of funding required for the 211 projects in this CMP is provided in Table 5-6. The El Paso region requires approximately \$9.75 billion to fully accomplish its congestion management goals and objectives.

Table 5-7. El Paso Region Estimated Transportation Funding Needed (in dollars)

CMP Strategy Category	TX Hwy	TX Transit	NM Hwy/Transit	Developer	Total
DEMAND MANAGEMENT	128,119,245	63,267,552	5,948,503	-	197,335,300
TRAFFIC OPERATIONS	1,013,917,934	140,984,334	16,423,206	-	1,171,325,474
PUBLIC TRANSPORTATION	1	262,023,865	-	-	262,023,865
ROAD CAPACITY	2,799,028,347	1	42,801,207	450,233,244	3,292,062,799
NOT A CMP STRATEGY - N/A	1,568,560,218	3,250,811,617	4,325,000	-	4,823,696,835
Total	5,509,625,745	3,717,087,368	69,497,916	450,233,244	9,746,444,273

## Performance Measures

To further enhance strategy and project evaluation, new performance measures were developed by the subcommittee and MPO staff for each objective of the CMP. Great effort was made to lay the groundwork for performance measures that are specific, measurable, agreed upon by local agencies, realistic, and time-specific. The performance measures have also been developed based on the need for operational characteristics that are easily understood by the public and that provide consistency with existing MPO goals and objectives and national practice.

They are listed below with their objective.

- 1. Provide a transportation system that serves the public with mobility choices including pedestrians and bicycles
  - a. Increase and improve bicycling options and facilities in the region

PM: Length of bike lanes per corridor mile (system)
Number of buses with bike racks
Number of transit facilities with bike parking facilities

Increase and improve pedestrian facilities in the region
 PM: Length of sidewalks per corridor mile (system)

c. Increase and improve transit system and facilities

PM: System/Route Accessibility and expansion Construction of multimodal facilities

d. Improve the reliability and efficiency of buses

PM: Schedule adherence

e. Continue Intelligent Transportation System (ITS) improvements in the region

PM: Number of miles of highway and major arterial CMP network with traffic detectors, CCTV, and DMS coverage

- 2. Identify and mitigate congestion on the transportation system
  - a. Identify, diagnose, and address highway bottlenecks and travel delays **PM:** V/C ratios and delays per link of Highway on CMP Network
  - Reduce travel delays on major arterial roads for all alternative modes
     PM: V/C ratios and delays per link of major arterial roads on CMP
     Network
  - c. Reduce travel delays at traffic signals

PM: Intersection Level of Service at Peak-hour

d. Increase and improve the regional incident management program

PM: Number of incidents on state highways, incident response time, incident resolution time

e. Enhance border crossing road operations to improve facilitation of truck traffic

PM: Average truck border crossing time

f. Increase efforts to reduce crash rates and improve safety on the system

PM: Number of accidents (e.g., fatalities or injuries) on state highways on the CMP Network (on street network if data available from Police Departments)

g. Enhance partnerships between regional transportation system providers

PM: Regional incident management program participation

3. Minimize air quality impacts of congestion

a. Create and enhance shared ride programs in the region (e.g., carpools, vanpools)

PM: Number of vehicles in vanpool/carpool programs Number of riders on vanpool/carpool program

b. Promote transit options to citizens in the region

PM: System/Route Accessibility-marketing programs developed and implemented

c. Promote travel demand management programs in the region

PM: Number of large employers in the region with official alternative work schedules (e.g., City of El Paso, UTEP)

- 4. Promote accessibility to an efficient transportation system for all citizens
  - a. Improve connectivity between all modes in the system

PM: Number of park and ride lots Number of transfer centers

b. Improve border crossing activities for all users of the system (pedestrian, automobile, trucks)

PM: Border wait times
Number of pedestrians crossing the border

A critical step to integrate the CMP with the MTP, TIP and local Capital Improvement Programs is setting targets for each of the congestion performance measures with the qualities previously described. Specific, realistic metrics for performance measures are very important for implementation and monitoring of the CMP. Performance measure targets do not in themselves establish priorities to guide investment in the regional transportation system. The EPMPO MTP and TIP development process will accomplish priority setting in terms of how congestion relief fits with safety, system preservation, and other modal improvement needs in the El Paso area. The CMP performance measure targets guide choices within the congestion management area.

The lack of comprehensive, system-wide data for many of the measures precluded setting for the targets. EPMPO staff will work with the TPB to develop and implement a more robust data collection program for the MPO in order to refine and recommend targets to the performance measures and refine them as additional data becomes available.

MAP-21 requires development of federal requirements for specific planning performance measure targets which are supposed to reflect local conditions and goals. Regardless, targets can be adjusted over time, usually linked to updates of the MTP and CMP. In general, performance targets should relate directly to the priority assigned to congestion mitigation by mode and strategy.

Citizens and stakeholders will expect to see progress on the performance measure targets, so the MPO must commit to investing in the strategies and projects linked to achieving improved transportation system performance. Appendix B provides the recommended initial performance measures for the El Paso CMP along with goals and objectives, and identified data sources for each measure.

# **Section 6 - Data Collection and Data Management Plan**

Data collection and analysis at the MPO level is crucial to successful conduct of the CMP. Since 2007, the EPMPO has attempted to conduct a data collection plan to provide performance indicators and help determine current congestion levels in the El Paso MPO Study Area. This data collection effort is intended to help identify changes over time and assist in the monitoring and evaluation process. The plan includes data gathering (only on congested segments), collecting traffic counts and speed data, as well as support for the regional travel demand model. The data collection monitoring reported by the MPO covers a time frame of 24 hours for traffic counts and travel time data at peak hours (7:00 AM to 9:00 AM; 11:00 AM to 1:00 PM; 4:00 PM to 6:00 PM). The EPMPO intended to collect data every two and a half years.

The most common types of data used by EPMPO are:

- Average Daily Traffic (ADT),
- Number of Lanes,
- AM and PM Peak Hour Volumes by Direction,
- Vehicle Classification Counts, and
- Travel Time statistics.

### Regional Data Sources

## <u>Texas Department of Transportation (TxDOT)</u>

TxDOT offers ITS data on state highways through TRANSVISTA, the regional traffic management center. The technology available through the facility includes: highway surveillance cameras, dynamic message signs, lane control signals, fiber backbone, SONET nodes, highway advisory radio, flood warning systems, and microwave vehicle detectors. Subsystem components to manage the dynamic message signs include: fiber optic network to various transportation and emergency operation facilities, including City of El Paso Traffic Management Center, City Street Center, Regional Emergency Operations Center, 911 Communications Center, local fire department headquarters, TxDOT West Area Maintenance Section, and the TxDOT East Area Maintenance Section. TRANSVISTA capabilities include:

- Detecting and verifying an incident
- Notifying 9-1-1 dispatch
- Providing information to the media
- Dispatching courtesy patrol (for minor incidents or to support police and fire services)
- Implementing dynamic message sign (DMS) sequencing plans
- Notifying City of El Paso traffic engineering that an element of the IMP is in effect

- Retiming TxDOT-operated traffic signals in response to incident-related traffic; and
- Broadcasting highway radio messages

TxDOT data are been collected by TRANSVISTA using logged information about incidents, road closures, maintenance reports, and related weather information. TxDOT has TRANSVISTA as a continuous data collection center. However, at this time, no data is reported.

#### El Paso Department of Transportation (EPDoT)

The City of El Paso Department of Transportation (EPDoT) was established on September 1, 2010. This relatively new department consists of the organization formerly known as the Street Department and Traffic Engineering. They were previously a division of the City Engineering Department.

EPDoT collects data using count stations at more than 28 intersections and 6 dynamic message signs (DMS). The department reports this information through its website.

Figure 6-1 and 6-2 show the available count locations in El Paso.

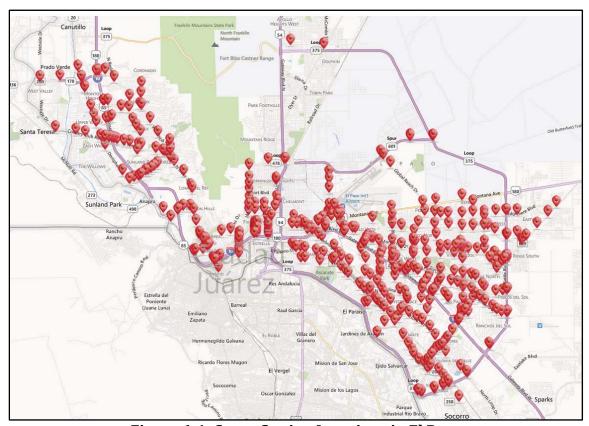


Figure 6-1. Count Station Locations in El Paso

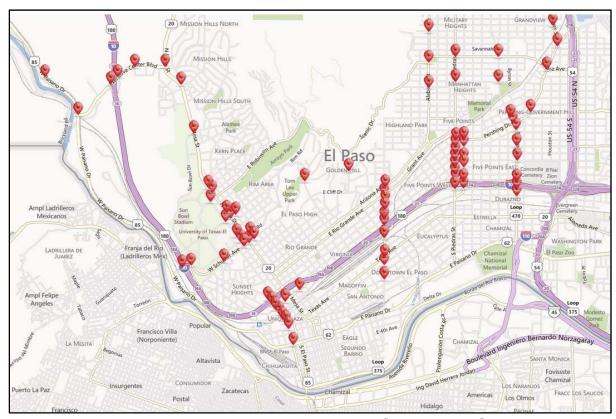


Figure 6-2. Count Station Locations in El Paso Central Area

EPDoT has a Traffic Engineering Division. The division provides for traffic engineering design, operation and maintenance of the City Traffic Management Center, and transportation planning.

Sun Metro Transit reports useful parameters that could be used for calculation of performance measures. According to a report elaborated in June 2012<sup>2</sup>, Sun metro tracks information regarding the:

- Total Ridership by Year and in a monthly and even daily basis.
- Passengers per hour (for all routes)
- Farebox Recovery Ratio (all routes in a monthly basis)
- Passengers per Capita
- Cost per Trip
- Collisions per 100,000 Miles
- Worker's Comp Claims per 100 Employees
- On-Time vehicles and Missed Service
- Customer Complaints per 100,000 Passengers

<sup>&</sup>lt;sup>2</sup> Performance Indicators YTD for Period Ending June 30, 2012 <a href="http://www.sunmetro.net/agenda/08-14-12/Item%206.pdf">http://www.sunmetro.net/agenda/08-14-12/Item%206.pdf</a>

Other potential sources of data include El Paso County Transit and the New Mexico DOT.

#### Data Collection Plan

The El Paso MPO plans to overcome the limitations of its data collection and analysis process and implement a robust system of collection based on regional cooperation with state and local agencies. It also intends to generate its own traffic and transportation system data for CMP implementation purposes.

The MPO has initiated LOS analysis of at selected congested intersections within the City of El Paso. Six intersections were chosen to utilize City of El Paso video detection count data with the Dynamic Traffic Assignment (DTA) model. The MPO intends to build upon this initial work.

The improved data collection program will require additional resources for data tabulation and analysis and expansion of the data included in this report. It will be necessary for the MPO and its partner agencies to increase their efforts in data collection as required by each performance measure. The MPO recognizes the importance of this data and will seek the required funds and resources to perform improved transportation system analysis and monitoring.

# **Section 7 - CMP Monitoring and Documentation**

### CMP Monitoring Process

Once adopted, it becomes the responsibility of the MPO, in cooperation with member agencies, to implement the CMP. As a result, it is imperative that there be a regular update cycle. An annual CMP report should be issued which documents not only performance, but also the projects that have been completed that were identified in the CMP, and the congestion mitigation strategies that have been put in place, have been maintained, or have been rescinded because they were determined to be ineffective. This annual update should also identify the following year's list of projects and strategies. Each performance measure is reported as it is updated, which may range from quarterly to annually.

The TIP is another important MPO action that is linked to the CMP. As El Paso MPO updates its TIP, there is an opportunity to match projects identified in the CMP with programming opportunities in the TIP. The TIP provides the vehicle for implementing transit and roadway improvements (including ITS deployments) identified in the CMP.

The El Paso MPO should adopt a procedure in which an annual CMP update is completed prior to and coordinated with the annual TIP update. While the MPO will generate a CMP report each year and coordinate its implementation with TIP development, it is most appropriate to link a full update of the CMP with the update of the MTP. The CMP must incorporate the goals and objectives of the MTP. The MTP includes land use, economic, and travel baseline data and forecasts, which are updated with each cycle. Each MTP update also provides an opportunity for decision makers to consider modifications to the goals and objectives for the regional transportation system. As a result, it is appropriate to revisit the CMP so that it will continue to reflect what the MPO expects to accomplish in terms of congestion mitigation. The MPO should program funds to update the CMP in the year following the MTP update.

The effort to monitor, maintain, and improve the CMP should require, at a minimum:

- Congestion management goals objectives will be reviewed and revised as necessary in coordination with updates to the MTP.
- The CMP network will be updated every four years, in advance of each update to the MTP. Changes to the CMP network will be approved by the CMP Subcommittee and the TPB.
- Travel time data will be collected and analyzed every four years by El Paso MPO, in advance of each update to the MTP.
- CMP network performance will be updated and analyzed on a cycle consistent with the availability of current, supporting data.
- A Performance Measurement Report will be updated and published annually by El Paso MPO, based on available data.
- The regional travel demand forecasting model network will be updated every four years, in advance of each update to the MTP.

- Observed traffic volumes will be incorporated into the CMP database as they are made available to El Paso MPO.
- In collaboration with the TPB and CMP Subcommittee, the CMP strategy list will be reviewed and updated by MPO staff at least every four years.
- Policies and procedures governing the CMP will be reviewed and revised as necessary to address changes to regional transportation goals and/or federal rules and requirements.

The list above is a minimum, but it is recommended that the CMP Subcommittee and MPO staff meet quarterly for the first year after adoption to initiate and sustain the CMP monitoring process. Year two may only require semi-annual meetings with future years requiring only annual updates.