Regional Mobility Strategy (RMS) 2027-2030 Transportation Improvement Program (TIP)

El Paso Metropolitan Planning Organization

211 N. Florence, Room 202
El Paso, Texas 79901
Phone: (915) 212-0258   Fax: (915) 212-0257
www.elpasompo.org

Public Comment/Involvement Period
April 18 – May 17, 2026

Public Meetings:
April 22, April 29, May 2, May 6, May 13, 2026

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Participating Agencies

City of Anthony, NM
City of El Paso, TX
City of San Elizario, TX
City of Socorro, TX
City of Sunland Park, NM
County of El Paso, TX
Doña Ana County, NM
El Paso Area Transit Service
Otero County, NM
Town of Anthony, TX
Town of Clint, TX
Town of Horizon City, TX
Village of Vinton, TX
New Mexico Department of Transportation, District 1
New Mexico Department of Transportation, District 2
Texas Department of Transportation, El Paso District 24
Sun Metro, Mass Transit provider
South Central Regional Transit District

Prepared by:

El Paso Metropolitan Planning Organization

Approved by:

Transportation Policy Board (TPB), May 22, 2026

Submitted to:

FHWA and FTA

Prepared in cooperation with the Texas Department of Transportation, the New Mexico Department of Transportation, the U.S. Department of Transportation, the Federal Highway Administration and the Federal Transit Administration.

1. Metropolitan Planning Organization

Federal regulations require the creation and management of a Metropolitan Planning Organization (MPO) for every urban area having a population of more than 50,000. Since 1988, the El Paso Metropolitan Planning Organization (EPMPO) is the organization designated by the Governor of Texas as being responsible, together with the State, for carrying out the provisions of federal regulations regarding Metropolitan Transportation Planning and Programming.

The Transportation Policy Board (TPB) is responsible for transportation planning and programming for EPMPO. The TPB directs MPO staff through the Executive Director of the MPO. The MPO's planning area encompasses El Paso County, Texas, along with portions of southern Doña Ana and Otero Counties in New Mexico. The MPO coordinates urban area-wide multi-modal transportation plans, which involve the study of present transportation regional patterns in relation to current and projected development.

EPMPO is responsible for the preparation of the Metropolitan Transportation Plan (MTP), Transportation Improvement Program (TIP), Unified Planning Work Program (UPWP), and other documents as required by federal regulations.

2. Role of the Transportation Policy Board (TPB)

The TPB was established for the purpose of setting transportation policy to ensure that regional transportation projects and studies are developed in accordance with federal and state laws, rules and regulations. The TPB is composed of elected public officials from local governments, membership from the Texas Department of Transportation (TxDOT), the New Mexico Department of Transportation (NMDOT), Texas and New Mexico State Senators and Representatives, transit operators as well as other members.

3. Committees of the TPB

The MPO has two standing committees, the Executive Committee (EC) and the Transportation Project Advisory Committee (TPAC). The EC's roles and responsibilities include review of the business aspect of the MPO, review of the Executive Director, review of contracts and other documents, and other assignments for recommendations to the TPB. The TPAC develops and makes recommendations to the TPB on projects with regards to the MTP and TIP, project selection process criteria, and special transportation planning studies.

4. Purpose of the Transportation Improvement Program (TIP)

The TIP is a short-range program of transportation improvements for EPMPO's planning area, and is required by federal law. The TIP is prepared and coordinated by EPMPO staff with participating agencies that implement transportation projects and programs in accordance with regulations issued by the United States Department of Transportation. Federal regulations require that the TIP shall cover a period of not less than four years, and be updated at least every four years.

Before adoption by the TPB, the draft TIP is reviewed by NMDOT and TxDOT, and is presented for public involvement for at least 30 days. Local officials, TxDOT, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) use the adopted TIP as a guide in budgeting funds for regional transportation improvements.

The Regional Mobility Strategy (RMS) 2027-2030 TIP is consistent with EPMPO's RMS 2050 and 2052 MTP. EPMPO's RMS documents were produced through a Comprehensive, Cooperative, and Continuing transportation planning process carried out by the MPO in consultation with TxDOT, NMDOT, local governments and the public transit operator(s) in the region. The TIP contains all projects to be funded with federal transportation funds, as well as all regionally significant transportation projects funded with non-federal funds.

The inclusion of a project in the TIP reflects a consensus of priority needs among the citizens living in the MPO planning area, locally-elected officials, local transportation agency representatives, transit providers, and representatives of TxDOT and NMDOT. The TIP is, in effect, a listing of transportation priorities, estimated costs and recommended implementation dates. The TIP may be amended as transportation needs and/or funding levels change. The process for amendments can be found in EPMPO's Public Participation Plan (PPP) which is available on the EPMPO website at www.elpasompo.org/PublicParticipationPlan.

5. Relationship between TIP and MTP

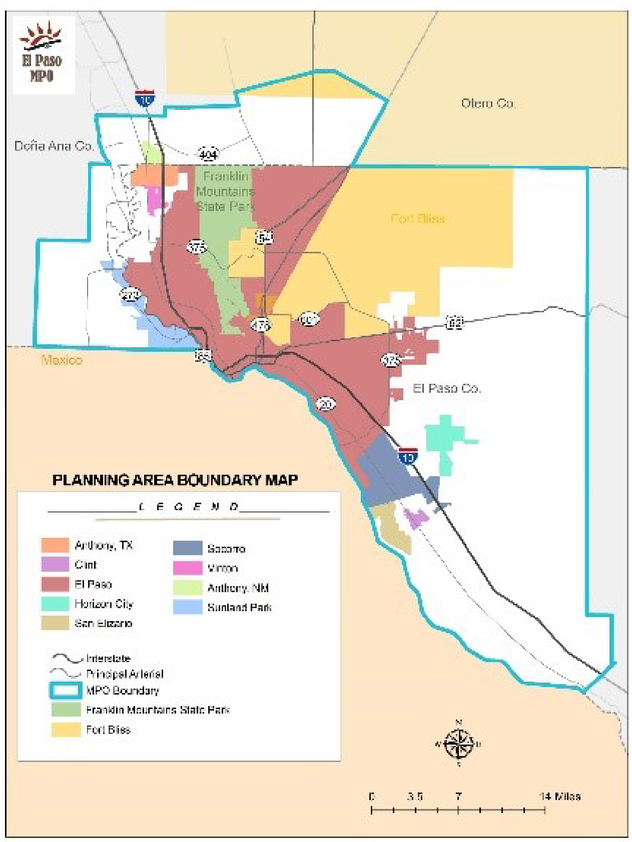
In metropolitan areas, the Metropolitan Transportation Plan (MTP) is the statement of the ways the region plans to invest in the transportation system. Per the federal regulations, the plan shall "include both long-range and short-range program strategies/actions that lead to the development of an integrated intermodal transportation system that facilitates the efficient movement of people and goods.

More specifically in the TIP, EPMPO identifies the transportation projects and strategies from the MTP that it plans to undertake over the upcoming four year period. The TIP is the region's way of allocating its limited transportation resources among the various capital and operating needs of the area, based on a clear set of short-term transportation priorities.

6. Definition of Area

EPMPO Planning Area includes the entirety of El Paso County, Texas, as well as portions of Doña Ana and Otero Counties in New Mexico. Within this boundary, the urbanized area has a population of over 200,000, and is therefore classified as a Transportation Management Area (TMA). The TMA designation applies to the overall metropolitan planning area, which includes the following governmental jurisdictions and agencies:

- City of El Paso, TX
- City of San Elizario, TX
- City of Socorro, TX
- El Paso County. TX
- Town of Anthony, TX
- Town of Clint, TX
- Town of Horizon City, TX
- Village of Vinton, TX
- TxDOT-El Paso District 24
- City of Anthony, NM
- City of Sunland Park, NM
- Doña Ana County, NM
- Otero County, NM
- NMDOT-District 1
- NMDOT-District 2



7. Public Participation Plan

The intent of the Public Participation Plan (PPP) for EPMPO is to include residents living in the MPO's Planning area, community groups, private and public agencies, and transportation providers in an effort that is proactive and that provides complete information, timely public notice, and full public access to key decisions made through the MPO. The PPP supports early and continuing involvement of the public in developing transportation plans and programs. Concerns of a wide variety of involved parties are integrated into the PPP and the plan encourages and provides for the greatest level of education on transportation issues. Opportunities for residents to contribute ideas and voice opinions early and often, both during and after the preparation of draft plans and programs is provided by the PPP.

Every effort is made to accommodate as many stakeholders as possible in EPMPO's outreach efforts. All public meetings, public hearings, and open houses are held at locations that are ADA-accessible and in the vicinity of transit lines or routes. Ideally the meetings are held in-person however, if under certain circumstances an in-person meeting may not be feasible, the MPO will hold virtual public meeting(s).

Accommodations for the visual and/or hearing impaired and Spanish-speaking individuals are provided upon request prior to all public meetings. All public meeting announcements are announced on the MPO website and are published in various local periodicals and announced on EPMPO's social media pages.

The PPP applies to the MTP, TIP and other routine and federally-required MPO documents requiring public involvement. All documents have, as a minimum, 30-day periods of continuing public review and comment, except the PPP itself, which requires 45 days of public review. Specific PPP measures are described as they relate to specific documents including, but not limited to, the MTP, the TIP, and amendments to adopted EPMPO documents

For a complete copy of EPMPO Public Participation Plan, please contact the MPO at (915) 212-0258 or visit EPMPO's web page at www.elpasompo.org/PublicParticipationPlan.

8. Americans with Disabilities Act (ADA)

The Americans with Disabilities Act of 1990 (ADA) stipulates involving the community, particularly those with disabilities, in the development and improvement of services. EPMPO fully complies with these requirements through its ADA plan and policies by making meeting room facilities accessible with wheelchair ramps, and restrooms and elevators that are wheelchair accessible. EPMPO facilitates public participation in transportation activities by people with disabilities using the guidelines found in the PPP and the El Paso MPO ADA Accessibility Plan. Additionally, TIP projects must comply with ADA requirements for accessibility. See El Paso MPO ADA Accessibility Plan here: El Paso MPO - Title II ADA

9. Title VI

EPMPO is required by the FHWA to implement Title VI of the Civil Rights Act of 1964 (42 U.S.C 2000d-1). Title VI declares it to be the policy of the United States that discrimination on the ground of race, color, or national origin shall not occur in connection with programs and activities receiving Federal financial assistance, and authorizes and directs the involved Federal departments and agencies to take action to carry out this policy. Title VI prohibits discrimination: whether intentional or where the unintended effect is unduly burdensome.

As a recipient of Federal financial assistance and under Title VI of the Civil Rights Act of 1964, EPMPO ensures that no person shall on the grounds of race, color and national origin be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any EPMPO programs or activities. See El Paso's adopted Title VI Plan here: El Paso MPO - Title VI

10. Project Selection Process

The selection of projects for the RMS 2052 MTP and RMS 2027-2030 TIP consisted of a project call to municipalities, departments of transportation, and transit agencies within the EPMPO planning area. Projects were evaluated and scored against a set of criteria developed based on the adopted goals of the RMS 2052 MTP and approved by the Transportation Project Advisory Committee. The scored list of projects for each agency was then evaluated against agency priorities and fiscal constraint, with the final project list balancing the needs of the region with the priorities of the municipalities, transportation departments, and transit agencies. Priority projects and initiatives were selected through this cooperative process and adopted by the TPB as part of the RMS 2052 MTP development process. Projects identified for inclusion in the RMS 2052 MTP project list were prioritized for the available funding in the RMS 2027-2030 TIP.

11. Performance Measures

Performance measures are quantifiable indicators of progress towards achieving the goals and objectives set forth in the Amended RMS 2050 MTP. The United States Department of Transportation (USDOT) first enumerated several performance measures on which MPOs were required to report progress in 2012. The federal performance measures fall into three main categories—safety, maintenance, and performance. Safety measures track highway and transit deaths and injuries and include transit incidents like fires or crashes. Maintenance measures look at the age of transit fleets and the condition of roads and bridges. System performance measures look at highway congestion and reliability, freight movement, and environmental sustainability, including air quality.

The measures set forth by the USDOT can be considered "tracking" measures, as they rely primarily on observed data to identify trends. EPMPO adopts targets established annually by the Texas and New Mexico DOTs for progress tracking purposes. The Amended RMS 2050 MTP proposes the use of several planning-level performance measures that the MPO can estimate or forecast using its existing modeling tools. These measures provide a proxy for the relative performance of different mixes of potential TIP projects – i.e. “alternatives” – and to help the MPO select the best program of projects to help it meet the goals set forth by the community through the visioning process as well as the targets it will set under federal law.

The planning-level performance measures recommended for the Amended RMS 2050 (Table 2) can be roughly categorized within the goals of the plan, although several of these measures indicate progress towards multiple goals. Additionally, some indicators (such as crash rates) that are useful for identifying deficiencies on the existing system are not easily adaptable to forecasting tools. For these goals, the Amended RMS 2050 MTP recommends performance measures that describe the overall program of projects’ ability to introduce safety improvements at crash hotspots, replace deficient infrastructure, and address access and/or operational concerns at Ports of Entry (POEs).

Table 1. Goals and Performance Measures

GOALS	ALTERNATIVES EVALUATION PERFORMANCE MEASURES
Safety	-Number of projects that include safety enhancements located near crash hotspots
Maintenance & Operations	-Number of projects that repair or replace deficient bridges or pavements
Mobility	-Travel Time Index (Actual Travel Time Divided by Non-Congested Travel Time) -Annual hours of delay (millions) -Commute times from Environmental Justice Zones (min)
Accessibility & Travel Choice	-Percentage of jobs, key destinations, and population within ½ mile of high-quality, rapid transit -Average trip costs
Sustainability	-Total Vehicle Miles Traveled (VMT) -VMT per capita (regional)
Economic Vitality	-Annual hours of delay along major freight corridors -Average wait times by mode at POEs -Number of projects that improve operations or multimodal access at current or future POEs
Quality of Life	The indicator for this goal is a summary of performance on each goal for each alternative relative to the other alternatives.
Implementation	Number of projects ready for implementation based on the Project Readiness Report

PERFORMANCE MEASURE 1 (PM 1)

On February 20, 2026, EPMPO Transportation Policy Board approved a resolution to support the updated 4-year target (previously adopted January 24, 2025), for both Texas Department of Transportation (TxDOT) and the New Mexico Department of Transportation (NMDOT). This target is adopted annually.

By agreeing to support the states' HSIP targets, EPMPO agrees to:

- Work with the states and safety stakeholders to address areas of concern for fatalities or serious injuries within the metropolitan planning area.
- Coordinate with the states and include the safety performance measures and the states' HSIP targets for those measures in the long-range regional transportation plan (RTP).
- Integrate into the metropolitan transportation planning process, the safety goals, objectives, performance measures and targets described in other state safety transportation plans and processes such as applicable portions of the HSIP, including the SHSP.
- Include a description in the TIP (Transportation Improvement Program) of the anticipated effect of the TIP toward achieving HSIP targets in the RTP, linking investment priorities in the TIP to those safety targets.

A summary of the Highway Safety Improvement Program's (HSIP) safety performance measures trends, state targets, the MPO's adopted performance measures and adopted targets, and how the TIP projects contribute towards reaching those targets can be found in Appendix B: Performance Based Planning & Programming.

PERFORMANCE MEASURE 2 (PM 2)

Texas state 2-year and 4-year targets for Infrastructure Condition were adopted by EPMPO Transportation Policy Board on May 19, 2023 for FY 2024 and FY 2026, with revised midpoint targets adopted on March 21, 2025. This target is adopted every four years, with a mid-performance period review every two years and adjusted targets adopted at that point as needed.

By agreeing to support the state PM 2 targets the El Paso MPO agrees to:

- Work with the states and relevant stakeholders to address areas of concern for pavement and bridge condition within the metropolitan planning area.
- Coordinate with the states and include the infrastructure condition targets for those measures in the long-range regional transportation plan (MTP).
- Integrate into the metropolitan transportation planning process, the infrastructure goals, objectives, performance measures and targets described in other state transportation plans and processes.
- Include a description in the TIP (Transportation Improvement Program) of the anticipated effect of the TIP toward achieving pavement and bridge condition targets in the MTP, linking investment priorities in the TIP to those infrastructure condition targets.

A summary of the Infrastructure Condition performance measures trends, state targets, the MPO's adopted performance measures and adopted targets, and how the TIP projects contribute towards reaching those targets can be found in Appendix B: Performance Based Planning & Programming.

PERFORMANCE MEASURE 3 (PM 3)

This target is adopted every four years, with a mid-performance period review every two years and adjusted targets adopted at that point as needed. Texas state 2-year and 4-year system performance and freight targets for FY 2024 and FY 2026 were adopted by EPMPO Transportation Policy Board on May 19, 2023. On March 21, 2025, EPMPO adopted adjusted mid-performance period targets. In May of 2026, EPMPO will adopt targets for 2028 and 2030.

By agreeing to support the state PM 3 targets the El Paso MPO agrees to continue implementation of policies and programs aimed at maximizing the existing system capacity, reducing demand through implementation of travel demand management strategies, and strategically adding new interstate capacity.

A summary of the system performance and freight performance measures trends, state targets, the MPO's adopted performance measures and adopted targets, and how the TIP projects contribute towards reaching those targets can be found in Appendix B: Performance Based Planning & Programming.

SYSTEM LEVEL PERFORMANCE EVALUATION OF ADDED CAPACITY PROJECTS IN TIP YEARS 2027-2030.

As described above and elaborated upon in Appendix B of this document, EPMPO has adopted a series of performance measures that allow quantification of the potential impacts that the RMS 2052 plan will have towards achieving the region's mobility and quality of life goals.

For the evaluation of the proposed added-capacity projects in the TIP 27-30, MPO staff compared the performance measures calculated for the 2022 "Base" Year and 2032 "No Build" scenarios to the performance of the 27-30 TIP "Build" scenario. In general, the "Build" scenario improves on almost every performance measure when compared to the "No-Build" scenario, although there is a minimal increase in total and per capita VMT (and subsequently a minimal increase in the estimated average trip cost).

The percent of non-single occupancy vehicle (SOV) trips remains the same in the Build and No Build scenarios, as there are no major differences in implementation of Travel Demand Management Strategies between the two scenarios. When comparing maximum daily CO emissions base year to the “Build” and “No-Build” scenarios, a small reduction is observed. The results of the scenario analysis comparisons for performance measures are shown in Table 3.

TABLE 2: 2027 – 2030 TIP ADDED-CAPACITY PROJECTS PERFORMANCE MEASURES ANALYSIS

	2022 BASE	2032 (NO-BUILD)	2027-2030 TIP (BUILD)	BASE VS. NO-BUILD	BASE VS. BUILD	NO-BUILD VS. BUILD
Travel Time Index	1.12	1.13	1.11	+1%	-1%	-2%
PM Peak Hour Delay per Capita (mins)	0.37	0.43	0.39	+16%	+5%	-9%
Average peak-period commuter minutes in EJ zones	34.20	34.19	34.28	0%	0%	0%
% of population within 1/2 mile of high-quality rapid transit stops	21.54%	20.32%	20.21%	-6%	-6%	-1%
% of jobs within 1/2 mile of high-quality rapid transit stops	35.90%	31.01%	30.93%	-14%	-14%	0%
% of non-SOV trips	56.60%	56.50%	56.50%	0%	0%	0%
Average trip costs	$2.37	$2.35	$2.38	-1%	0%	+1%
Max daily CO emissions (ton/day)	73.93	44.00	49.73	-40%	-33%	+13%
Max daily PM10 emissions (ton/day)	6.52	8.18	8.21	+25%	+26%	0%
Daily VMT Total (million miles)	18.52	20.00	20.20	+8%	+9%	+1%
Daily VMT per capita	19.85	20.17	20.38	+2%	+3%	+1%

12. TIP Funding Sources

Table 3. Descriptions of the 12 traditional federal funding sources used in Texas and other used funding categories

CATEGORY	DESCRIPTION
1. Preventive Maintenance ar Rehabilitation.	Category 1 addresses preventive maintenance and rehabilitation of the existing state highway system, including pavement, signs, traffic signals, and other infrastructure assets.
2. Metropolitan and Urban Area Corridor Projects	Category 2 addresses mobility and added capacity projects on urban corridors to mitigate traffic congestion, as well as traffic safety and roadway maintenance or rehabilitation. Projects must be located on the state highway system.
3. Non-Traditionally Funded Transportation Projects	Category 3 is for transportation projects that qualify for funding from sources not traditionally part of the State Highway Fund, including state bond financing (such as Proposition 12 and Proposition 14), the Texas Mobility Fund, passthrough financing, regional revenue and concession funds, and local funding. Category 3 also contains funding for the development costs of design-build projects. (Design-build construction costs are covered by other UTP categories)
4. Statewide Connectivity Corridor Projects	Category 4 addresses mobility on major state highway system corridors, which provide connectivity between urban areas and other statewide corridors. Projects must be located on the designated highway connectivity network
5. CMAQ	Category 5 addresses attainment of National Ambient Air Quality Standard in non-attainment areas (currently the Dallas-Fort Worth, Houston, San Antonio, and El Paso metro areas). Each project is evaluated to quantify its air quality improvement benefits. Funds cannot be used to add capacity for single-occupancy vehicles
6. Structures Replacement and Rehabilitation (Bridge)	Category 6 addresses bridge improvements through the following sub-programs: Highway Bridge Program, Bridge Maintenance and Improvement Program, Bridge System Safety Program
7. Metropolitan Mobility and Rehabilitation	Category 7 addresses transportation needs within the boundaries of MPOs with populations of 200,000 or greater — known as transportation management areas (TMAs). This funding can be used on any roadway with a functional classification greater than a local road or rural minor collector
8. Safety	Category 8 addresses highway safety improvements through the sub-programs listed below. Common Category

	8 project types include medians, turn lanes, intersections, traffic signals, and rumble strips. Highway Safety Improvement Program (HSIP) Systemic Widening Program (SSW) Road to Zero (RTZ)
9. Transportation Alternatives Set-Aside Program (TASA)	Category 9 handles the federal Transportation Alternatives (TA) Set-Aside Program. These funds may be awarded for the following activities: Construction of sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic-calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act
10. Supplemental Transportation Programs	Carbon Reduction Program Category 10 addresses a variety of transportation improvements through the following sub-programs: Coordinated Border Infrastructure (CBI) Supplemental Transportation Projects (Federal) Federal Lands Access Program (FLAP) Texas Parks and Wildlife Department (TPWD) Green Ribbon Program Americans with Disabilities Act (ADA) Landscape Incentive Awards Railroad Grade Crossing and Replanking Program Railroad Signal Maintenance Program
11. District Discretionary	Category 11 addresses TxDOT district transportation needs through the sub-programs listed below. Common Category 11 project types include roadway maintenance or rehabilitation, added passing lanes (Super 2), and roadway widening (non-freeway). District Discretionary Energy Sector Border Infrastructure
12. Strategic Priority	Category 12 addresses projects with specific importance to the state, including those that improve Congestion and connectivity, Economic opportunity, Energy sector access, Border and port connectivity, Efficiency of military deployment routes or retention of military assets in response to the Federal Military Base Realignment and Closure Report, the ability to respond to both man-made and natural emergencies Common project types include roadway widening (both freeway and non-freeway), interchange improvements, and new-location roadways

Proposition 1 (TXDOT)	Allocates money from the rainy day fund to State Highway Fund for construction, maintenance and rehabilitation.
Proposition 7 (TXDOT)	Supplies funding to the State Highway Fund from sales and use tax and state motor vehicle tax to build, maintain and restore non-tolled public roads.
FTA Section 5307	Mass Transit apportionment to urbanized areas based on population and operating performance.
FTA Section 5309	Funding for major transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit.
FTA Section 5339	Mass Transit discretionary funds for capital projects only.
FTA Section 5310	Provides federal funds to private nonprofit entities for the transportation of elderly and/or disabled persons.
FTA Section 5311	Rural Transit Program
Federal Highway-CMAQ (NMDOT)	Congestion Mitigation and Air Quality
Federal Highway-HSIP (NMDOT)	Highway Safety Improvement Program
Federal Highway-NHPP (NMDOT)	National Highway Performance Program
Federal Highway-STP (NMDOT)	Surface Transportation Block Grant Program
Federal Highway-TAP (NMDOT)	Transportation Alternatives Program
NM State Funds (NMDOT)	New Mexico State funds

13. Air Quality

EPMPO boundary extends into a portion of Otero County and additional portions of Doña Ana County, New Mexico. A marginal PM-10 non-attainment area in Anthony, NM is within the area covered by the MTP and TIP. NMDOT and their consultants may prepare a qualitative analysis of roadway projects that fall within the non-attainment area. A small portion of Doña Ana County (Sunland Park)~~,~~ was designated non-attainment under 2015 Ozone (O_3) NAAQS on June 4, 2018 (Effective August 3, 2018) (83 FR 25776)~~.~~. The New Mexico Environmental Department (NMED) developed a nonattainment State Implementation Plan (SIP) for the Sunland Park area to meet the requirements of the 2015 O_3 NAAQS. In general, a nonattainment SIP for a marginal area must include an emissions inventory, adoption of Reasonably Available Control Technologies (RACT), nonattainment permitting programs, and an emissions offsetting program. The emission inventories SIP did not include a Motor Vehicle Emissions Budget.

CARBON MONOXIDE (CO)

Texas Commission on Environmental Quality (TCEQ) submitted a petition to the United States Environmental Protection Agency (EPA) for a re-designation of the CO non-attainment area to attainment status, and EPA proposed approval of the re-designation request~~,~~ and a maintenance plan on August 4, 2008. The proposal was a direct final, effective on October 3, 2008. The maintenance State Implementation Plan (SIP) for CO for EPMPO was operating under a motor vehicle emission budget of 29.66 tons/day. The CO limited maintenance plan was approved on September 8, 2017 (effective October 10, 2017).

PARTICULATE MATTER 10 (PM 10)

For PM-10 the SIP has a motor vehicle emissions budget of 12.05 tons/ day. Texas Administrative Code 30 TAC §111.147(1)(E) was developed in an effort to help develop a maintenance status for PM-10. It includes requirements regarding paving of new alleyways, unpaved alleyways not being used for residential garbage and recycling collection, and use of reclaimed asphalt pavement as an alternate means to pave roads. Texas Administrative Code 30 TAC §111.147(2) was developed to require street sweeping at regular intervals to help the City of El Paso achieve goals on dust emissions. In New Mexico, Doña Ana County implemented erosion control regulations Ordinance No 194-2000 to enhance the containment of PM-10 and reduction of negative health effects caused by the creation of fugitive dust. In addition, TCEQ developed a Natural Events Action Plan (NEAP) for El Paso County. The NEAP provides analysis and documentation of the exceedances as attributable to uncontrollable natural events due to unusually high winds. In addition, the NEAP is designed to protect public health, educate the public about high wind events, mitigate health impacts on the community during future events, and identify and implement Best Available Control Measures (BACM) for man-made sources of windblown dust.

OZONE (O3)

In August 2018, the City of Sunland Park, New Mexico and environmental petitioners challenged the EPA's attainment/unclassifiable designation for El Paso County. On November 30, 2021, the EPA published a final nonattainment designation for the 2015 eight-hour ozone NAAQS for El Paso County, effective December 30, 2021 (86 FR 67864). The EPA expanded the Sunland Park marginal nonattainment area to include all of El Paso County and renamed the area as the “El Paso-Las Cruces, Texas-New Mexico nonattainment area." As a result of the revised designation, El Paso County is retroactively tied to Sunland Park's August 31, 2021 marginal attainment date.

On February 28, 2022, the TCEQ submitted an FCAA, §179 Demonstration to the EPA for the El Paso County portion of the El Paso-Las Cruces, Texas-New Mexico nonattainment area. The demonstration documented that El Paso County would have attained the 2015 eight-hour ozone NAAQS by the August 3, 2021 attainment date "but for" emissions emanating from outside the U.S.

On November 16, 2022, the commission adopted the El Paso County Emissions Inventory SIP Revision for the 2015 Eight-Hour Ozone NAAQS. The SIP revision satisfies

FCAA, §172(c)(3) and §182(a)(1) emissions inventory reporting requirements for El Paso County for the 2015 eight-hour ozone NAAQS. The SIP revision also includes a certification statement to confirm that the emissions statements and nonattainment new source review requirements have been met for El Paso County. The SIP revision was submitted to the EPA on December 8, 2022.

On June 30, 2023, the D.C. Circuit Court of Appeals reversed the nonattainment designation for El Paso County, finding that the EPA's action was impermissibly retroactive.

CONFORMITY DETERMINATION

Before the TIP is given final approval by FHWA, it must be approved for air quality conformity. The MPO prepares an Air Quality Transportation Conformity Statement for the TIP, and comments are received through the public involvement process. The conformity statement is forwarded to TXDOT, NMDOT, TCEQ, and other state and federal agencies for review through the State Consultative Procedures.

The statement is sent to the Texas and New Mexico FHWA State Division office for review and final approval. The FHWA consults with the FTA, and the statement is forwarded to the EPA. The FHWA takes into account any comments received by the general public, TCEQ, FTA or the EPA concerning the advisability of constructing certain projects, and grants approval based on federal guidelines. A similar process is followed with New Mexico state agencies such as NMED, and the New Mexico FHWA State Division office.

The RMS 2027-2030 TIP is part of the RMS 2050 MTP and the RMS 2052 MTP, which will replace the RMS 2050 MTP upon its adoption. Transportation Conformity for the RMS 2027-2030 TIP was determined as part of the conforming RMS 2050 MTP and reaffirmed with the RMS 2052 MTP. The conformity statement is evaluated according to the amount of particulate matter (PM-10), volatile organic components (VOCs) and oxides of nitrogen (NO_x) emissions that are projected from the existing transportation network, along with proposed projects. Changes in conformity rules contain several important differences from previous conformity determinations. Budget tests are made for PM-10, O_3 (VOC and NOx), and the no-greater-than-baseline year interim emission test for O_3 (VOC and NOx).

MOVES 3, an emissions modeling tool that can help determine the amount of emissions produced by vehicles, was used for the RMS 2050 MTP and MOVES 4 will be used for the 2052 MTP and RMS 2027-2030 TIP. The Texas A&M University Transportation Institute (TTI) is under a TxDOT contract to run the MOVES model for El Paso.

Projects marked "Exempt" may proceed towards implementation even in the absence of a conforming MTP and TIP. The EPA listed certain categories of projects as being exempt from conformity requirements in the Federal Register.

El Paso County, southern Doña Ana County, and a small portion of Otero County are included on the same traffic model for the purpose of conformity determination. Separate figures are calculated for each area for vehicle miles traveled (VMT) and emissions. The El Paso County conformity determination reports PM-10, VOC and NOx emissions where they must conform to the motor vehicle emissions budget tests. Southern Doña Ana County (including Sunland Park, Santa Teresa, La Union and the Gadsden High School area) does not currently have any emission budget tests. No tests are run for the Anthony, New Mexico PM-10 non-attainment area, since only a qualitative analysis is required. A small portion of Doña Ana County near Sunland Park required an interim conformity test no-greater-than-baseline year as appropriate for marginal O_3 nonattainment area.

Once the RMS 2027-2030 TIP receives final approval by the TPB, it will be included in New Mexico & Texas STIPs, and the document will be available for distribution upon request.

14. Grouped Documentation

Under 23 CFR 450.326(h) projects proposed for FHWA and/or FTA funding that are not considered by the State and MPO to be of appropriate scale for individual identification in a given program year may be grouped by function, geographic area, and work type by using applicable classifications under 23 CFR 771.117(c) and (d). In non-attainment and maintenance areas, these classifications must be consistent with the exempt project classifications contained in the EPA transportation conformity requirements (40 CFR Part 93, subpart A).

EPMPO has adopted the grouped project categories found in Table 4 and currently maintains an informational list to track grouped Bicycle and Pedestrian and Recreational Trails Program projects funded with Category 9 Transportation Alternative Set-Aside funds. EPMPO will continue to evaluate the possibility of utilizing other grouped categories in the future.

Table 4. Grouped Projects Categories (TXDOT)

PROPOSED CSJ (TXDOT)	GROUPED PROJECT CATEGORY	DEFINITION
5000-00-950	PE – Preliminary Engineering	Preliminary Engineering for any project except added capacity projects in a nonattainment area. Includes activities which do not involve or lead directly to construction, such as planning and research activities; grants for training; engineering to define the elements of a proposed action or alternatives so that social, economic, and environmental effects can be assessed.
5000-00-951	Right of Way Acquisition	Right of Way acquisition for any project except added capacity projects in a nonattainment area. Includes relocation assistance, hardship acquisition and protective buying.
5000-00-952 5000-00-957 5000-00-958	Preventive Maintenance and Rehabilitation	Projects to include pavement repair to preserve existing pavement so that it may achieve its designed loading. Includes seal coats, overlays, resurfacing, restoration and rehabilitation

		done with existing ROW. Also includes modernization of a highway by reconstruction, adding shoulders or adding auxiliary lanes (e.g., parking, weaving, turning, climbing, non-added capacity) or drainage improvements associated with rehabilitation (See Note 3).
5000-00-953	Bridge Replacement and Rehabilitation	Projects to replace and/or rehabilitate functionally obsolete or structurally deficient bridges.
5000-00-954	Railroad Grade Separations	Projects to construct or replace existing highway-railroad grade crossings and to rehabilitate and/or replace deficient railroad underpasses, resulting in no added capacity.
5800-00-950	Safety	Projects to include the construction or replacement/rehabilitation of guard rails, median barriers, crash cushions, pavement markings, skid treatments, medians, lighting improvements, highway signs, curb ramps, railroad/highway crossing warning devices, fencing, intersection improvements (e.g., turn lanes), signalization projects and interchange modifications. Also includes projects funded via the Federal Hazard Elimination Program, Federal Railroad Signal Safety Program, or Access Managements projects, except those that result in added capacity.
5000-00-956	Landscaping	Project consisting of typical right-of-way landscape development, establishment and aesthetic improvements to include any associated erosion control and environmental mitigation activities.
5800-00-915	Intelligent Transportation Systems Deployment	Highway traffic operation improvement projects including the installation of ramp metering control devices, variable message signs, traffic monitoring equipment and projects in the Federal ITS/IVHS programs.
5000-00-916	Bicycle and Pedestrian	Projects including bicycle and pedestrian lanes, paths and facilities. (e.g., sidewalks, shared use paths, side paths, bicycle boulevards, curb extensions, bicycle parking facilities, bikeshare facilities, etc.) Safe Routes to School non-infrastructure related activities (e.g. enforcement, tools and education programs).
5000-00-917	Safety Rest Areas and Truck Weigh Stations	Construction and improvement of rest areas, and truck weigh stations.
5000-00-918	Transit Improvements and Programs	Projects include the construction and improvement of small passenger shelters and information kiosks. Also includes the construction and improvement of rail storage/maintenance facilities bus transfer facilities where minor amounts of additional land are required and there is not a substantial increase in the number of users. Also includes transit operating assistance, preventive maintenance of transit vehicles and facilities, acquisition of third-party transit services, and transit marketing, and mobility management/coordination. Additionally includes the purchase of new buses and rail cars to replace existing vehicles of for minor expansions of the fleet [See Note 4].

5000-00-919	Recreational Trails Program	Off-Highway Vehicle (OHV), Equestrian, Recreational Water/Padding Trails and related facilities; Recreational Trails related education and safety programs.

Note 1: Projects eligible for grouping include associated project phases (Preliminary Engineering, Right-Of-Way and Construction)

Note 2: Projects funded with Congestion Mitigation Air Quality funding require a Federal eligibility determination, and are not approved to be grouped.

Note 3: Passing lanes include "SUPER 2" lanes consistent with TxDOT's Roadway Design Manual

Note 4: In PM10 and PM2.5 nonattainment or maintenance areas, such projects may be grouped only if they are in compliance with control measures in the applicable implementation plan.

Note 5: Projects funded as part of the Recreational Trails Program (RTP) and Transportation Alternatives (TA) Program consistent with the revised grouped project category definitions may be grouped. RTP or TA projects that are not consistent with the revised grouped project category definitions must be individually noted in the Transportation Improvement Program (TIP) and State Transportation Improvement Program (STIP). Road diet projects may not be grouped.

15. MPO Glossary – Project Section

Table 5.

PROJECT CODE	DEFINITION	EXPLANATION
CSJ	Control Section Job Number	TXDOT-assigned number for projects entered into the Unified Transportation Plan (UTP)
CN	Control Number	NMDOT-number assigned for projects in New Mexico State Transportation Improvement Program (STIP)
PROJ ID	Project Identification	Code assigned by the MPO for local tracking/identification; used to relate projects to the Metropolitan Transportation Plan
F. CLASS	Federal Functional Classification	Federal classification of streets and highways into functional operating characteristics. Categories: • Interstate • Other Urban Freeways and Expressways • Other Principal Arterials
FED PROG	Federal Funding Category	PM&R: Preventive Maintenance and Rehabilitation Metro ACP: Metropolitan Area (TMA) Corridor Projects Urban ACP: Urban Area (Non-TMA) Corridor Projects State CCP: Statewide Connectivity Corridor Projects CMAQ: Congestion Mitigation and Air Quality Improvement CSREHAB: Consolidated Structure Rehabilitation STP-MM: Surface Transportation Program - Metro-Mobility SAFE: Safety Projects ENHAN: Enhancement Projects MISC: Miscellaneous Dist Discret: District Discretionary STRATEGIC: Strategic Priority FTA: Federal Transit Administration STP-L: New Mexico, Surface Transportation Program Large Urban STP-FLEX: New Mexico, Surface Transportation Program- Flexible STP-TPS: New Mexico, Surface Transportation Program-Safety BOR/COR: Borders and Corridors
PHASE	Project Phase for Federal Funding	T - Transfers C – Construction E - Preliminary Engineering R - Right of Way Acquisition

Texas Highway Projects FHWA & Other Funds[1]

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-743**	00	C,E,R	Horizon City	Horizon	**$3,800,000**

TIP PROJECT NAME: Horizon City Transit Plaza
LIMITS FROM: Bordered by Darrington Road (west) and Rodman Street (east)
LIMITS TO: Bordered by Horizon Boulevard (south)
TIP DESCRIPTION: Horizon City Transit Plaza: Development of Transit Plaza with parking within the Horizon Country Club Estates Subdivision(s)
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: T410X
MTP REFERENCE: T410X
FUNDING CATEGORY: CAT 5 CMAQ
VOC (Kg/Day): 0.039
CO (Kg/Day): 7.768
NOX (Kg/Day): 0.157
PM 10 (Kg/Day): 0.01

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027, and amend Amended RMS 2050 MTP to amend fiscal year to FY 2027

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$283,775
Construction:	$2,606,224
Construction Engineering:	$390,934
Contingencies:	$519,067
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$3,800,000**

Cost of Approved Phases: $3,800,000

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 5	CMAQ	$3,040,000	$0	$0	$760,000	$0	$3,800,000
	Fund by Share	**$3,040,000**	**$0**	**$0**	**$760,000**	**$0**	**$3,800,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2026		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027, and amend Amended RMS 2050 MTP to amend fiscal year to FY 2027
07/2022	2025	03/2022	Program to RMS 2050 MTP and RMS 23-26 TIP in FY 2025
02/2024	2025	12/2023	Administratively amnd to reduce CAT 3 TRZ funds to $2,625,211 in FY 2025
07/2024	2025	04/2024	Program in RMS 25-28 TIP and 25-28 STIP using $2,714,257 of CAT 3 TRZ in FY 2025
11/2024	2025	09/2024	Amend the RMS 2050 MTP, Amended RMS 2050 MTP, 25-28 TIP, and 25-28 STIP to move the the local contribution amount to $0 and add $3,800,000 in Cat 5 CMAQ funds for a total funded amount of $3,800,000; and increase phase costs for construction, construction engineering, contingencies, reduce ROW phase cost, remove PE phase for a total project cost of $3,800,000, and add CSJ: CSJ: 0924-06-743.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-665**	CS	C	El Paso	COEP	**$7,124,204**

TIP PROJECT NAME: Buffalo Soldier Rd Street Reconstruction

LIMITS FROM: Edgemere Blvd

LIMITS TO: Montana Ave

TIP DESCRIPTION: Project includes complete 2 lane roadway reconstruction, parkway improvements, sidewalks, bicycle facilities, street illumination, landscaping and irrigation, and striping.

REMARKS:

REVISION DATE: 7/2026

MPO PROJECT ID: R401X

MTP REFERENCE: R401X

FUNDING CATEGORY: CAT 7 - STP MM

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027 and amend Amended RMS 2050 MTP to reduce PE phase to $0 and decrease TPC to $7,124,204.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$6,372,211
Construction Engineering:	$644,355
Contingencies:	$107,638
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$7,124,204**

Cost of Approved Phases: **$7,124,204**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 7	STP MM	$5,699,363	$0	$0	$1,424,841	$0	$7,124,204
	Fund by Share	**$5,699,363**	**$0**	**$0**	**$1,424,841**	**$0**	**$7,124,204**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027 and amend Amended RMS 2050 MTP to reduce PE phase to $0 and decrease TPC to $7,124,204.
07/2022	2026	03/2022	Program to RMS 2050 MTP and RMS 23-26 TIP in FY 2026
02/2024	2027	12/2023	Amend RMS 2050 MTP, 23-26 TIP, and 23-26 STIP to remove PE phase, increase CAT 7 STP MM funds, move from FY 2026 to FY 2027, and deprogram from the RMS 2023-2026 TIP
07/2024	2027	04/2024	Program in RMS 25-28 TIP and 25-28 STIP in FY 2026

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-730**	CS	C	El Paso	COEP	**$7,257,320**

TIP PROJECT NAME: **Sunland Park Shared Use Path**
LIMITS FROM: Cadiz St
LIMITS TO: Mesa St.
TIP DESCRIPTION: Construction of a shared use path with associated signage, landscaping and irrigation, furnishings, and illumination.
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: **E111X**
MTP REFERENCE: E111X
FUNDING CATEGORY: CAT 5 CMAQ, CAT 10 - CRP, CAT 3TRZ - COEP
VOC (Kg/Day): 0.039 CO (Kg/Day): 1.851
NOX (Kg/Day): 0.025 PM 10 (Kg/Day): 0.018

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027, and amend project title, project description, construction costs, TPC, remove engineering phase, and add CAT 10-CRP and CAT 3 TRZ funds in Amended RMS 2050 MTP in FY 2027.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$6,545,469
Construction Engineering:	$602,182
Contingencies:	$109,669
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$7,257,320**

Cost of Approved Phases: **$7,257,320**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 5	CMAQ	$2,672,800	$0	$0	$668,200	$0	$3,341,000
Cat 10	CRP	$1,938,181	$0	$0	$484,545	$0	$2,422,726
Cat 3TRZ	COEP	$0	$0	$0	$0	$1,493,594	$1,493,594
	Fund by Share	**$4,610,981**	**$0**	**$0**	**$1,152,745**	**$1,493,594**	**$7,257,320**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027, and amend project title, project description, construction costs, TPC, remove engineering phase, and add CAT 10-CRP and CAT 3 TRZ funds in Amended RMS 2050 MTP in FY 2027.
07/2024	2027	04/2024	Program in RMS 2025-2028 TIP and 2025-2028 STIP in FY 2027 - EXEMPT

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-729**	CS	C	El Paso	COEP	**$5,021,867**

TIP PROJECT NAME: **Sun Valley Dr Street Reconstruction Gateway Blvd North to Kenworthy St, Construction Phase**

LIMITS FROM: Gateway Blvd North

LIMITS TO: Kenworthy St

TIP DESCRIPTION: Roadway reconstruction of existing roadway, road diet reduction from 4 lanes to 2 lanes, buffered bike lane, street illumination, landscaping and irrigation, and striping on Sun Valley Dr from Gateway Blvd North to Kenworthy St.

REMARKS:

REVISION DATE: 7/2026

MPO PROJECT ID: **R201X**

MTP REFERENCE: R201X

FUNDING CATEGORY: CAT 7 STP MM, CAT 10 CRP funds

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027, and amend project title, project description, TPC, and reduce PE phase to $0 in Amended RMS 2050 MTP in FY 2027.

Total Project Cost Information:	
Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$4,514,727
Construction Engineering:	$431,257
Contingencies:	$75,883
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$5,021,867**

Cost of Approved Phases: **$5,021,867**

Authorized Funding by Category/Share

			Federal Share	**State Share**	**Regional Share**	**Local Share**	**Lcl Contribution**	**Total Share**
Cat	7	STP MM	$2,897,494	$0	$0	$724,373	$0	$3,621,867
Cat	10	CRP	$1,120,000	$0	$0	$280,000	$0	$1,400,000
		Fund by Share	**$4,017,494**	**$0**	**$0**	**$1,004,373**	**$0**	**$5,021,867**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	**FY(s)**	**Note/Amend Date**	**Note/Amendment**
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027, and amend project title, project description, TPC, and reduce PE phase to $0 in Amended RMS 2050 MTP in FY 2027.
07/2024	2027	04/2024	Program in RMS 2025-2028 TIP and 2025-2028 STIP in FY 2027
11/2024	2027	09/2024	Amend RMS 2050 MTP, Amended RMS 2050 MTP, RMS 25-28 TIP, 25-28 STIP to reduce CAT 7 STP funds and increase CAT 10 CRP funds for a total project amount of $5,021,867

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-625**	CS	C	El Paso	COEP	**$19,421,338**

TIP PROJECT NAME: Railroad Dr. Widening and Reconstruction
LIMITS FROM: Purple Heart Highway
LIMITS TO: Shrub Oak Drive
TIP DESCRIPTION: Railroad Dr. Widening and Reconstruction:Add 1 lane ea direction fr Purple Heart Hwy to Shrub Oak to increase capacity fr 2 to 4 lanes.Include road rehab & reconstruction of existing road, sidewalk, shared use path, illumination,landscaping & irrigation
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: P219X-CAP
MTP REFERENCE: P219X-CAP
FUNDING CATEGORY: CAT 7 STPMM, CAT 3 LCL, CAT 10 CRP

*Project Sponsor paying for PE and/or ROW Costs, if any.

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 27-30 TIP in FY 2027.

Total Project Cost Information:

Preliminary Engineering:	$3,500,000
Right Of Way:	$0
Construction:	$17,964,998
Construction Engineering:	$1,256,000
Contingencies:	$200,340
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$22,921,338**

Cost of Approved Phases: $19,421,338

Authorized Funding by Category/Share

			Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat	7	STP MM	$12,164,270	$0	$0	$3,041,068	$0	$15,205,338
Cat	3LC	LCL	$0	$0	$0	$0	$2,116,000	$2,116,000
Cat	10	CRP	$1,680,000	$0	$0	$420,000	$0	$2,100,000
		Fund by Share	**$13,844,270**	**$0**	**$0**	**$3,461,068**	**$2,116,000**	**$19,421,338**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2026		Program project in RMS 2052 MTP and RMS 27-30 TIP in FY 2027.
07/2022	2026	03/2022	Program to RMS 2050 MTP and RMS 23-26 TIP in FY 2026
02/2023	2026	01/2023	Amend to add $7,449,338 of CAT 7 STP MM funds
05/2024	2026	02/2024	Amend RMS 2050 MTP and RMS 23-26 TIP to change project description in FY 2026
07/2024	2026	04/2024	Program in RMS 25-528 TIP and 25-28 STIP in FY 2026
05/2024	2026	04/2024	Amend RMS 2050 MTP and RMS 23-26 TIP to remove PE phase in FY 2026
2/2025	2026	10/2024	Admin amend RMS 2050 MTP, Amended RMS 2050 MTP, RMS 2025-2028 TIP, and 25-28 STIP to decrease Category 7 STP funds from $17,305,338 to $15,205,338 and increase category 10 CRP funds from $0 to $2,100,000
11/2025	2026	12/2025	A clerical amendment to the Amended RMS 2050 MTP and RMS 2025-2028 TIP to abbreviate certain words in the description in the MTP so that it exactly matches its description in the STIP portal in FY 2026.
2/2026	2026	02/2026	Admin amend Amended RMS 2050 MTP and RMS 2025-2028 TIP to move project from FY 2026 to FY 2027.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-780**	CS	C,R	Vinton	Vinton	**$2,200,688**

TIP PROJECT NAME: Quejette Rd Extension
LIMITS FROM: Douglas Rd
LIMITS TO: 430 Feet South of Vinton Rd
TIP DESCRIPTION: Construction and extension of a new 2-ln road on an existing unpaved road, including curb/gutter, sidewalks, street lighting, asphalt pavement, and stormwater drainage infrastructure.
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: A410X-CAP
MTP REFERENCE: A410X-CAP
FUNDING CATEGORY: CAT 7 - STP MM

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$80,000
Construction:	$1,472,740
Construction Engineering:	$353,448
Contingencies:	$294,500
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$2,200,688**

Cost of Approved Phases: **$2,200,688**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 7	STP MM	$1,760,550	$0	$0	$440,138	$0	$2,200,688
	Fund by Share	**$1,760,550**	**$0**	**$0**	**$440,138**	**$0**	**$2,200,688**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**2121-02-166**	IH 10	E,R	EL Paso	TX DOT	**$183,000,000**

TIP PROJECT NAME: DOWNTOWN 10 from EXECUTIVE CENTER to SL 478 (COPIA ST.) PE and ROW

LIMITS FROM:	EXECUTIVE CENTER
LIMITS TO:	SL 478 (COPIA ST)
TIP DESCRIPTION:	WIDEN FROM 3/5 TO 4/6 LANES EACH DIRECTION, ADD 2-LANE FRONTAGE ROADS EACH DIRECTION, RAMP AND OPERATIONAL IMPROVEMENTS, AND BIKE/PED PATHS.
REMARKS:	Serves as PE and ROW project for CSJ 2121-02-186 Downtown 10, Phase 1; CSJ 2121-02-184 Downtown 10, Phase 2; CSJ 2121-02-185 Downtown 10, Phase 3.

REVISION DATE:	7/2026
MPO PROJECT ID:	**I063X-PE**
MTP REFERENCE:	I063X-PE
FUNDING CATEGORY:	SWROW and SWPE

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

Total Project Cost Information:

Preliminary Engineering:	$88,000,000
Right Of Way:	$95,000,000
Construction:	$0
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$183,000,000**

Cost of Approved Phases: **$183,000,000**

Authorized Funding by Category/Share

			Federal Share	**State Share**	**Regional Share**	**Local Share**	**Lcl Contribution**	**Total Share**
Cat	SWROW	SWROW	$0	$95,000,000	$0	$0	$0	$95,000,000
Cat	SWPE	SWPE	$0	$88,000,000	$0	$0	$0	$88,000,000
	Fund by Share		**$0**	**$183,000,000**	**$0**	**$0**	**$0**	**$183,000,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
5/2025	2025	04/2025	Program project in RMS 2025-2028 TIP and 2025-2028 STIP and amend the Amended RMS 2050 MTP to change the MPO ID, project title, project description, project phases and to change the FY from FY 2029 to FY 2025.
7/2026	2025	05/2026	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**2121-02-167**	IH 10	C,E,R	El Paso	TxDOT	**$34,111,070**

TIP PROJECT NAME: I-10 FR Ext PH I (Executive to Sunland Park)
LIMITS FROM: EXECUTIVE CENTER BLVD
LIMITS TO: SUNLAND PARK DR
TIP DESCRIPTION: I-10 FR Ext PH I (Executive to Sunland Park): Construct 2-lane Westbound Frontage Roads, Frontage Road Improvements.
REMARKS: PE began in FY 2013 and continues through FYs 2023-2025. ROW will begin in FY 2023 and continue through FY 2026

REVISION DATE: 7/2026
MPO PROJECT ID: I061X-CAP-1
MTP REFERENCE: I061X-CAP-1
FUNDING CATEGORY: CAT 2-TMA, SWPE, SWROW

PROJECT HISTORY:
Program Project in RMS 2052 MTP and RMS 2027-2030 TIP.

Total Project Cost Information:

Preliminary Engineering:	$787,500
Right Of Way:	$2,000,000
Construction:	$31,323,570
Construction Engineering:	$1,015,171
Contingencies:	$668,454
Indirects:	$450,841
Bond Financing:	$0
Potential Change Order:	$167,113
Total Project Cost:	**$36,412,649**

Cost of Approved Phases: $34,111,070

Authorized Funding by Category/Share

			Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat	2M	TMA	$0	$31,323,570	$0	$0	$0	$31,323,570
Cat	SBPE	SWPE	$0	$787,500	$0	$0	$0	$787,500
Cat	SWROW	SWROW	$0	$2,000,000	$0	$0	$0	$2,000,000
		Fund by Share	**$0**	**$34,111,070**	**$0**	**$0**	**$0**	**$34,111,070**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2025		Program Project in RMS 2052 MTP and RMS 2027-2030 TIP.
07/2022	2025	03/2022	Program to RMS 2050 MTP and to RMS 23-26 TIP in FY 2025
05/2023	2025	04/2023	Amend RMS 2050 MTP and 23-26 TIP to add PE phase using SWPE funds and ROW phase using SWROW in FY 2025
08/2023	2025	06/2023	Amend RMS 2050 MTP and 23-26 TIP to add $12M of CAT 2M funds in FY2025.
07/2024	2025	04/2024	Program in RMS 2025-2028 TIP and 2025-2028 STIP in FY 2025
02/2025	2025	03/2025	Amend RMS 2050 MTP, amended RMS 2050 MTP, RMS 25-28 TIP, and 25-28 STIP to change the federal share of CAT 2 from 80% to 0%, increase the state share from 20% to 100% and change the fiscal year from FY 2025 to FY 2026.
11/2025	2025	12/2025	Administratively amend Amended RMS 2050 MTP, RMS 2025-2028 TIP, 2025-2028 STIP to increase Category 2 TMA funds from $28,475,973 to $31,323,570 for an increased total project cost of $36,412,649 in FY 2026.
2/2026	2025	03/2026	Administratively amend Amended RMS 2050 MTP, RMS 2025-2028 TIP, 2025-2028 STIP to change the Fiscal Year (FY) from FY 2026 to FY 2027.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-755**	N/A	C	Regional	CRRMA	**$124,987**

TIP PROJECT NAME: SunCycle Bike Share Fleet Improvement Project (FY 2027)

LIMITS FROM: El Paso MPO Region within El Paso County

LIMITS TO: El Paso MPO Region within El Paso County

TIP DESCRIPTION: Supports the purchase of electric bikes & batteries to augment the bike share program. Users ride e-bikes at a higher rate and longer duration allowing users to ride to further destinations.

REMARKS:

REVISION DATE: 7/2026

MPO PROJECT ID: M096X-2

MTP REFERENCE: M096X-2

FUNDING CATEGORY: CAT 9 MPO TA

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$124,987
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$124,987**

Cost of Approved Phases: **$124,987**

Authorized Funding by Category/Share

	Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 9 MPO TA	$99,989	$0	$0	$24,998	$0	$124,987
Fund by Share	**$99,989**	**$0**	**$0**	**$24,998**	**$0**	**$124,987**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.
11/2025	2027	11/2025	Program project in Amended RMS 2050 MTP and RMS 2025-2028 TIP using $124,987 of TASA funds in FY 2027.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0374-02-126**	US 62/180	C,E	El Paso	TxDOT	**$26,906,107**

TIP PROJECT NAME: US62/180 MONTANA AVE. PHASE II-A (GLOBAL REACH DR.): CONSTRUCTION OF BRIDGE OVERPASS

LIMITS FROM: 0.70 mi W of Global Reach (Lorne Rd)
LIMITS TO: 1.33 mi E of Global Reach (Wooster Ln)
TIP DESCRIPTION: CONSTRUCTION OF BRIDGE OVERPASS
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: B401X
MTP REFERENCE: B401X
FUNDING CATEGORY: CAT 11-BSIF, SWPE

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

Total Project Cost Information:	
Preliminary Engineering:	$2,446,010
Right Of Way:	$0
Construction:	$24,460,097
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$26,906,107**

Cost of Approved Phases: $26,906,107

Authorized Funding by Category/Share

			Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat	11	11 - BSIF	$19,568,078	$4,892,019	$0	$0	$0	$24,460,097
Cat	SWPE	Statewide PE	$0	$2,446,010	$0	$0	$0	$2,446,010
		Fund by Share	**$19,568,078**	**$7,338,029**	**$0**	**$0**	**$0**	**$26,906,107**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.
2/2026	2027	12/2025	Program project in Amended RMS 2050 MTP and RMS 2025-2028 TIP in FY 2027.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-736**	VARIOUS	C	El Paso	TXDOT	**$2,000,000**

TIP PROJECT NAME: ELP Safety Service Patrol-HERO FY 2027
LIMITS FROM: Countywide
LIMITS TO: AlongI10,US54,LP375,SS601,SH178&US62/180
TIP DESCRIPTION: HIGHWAY EMERGENCY RESPONSE OPERATIONS (HERO) FY 2027
REMARKS:

REVISION DATE: 7/2026
11/2024
MPO PROJECT ID: M091X-6
MTP REFERENCE: M091X-6
FUNDING CATEGORY: CAT 7 - STP

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

Total Project Cost Information:	
Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$2,000,000
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$2,000,000**

Cost of Approved Phases: **$2,000,000**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 7	STP - MM	$1,600,000	$400,000	$0	$0	$0	$2,000,000
	Fund by Share	**$1,600,000**	**$400,000**	**$0**	**$0**	**$0**	**$2,000,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.
11/2024	2027	09/2024	Program in RMS 2050 MTP, Amended RMS 2050 MTP, RMS 2025-2028 TIP, and 2025-2028 STIP in FY 2027

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-745**	VARIOUS	C	Horizon City	Horizon	**$923,784**

TIP PROJECT NAME: Horizon City - Socorro Bus Circulator

LIMITS FROM: Horizon City, TX (stop at future TOD site at Horizon Blvd. and Darrington Road)

LIMITS TO: Socorro, TX (stops near Nuevo Hueco Tanks Road and North Loop Drive and at EPPC Mission Del Paso Campus)

TIP DESCRIPTION: A transit route that provides service to and from the City of Socorro, Horizon City, and the Mission Del Paso EPCC Campus. This is being proposed as a three year pilot program; the cost presented is for the three year total.

REMARKS: Project funded with CAT 10 CRP funds but is displaying CMAQ emissions numbers to demonstrate eligibility for carbon funding.

REVISION DATE: 7/2026
MPO PROJECT ID: **T411X**
MTP REFERENCE: T411X
FUNDING CATEGORY: CAT 10 - CRP

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP, and amend Amended RMS 2050 MTP to change FY from FY 2026 to FY 2027.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$923,784
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$923,784**

Cost of Approved Phases: **$923,784**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 10	CRP	$739,026	$0	$0	$184,758	$0	$923,784
	Fund by Share	**$739,026**	**$0**	**$0**	**$184,758**	**$0**	**$923,784**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2026	05/2026	Program project in RMS 2052 MTP and RMS 2027-2030 TIP, and amend Amended RMS 2050 MTP to change FY from FY 2026 to FY 2027.
11/2024	2026	09/2024	Program in RMS 2050, Amended RMS 2050, RMS 25-28 TIP, 25-28 STIP in FY 2026, and add CSJ: 0924 -06-745 to the project.
11/2025	2026	10/2025	Amend Amended RMS 2050 MTP to reduce CMAQ funds to $0, and add $923,784 of CAT 10 CRP funds in FY 2026.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-607**	CS	C,R	Socorro	Socorro	**$21,461,510**

TIP PROJECT NAME: **Nuevo Hueco Tanks Extension (FM 76 to SH20) - Construction**
LIMITS FROM: FM 76 North Loop Dr
LIMITS TO: SH 20 - Alameda Avenue
TIP DESCRIPTION: Nuevo Hueco Tanks Extension (FM 76 TO SH20) - Construction: Build 4 lane roadway and shared-use path
REMARKS: PE PHASE PROGRAMMED IN 2019-2022 TIP FY 2020 (CSJ 0924-06-607)

REVISION DATE: 7/2026
MPO PROJECT ID: **A527X-CAP-1**
MTP REFERENCE: A527X-CAP-1
FUNDING CATEGORY: CAT 7, CAT 3 LC, CAT 3TRZ-Socorro

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030, and amend RMS 2050 MTP to amend phase costs and TPC in FY 2028.

Total Project Cost Information:	
Preliminary Engineering:	$0
Right Of Way:	$1,500,000
Construction:	$15,357,837
Construction Engineering:	$2,303,673
Contingencies:	$2,300,000
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$21,461,510**

Cost of Approved Phases: **$21,461,510**

Authorized Funding by Category/Share

			Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat	3TRZ	Socorro TRZ	$0	$0	$0	$0	$5,971,134	$5,971,134
Cat	7	STP-MM	$11,192,300	$0	$0	$2,798,076	$0	$13,990,376
Cat	3LC		$0	$0	$0	$0	$1,500,000	$1,500,000
		Fund by Share	**$11,192,300**	**$0**	**$0**	**$2,798,076**	**$7,471,134**	**$21,461,510**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030, and amend RMS 2050 MTP to amend phase costs and TPC in FY 2028.
07/2020	2024	05/2020	Program into amended D2045 MTP, D21-24 TIP and 21-24 STIP in FY 2024
07/2022	2024	03/2022	Program in RMS 2050 MTP and RMS 23-26 TIP in FY 2024
02/2023	2024	01/2023	Amend to add $4,990,376 of CAT 7 STP MM funds
05/2023	2024	04/2023	Amend RMS 2050 MTP and RMS 23-26 TIP to add ROW phase using CAT 3 Lcl Contribution funds in FY 2024
08/2023	2026	08/2023	Adminitratively amend RMS 2050 MTP and RMS 23-26 TIP to move from FY 2024 to FY 2026
07/2024	2026	04/2024	Program in RMS 25-28 TIP and 25-28 STIP in FY 2026
02/2026	2028	02/2026	Adminitratively amend the amended RMS 2050 MTP and RMS 25-28 TIP to move the project from FY 2026 to FY 2028

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**2121-02-186**	IH 10	C	El Paso	TXDOT	**$525,000,000**

TIP PROJECT NAME: Downtown 10, Phase 1 from SS 1966 to 0.5MI East of Campbell St.

LIMITS FROM: SS 1966

LIMITS TO: 0.5 MI EAST OF CAMPBELL ST

TIP DESCRIPTION: WIDEN FROM 3/5 TO 4/6 LANES EACH DIRECTION, ADD 2-LANE FRONTAGE ROADS EACH DIRECTION, RAMP AND OPERATIONAL IMPROVEMENTS, AND BIKE/PED PATHS.

REMARKS: PE and ROW for this project is programmed on CSJ 2121-02-166 DOWNTOWN 10, PE and ROW

REVISION DATE: 7/2026

MPO PROJECT ID: I063X-CAP-1

MTP REFERENCE: I063X-CAP-1

FUNDING CATEGORY: CAT 2 - TMA, CAT 4, CAT 7 - STP, CAT 11, CAT 12

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$525,000,000
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$525,000,000**

Cost of Approved Phases: $525,000,000

Authorized Funding by Category/Share

			Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat	2M	Metropolitan Area (TMA) Corridor Projects	$137,210,992	$34,302,748	$0	$0	$0	$171,513,740
Cat	4	Statewide Urban Connectivity Corridor	$57,405,754	$14,351,438	$0	$0	$0	$71,757,192
Cat	7	STP - MM	$23,120,000	$5,780,000	$0	$0	$0	$28,900,000
Cat	11	District Discretionary	$2,263,254	$565,814	$0	$0	$0	$2,829,068
Cat	12	Strategic Priority	$200,000,000	$50,000,000	$0	$0	$0	$250,000,000
		Fund by Share	**$420,000,000**	**$105,000,000**	**$0**	**$0**	**$0**	**$525,000,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.
5/2025	2028	04/2025	Program into Amended RMS 2050 MTP, RMS 2025-2028 TIP and 2025-2028 STIP in FY 2028
8/2025	2028	09/2025	Admin amend Amended RMS 2050 MTP, RMS 2025-2028 TIP, and 25-28 STIP to increase CAT 2 TMA funds and decrease CAT 4 Statewide Urban Connectivity Corridor funds for an unchanged total project cost of $500,000,000 in 2028.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-728**	N/A	C	El Paso	COEP	**$4,107,096**

TIP PROJECT NAME: Playa Drain Shared Use Path (Knights Dr to Midway Dr), Construction Phase

LIMITS FROM: Knights Dr from Playa Dr; Midway Dr from SH20/Alameda; Mimosa Ave from Midway Dr

LIMITS TO: Knights Dr to Midway Dr; Midway Dr to Mimosa Ave; Mimosa Ave to Vocational Dr

TIP DESCRIPTION: New pedestrian and bicycle facilities with signage, sidewalks, landscaping, furnishings and illumination.

REMARKS:

REVISION DATE: 7/2026

MPO PROJECT ID: E501X-2

MTP REFERENCE: E501X-2

FUNDING CATEGORY: CAT 5 - CMAQ, CAT 7 FRHFA-TIFIA

VOC (Kg/Day): 0.045 CO (Kg/Day): 0.746

NOX (Kg/Day): 0.083 PM 10 (Kg/Day): 0.002

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028 and amend Amended RMS 2050 MTP to amend project title, project description, limits reduce PE phase to $0 and update TPC and funding in FY 2028.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$4,107,096
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$4,107,096**

Cost of Approved Phases: $4,107,096

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 5	CMAQ	$2,479,960	$0	$0	$619,990	$0	$3,099,950
Cat 7	FRHFA-TIFIA	$805,717	$0	$0	$201,429	$0	$1,007,146
	Fund by Share	**$3,285,677**	**$0**	**$0**	**$821,419**	**$0**	**$4,107,096**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028 and amend Amended RMS 2050 MTP to amend project title, project description, limits reduce PE phase to $0 and update TPC and funding in FY 2028.
07/2024	2027	04/2024	Program in RMS 2025-2028 TIP and 2025-2028 STIP - EXEMPT
11/2025	2027	10/2025	Amend Amended RMS 2050 MTP and RMS 2025-2025 TIP reduce CMAQ funds to $0 and add $4,107,096 of CRP for an unchanged total of $4,107,096 and change FY from 2027 to FY 2028.
2/2026	2027	12/2026	Amend Amended RMS 2050 MTP and RMS 2025-2025 TIP to update project name, project description and and project limits in FY 2028.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-756**	N/A	C	Regional	CRRMA	**$124,987**

TIP PROJECT NAME: SunCycle Bike Share Fleet Improvement Project (FY 2028)

LIMITS FROM: El Paso MPO Region within El Paso County

LIMITS TO: El Paso MPO Region within El Paso County

TIP DESCRIPTION: Supports the purchase of electric bikes & batteries to augment the bike share program. Users ride e-bikes at a higher rate and longer duration allowing users to ride to further destinations.

REMARKS:

REVISION DATE: 7/2026

MPO PROJECT ID: M096X-3

MTP REFERENCE: M096X-3

FUNDING CATEGORY: CAT 9 MPO TA

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$124,987
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$124,987**

Cost of Approved Phases: **$124,987**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 9	MPO TA	$99,989	$0	$0	$24,998	$0	$124,987
	Fund by Share	**$99,989**	**$0**	**$0**	**$24,998**	**$0**	**$124,987**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.
11/2025	2028	11/2025	Program project in Amended RMS 2050 MTP and RMS 2025-2028 TIP using $124,987 of TASA funds in FY 2028

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-785**	N/A	C	El Paso	Project Amistad	**$624,000**

TIP PROJECT NAME: Project Amistad-Solar Panel-Equipped Carports

LIMITS FROM: El Paso MPO Region
LIMITS TO: El Paso MPO Region
TIP DESCRIPTION: New Solar panel-equipped carports at local transit facility to provide shaded parking, generate solar energy for on-site use.
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: M313X
MTP REFERENCE: M313X
FUNDING CATEGORY: CAT 5 - CMAQ
VOC (Kg/Day): 0 CO (Kg/Day): 0
NOX (Kg/Day): 0.165 PM 10 (Kg/Day): 0

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$624,000
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$624,000**

Cost of Approved Phases: **$624,000**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 5	CMAQ	$499,200	$0	$0	$124,800	$0	$624,000
	Fund by Share	**$499,200**	**$0**	**$0**	**$124,800**	**$0**	**$624,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2028	5/2026	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-744**	N/A	C	Horizon City	Horizon	**$611,000**

TIP PROJECT NAME: Horizon City to UTEP Express Route

LIMITS FROM: Glory Road Transit Station

LIMITS TO: Horizon City, TX

TIP DESCRIPTION: A pilot transit route providing service to UTEP from Horizon City at peak hour in the morning and afternoon. The cost and proposal represents a three year pilot program.

REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: T412X
MTP REFERENCE: T412X
FUNDING CATEGORY: CAT 5 - CMAQ
VOC (Kg/Day): 0.082
CO (Kg/Day): 6.617
NOX (Kg/Day): 0.332
PM 10 (Kg/Day): 0.018

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030, and amend project's From and To limits, and funding in the Amended RMS 2050 MTP in FY 2028.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$611,000
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$611,000**

Cost of Approved Phases: **$611,000**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 5	CMAQ	$488,800	$0	$0	$122,200	$0	$611,000
	Fund by Share	**$488,800**	**$0**	**$0**	**$122,200**	**$0**	**$611,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030, and amend project's From and To limits in the Amended RMS 2050 MTP in FY 2028.
11/2024	2028	09/2024	Program in RMS 2050, Amended RMS 2050, RMS 25-28 TIP, 25-28 STIP in FY 2028, and add CSJ: 0924-06-744 to the project.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-737**	VARIOUS	C	El Paso	TXDOT	**$2,100,000**

TIP PROJECT NAME: ELP Safety Service Patrol-HERO FY 2028
LIMITS FROM: Countywide
LIMITS TO: AlongI10,US54,LP375,SS601,SH178&US62/180
TIP DESCRIPTION: HIGHWAY EMERGENCY RESPONSE OPERATIONS (HERO) FY 2028
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: M091X-7
MTP REFERENCE: M091X-7
FUNDING CATEGORY: CAT 7 - FRHFA-TIFIA

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028 and amend Amended RMS 2050 MTP to reduce CAT 10 CRP funding to $0 and add $2,100,000 of CAT 7 TIFIA funding.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$2,100,000
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$2,100,000**

Cost of Approved Phases: **$2,100,000**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 7	FRHFA-TIFIA	$1,680,000	$420,000	$0	$0	$0	$2,100,000
	Fund by Share	**$1,680,000**	**$420,000**	**$0**	**$0**	**$0**	**$2,100,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028 and amend Amended RMS 2050 MTP to reduce CAT 10 CRF funding to $0 and add $2,100,000 of CAT 7 TIFIA funding.
11/2024	2028	09/2024	Program in 2050 RMS, Amended 2050 RMS, RMS 2025-2028 TIP, and 2025-2028 STIP in FY 2028
11/2025	2028	10/2025	Amend Amended RMS 2050 MTP and RMS 2025-2025 TIP reduce STP-MM funds to $0 and add $2,000,000 of CRP for an unchange total of $1,543,810 in FY 2028.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-781**	CS	C,E	Socorro	Socorro	**$1,896,125**

TIP PROJECT NAME: Place Rd Bridge Replacement
LIMITS FROM: Place Rd at Franklin Canal on Alameda Ave (SH20)
LIMITS TO: Place Rd at Franklin Canal on Alameda Ave (SH20)
TIP DESCRIPTION: Design and reconstruction of bridge culvert replacement and expansion to include ADA-accessibility and pedestrian accessibility at Place Rd at Franklin Canal on Alameda Ave (SH20)
REMARKS:

REVISION DATE:
MPO PROJECT ID: **B505X**
MTP REFERENCE: B505X
FUNDING CATEGORY: CAT 7 - STP MM

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2029.

Total Project Cost Information:

Preliminary Engineering:	$296,125
Right Of Way:	$0
Construction:	$1,440,000
Construction Engineering:	$160,000
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$1,896,125**

Cost of Approved Phases: **$1,896,125**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 7	STP MM	$1,516,900	$0	$0	$379,225	$0	$1,896,125
	Fund by Share	**$1,516,900**	**$0**	**$0**	**$379,225**	**$0**	**$1,896,125**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
	2029		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2029.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-691**	CS	C	Horizon City	Horizon	**$5,497,781**

TIP PROJECT NAME: **Delake Street Construction**

LIMITS FROM: Rodman St

LIMITS TO: Darrington Rd

TIP DESCRIPTION: Construction of a 2-ln road w enhanced ped facilities, bike lns, lighting to provide access to Horizon City Transit Oriented Town Center. Dilley St will still be constructed parallel w/ Horizon TRZ funds. Both open to public by 2032.

REMARKS: PE being completed with Horizon City TOD Design project (MPO Project Number: M408X) programmed in 2023-2026 S/TIP in FY 2024 with 3LC funds.

REVISION DATE: 7/2026

MPO PROJECT ID: **A442X**

MTP REFERENCE: A442X

FUNDING CATEGORY: CAT 7 - STP MM

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2029, and remove PE and ROW phases and amend TPC in Amended RMS 2050 MTP.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$5,497,781
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$5,497,781**

Cost of Approved Phases: **$5,497,781**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 7	STP-MM	$4,398,224	$0	$0	$1,099,557	$0	$5,497,781
	Fund by Share	**$4,398,224**	**$0**	**$0**	**$1,099,557**	**$0**	**$5,497,781**

7/2026	2025		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2029, and remove PE and ROW phases and amend TPC in Amended RMS 2050 MTP.
07/2022	2025	03/2022	Program to the RMS 2050 MTP and the RMS 23-26 TIP in FY 2025
02/2023	2025	01/2023	Amend to remove $6,184,474 of CAT 3 TIRZ and add $6,193,514 of CAT 7 STP MM funds
02/2024	2025	12/2023	Amend the RMS 2050 MTP, 23-26 TIP, and 23-26 STIP to change project name, description, and reduce CAT 7 STP MM funds in FY 2025
07/2024	2025	04/2024	Program in RMS 25-28 TIP and 25-28 STIP in FY 2025
5/2025	2025	01/2025	Amend Amended RMS 2050 MTP, 25-28 TIP, and 25-28 STIP to change the project description and FY from FY 2025 to FY 2027
2/2026	2025	12/2025	Amend the Amended RMS 2050 MTP to change the FY from FY 2027 to FY 2029, and deprogram the project from the RMS 2025-2028 TIP.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-766**	N/A	C	San Elizario	San Elizario	**$5,743,771**

TIP PROJECT NAME: **San Elizario Safety and Operational Improvements, Construction Phase**

REVISION DATE: 7/2026
MPO PROJECT ID: **E512X**
MTP REFERENCE: E512X
FUNDING CATEGORY: CAT 7 - STP MM

LIMITS FROM: San Antonio Rd. @ Socorro Rd. (FM 258), San Elizario Rd. (FM1110) @ FM 258, Chicken Ranch Rd. @ FM 258, Chicken Ranch Rd. @ FM1110

LIMITS TO: San Antonio Rd. @ Socorro Rd. (FM 258), San Elizario Rd. (FM1110) @ FM 258, Chicken Ranch Rd. @ FM 258, Chicken Ranch Rd. @ FM1110

TIP DESCRIPTION: Construction phase includes operational improvements to four intersections in San Elizario. Includes improvements of intersections, signal modifications and addition of LT & Rt turn lanes

REMARKS:

PROJECT HISTORY:
Program project in Amended RMS 2050 MTP, RMS 2052 MTP, and RMS 2027-2030 TIP in FY 2029.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$5,038,397
Construction Engineering:	$352,688
Contingencies:	$201,535
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$151,151
Total Project Cost:	**$5,743,771**

Cost of Approved Phases: **$5,743,771**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 7	STP MM	$4,595,017	$0	$0	$1,148,754	$0	$5,743,771
	Fund by Share	**$4,595,017**	**$0**	**$0**	**$1,148,754**	**$0**	**$5,743,771**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2029		Program project in Amended RMS 2050 MTP, RMS 2052 MTP, and RMS 2027-2030 TIP in FY 2029.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-784**	N/A	C,E	El Paso	COEP	**$4,275,421**

TIP PROJECT NAME: Paul Harvey Park Trail
LIMITS FROM: Sunland Park Dr
LIMITS TO: De Leon Dr
TIP DESCRIPTION: Construction of a new shared-use path from Paul Harvey Park to the Westside Natatorium. Project runs on social trail behind Bluff Canyon Circle/Bel Mar Ave on to Mesa Hills Dr
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: E113X
MTP REFERENCE: E113X
FUNDING CATEGORY: CAT 5 - CMAQ
VOC (Kg/Day): 0.006 CO (Kg/Day): 0.08
NOX (Kg/Day): 0.012 PM 10 (Kg/Day): 0.0003

PROJECT HISTORY:
Program project in Amended RMS 2050 MTP, RMS 2052 MTP, and RMS 2027-2030 TIP in FY 2029.

Total Project Cost Information:

Preliminary Engineering:	$737,545
Right Of Way:	$0
Construction:	$2,711,950
Construction Engineering:	$825,926
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$4,275,421**

Cost of Approved Phases: **$4,275,421**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 5	CMAQ	$3,420,337	$0	$0	$855,084	$0	$4,275,421
	Fund by Share	**$3,420,337**	**$0**	**$0**	**$855,084**	**$0**	**$4,275,421**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2029		Program project in Amended RMS 2050 MTP, RMS 2052 MTP, and RMS 2027-2030 TIP in FY 2029.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-775**	N/A	C,E	El Paso	COEP	**$6,070,329**

TIP PROJECT NAME: Montwood Dr and Sun Fire Blvd Roundabout

LIMITS FROM: Montwood Dr
LIMITS TO: Sun Fire Blvd
TIP DESCRIPTION: New two-lane roundabout at Montwood Dr and Sun Fire Blvd. Includes pedestrian improvements, hawks, signage, striping, bicycle lanes on all roundabouts, and ramps for cyclists.
REMARKS: The pedestrian improvements include new sidewalks and new ADA ramps to allow pedestrians to travel through the roundabout.

REVISION DATE: 7/2026
MPO PROJECT ID: E409X
MTP REFERENCE: E409X
FUNDING CATEGORY: CAT 5 - CMAQ
VOC (Kg/Day): 0.054
CO (Kg/Day): 0.929
NOX (Kg/Day): 0.219
PM 10 (Kg/Day): 0.014

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2029, and amend Amended RMS 2052 MTP to change fiscal year from FY 2028 to FY 2029.

Total Project Cost Information:	
Preliminary Engineering:	$970,195
Right Of Way:	$0
Construction:	$4,386,970
Construction Engineering:	$713,164
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$6,070,329**

Cost of Approved Phases: **$6,070,329**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 5	CMAQ	$4,856,263	$0	$0	$1,214,066	$0	$6,070,329
	Fund by Share	**$4,856,263**	**$0**	**$0**	**$1,214,066**	**$0**	**$6,070,329**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
2/2026	2028	12/2025	Program project in Amended RMS 2050 MTP and RMS 2025-2028 TIP in FY 2026.
7/2026	2029	05/2026	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2029, and amend Amended RMS 2052 MTP to change fiscal year from FY 2028 to FY 2029.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-778**	VARIOUS	C	El Paso	TXDOT	**$1,900,000**

TIP PROJECT NAME: ELP Safety Service Patrol-HERO FY 2029
LIMITS FROM: Countywide
LIMITS TO: AlongI10,US54,LP375,SS601,SH178&US62/180
TIP DESCRIPTION: HIGHWAY EMERGENCY RESPONSE OPERATIONS (HERO) FY 2029
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: M091X-8
MTP REFERENCE: M091X-8
FUNDING CATEGORY: CAT 7 - STP MM

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2029.

Total Project Cost Information:	
Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$1,900,000
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$1,900,000**

Cost of Approved Phases: **$1,900,000**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 7	STP-MM	$1,520,000	$380,000	$0	$0	$0	$1,900,000
	Fund by Share	**$1,520,000**	**$380,000**	**$0**	**$0**	**$0**	**$1,900,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2029		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2029.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-783**	CS	C,E	El Paso	COEP	**$16,186,763**

TIP PROJECT NAME: Saul Kleinfeld Dr Street Reconstruction

LIMITS FROM: Montwood Dr

LIMITS TO: Pebble Hills Blvd

TIP DESCRIPTION: Project includes complete 4 lane roadway reconstruction, parkway improvements, bicycle facilities, landscaping and irrigation, and striping on Saul Kleinfeld Dr from Montwood Dr to Pebble Hills Blvd.

REVISION DATE: 7/2026

MPO PROJECT ID: R402X

MTP REFERENCE: R402X

FUNDING CATEGORY: CAT 7 - STP MM

REMARKS:

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030, and amend project title, project description, construction costs, engineering costs, TPC, and change fiscal year from FY 2029 to FY 2030 in the Amended RMS 2050 MTP in FY 2030.

Total Project Cost Information:	
Preliminary Engineering:	$2,435,655
Right Of Way:	$0
Construction:	$12,889,459
Construction Engineering:	$861,649
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$16,186,763**

Cost of Approved Phases: **$16,186,763**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 7	STP MM	$12,949,410	$0	$0	$3,237,353	$0	$16,186,763
	Fund by Share	**$12,949,410**	**$0**	**$0**	**$3,237,353**	**$0**	**$16,186,763**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2029		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030, and amend project title, project description, construction costs, engineering costs, TPC, and change fiscal year from FY 2029 to FY 2030 in the Amended RMS 2050 MTP in FY 2030.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**2201-01-013**	FM 2316	C,E	El Paso	COEP	**$4,927,410**

TIP PROJECT NAME: McRae Blvd Shared Use Path, Phase 3

LIMITS FROM: I10
LIMITS TO: Montwood Dr
TIP DESCRIPTION: New Shared use path to include illumination, landscaping, irrigation, signage and pedestrian improvements to intersections including ADA ramps and striping.
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: M310C
MTP REFERENCE: M310C
FUNDING CATEGORY: CAT 5 - CMAQ
VOC (Kg/Day): 0.018
CO (Kg/Day): 0.246
NOX (Kg/Day): 0.034
PM 10 (Kg/Day): 0.001

PROJECT HISTORY:
Program project in Amended RMS 2050 MTP, RMS 2052 MTP, and RMS 2027-2030 TIP in FY 2030.

Total Project Cost Information:

Preliminary Engineering:	$820,510
Right Of Way:	$0
Construction:	$3,485,343
Construction Engineering:	$621,557
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$4,927,410**

Cost of Approved Phases: **$4,927,410**

Authorized Funding by Category/Share

		Federal Share	**State Share**	**Regional Share**	**Local Share**	**Lcl Contribution**	**Total Share**
Cat 5	CMAQ	$3,941,928	$0	$0	$985,482	$0	$4,927,410
	Fund by Share	**$3,941,928**	**$0**	**$0**	**$985,482**	**$0**	**$4,927,410**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	**FY(s)**	**Note/Amend Date**	**Note/Amendment**
7/2026	2030		Program project in Amended RMS 2050 MTP, RMS 2052 MTP, and RMS 2027-2030 TIP in FY 2030.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0665-02-005**	SS320	C,E	El Paso	TXDOT	**$165,000,000**

TIP PROJECT NAME: Borderland Expressway, Phase 3: BU54 (Dyer St.) to SL 375

LIMITS FROM: BU54 (Dyer St.)

LIMITS TO: SL 375

TIP DESCRIPTION: Borderland Expressway Phase III Construct New Divided 4 Lane Facility from Railroad to SL 375 and Transitionary work from BU54 (Dyer) to Railroad Drive

REMARKS:

REVISION DATE: 7/2026

MPO PROJECT ID: P201B-CAP3

MTP REFERENCE: P201B-CAP3

FUNDING CATEGORY: CAT 12

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030.

Total Project Cost Information:

Preliminary Engineering:	$15,000,000
Right Of Way:	$0
Construction:	$150,000,000
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$165,000,000**

Cost of Approved Phases: $165,000,000

Authorized Funding by Category/Share

			Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat	12	Strategic Priority	$120,000,000	$30,000,000	$0	$0	$0	$150,000,000
Cat	SWPE	Statewide PE	$0	$15,000,000	$0	$0	$0	$15,000,000
		Fund by Share	**$120,000,000**	**$45,000,000**	**$0**	**$0**	**$0**	**$165,000,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2030		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-779**	VARIOUS	C	El Paso	TXDOT	**$2,000,000**

TIP PROJECT NAME: **ELP Safety Service Patrol-HERO FY 2030**
LIMITS FROM: Countywide
LIMITS TO: AlongI10,US54,LP375,SS601,SH178&US62/180
TIP DESCRIPTION: HIGHWAY EMERGENCY RESPONSE OPERATIONS (HERO) FY 2030
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: **M019X-9**
MTP REFERENCE: M019X-9
FUNDING CATEGORY: CAT 7 - STP MM

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$2,000,000
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$2,000,000**

Cost of Approved Phases: **$2,000,000**

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 7	STP MM	$1,600,000	$400,000	$0	$0	$0	$2,000,000
	Fund by Share	**$1,600,000**	**$400,000**	**$0**	**$0**	**$0**	**$2,000,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2030		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

FHWA to FTA Funds Transfer Projects[2]

DISTRICT	COUNTY	CSJ	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
TX DIST. 24	EP	**0924-06-785**	N/A	C	El Paso	Project Amistad	**$624,000**

TIP PROJECT NAME: Project Amistad-Solar Panel-Equipped Carports

LIMITS FROM: El Paso MPO Region
LIMITS TO: El Paso MPO Region
TIP DESCRIPTION: New Solar panel-equipped carports at local transit facility to provide shaded parking, generate solar energy for on-site use.
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: M313X
MTP REFERENCE: M313X
FUNDING CATEGORY: CAT 5 - CMAQ
VOC (Kg/Day): 0
CO (Kg/Day): 0
NOX (Kg/Day): 0.165
PM 10 (Kg/Day): 0

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

Total Project Cost Information:

Preliminary Engineering:	$0
Right Of Way:	$0
Construction:	$624,000
Construction Engineering:	$0
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$624,000**

Cost of Approved Phases:

$624,000

Authorized Funding by Category/Share

		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat 5	CMAQ	$499,200	$0	$0	$124,800	$0	$624,000
	Fund by Share	**$499,200**	**$0**	**$0**	**$124,800**	**$0**	**$624,000**

PROJECT AMENDMENT HISTORY

STIP Rev Date(s)	FY(s)	Note/Amend Date	Note/Amendment
7/2026	2028	5/2026	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

'STIP Rev Date(s)' also refers to TIP Administrative Amendment (Local Revision) Date

New Mexico Highway / Transit Projects[3]

DISTRICT	COUNTY	CSJ/CN	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
NM DIST. 1	DA		NM 498	C,E	Sunland Park	Sunland Park	**$3,400,000**

TIP PROJECT NAME: NM 498 (Anapra) Reconstruction

LIMITS FROM: McNutt Rd

LIMITS TO: NMDO South Connector Rd

TIP DESCRIPTION: 'Reconstruction of an existing 2-lane roadway. Scope includes Design, Construction and Construction Management of roadway reconstruction, drainage, erosion control, and permanent signing & striping. Shared use path to be included.

REMARKS:

REVISION DATE: 7/2026

MPO PROJECT ID: R615X

MTP REFERENCE: R615X

FUNDING CATEGORY: NM STPL

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027, and amend the Amended RMS 2050 MTP to update phase costs, TPC, andf fiscal year to FY 2028.

Total Project Cost Information:

Preliminary Engineering:	$400,000
Right Of Way:	$0
Construction:	$2,750,000
Construction Engineering:	$250,000
Contingencies:	$0
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$0
Total Project Cost:	**$3,400,000**

Cost of Approved Phases: **$3,150,000**

Authorized Funding by Category/Share

			Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat	NM STPL	Surface Transportation Program Large	$2,720,000	$0	$0	$680,000	$0	$3,400,000
	Fund by Share		**$2,720,000**	**$0**	**$0**	**$680,000**	**$0**	**$3,400,000**

AMENDMENT HISTORY

History STIP Rev Date	History FY	History Note/Amendment
7/2026	2028	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027, and amend the Amended RMS 2050 MTP to update phase costs, TPC, andf fiscal year to FY 2028.

DISTRICT	COUNTY	CSJ/CN	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
NM DIST. 1	DA		Sunland Park Dr	C,E	Sunland Park	Sunland Park	**$25,450,300**

TIP PROJECT NAME: Sunland Park Dr Extension
LIMITS FROM: Texas State Line
LIMITS TO: McNutt Rd
TIP DESCRIPTION: Widen from 2 to 3 lanes in each dir from State Line to McNutt and build/widen 4-lane roadway (2-lanes each dir) from McNutt to Sunland Park POE. Inclu design & const, const mgt, drainage, erosion control, signing & striping.
REMARKS:

REVISION DATE: 7/2026
MPO PROJECT ID: A607X
MTP REFERENCE: A607X
FUNDING CATEGORY: NM STPL, City of Sunland Park

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030, and amend the Amended RMS 2050 MTP to update the To limit, update construction and PE costs and total project costs and the change the fiscal year from FY 2027 to FY 2030.

Total Project Cost Information:

Preliminary Engineering:	$450,300
Right Of Way:	$23,450
Construction:	$20,000,000
Construction Engineering:	$1,500,000
Contingencies:	$2,000,000
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$1,500,000
Total Project Cost:	**$25,473,750**

Cost of Approved Phases: **$20,450,300**

Authorized Funding by Category/Share

			Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Cat	NM STPL	Sufface Transportation Program - Large Urban	$1,688,800	$0	$0	$311,200	$0	$2,000,000
Cat	Other	City of Sunland Park, NM	$0	$0	$0	$0	$23,450,300	$23,450,300
		Fund by Share	**$1,688,800**	**$0**	**$0**	**$311,200**	**$23,450,300**	**$25,450,300**

AMENDMENT HISTORY

History STIP Rev Date	History FY	History Note/Amendment
7/2026	2030	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2030, and amend the Amended RMS 2050 MTP to update the To limit, update construction and PE costs and total project costs and the change the fiscal year from FY 2027 to FY 2030.

DISTRICT	COUNTY	CSJ/CN	HWY	PHASE	CITY	PROJECT SPONSOR	YOE COST
NM DIST. 1	DA		Airport Rd	C,E	Sunland Park	Sunland Park	**$13,350,000**

TIP PROJECT NAME: Airport Rd Reconstruction

LIMITS FROM: NM 136

LIMITS TO: NM 273

TIP DESCRIPTION: Reconstruct existing 2-lane collector street, with raised medians, auxiliary lanes, multi-purpose trail, street lighting, landscape and irrigation, and RTD stops.

REMARKS:

REVISION DATE: 7/2026

MPO PROJECT ID: R618X

MTP REFERENCE: R618X

FUNDING CATEGORY: City of Sunland Park

PROJECT HISTORY:
Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2029.

Total Project Cost Information:	
Preliminary Engineering:	$750,000
Right Of Way:	$0
Construction:	$10,000,000
Construction Engineering:	$800,000
Contingencies:	$1,200,000
Indirects:	$0
Bond Financing:	$0
Potential Change Order:	$600,000
Total Project Cost:	**$13,350,000**

Cost of Approved Phases: **$10,750,000**

Authorized Funding by Category/Share

Cat		Federal Share	State Share	Regional Share	Local Share	Lcl Contribution	Total Share
Other	City of Sunland Park	$0	$0	$0	$0	$13,350,000	$13,350,000
Fund by Share		**$0**	**$0**	**$0**	**$0**	**$13,350,000**	**$13,350,000**

AMENDMENT HISTORY

History STIP Rev Date	History FY	History Note/Amendment
7/2026	2029	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2029.

Transit Projects FTA & Other Funds

Transit projects are included in this TIP. Public notice of public participation activities and time established for public review of and comments on the TIP will satisfy the Program of Projects (POP) requirements.

District: TX DIST. 24

YOE = Year of Expenditure

General Project Information

Project Sponsor:	Sun Metro
MPO ID:	**T3C**
Project Name:	Capital Maintenance (5307)
Apportionment Year:	2026
Project Phase:	T
Brief Project Description:	Capital Maintenance (5307): Capital & Preventive Maintenance
Sec5309 ID:	
Amend Date:	7/2026
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

Funding Information (YOE)

Fed. Funding Category:	**Sec. 5307 - Urbanized Formula >200K**
Other FTA Section:	
Federal (FTA) Funds:	$13,915,729
State (TXDOT) Funds:	$0
Other Funds:	$3,478,933
Fiscal Year Cost:	**$17,394,662**
Construction: $17,394,662 PE: $0	ROW: $0
Total Project Cost:	**$17,394,662**
TDC Amount Requested:	$0
TDC Awarded Date & Amount:	$0

7/2024	2027	07/2024	Program in RMS 25-28 TIP and 25-28 STIP in FY 2027 - EXEMPT
10/2024	2027	10/2024	Administratively amend RMS 2050 MTP, Amended RMS 2050 MTP, RMS 2025-2028 TIP, and 25-28 STIP to increase FTA 5307 funds from $11,945,475 to $14,091,139 and change FY from FY 2027 to FY 2028 - Exempt
11/2024	2027	12/2024	Administratively amend RMS 2050, Amended RMS 2050, 25-28 TIP and 25-28 STIP (FY 27) to increase FTA 5307 funds from $11,945,475 to $14,091,139 and change the apportionment year from FFY 2027 to FFY 2026 - EXEMPT
7/2026	2027	05/2026	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

District: TX DIST. 24

YOE = Year of Expenditure

General Project Information

Project Sponsor:	Sun Metro
MPO ID:	**T3H**
Project Name:	ADA ParaTransit (5307)
Apportionment Year:	2026
Project Phase:	T
Brief Project Description:	ADA ParaTransit (5307): Provide ADA Para Transit Service (Up to 10% allowed)
Sec5309 ID:	
Amend Date:	7/2026
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

Funding Information (YOE)

Fed. Funding Category:	**Sec. 5307 - Urbanized Formula >200K**
Other FTA Section:	
Federal (FTA) Funds:	$1,705,879
State (TXDOT) Funds:	$0
Other Funds:	$426,470
Fiscal Year Cost:	**$2,132,349**
Construction: $2,132,349 PE: $0	ROW: $0
Total Project Cost:	**$2,132,349**
TDC Amount Requested:	$0
TDC Awarded Date & Amount:	$0

AMENDMENT HISTORY

History STIP Rev Date	History FY		History Note/Amendment
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.
07/2024	2027	03/2024	Program in RMS 25-28 TIP and 25-28 STIP in FY 2027 - EXEMPT
11/2024		12/2024	Administratively amend (FY 25-28) RMS 2050 MTP, Amended 2050 MTP, 25-28 TIP, and 25-28 STIP to decrease FTA 5307 funds to $2,132,349 and change apportionment years from FFY 2027 to FFY 2026.

C=Construction, E=Engineering, R=ROW, T=Transfer

District: TX DIST. 24

YOE = Year of Expenditure

General Project Information

Project Sponsor:	Sun Metro
MPO ID:	**T3F**
Project Name:	Support Vehicles/Bus Rehab (5339)
Apportionment Year:	2026
Project Phase:	N/A
Brief Project Description:	Support Vehicles/Bus Rehab (5339): Support Vehicles
Sec5309 ID:	
Amend Date:	7/2026
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

Funding Information (YOE)

Fed. Funding Category:	**Sec. 5339 - Bus & Bus Facilities >200K**
Other FTA Section:	
Federal (FTA) Funds:	$200,000
State (TXDOT) Funds:	$0
Other Funds:	$50,000
Fiscal Year Cost:	**$250,000**
Construction: $250,000 PE: $0 ROW: $0	
Total Project Cost:	**$250,000**
TDC Amount Requested:	$0
TDC Awarded Date & Amount:	$0

AMENDMENT HISTORY

History STIP Rev Date	History FY	History Date	History Note/Amendment
11/2024	2027	12/2024	Adminstratively amend RMS 20250 MTP, Amended RMS 2050 MTP, 25-28 TIP, and 25-28 STIP to to increase FTA 5339 funds from $250,000 to $500,000 and change apportionment year from FFY 2027 to FFY 2026 - EXEMPT
7/2026	2027	05/2027	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

District: TX DIST. 24 | YOE = Year of Expenditure

General Project Information

Project Sponsor:	Sun Metro
MPO ID:	**T3G**
Project Name:	Transit Enhancements (5339)
Apportionment Year:	2026
Project Phase:	N/A
Brief Project Description:	Transit Enhancements (5339): Sidewalks and Curbcuts for ADA Access
Sec5309 ID:	
Amend Date:	7/2026
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

Funding Information (YOE)

Fed. Funding Category:	**Sec. 5339 - Bus & Bus Facilities >200K**
Other FTA Section:	
Federal (FTA) Funds:	$400,000
State (TXDOT) Funds:	$0
Other Funds:	$100,000
Fiscal Year Cost:	**$500,000**
Construction: $500,000	PE: $0 ROW: $0
Total Project Cost:	**$500,000**
TDC Amount Requested:	$0
TDC Awarded Date & Amount:	$0

AMENDMENT HISTORY

History STIP Rev Date	History FY		History Note/Amendment
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.
11/2024	2027	12/2024	Administratively amend RMS 2050 MTP, Amended RMS 2050 MTP, 25-28 TIP, and 25-28 STIP to change appoortionment year from FFY 2027 to FFY 2026 - EXEMPT

District: TX DIST. 24 | YOE = Year of Expenditure

General Project Information

Project Sponsor:	Sun Metro
MPO ID:	**T3I-14**
Project Name:	FY 2027 FTA 5339 Funding for Bus & Bus Facilities
Apportionment Year:	2026
Project Phase:	N/A
Brief Project Description:	FY 2027 FTA 5339 Funding: For the purchase of buses and facility enhancements incl. equipment such a ADP hardware/software and security related needs, ticket vending machines and sales related software. Capitalized maintenance incl rebuilds, bus shelters & amenities.
Sec5309 ID:	
Amend Date:	7/2026
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.

Funding Information (YOE)

Fed. Funding Category:	**Sec. 5339 - Bus & Bus Facilities >200K**
Other FTA Section:	
Federal (FTA) Funds:	$781,368
State (TXDOT) Funds:	$0
Other Funds:	$195,343
Fiscal Year Cost:	**$976,711**
Construction: $976,711 PE: $0 ROW: $0	
Total Project Cost:	**$976,711**
TDC Amount Requested:	$0
TDC Awarded Date & Amount:	$0

AMENDMENT HISTORY

History STIP Rev Date	History FY		History Note/Amendment
7/2026	2027		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2027.
11/2024	2027	12/2024	Amend in RMS 2050 MTP, Amended RMS 2050 MTP, 25-28 TIP, and 25-28 STIP to decrease FTA 5339 funds to $967,711 and change the apportionment year from FFY 2027 to FFY 2026 - EXEMPT

District: TX DIST. 24

YOE = Year of Expenditure

General Project Information

Project Sponsor:	Sun Metro
MPO ID:	**T3C**
Project Name:	Capital Maintenance (5307)
Apportionment Year:	2027
Project Phase:	T
Brief Project Description:	Capital Maintenance (5307): Capital & Preventive Maintenance
Sec5309 ID:	
Amend Date:	7/2026
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

Funding Information (YOE)

Fed. Funding Category:	**Sec. 5307 - Urbanized Formula >200K**
Other FTA Section:	
Federal (FTA) Funds:	$11,272,911
State (TXDOT) Funds:	$0
Other Funds:	$2,818,228
Fiscal Year Cost:	**$14,091,139**
Construction: $14,091,139 PE: $0 ROW: $0	
Total Project Cost:	**$14,091,139**
TDC Amount Requested:	$0
TDC Awarded Date & Amount:	$0

AMENDMENT HISTORY

History STIP Rev Date	History FY		History Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.
7/2024	2028	07/2024	Program in RMS 25-28 TIP and 25-28 STIP in FY 2028 - EXEMPT
10/2024	2028	10/2024	Administratively amend RMS 2050 MTP, Amended RMS 2050 MTP, RMS 2025-2028 TIP, and 25-28 STIP to increase FTA 5307 funds from $11,945,475 to $14,091,139 and change FY from FY 2028 to FY 2029 - Exempt
11/2024	2028	12/2024	Administratively amend RMS 2050, Amended RMS 2050, 25-28 TIP and 25-28 STIP (FY 2028) to decrease FTA 5307 funds from $11,945,475 to $14,091,139 and change the apportionment year from FFY 2028 to FFY 2027 - EXEMPT

FY 2028 TRANSIT PROJECT DESCRIPTIONS

EL PASO MPO TRANSPORTATION IMPROVEMENT PROGRAM (TIP) 2027-2030

District: TX DIST. 24

YOE = Year of Expenditure

General Project Information

Project Sponsor:	Sun Metro
MPO ID:	**T3H**
Project Name:	ADA ParaTransit (5307)
Apportionment Year:	2027
Project Phase:	T
Brief Project Description:	ADA ParaTransit (5307): Provide ADA Para Transit Service (Up to 10% allowed)
Sec5309 ID:	
Amend Date:	7/2026
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

Funding Information (YOE)

Fed. Funding Category:	**Sec. 5307 - Urbanized Formula >200K**
Other FTA Section:	
Federal (FTA) Funds:	$1,705,879
State (TXDOT) Funds:	$426,470
Other Funds:	$0
Fiscal Year Cost:	**$2,132,349**
Construction: $2,132,349 PE: $0 ROW: $0	
Total Project Cost:	**$2,132,349**
TDC Amount Requested:	$0
TDC Awarded Date & Amount:	$0

AMENDMENT HISTORY

History STIP Rev Date	History FY		History Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.
07/2024	2028	03/2024	Program in RMS 25-28 TIP and 25-28 STIP in FY 2028 - EXEMPT
11/2024	2028	12/2024	Administratively amend (FY 25-28) RMS 2050 MTP, Amended 2050 MTP, 25-28 TIP, and 25-28 STIP to decrease FTA 5307 funds to $2,132,349 and change apportionment years from FFY 2028 to FFY 2027 - EXEMPT

District: TX DIST. 24

YOE = Year of Expenditure

General Project Information		Funding Information (YOE)	
Project Sponsor:	Sun Metro	Fed. Funding Category:	**Sec. 5307 - Urbanized Formula >200K**
MPO ID:	**T3J**	Other FTA Section:	
Project Name:	Bus Purchase (5307)	Federal (FTA) Funds:	$4,080,000
Apportionment Year:	2027	State (TXDOT) Funds:	$0
Project Phase:		Other Funds:	$720,000
Brief Project Description:	Bus Purchase (5307): Fixed Route and BRIO Buses	**Fiscal Year Cost:**	**$4,800,000**
		Construction: $4,800,000 PE: $0	ROW: $0
Sec5309 ID:		**Total Project Cost:**	**$4,800,000**
Amend Date:	7/2026	TDC Amount Requested:	$0
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.	TDC Awarded Date & Amount:	$0

AMENDMENT HISTORY

History STIP Rev Date	History FY		History Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.
11/2024	2028	12/2024	Administratively amend RMS 20250, Amended RMS 2050, 25-28 TIP, and 25-28 STIP to decrease FTA 5307 funds from $7,000,000 to $4,800,000 and change apportionment year from FFY 2028 to FFY 2027- EXEMPT

District: TX DIST. 24

YOE = Year of Expenditure

General Project Information

Project Sponsor:	Sun Metro
MPO ID:	**T3F**
Project Name:	Support Vehicles/Bus Rehab (5339)
Apportionment Year:	2027
Project Phase:	N/A
Brief Project Description:	Support Vehicles/Bus Rehab (5339): Support Vehicles
Sec5309 ID:	
Amend Date:	7/2026
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

Funding Information (YOE)

Fed. Funding Category:	**Sec. 5339 - Bus & Bus Facilities >200K**
Other FTA Section:	
Federal (FTA) Funds:	$400,000
State (TXDOT) Funds:	$0
Other Funds:	$100,000
Fiscal Year Cost:	**$500,000**
Construction: $500,000 PE: $0 ROW: $0	
Total Project Cost:	**$500,000**
TDC Amount Requested:	$0
TDC Awarded Date & Amount:	$0

AMENDMENT HISTORY

History STIP Rev Date	History FY		History Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.
11/2024	2028	12/2024	Adminstratively amend RMS 20250 MTP, Amended RMS 2050 MTP, 25-28 TIP, and 25-28 STIP to to increase FTA 5339 funds from $250,000 to $500,000 and change apportionment year from FFY 2028 to FFY 2027 - EXEMPT

District: TX DIST. 24

YOE = Year of Expenditure

General Project Information

Project Sponsor:	Sun Metro
MPO ID:	**T3G**
Project Name:	Transit Enhancements (5339)
Apportionment Year:	2027
Project Phase:	N/A
Brief Project Description:	Transit Enhancements (5339): Sidewalks and Curbcuts for ADA Access
Sec5309 ID:	
Amend Date:	7/2026
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

Funding Information (YOE)

Fed. Funding Category:	**Sec. 5339 - Bus & Bus Facilities >200K**
Other FTA Section:	
Federal (FTA) Funds:	$400,000
State (TXDOT) Funds:	$0
Other Funds:	$100,000
Fiscal Year Cost:	**$500,000**
Construction: $500,000 PE: $0 ROW: $0	
Total Project Cost:	**$500,000**
TDC Amount Requested:	$0
TDC Awarded Date & Amount:	$0

AMENDMENT HISTORY

History STIP Rev Date	History FY		History Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.
11/2024	2028	12/2024	Amend RMS 2050, Amended RMS 2050, 25-28 TIP, and 25-28 STIP to change apportionment year from FFY 2028 to FFY 2027 - EXEMPT

District: TX DIST. 24

YOE = Year of Expenditure

General Project Information

Project Sponsor:	Sun Metro
MPO ID:	**T3I-15**
Project Name:	FY 2028 FTA 5339 Funding for Bus & Bus Facilities
Apportionment Year:	2027
Project Phase:	N/A
Brief Project Description:	FY 2028 FTA 5339 Funding: For the purchase of buses and facility enhancements incl. equipment such a ADP hardware/software and security related needs, ticket vending machines and sales related software. Capitalized maintenance incl rebuilds, bus shelters & amenities.
Sec5309 ID:	
Amend Date:	7/2026
Remarks/Amend Action:	Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.

Funding Information (YOE)

Fed. Funding Category:	**Sec. 5339 - Bus & Bus Facilities >200K**
Other FTA Section:	
Federal (FTA) Funds:	$781,368
State (TXDOT) Funds:	$0
Other Funds:	$195,343
Fiscal Year Cost:	**$976,711**
Construction: $976,711 PE: $0 ROW: $0	
Total Project Cost:	**$976,711**
TDC Amount Requested:	$0
TDC Awarded Date & Amount:	$0

AMENDMENT HISTORY

History STIP Rev Date	History FY		History Note/Amendment
7/2026	2028		Program project in RMS 2052 MTP and RMS 2027-2030 TIP in FY 2028.
1/2024	2028	12/2024	Administratively amend RMS 2050 MTP, Amended RMS 2050 MTP, 25-28 TIP, and 25-28 STIP to decrease FTA 5339 funds to $976,711 and change the apportionment year from FFY 2028 to FFY 2027 - EXEMPT

FTA from FHWA Transfer Transit Projects

N/A

Financial Section

TIP Financial Summary

District/MPO: ELP - El Paso **STIP Window:** 2027-2030 **STIP Revision:** 5/1/2026

		FY 2027		FY 2028		FY 2029		FY 2030		Total FY 2027-2030		Notes
Funding Category	Description	Programmed FY 2027	Authorized FY 2027	Programmed FY 2028	Authorized FY 2028	Programmed FY 2029	Authorized FY 2029	Programmed FY 2030	Authorized FY 2030	Total Programmed FY 2027-2030	Total Authorized FY 2027-2030	
1	Preventive Maintenance and Rehabilitation	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
2	Metropolitan and Urban Area Corridor Projects	$31,323,570	$3,123,570	$171,513,740	$171,513,740	$0	$29,606,574	$0	$0	$202,837,310	$204,243,884	
3	Non-Traditionally Funded Transportation Projects	$3,609,594	$3,609,594	$7,471,134	$7,471,134	$0	$0	$0	$0	$11,080,728	$11,080,728	
4	Statewide Connectivity Corridor Projects	$0	$0	$71,757,192	$71,575,192	$0	$0	$0	$0	$71,757,192	$71,575,192	
5	Congestion Mitigation and Air Quality Improvement	$7,141,000	$7,571,555	$4,334,950	$7,773,194	$10,345,750	$10,737,965	$4,927,410	$7,130,419	$26,749,110	$33,213,133	
6	Structures Replacement and Rehabilitation (Bridge)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
7	Metropolitan Mobility and Rehabilitation	$30,152,097	$75,767,958	$45,997,522	$69,124,793	$15,037,677	$46,650,495	$18,186,763	$23,531,793	$109,374,059	$215,075,039	
8	Safety	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
9	Transportation Alternatives Set-Aside Program	$124,987	$124,987	$124,987	$10,124,987	$0	$10,000,000	$0	$10,000,000	$249,974	$30,249,974	
10	Supplemental Transportation Programs	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
10 CRBN	Carbon Reduction Program	$6,846,510	$7,558,770	$0	$712,260	$0	$712,260	$0	$0	$6,846,510	$8,983,290	
10 Other	Competitive Grant, Earmark, etc.	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
11	District Discretionary	$24,460,097	$28,885,761	$2,829,068	$45,110,890	$0	$66,776,390	$0	$58,868,059	$27,289,165	$199,641,100	
12	Strategic Priority	$0	$0	$250,000,000	$250,000,000	$0	$0	$150,000,000	$150,000,000	$400,000,000	$400,000,000	
SW PE	Statewide Budget PE	$91,233,510	$91,233,510	$0	$0	$0	$0	$15,000,000	$15,000,000	$106,233,510	$106,233,510	
SW ROW	Statewide Budget ROW	$97,000,000	$97,000,000	$0	$0	$0	$0			$97,000,000	$97,000,000	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
										$0	$0	
	Total	$291,891,365	$314,875,705	$554,028,593	$633,406,190	$25,383,427	$164,483,684	$188,114,173	$264,530,271	$1,059,417,558	$1,377,295,850	

		FY 2027	FY 2028	FY 2029	FY 2030	Total FY 2027-2030*	Notes
Source	Description	Programmed FY 2027	Programmed FY 2028	Programmed FY 2029	Programmed FY 2030	Total Programmed FY 2027-2030	
Federal		$54,979,751	$437,245,966	$20,306,741	$138,491,338	$651,023,796	
State		$36,615,589	$105,420,000	$380,000	$30,400,000	$172,815,589	
Regional		$0	$0	$0	$0	$0	
Local Match		$8,452,921	$3,891,493	$4,696,686	$4,222,835	$21,263,935	
CAT 3 - LC	Local Contributions	$2,116,000	$1,500,000	$0	$0	$3,616,000	
SW PE		$91,233,510	$0	$0	$15,000,000	$106,233,510	
SW ROW		$97,000,000	$0	$0	$0	$97,000,000	
Other		$1,493,594	$5,971,134	$0	$0	$7,464,728	
						$0	
						$0	
						$0	
						$0	
						$0	
						$0	
						$0	
						$0	
	Total	$291,891,365	$554,028,593	$25,383,427	$188,114,173	$1,059,417,558	

* "Cat 3 TDC" is excluded from the total calculation.

* Programmed funding may exceed the authorized amount in a given year, as long as the total programmed funding across the four-year cycle does not surpass the overall authorized funding.

Texas Department of Transportation

Transit Financial Summary

El Paso Metropolitan Planning Organization

FY 2027- 2030 Transportation Improvement Program

All Figures in Year of Expenditure (YOE) Dollars

Current as of 2/27/2026

	Transit Program	FY 2027			FY 2028			FY 2029		
		Federal	State/Other	Total	Federal	State/Other	Total	Federal	State/Other	Total
1	Sec. 5307 - Urbanized Formula >200K	$15,621,608	$3,905,403	$19,527,011	$17,058,790	$3,964,698	$21,023,488			
2	Sec. 5307 - Urbanized Formula <200K	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Sec. 5309 - Discretionary	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	Sec. 5310 - Elderly &Individuals w/Disabilities	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	Sec. 5339 - Bus & Bus Facilities >200K	$1,381,368	$345,343	$1,726,711	$1,581,368	$395,343	$1,976,711	$0	$0	$0
6	Sec. 5311 - Nonurbanized Formula	$0		$0	$0	$0	$0	$0	$0	$0
7	Sec. 5316 - JARC >200K	$0		$0	$0	$0	$0	$0	$0	$0
8	Sec. 5316 - JARC <200K	$0		$0	$0	$0	$0	$0	$0	$0
9	Sec. 5316 - JARC Nonurbanized	$0		$0	$0	$0	$0	$0	$0	$0
10	Sec. 5317 - New Freedom >200K	$0		$0	$0	$0	$0	$0	$0	$0
11	Sec. 5317 - New Freedom <200K	$0		$0	$0	$0	$0	$0	$0	$0
12	Sec. 5317 - New Freedom Nonurbanized	$0		$0	$0	$0	$0	$0	$0	$0
13	Other FTA	$0	$0	$0	$0	$0	$0	$0	$0	$0
14	Regionally Significant or Other	$0		$0	$0	$0	$0	$0	$0	$0
	Total Funds	$17,002,976	$4,250,746	$21,253,722	$18,640,158	$4,360,041	$23,000,199	$0	$0	$0
	Transportation Development Credits									
	Requested			$0			$0			$0
	Awarded			$0			$0			$0

All Figures in Year of Expenditure (YOE) Dollars

	Transit Programs	FY 2030			FY 2027-2030 Total		
		Federal	State/Other	Total	Federal	State/Other	Total
1	Sec. 5307 - Urbanized Formula >200K	$0	$0	$0	$32,680,398	$7,870,101	$40,550,499
2	Sec. 5307 - Urbanized Formula <200K	$0	$0	$0	$0	$0	$0
3	Sec. 5309 - Discretionary	$0		$0	$0	$0	$0
4	Sec. 5310 - Elderly &Individuals w/Disabilities	$0	$0	$0	$0	$0	$0
5	Sec. 5339 - Bus & Bus Facilities >200K	$0	$0	$0	$6,552,131	$1,638,036	$8,190,167
6	Sec. 5311 - Nonurbanized Formula	$0	$0	$0	$0	$0	$0
7	Sec. 5316 - JARC >200K	$0	$0	$0	$0	$0	$0
8	Sec. 5316 - JARC <200K	$0	$0	$0	$0	$0	$0
9	Sec. 5316 - JARC Nonurbanized	$0	$0	$0	$0	$0	$0
10	Sec. 5317 - New Freedom >200K	$0	$0	$0	$0	$0	$0
11	Sec. 5317 - New Freedom <200K	$0	$0	$0	$0	$0	$0
12	Sec. 5317 - New Freedom Nonurbanized	$0	$0	$0	$0	$0	$0
13	Other FTA	$0	$0	$0	$0	$0	$0
14	Regionally Significant or Other	$0	$0	$0	$0	$0	$0
	Total Funds	$0	$0	$0	$35,643,134	$8,610,787	$44,253,921
	Transportation Development Credits						
	Requested			$0			$0
	Awarded			$0			$0

EL PASO MPO - New Mexico District 1 & 2

2024-2027 NM State Transportation Improvement Program

RMS 2027-2030 TIP

Funding by Category

Monday, March 30, 2026

	FY 2027		FY 2028		FY 2029		FY 2030		Total FY 2027 - 2030	
Description	Programmed	Authorized	Programmed	Authorized	Programmed	Authorized	Programmed	Authorized	Programmed	Authorized
American Recovery and Reinvestment Act (ARRA)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
BR- ON/Off System (Flexible)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
BR-Off System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
BR-On System	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
BR-Prev	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
CBIP (Coordinated Border Infrastructure Prog.)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
City of Sunland Park, N.M.	$0	$0	$0	$0	$13,350,000	$13,350,000	$23,450,300	$23,450,300	$36,800,300	$36,800,300
NM CMAQ (CMAQ Mandatory and CMAQ Flex)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Dona Ana County	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EBE (Equity Bonus - Exempt From Limitation)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
EBSL Equity Bonus - Special Limitation)-STP	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
General Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
GRIP (Governor Richardson Investment Prog)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
HPP (High Priority Projects)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
HSIP (Highway Safety Improvement Program)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Interstate Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Jobs for Main Street Act 2010 (ARRA 2)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
MCS (Motor Carrier Safety)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
MGO (Minimum Guarantee - Obligation Limit)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
MGS (Minimum Guarantee - Special Limitation)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NAFTA (Trade Corridors/Border Infrastructure)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
National Corridor Planning & Dev (BORCOR)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NHPP (National Highway Performance Program)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NHPP (National Highway Performance Program)-Freight	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
NM State Funds (Includes HB2 Funds)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Other (Includes SBSI, SCRTD funds, FTA 5307, FTA 5339 b and FTA 5339 c)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Other State Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
PNRS (Earmark)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
ROW (Right of Way Acquisition)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
SPP (State Priority)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
State Severance Tax	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
STLE (Surface Transp Prog Large Urban - Exempt)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
STPF (Surface Transp Prog Flexible)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
STP-TPE (STP Enhancements)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
STP-TPM (STP Rural Areas)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
STPS (Surface Transp Prog Small Urban >5K <200K)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
STPL (Surface Transp Prog Large Urban >200K)	$0	$0	$3,400,000	$3,400,000	$0	$0	$2,000,000	$2,000,000	$5,400,000	$5,400,000
TAPF (Transp. Alternative Prog Flexible)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TAPL (Transp. Alternative Prog Large Urban >200K)	$0		$0	$0	$0	$0	$0	$0	$0	$0
TAPS (Transp. Alternative Prog Small Urban >5K <200K)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TPZ (Safety)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total	$0	$0	$3,400,000	$3,400,000	$13,350,000	$13,350,000	$25,450,300	$25,450,300	$42,200,300	$42,200,300

Funding Participation Source

Source	FY 2027	FY 2028	FY 2029	FY 2030	Total
Federal Participation	$0	$2,720,000	$0	$1,688,800	$4,408,800
State Participation	$0	$0	$0	$0	$0
Local Participation	$0	$680,000	$0	$311,200	$991,200
Local/State Contributions	$0	$0	$13,350,000	$23,450,300	$36,800,300
Total	$0	$3,400,000	$13,350,000	$25,450,300	$42,200,300

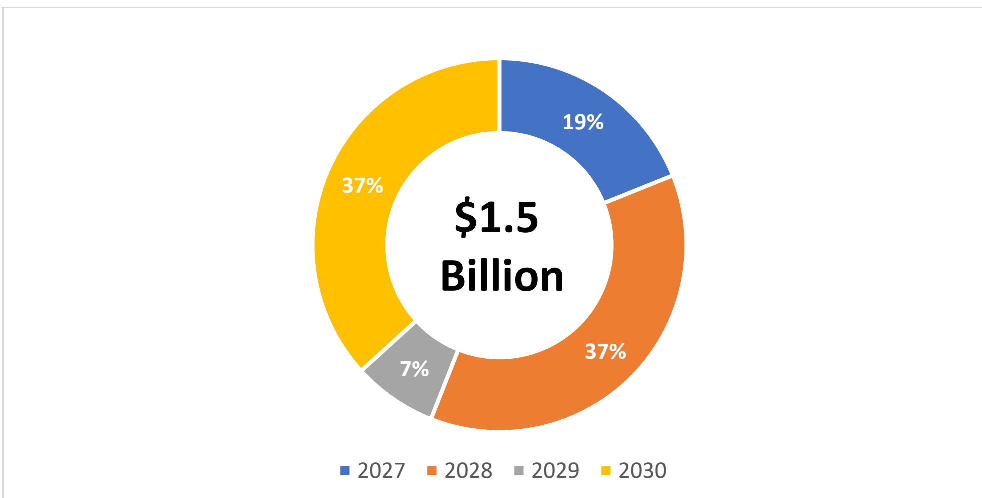
El Paso Metropolitan Planning Organization

Analyses Section

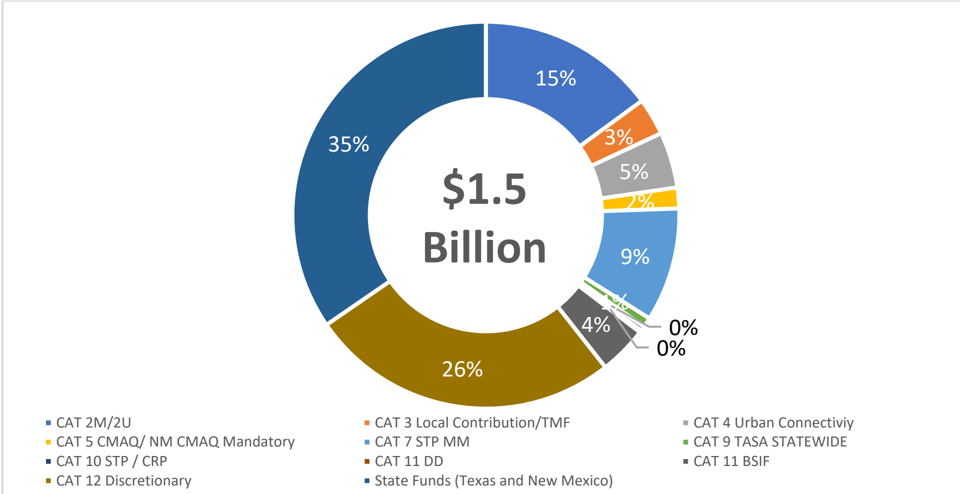
The illustrations below show a summary of the Total Costs per Fiscal Year for Texas Highway FHWA/Local Funds, New Mexico Highway/Transit Funds, and Texas Transit FTA/Local Funds.

Highway Funds by Year of Expenditure (YOE) By Fiscal Year

Fiscal Year	TX (YOE)	NM (YOE)	Total YOE
2027	$290,930,209	$-	$290,930,209
2028	$566,472,606	$3,400,000	$569,872,606
2029	$98,780,528	$13,350,000	$112,130,528
2030	$539,595,299	$25,450,300	$565,045,599
Total	**$1,495,778,642**	**$42,200,300**	**$1,537,978,942**

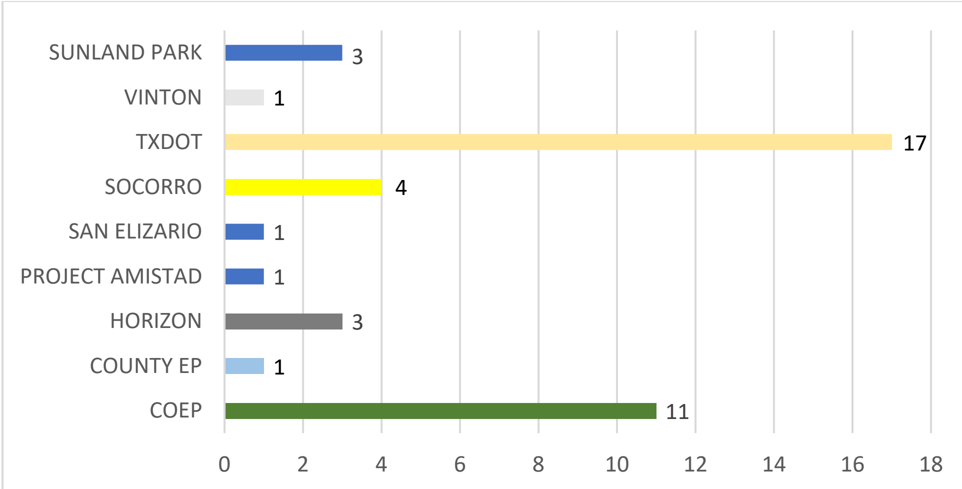


Highway Funds Year of Expenditure (YOE) by Funding Category

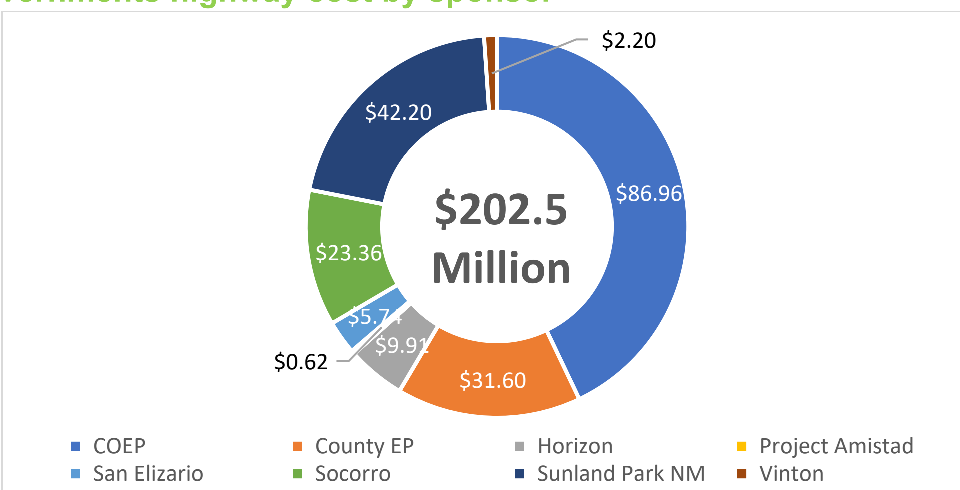


Funding Category	Millions	Percentage of Funds
CAT 2M/2U	$229.60	14.9%
CAT 3 Local Contribution/TMF	$47.88	3.1%
CAT 4 Urban Connectiviy	$71.76	4.7%
CAT 5 CMAQ/ NM CMAQ Mandatory	$26.75	1.7%
CAT 7 STP MM	$146.37	9.5%
CAT 9 TASA STATEWIDE	$12.57	0.8%
CAT 10 STP / CRP	$5.92	0.4%
CAT 11 DD	$2.83	0.2%
CAT 11 BSIF	$62.34	4.1%
CAT 12 Discretionary	$400.00	26.0%
State Funds (Texas and New Mexico)	$531.96	34.6%
Total	**$1,537.98**	**100%**

Number of Highway Projects by Sponsoring Entities

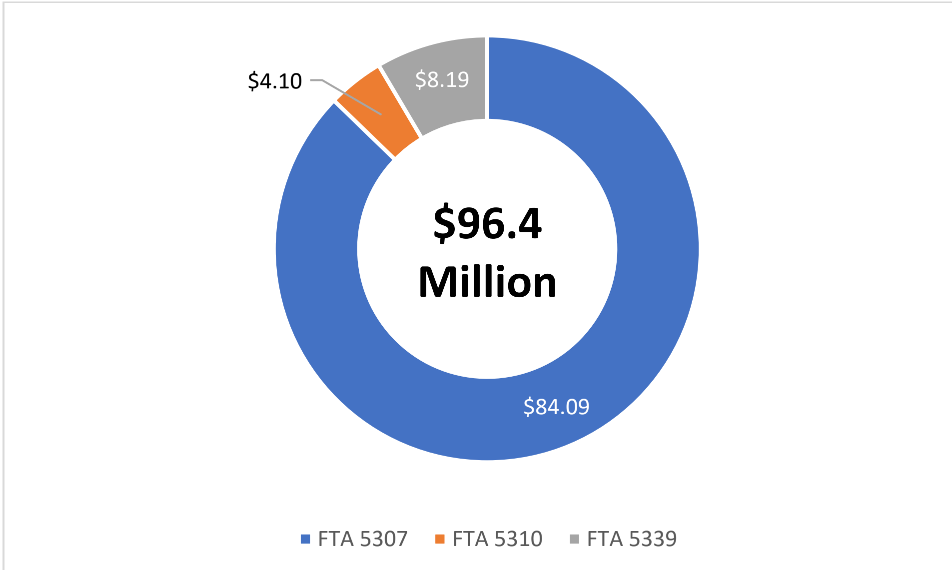


Local Governments highway cost by sponsor

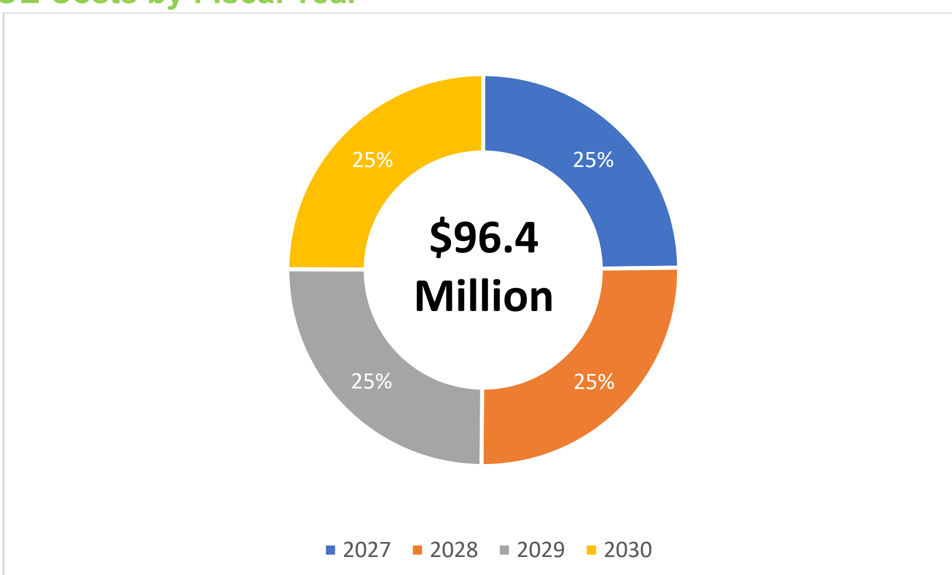


Sponsor	YOE in Millions
COEP	$86.96
County EP	$31.60
Horizon	$9.91
Project Amistad	$0.62
San Elizario	$5.74
Socorro	$23.36
Sunland Park NM	$42.20
TXDOT	$1,335.39
Vinton	$2.20
Total	**$1,538**

Transit Funds by Funding Category

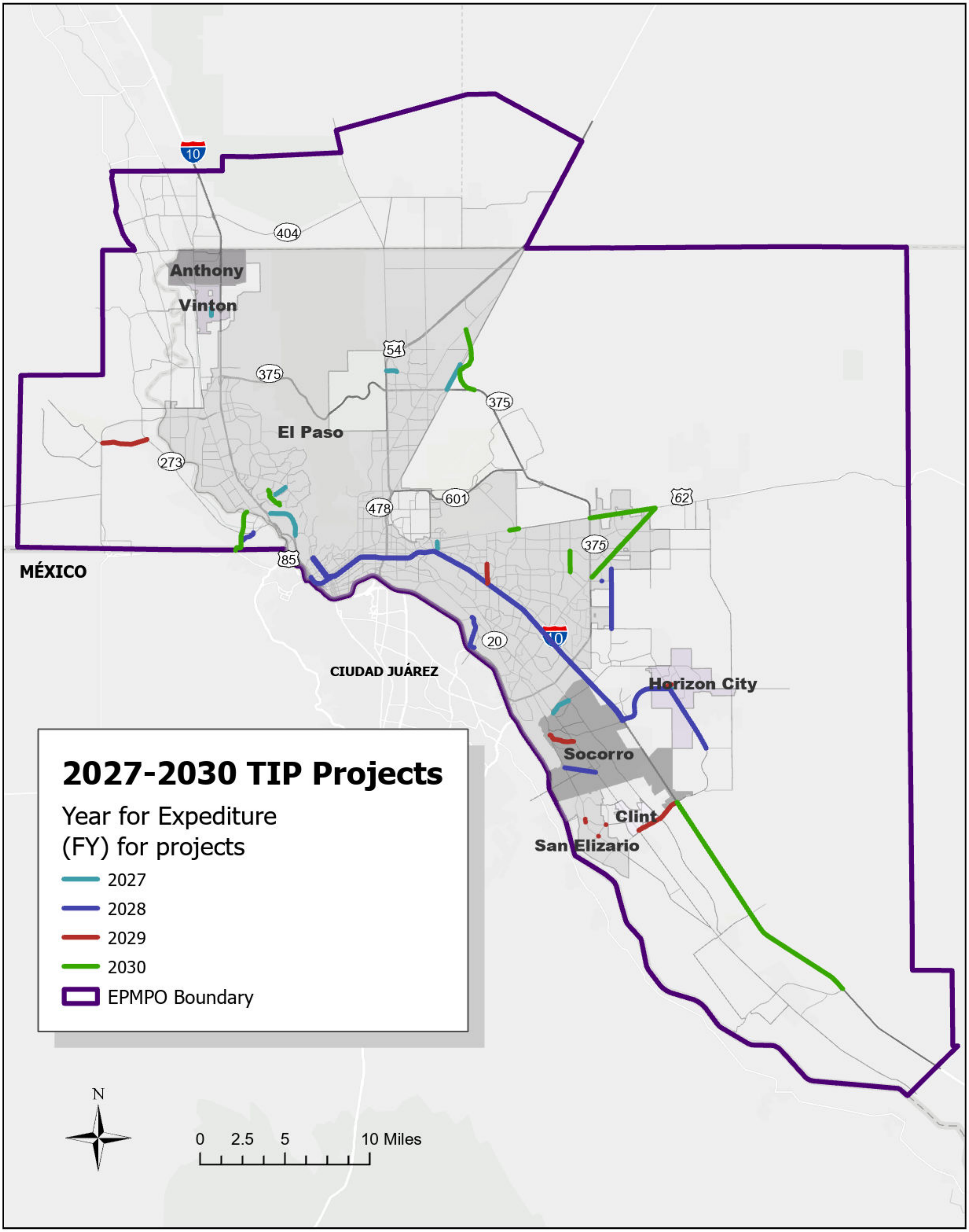


Transit YOE Costs by Fiscal Year



Fiscal Year	Total YOE
2027	$23,908,961
2028	$24,426,662
2029	$24,026,150
2030	$24,026,150
Total	**$96,387,923**

Map Section[4]


2027-2030 TIP Projects
Year for Expediture
(FY) for projects
2027
2028
2029
2030
EPMPO Boundary
Anthony
Vinton
El Paso
MÉXICO
CIUDAD JUÁREZ
Horizon City
Socorro
Clint
San Elizario
10
404
54
375
273
478
601
62
85
20
N
0 2.5 5 10 Miles

MPO Self-Certification

El Paso Metropolitan Planning Organization

MPO SELF-CERTIFICATION

In accordance with 23 CFR Part 450.336 and 450.220 of the Infrastructure Investment and Jobs Act (IIJA) the Texas Department of Transportation, the New Mexico Department of Transportation and the El Paso Metropolitan Planning Organization for the El Paso urbanized area(s) hereby certify that the transportation planning process is addressing major issues in the metropolitan planning area and is being conducted in accordance with all applicable requirements of:

1) 23 U.S.C. 139, 49 U.S.C. 5303, and this subpart;
2) In nonattainment and maintenance areas, sections 174 and 176(c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506(c) and (d)) and 40 CFR part 93;
3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
4) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
5) Section 1101(b) of the FAST Act (Pub. L. 114–357) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in DOT funded projects;
6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;
8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
9) Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

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Tomas Trevino P.E., District Engineer
El Paso District, Texas Department of Transportation

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Date

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Aaron Chavarria P.E., District Engineer
District 1, New Mexico Department of Transportation

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Date

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Javier Parea, Chairperson
Transportation Policy Board, El Paso MPO

____

Date

MPO SELF-CERTIFICATION FOR NON-ATTAINMENT AREAS CERTIFICATION STATEMENT

The following information provides a summary of policies, procedures, and planning activities of the El Paso Metropolitan Planning Organization (MPO) and its Transportation Policy Board set forth to meet the requirements of federal transportation and air quality planning regulations in carrying out the FY 2026 and FY 2027 Unified Planning Work Program for Regional Transportation Planning and biennial development of the Transportation Improvement Program.

Metropolitan Planning: 23 U.S.C. 134, 49 U.S.C 5303, and implementing regulations;

EPMPO's planning process is based on using state-of-the-art procedures, encompassing accurate data and methodologies, applied in a professional and unbiased manner. This planning process is carried out through an open approach that includes all local, state and federal transportation and air quality related agencies and organizations, local elected officials, and the public in the decision-making process. The continued focus of the MPO planning process is on the use of innovative techniques, as well as facilitating communication and partnerships as key mechanisms for improving mobility and air quality.

This process is carried out through the implementation of the Unified Planning Work Program through Performance Based Planning and the development of a financial and fiscally constrained long-range multi-modal transportation plan for the region; the biennial development of the Transportation Improvement Program; the development and adoption of the Metropolitan Transportation Plan every four years; the ongoing implementation of the region's Congestion Management Process focusing on the Travel Demand Management (TDM), Transportation Systems Management (TSM), and Intelligent Transportation System (ITS) technology; working closely with transportation providers throughout the region to conduct major investment and corridor feasibility studies which serve to evaluate, refine, and select transportation options for implementation; and ensuring that policies, programs, and projects when implemented will result in improved air quality for the region through the air quality conformity process.

Statewide Planning: U.S.C. Title 23, Sec. 135, U.S.C. Title 49, Ch. 53, Secs 5307-5311 and 5323(l); and 23 CFR Part 450.220

EPMPO works closely with TXDOT-El Paso District Office, the TXDOT Transportation Planning and Programming Division, and the Texas Transportation Commission to support the planning, funding, and implementation of transportation improvements. Whenever called upon, planning assistance is provided to assist TXDOT in meeting Statewide Planning requirements. The MPO and the State share financial information to carry out the financial constraint requirements of the planning process.

Clean Air Act: Air Pollution Prevention and Control: In non-attainment and maintenance area, section 174 and 176 © and (d) of the Clean Air Act, as amended (42, U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;

It is the policy of EPMPO and its Transportation Policy Board that the continuing, cooperative, and comprehensive transportation planning process carried out by the MPO shall be done in coordination with the transportation-air quality planning process carried out by the State of Texas. Furthermore, it is the policy of EPMPO and its Transportation Policy Board to not adopt a Metropolitan Transportation Plan or a Transportation Improvement Program until each plan or program has been demonstrated to be in conformity with the State Implementation Plan for Air Quality, including the air quality conformity requirements as set forth in the Clean Air Act Amendments of 1990. Resources are allocated biennially as part of the Unified Planning Work Program to ensure the coordination of EPMPO transportation and air quality planning activities, and support determination of the air quality conformity process of the Metropolitan Transportation Plan and the Transportation Improvement Program. EPMPO is an active partner with state and federal agencies as a member of the Air Quality Conformity Consultation Process.

Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CRF part 21; The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the bases of age in programs or activities receiving Federal financial assistance; and Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender;

EPMPO is committed throughout the development of its plans and programs to ensure that no person on the grounds of age, gender, race, color, or national origin is excluded from participation in, denied the benefits of, or subjected to discrimination under any program receiving federal financial assistance. No plans, programs or policies developed or implemented by EPMPO will have a disproportionately high adverse human health or environmental effect on minority and low-income populations. EPMPO plans continue to work on improving the accessibility of employment to the identified protected populations. Further, many of the current MPO public meetings are held in minority and low-income communities in the region and are located near accessible public transit facilities. Funding is allocated as part of the Unified Planning Work Program for a Title VI Plan to maintain an analytical approach that produces procedures that meet Title VI requirements by ensuring that federally-funded transportation projects adequately consider effects on low-income and minority segments of the population.

Disadvantaged Business Enterprises (DBE) in planning projects: 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex or age in employment business opportunity; and Section 1101 (b) of the SAFETEA-LU (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects; 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;

EPMPO follows the City of El Paso's Disadvantaged Business Enterprise which in turn follows the TXDOT DBE Plan. Funding is allocated as part of the Unified Planning Work Program to maintain an analytical approach that produces procedures that meet Environmental Justice requirements by ensuring that federally-funded transportation projects adequately consider effects on low-income and minority segments of the population.

Americans with Disabilities Act of 1990: The provision of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38; and Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

It is the policy of EPMPO to ensure that all agency programs and services are accessible to people with disabilities and are in compliance with the applicable regulations as a condition of receiving Federal financial assistance from the Department of Transportation. EPMPO will make reasonable accommodations to a qualified individual with a disability who attends on-site meetings, and meeting facilities meet this requirement. Every effort is made to ensure that meeting facilities off-site are ADA accessible. A notice is published in advance of all MPO public meetings that reasonable accommodations will be provided for meeting locations on and off-site with a phone number and contact persons listed to provide assistance if needed. As direct recipients of FTA Section 5310 (Enhanced Mobility for Seniors and Individuals with Disabilities Program) funding, EPMPO staff is actively involved in various ADA-related initiatives which are being carried out the sub-recipients, and the review of ADA compliance documents developed by the region's transit and paratransit agencies, all of which focus on ensuring that transportation programs and services across the region are accessible to those citizens with disabilities.

Restrictions on influencing certain federal activities: CFR 29, Part 20;

It is the policy of EPMPO that no state or federal funds received by the agencies shall be paid to any person for the purpose of influencing the award of a federal contract, grant, or loan or the entering into of a cooperative agreement. No state or federal funds received by the agencies shall be used directly or indirectly to influence any member of Congress, any member of the State Legislature, or any local elected official to favor or oppose the adoption of any proposed legislation before any federal, state, or local legislative body.

Acronyms

ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
BACM	Best Available Control Measures
CFR	Code of Federal Regulations
CMAQ	Congestion, Mitigation, & Air Quality
CMP	Congestion Management Process
CO	Carbon Monoxide
DBE	Disadvantaged Business Enterprises
EPA	U.S. Environmental Protection Agency
FAST Act	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HOV	High Occupancy Vehicle
HSIP	Highway Safety Improvement Program
ITS	Intelligent Transportation System
IVHS	Intelligent Vehicle Highway System
MAP-21	Moving Ahead for Progress in the 21st Century
MOVES	Motor Vehicle Emission Simulator
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
NAAQS	National Ambient Air Quality Standards
NEAP	Natural Events Action Plan
NM	New Mexico
NMDOT	New Mexico Department of Transportation
NMED	New Mexico Environment Department
NOx	Nitrogen Oxide
PM-10	Particulate Matter 10 Microns or Less
POE	Port of Entry
PPP	Public Participation Plan
PSP	Project Selection Process
RACT	Reasonably Available Control Technologies
ROW	Right of Way
RTP	Recreational Trails Program
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users
SHSP	Strategic Highway Safety Plan
SIP	State Implementation Plan
SOV	Single Occupancy Vehicle
STIP	Statewide Transportation Improvement Program
STP-MM	Surface Transportation Program – Metro-Mobility
TAC	Texas Administrative Code
TAP	Transportation Alternatives Program
TASA	Transportation Alternatives Set-Aside
TCEQ	Texas Commission on Environmental Quality

TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TPAC	Transportation Project Advisory Committee
TPB	Transportation Policy Board
TPWD	Texas Parks and Wildlife Department
TRZ	Transportation Reinvestment Zone
TSM	Transportation System Management
TTI	Texas Transportation Institute
TXDOT	Texas Department of Transportation
UPWP	Unified Planning Work Program
UTEP	University of Texas at El Paso
UTP	Unified Transportation Program
VMT	Vehicles Miles Traveled
VOC	Volatile Organic Compound
YOE	Year of Expenditure

Appendix A: CMAQ Analyses

Emission Reduction Analysis for City of El Paso Proposed CMAQ Project

Sunland Park Drive Shared Use Path

January 2024

Prepared for

By

Task Summary

The Texas A&M Transportation Institute (TTI) was tasked by the City of El Paso to perform a mobile source emissions analysis for a proposed project in the El Paso metropolitan region. The city is seeking funding from the Congestion Mitigation/Air Quality Improvement Program (CMAQ) to help implement the project.

The project will construct 0.63 miles of pedestrian and bike lane infrastructure improvements in the northwest region of the city along Sunland Park Drive.

Individual Project Analysis

The emissions analysis for the project is presented below. The project name is given along with a brief description of the project. Data sources and analysis assumptions are provided. The equation used from the *Texas Guide to Accepted Mobile Source Emission Reduction Strategies* (MOSERs Guide) is given for the strategy along with the variables of the equation and the equation itself. The results are then computed for the strategy.

It is recommended that the agency conduct a more detailed emissions study of the project as it develops further. The results presented below are valid for CMAQ applications, but more time and effort would increase the accuracy of the emissions benefits. As a result, this analysis should not be used for conformity purposes.

Sunland Park Shared Use Path

The Sunland Park Shared Use Path project will install 0.63 miles of pedestrian and bicycle trail improvements along a major arterial in the northwest El Paso region. The project will construct pedestrian and bicycle facilities to include signage, landscaping, furnishings, and illumination. The limits of the improvements are from Cadiz St. to Mesa St.

The project will serve the City of El Paso by increasing its regional transportation infrastructure coupled with existing transit projects, educational centers, and commercial developments. Bicycle facilities will support and provide connectivity to existing bicycle facilities Citywide with connection to mass transit facilities and provide an alternative method of transportation. The infrastructure will be installed within City right-of-way and no property acquisition is anticipated.

The components of the project are consistent with the August 2016 City of El Paso Bike Plan.

Data Sources

The City of El Paso provided the project description and project scope information. This resource provided the research team with a better understanding of the proposed project and potential emissions benefits.

TTI researchers utilized the U.S. EPA MOVES 3.1.0 model to generate emissions rates for the expected vehicle types affected by the project. Researchers used updated summer season inputs based on TCEQ's latest (2023) summer fuel survey, with adjustments for particular properties made to reflect latest expected "future year" values (i.e., consistent with the pertinent regulations and/or local observations, such as for Reid vapor pressure of gasoline, average sulfur content of gasoline and diesel, biodiesel ester volume, gasoline benzene content). Fuel supply consists of monthly inputs, for gasoline, one summer formulation and one winter formulation, assigned to months as appropriate, and for diesel, one formulation applied to all months. Gasoline is E10, or 10% ethanol, and diesel about 4-5% biodiesel. For winter gasoline, used the MOVES3.1 January default in the absence of local data.

Vehicle age distributions are consistent with prior analysis. For passenger vehicle source types, researchers used the latest estimates across 31 years based on latest available (end-of-year 2021) El Paso County TxDMV vehicle registration data.

TTI staff used American Community Survey data to compute a bicycle mode share for El Paso, along with a future growth rate for the mode in the region.

Analysis Methods

TTI staff used the analysis method provided in the August 2008 version of the MOSERs Guide, Equation 11.1 – *Bicycle and Pedestrian Lanes or Paths*.

Stated in words, the average annual daily traffic (AADT) of the corridor is multiplied by the percentage of drivers shifting to bicycle mode, multiplied by the bike facility length, and multiplied by the speed-based running exhaust emission factor for participants' trips before utilizing the bike lane.

The detailed equation is provided below in Strategy Equation.

The analysis year used is 2031, the first year of operation. *For planning purposes, the emissions benefit of a static program will decline over time.* Without the increased use of the bike lanes over the project lifetime, any benefits accrued by the mode shift to bicycles may be negated by the increased emissions from potential higher traffic volumes in the corridor over time.

Assumptions in the MOVES3.1.0 output for the project included:

- Output created for VOC, CO, NOx, and PM-10.
- Light-duty passenger vehicles and light-duty passenger trucks (SUVs), gasoline and diesel-fueled, are included according to a projected regional VMT fleet mix (Source Type ID 21, 31)
- Running exhaust and evaporative emissions and start emissions rates were calculated. (Process ID 1, 2, 11, 12, 13, 15)
- Considering the project area and the type of trips reduced through the strategy, emissions on Road Type 5, urban unrestricted access were analyzed.
- Overall average speed in the seven roadways is assumed to be 30 mph (Speed bin 7).
- The analysis period is from 7:00 a.m. to 7:00 p.m. on a winter weekday for CO; the same periods on a summer weekday for NOx, VOC, and PM-10. Use of the bicycle lanes can occur throughout the day, but the greatest impact on emissions will occur with any peak hour or daytime mode shift.
- The vehicle-miles traveled (VMT) reduced because of the mode shift to bicycle were distributed proportionally across the 12 hours and by vehicle types and fuel types in line with the vehicle fleet mix in the El Paso region.

TTI staff reviewed the project information to determine values for the individual variables in the MOSERs equation. The MOSERS Guide encourages planners to make conservative, justifiable assumptions about projects. TTI staff determined a valid percentage mode shift from automobile to bicycle by participants in El Paso region. The characteristics of this new facility may provide impetus for significant mode shift, but planners should use available data.

The following assumptions were made for the project:

- Light-duty passenger vehicle and light-duty passenger truck AADT in the project area of 2,920 is estimated. This figure is based on 2022 AADT and ADT traffic counts from TxDOT and the City of El Paso. AADT is estimated based on the data plus a professional estimate of traffic growth and an averaging of the counts. It assumes 80% of the daily traffic along the roadways occurs in the 12-hour daytime period under analysis. It assumes 86% of the traffic is passenger vehicles.
- Most of the future users of the facility will generate and replace trips from the residential areas to the north and south of Sunland Park Drive for use of local businesses and facilities. Greater connectedness to the developed bike lane infrastructure in the area will attract riders from adjacent neighborhoods and increase the use of the path and emissions benefits.

- The current percent bicycle mode share for the El Paso region is estimated to be 2.0% and can serve as an optimistic mode share increase for the new bike facilities.
- The 0.02 increase in mode share represents new cyclists (vehicle trips replaced).
- Bike lane facility length of 0.63 miles is computed.

The emission reductions are presented in kilograms per day (kg/day) in accordance with CMAQ project reporting requirements.

Strategy Equation

Equation 11.1, Bicycle and Pedestrian Lanes or Paths

Daily Emission Reduction = AADT * PMS * L * EF_B

The average annual daily traffic of the corridor multiplied by the percentage of drivers shifting to bike/pedestrian multiplied by the average bicycle trip length multiplied by the speed-based running exhaust emission factor for participants' trip before participating in the bike/pedestrian program.

Final unit of measure: grams/day
Source: Capitol Area MPO (CAMPO)

Variables:

AADT: Average annual daily traffic in corridor (vehicles/day)

EF_B: Speed-based running exhaust emission factor for participants' trip before participating in the bike/pedestrian program (NO_x, VOC, or CO) (grams/mile)

L: Length of facility (miles)

PMS: Percentage mode shift from driving to bike/pedestrian (decimal)

Analysis

Results

Daily Emission Reduction = AADT * PMS * L * EF_B

Note: Due to the large amount of data generated by the MOVES model and the required off-model computations, for presentation purposes the individual emissions rates are not provided in the results below.

For CO:

2,920 * 0.02 * 0.63 * EF_B = 1851.247 grams/day

Daily emission reduction is equal to 1.851 kg/day

For NOx:

2,920 * 0.02 * 0.63 * EF_B = 25.116 grams/day

Daily emission reduction is equal to 0.025 kg/day

For VOC:

2,920 * 0.02 * 0.63 * EF_B = 38.994 grams/day

Daily emission reduction is equal to 0.039 kg/day

For PM-10:

2,920 * 0.02 * 0.63 * EF_B = 18.082 grams/day

Daily emission reduction is equal to 0.018 kg/day

Summary of Results

The overall emissions analysis results for the project are shown in Table 1. The estimated emissions benefits from the pedestrian and bicycle facilities are modest and are dependent on the increased use of bicycles as a travel mode in the city and region. An emissions benefit for the El Paso region can be expected from this project.

Table 1. Estimated Emissions Benefits from Sunland Park Shared Use Path

Pollutant	Emissions Reduction (kg/day)
CO	1.851
NOx	0.025
VOC	0.039
PM_{10}	0.018

Congestion Mitigation and Air Quality (CMAQ) Analysis-Edgemere/John Hayes Roundabout

Prepared for City of El Paso

February 2026

Texas A&M Transportation Institute

TECHNICAL REPORT

Technical Documentation

Date: February 25th, 2026

To: Margaret K. Schroeder
City of El Paso

FROM: Camilo Jurado
Chaoyi Gu, P.E.
Erik Vargas
Texas A&M Transportation Institute (TTI)

FOR MORE INFORMATION:

Erik Vargas
(979) 393-0688
E-vargas@tti.tamu.edu

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1. TASK SUMMARY

The City of El Paso ("City") requested technical assistance from the Texas A&M Transportation Institute (TTI) in developing a Congestion Mitigation and Air Quality (CMAQ) analysis for its roundabout project at Edgemere and John Hayes (See Figure 1 for a spatial location). This analysis estimated emissions benefits from the project's key components, including potential improvements to bicycle lanes and roundabouts.

The primary objective of this analysis was to assist the City of El Paso in preparing an updated CMAQ report for submission to the MPO and other relevant agencies. This report included new emissions estimates and a summary of the project's anticipated benefits, supporting the City of El Paso's CMAQ funding application.

The emissions analysis for the project is presented below. The strategy name is given along with a brief description of the project. Data sources and assumptions for the analysis are provided. The equation from the Texas Guide to Accept Mobile Source Emission Reduction Strategies (MOSERs Guide) is provided for the strategy, along with the equation's variables and the equation itself. The results are then computed for the strategy equation.

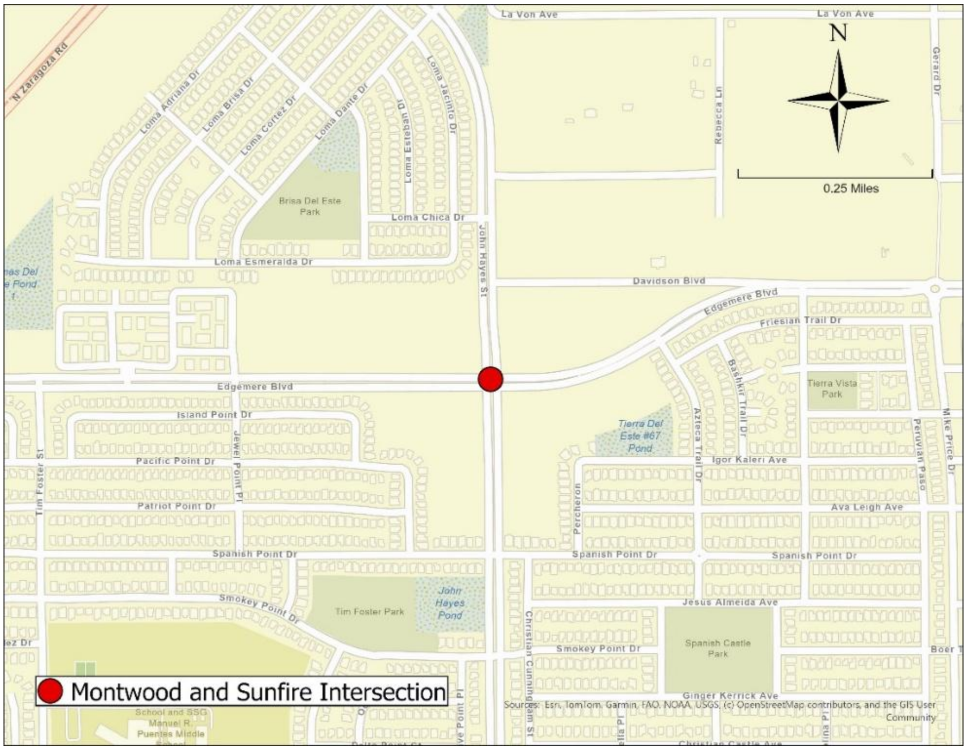

Figure 1. Edgemere Blvd and John Hayes St Intersection

2. STRATEGIES AND METHODOLOGY

The Texas Guide to Accepted Mobile Source Emission Reduction Strategies (commonly known as the MOSERS Guide) is a set of reference documents and tools for Texas transportation practitioners undertaking air quality planning. The intent of MOSERS is to provide guidance and resources for transportation of air quality practitioners to understand and evaluate mobile-source emissions-reduction strategies. The MOSERS guide was originally developed by TTI in 2003 and updated subsequently in 2007, and 2020. After a thorough review by the research team, the strategies implemented in the roundabout project at Edgemere and John Mayes intersection are “Bicycle and Pedestrian” (strategy 3.2) and “Roundabouts” (strategy 5.8)

2.1 Bicycle and Pedestrian

Bicycle and pedestrian programs reduce vehicle trips, vehicle miles traveled (VMT), and emissions by shifting a portion of short local travel from cars to walking and bicycling. In the context of the Edgemere Blvd. and John Mayes St, intersection in El Paso, where an all-way stop is being converted to a roundabout, this strategy applies through the addition of bicycle facilities (e.g., a bike path or bike-pedestrian shared path) that provide a safer, more direct, and more comfortable option for cyclists. By improving connectivity and reducing conflicts with vehicle traffic, the bike facility is expected to attract some trips that would otherwise be made by car, particularly short neighborhood-to-commercial or neighborhood-to-neighborhood trips. The emissions benefit is quantified by estimating the number of vehicle trips and VMT that are avoided due to mode shift, then translating those avoided vehicle activities into reductions in pollutants and greenhouse gases using the MOSERS methodology.

This strategy is most applicable in areas with existing or planned bicycle/pedestrian connectivity (sidewalks, trails, low-stress routes, nearby destinations) that can support regular use. The effectiveness depends primarily on how many travelers shift from driving to biking or walking, and on the typical trip lengths replaced, especially during peak periods.

Emissions Equations:

$$Daily\ Emission\ Reduction\ (g/day)\ =\ A\ +\ B$$

Reduction in auto start emissions from reduced trips: $A\ =\ VT_R \times\ TEF_{AUTO}$

Reduction in auto-running exhaust emissions from a reduction in vehicle miles traveled:

$$B\ =\ VMT_R \times\ EF_B$$

Where:

$$VT_R = VT_P + VT_{OP}$$

$$VMT_R = VMT_P + VMT_{OP}$$

Activity (mode-shift) calculations:

$$VT_P\ =\ N_{HH}\ \times\ n_v \times\ p_p \times \frac{n_p}{O_{auto}}$$

$$VT_{OP} = N_{HH}\ \times\ n_v \times\ p_{op} \times \frac{n_{op}}{O_{auto}}$$

$$VMT_P\ =\ VT_P\ \times\ LV_P$$

$$VMT_{OP} =\ VT_{OP} \times\ LV_{OP}$$

The calculator requires basic information, such as the area type, area size, and number of households or population of the service area where the new bike-ped facility will be constructed. It also requires trip information, such as the average trip length before the bike-ped program, the average number of trips during peak hours, and the average number of trips during off-peak hours. It also needs an estimated percentage of new program participants who previously were single-occupancy drivers. The methodology assumes that a certain percentage of people are attracted to choose cycling or walking over driving vehicles when a bike-ped facility is available. Bike-ped users are estimated based on the number of households, the number of vehicles per household, and auto occupancy. Trips shifted to bike or walk reduce vehicle trips and associated VMT. All the variables and their definitions are provided in Table 1.

Table 1. Bicycle and Pedestrian Variables and Definitions

Variable	Unit	Definition / Notes
Daily Emission Reduction	g/day	Total daily reduction in emissions from auto activity reduced (sum of trip-end + running).
A	g/day	Reduction in auto trip-end emissions due to fewer auto trips.
B	g/day	Reduction in running exhaust emissions due to fewer auto miles traveled.
TEF_{AUTO}	g/trip	Auto trip-end emission factor (pollutant-specific: NOx, VOC, PM, CO).
EF_{B}	g/mile	Speed-based running exhaust emission factor for the average pre-project auto speed (pollutant-specific: NOx, VOC, PM, CO).
VT_{R}	trips/day	Reduction in total daily auto trips (peak + off-peak).
VMT_{R}	miles/day	Reduction in total daily auto VMT (peak + off-peak).
VT_{P}	trips/day	Peak-period auto trips reduced due to mode shift.

VT_{OP}	trips/day	Off-peak auto trips reduced due to mode shift.
VMT_P	miles/day	Peak-period auto VMT reduced.
VMT_{OP}	miles/day	Off-peak auto VMT reduced.
N_{HH}	households	Number of households within the bike facility service area.
n_v	vehicles/household	Average vehicles per household (default commonly used: 1.9; local data preferred if available).
O_{auto}	persons/vehicle	Average auto occupancy (default commonly used: 1.13; may be set to 1.0 if assuming SOV only).
p_p	percent	Share of new bike/ped users during peak who would have otherwise driven (SOV).
p_{op}	percent	Share of new bike/ped users during off-peak who would have otherwise driven (SOV).
n_p	trips/participant	Average number of peak-period trips per participant (that are assumed shifted from auto).
n_{op}	trips/participant	Average number of off-peak trips per participant (that are assumed shifted from auto).
LV_P	miles/trip	Average pre-project auto trip length for shifted peak-period trips.
LV_{OP}	miles/trip	Average pre-project auto trip length for shifted off-peak trips.

2.2 ROUNDABOUTS

Roundabouts can reduce emissions at intersections by reducing the time vehicles spend idling and by smoothing stop-and-go traffic. A roundabout operates with vehicles circulating counterclockwise around a central island and entering traffic yielding to vehicles already in the circle. Compared to an all-way stop or a signal, especially under moderate traffic conditions, this yield-on-entry control typically reduces full stops, shortens queues, and lowers average delay. As a result, vehicles spend less time idling and less time accelerating from a stop, which can translate into lower emissions at the intersection.

This strategy is most applicable on arterials or low- to medium-capacity roadways where traffic is currently controlled by stop signs or signals, and where intersection geometry and right-of-way can accommodate a roundabout. In MOSERS, the roundabout method is applied at the individual intersection level to estimate emission benefits associated with reduced delay and idling.

Emissions Equations:

$$Daily\ Emission\ Reduction\ \left(\frac{g}{day}\right) = A + B$$

$$A = \left(D_{B,P} - D_{A,P}\right) \times EF_I \times VD_P$$

$$B = \left(D_{B,OP} - D_{A,OP}\right) \times EF_I \times VD_{OP}$$

The variables displayed above are described in Table 2

Table 2. Roundabouts Variables and Definitions

Variable	Unit	Definition
$D_{A,P}$	hour/vehicle	Average vehicle delay at the intersection after implementation during peak hours (convert from sec/veh if needed).
$D_{B,P}$	hour/vehicle	Average vehicle delay at the intersection before implementation during peak hours (convert from sec/veh if needed).
$D_{A,OP}$	hour/vehicle	Average vehicle delay at the intersection after implementation during off-peak hours (convert from sec/veh if needed).

$D_{B,OP}$	hour/vehicle	Average vehicle delay at the intersection before implementation during off-peak hours (convert from sec/veh if needed).
EF_I	grams/hour	Idling emission factor for the pollutant of interest (NOx, VOC, PM, or CO).
VD_P	vehicles/day	Traffic volume represented during peak hours (vehicles processed during peak period).
VD_{OP}	vehicles/day	Traffic volume represented during off-peak hours (vehicles processed during off-peak period).
A	grams/day	Change in idling emissions from reduced vehicle delay during the peak period.
B	grams/day	Change in idling emissions from reduced vehicle delay during the off-peak period.

For the activity methodologies, the following equations were used:

Peak/off-peak hourly volumes (with truck adjustment)

$$V_{P,H} = \frac{V_{P,H,V}}{\frac{1}{1+\frac{T}{100}}}$$

$$V_{OP,H} = \frac{V_D - V_{P,H,V} \times N_P}{N_{OP} \times \frac{1}{1+\frac{T}{100}}}$$

Conflicting volumes (peak and off-peak)

$$V_{C,P} = (1 - P_{RT,n-1}) \times V_{P,n-1} + (P_{LT,n-2} + P_{UT,n-2}) \times V_{P,n-2} + P_{UT,n-3} \times V_{P,n-3}$$

$$V_{C,OP} = (1 - P_{RT,n-1}) \times V_{OP,n-1} + (P_{LT,n-2} + P_{UT,n-2}) \times V_{OP,n-2} + P_{UT,n-3} \times V_{OP,n-3}$$

Capacity (HCM-based form used by the roundabout method)

For this analysis, only equations relevant to two-lane approaches and two-lane circulating roundabouts will be utilized. This is based on observations that the project site's approaches are configured with two lanes (as shown in Figure 2), which is the typical design standard for roundabouts in urban areas.

Figure 2. Edgemere and John Hayes intersection, Google Streetview

When $NCL = 2, N = 2$:

$$C_P = 1130 \times e^{-0.7\times10^{-3}\times V_{C,P}} + 1130 \times e^{-0.75\times10^{-3}\times V_{C,P}}$$

$$C_{OP} = 1130 \times e^{-0.7\times10^{-3}\times V_{C,OP}} + 1130 \times e^{-0.75\times10^{-3}\times V_{C,OP}}$$

Delay after implementation (peak and off-peak)

$$D_{A,P} = \frac{3600}{C_P} + 900 \times \left(\frac{V_{P,H}}{C_P} - 1 + \sqrt{(\frac{V_{P,H}}{C_P} - 1)^2 + \frac{3600 \times \frac{V_{P,H}}{C_P}}{450 \times C_P}} \right) + 5 \times MIN\left(\frac{V_{P,H}}{C_P}, 1\right)$$

$$D_{A,OP} = \frac{3600}{C_{OP}} + 900 \times \left(\frac{V_{OP,H}}{C_{OP}} - 1 + \sqrt{(\frac{V_{OP,H}}{C_{OP}} - 1)^2 + \frac{3600 \times \frac{V_{OP,H}}{C_{OP}}}{450 \times C_{OP}}} \right) + 5 \times MIN\left(\frac{V_{OP,H}}{C_{OP}}, 1\right)$$

Delay reduction (per vehicle)

$$DR_P = D_{B,P} - D_{A,P}$$

$$DR_{OP} = D_{B,OP} - D_{A,OP}$$

With the equations described above, Table 3 displays the input variables needed for the equations, while Table 4 describes the derived/output variables

Table 3. Roundabouts Input Variables

Input	Unit	Definition / Input Guidance
NCL	—	Number of circulating lanes in the roundabout (e.g., 1-lane or 2-lane circulating).
N	lanes	Number of lanes on the approach being evaluated.
VD	vehicles/day	Approach AADT (or daily volume used for the approach).
$D_{B,P}$	sec/vehicle	Existing (before) peak-hour control delay per vehicle on the approach (convert to hr/veh for emissions equation).
$D_{B,OP}$	sec/vehicle	Existing (before) off-peak control delay per vehicle on the approach (convert to hr/veh for emissions equation).
T	percent	Truck percentage on the approach.
PRT	percent	Right-turn percentage on the approach.
PLT	percent	Left-turn percentage on the approach.
PUT	percent	U-turn percentage on the approach.
N_P	hours/day	Number of peak hours per day (default: 6, unless local data is available).

N_{OP}	hours/day	Number of off-peak hours per day (default: 18, unless local data is available).
$VP_{H,V}$	vehicles/hour	Default or locally provided peak-hour volume basis used by the method.
EF_{I}	grams/hour	Idling emission factor for the pollutant and region (NOx, VOC, PM, CO).

Table 4. Roundabouts Derived/Output Variables

Variable	Unit	Definition
VP_{H}	vehicles/hour	Peak-hour volume adjusted for trucks.
VOP_{H}	vehicles/hour	Off-peak hourly volume adjusted for trucks.
VC_{P}	vehicles/hour	Peak-hour conflicting volume is used for capacity.
VC_{OP}	vehicles/hour	Off-peak conflicting volume used for capacity.
C_{P}	vehicles/hour	Peak-hour approach capacity.
C_{OP}	vehicles/hour	Off-peak approach capacity.
$D_{A,P}$	sec/vehicle	Peak-hour delay per vehicle after implementation (roundabout).
$D_{A,OP}$	sec/vehicle	Off-peak delay per vehicle after implementation (roundabout).
DR_{P}	sec/vehicle	Peak-hour delay reduction per vehicle.
DR_{OP}	sec/vehicle	Off-peak delay reduction per vehicle.

For the Edgemere Blvd. and John Hayes St. intersection in El Paso, the roundabout strategy is evaluated as an operational improvement that reduces intersection control delay. Converting the existing all-way stop to a roundabout is expected to improve traffic flow by reducing full stops and shortening queues, which lowers the average time vehicles spend idling at the intersection. MOSERS estimates daily emission benefits by comparing before- and after-control delays under peak and off-peak conditions and applying an idling emission factor to the traffic volume represented in each period.

The method requires roadway and traffic input for each approach (e.g., approach lanes, circulating lanes, AADT/volumes, existing peak/off-peak delay, and truck percentage). Peak and off-peak approach volumes are estimated using default peak-hour assumptions (or local counts if available). Roundabout approach capacity is calculated using an HCM-based formulation driven by conflicting volumes, and after-implementation delay is then computed from the demand-to-capacity relationship. The difference between before- and after-delays is converted into emission reductions using pollutant-specific idling emission factors appropriate for the project location.

3. INPUT DATA AND ASSUMPTIONS

To estimate emission reductions for the proposed roundabout (and associated bicycle facility) at Edgemere Blvd. and John Hayes St., the MOSERS tool requires a set of project-specific inputs for each strategy described in Section 2. This section summarizes the input data used in the analysis and documents the key assumptions applied to the Bicycle and Pedestrian Programs strategy and the Roundabouts strategy.

3.1 Bicycle and Pedestrian

The input values in Table 5 were developed using a combination of (1) project- and location-specific information from local agencies, (2) nationally recognized travel behavior datasets, (3) prior CMAQ analysis prepared for the El Paso region, and (4) engineering judgment from the TTI research team where local data were not available at the level needed for MOSERS. Specifically, the analysis year reflects the City of El Paso's expected project delivery timeframe. The bike/ped impact area was defined using an estimated service-area population and an average household size to convert to households, which is the required MOSERS input; this approach provides a transparent, replicable method tied to publicly available demographic data. Households were estimated by dividing the service-area population (5,040 residents) by the City of El Paso for average persons-per-household (2.7), yielding approximately 1,867 households for the MOSERS input. The assumed shares of new bicycle/pedestrian participants who previously drove were based on the El Paso MPO CMAQ supporting documentation, which references the region's existing bicycle mode share as a reasonable (and intentionally optimistic) basis for participation in new facilities; applying slightly different peak vs. off-peak percentages reflects typical differences in travel patterns by time of day. Where detailed local bicycle trip frequency data were not available, the TTI research team assumed a minimum of a round trip for commuting and a minimum of a round trip for essential non-work travel to avoid overstating benefits. Average pre-project auto trip lengths were taken from the most recent National Household Travel Survey trip-length statistics by trip purpose, which is a standard national reference when corridor-level observed trip lengths are not available. Finally, representative peak and off-peak operating speeds were derived from local arterial speed/profile information to capture congested versus free-flow conditions, ensuring emission factors are applied using speeds that reflect how the corridor operates by time period. Overall, the assumptions were selected to be defensible, transparent, and consistent with MOSERS input requirements, while prioritizing local sources whenever feasible and relying on national defaults only when local data were not available.

Table 5. Bicycle and Pedestrian Strategy: MOSERS Inputs, Assumptions, and References

Strategy	Input data Description	Data	Units	Assumption	Source
3.2 Bicycle and Pedestrian	Year	2030	-	Estimated completion year of the project	City of El paso
	Number of households in bike/pedestrian program impact area	1867	household	# of residents/ average persons by household --> 5040/2.7 = 1867	US census data. Census Tract 101.03

	Percentage of new bike/pedestrian program participants who previously drove during peak hours	2	percent	In the El Paso MPO CMAQ appendix, It's assumed "the current percent bicycle mode share for the El Paso region is 2.0% and can serve as an optimistic mode share increase for the new bike facilities," and it's treated 0.02 as new cyclists (vehicle trips replaced), during peak hours	CMAQ Analysis by TTI Jan 2024
	Percentage of new bike/pedestrian program participants who previously drove during off peak hours	1.75	percent	In the El Paso MPO CMAQ appendix, it's assumed "the current percent bicycle mode share for the El Paso region is 2.0% and can serve as an optimistic mode share increase for the new bike facilities," and it's treated 0.02 as new cyclists (vehicle trips replaced), during off-peak hours	CMAQ Analysis by TTI Jan 2024
	Average number of trips per participant during peak hours	2	trip	At least a round trip from/to home/work	TTI Research Team
	Average number of trips per participant during off peak hours	2	trip	At least a round trip from/to daily necessary locations besides work	TTI Research Team
	Average auto trip length of participants before participating in the bike/pedestrian program during peak hours	13.4	mile	based on 2022 NHTS average person trip length by trip purpose	National Household Travel Survey

	Average auto trip length of participants before participating in the bike/pedestrian program during off-peak hours	12.3	mile	based on 2022 NHTS avg person trip length by trip purpose	National Household Travel Survey
	Average trip speed in the service zone during peak hours	30	mph	congested speed, a fraction of the free flow (posted speed)	2020 arterial segment profiles, ElP MPO
	Average trip speed in the service zone during off-peak hours	40	mph	free-flow uncongested speed	2020 arterial segment profiles, ElP MPO

3.2 ROUNDABOUTS

The roundabout inputs in Table 6 were developed using a combination of local project information, official traffic count data, and documented default assumptions from prior research where approach-specific field measurements were not available. The analysis year (2030) reflects the anticipated project delivery timeframe provided by the City of El Paso. Because MOSERS evaluates roundabout benefits at the approach level (north, south, east, and west), the table inputs are applied to each approach; the only approach-specific value is the AADT, while the remaining parameters (geometry, delay assumptions, truck share, and turning movement percentages) are held constant across approaches to maintain consistency and because no evidence suggested materially different conditions by approach for those inputs.

Approach-level AADT for the analysis year was developed from TxDOT traffic count data, projected to 2030 using a linear regression based on historical counts. Geometric inputs such as circulating lanes and approach lanes were defined using a combination of standard roundabout assumptions (circulating lanes) and existing conditions observed in Google Street View (approach lanes). Existing control delay values represent planning-level "before" conditions for an all-way stop at a busier arterial intersection and were selected from published ranges used by TxDOT/VDOT references. The truck percentage (6%) was derived from the El Paso District conformity VMT mix developed for MOVES4.0.3. Specifically, the VMT mix table was filtered to a weekday and time-of-day = "day", then all truck-related MOVES source types were isolated, and their VMT mix fractions were summed to obtain the total truck share used as the input in MOSERS. Turning movement percentages (right, left, and U-turn) were taken from published studies and guidance (UT Austin CTR and TTI roundabout research) as reasonable planning-level values. Overall, the assumptions were selected to be transparent, repeatable, and consistent with MOSERS input requirements, relying on local data for volumes and regional conformity inputs where available and using established literature-based defaults for parameters that typically require dedicated turning-movement and delay counts.

Table 6. Roundabouts Strategy: MOSERS Inputs, Assumptions, and References

Strategy	Input data Description	Data	Units	Assumption	Source
5.8 Roundabouts	Year	2030	-	Estimated completion year of the project	City of El paso
	Number of Circulating Roundabout Lanes	2	lanes	average # of lanes in a standard roundabout	TTI
	Number of Lanes	2	lanes	# of lanes spotted in google Streetview	Google Maps
	Annual Average Daily Traffic for the analysis year	Different for each approach	veh/day	AADT projected based on past years, linear regression	Traffic count TxDOT
	Existing Peak-hour Delay per Vehicle	35	sec/veh	based on AWSC for busy roads	TxDOT and VDOT
	Existing Off-Peak hour Delay per Vehicle	15	sec/veh	based on AWSC for non-busy roads	TxDOT and VDOT
	Existing Truck Percentage	6	percent	% estimated based on the VMT Mix used for ELP conformity	TTI VMT Mix
	Existing Right Turn Percentage	10	percent	typical percentage estimated by the source study	UT Austin CTR

	Existing Left Turn Percentage	10	percent	typical percentage estimated by the source study	UT Austin CTR
	Existing U-Turn Percentage	3	percent	Research and Findings on Roundabouts and Innovative Intersections for High-Speed and Rural Locations	TTI

3.2.1 AADT for Each Roundabout approach

Traffic volumes used in this CMAQ analysis were developed to represent 2030 conditions at the proposed roundabout intersection of Edgemere Road and John Hayes Drive in El Paso, Texas. The objective was to produce a defensible, transparent set of approach-leg AADT values for the roundabout while preserving directional information needed for quality assurance and for documenting how totals were constructed. The roundabout has four approach legs, Edgemere West, Edgemere East, John Hayes North, and John Hayes South. Each approach leg carries two directions of travel, which results in eight directional AADT series that were estimated and projected to the analysis year. The eight directional 2030 values are summarized in Table 10, and the final four approach-leg AADT values used for the roundabout are summarized in Table 11.

Directional distributions were developed first using the TxDOT Traffic Count Database System (TCDS). The TCDS map was used to identify the closest available traffic counters on each of the four approach legs, and the locations of the selected devices are shown in Figure 3. As shown in Table 7, these counters provided usable directional data for years 2017 and 2022. For each counter-year, total AADT and the corresponding directional AADT values were extracted. Directional percentages were computed as the ratio of directional AADT to the total AADT for that counter-year using Equation below. These directional percentages represent the observed share of total traffic traveling in each direction on each approach leg and are reported in Table 7.

$$\%_{Dir} = \frac{AADT_{Dir}}{AADT_{Total}}$$

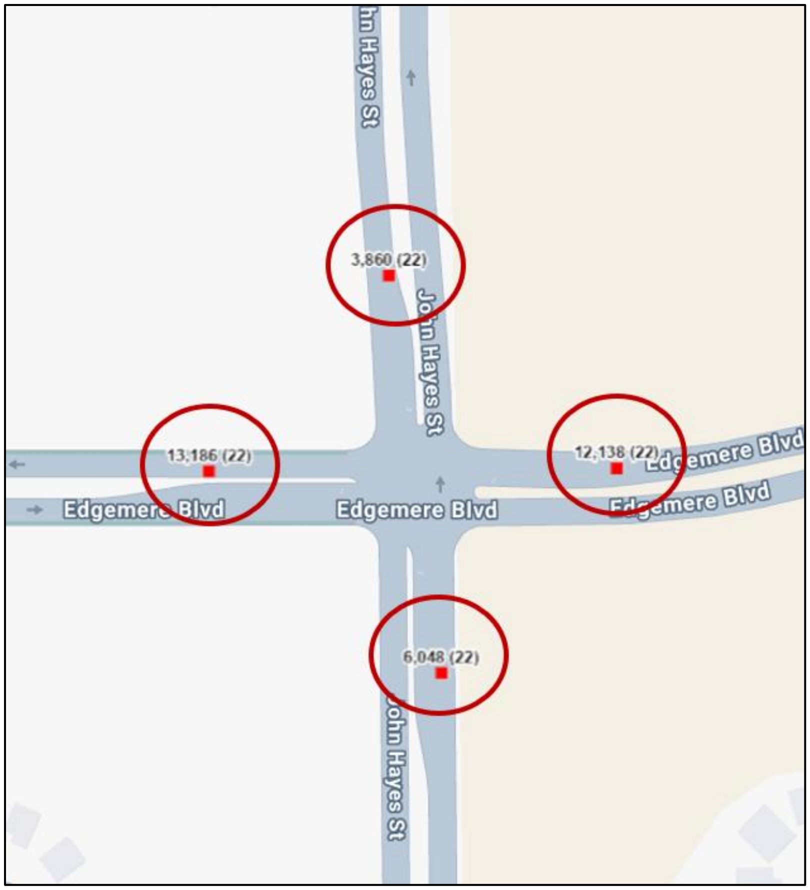

Figure 3. Traffic counter device's location

Table 7. TCDS counter extraction and computed directional percentages

Device ID	location	year	total AADT	EB AADT	EB %	WB AADT	WB %
72u241	Edgemere West	2022	13186	6649	0.5042	6537	0.4958
72u241	Edgemere West	2017	9559	4760	0.4980	4799	0.5020
72U240	Edgemere East	2022	12138	5992	0.4937	6146	0.5063
72U240	Edgemere East	2017	5046	2564	0.5081	2482	0.4919

deviceID	location	year	total AADT	NB AADT	NB %	SB AADT	SB %
72U239	John Hayes South	2022	6048	2857	0.4724	3191	0.5276
72U239	John Hayes South	2017	6537	3186	0.4874	3350	0.5125
72U238	John Hayes North	2022	3860	1918	0.4969	1942	0.5031
72U238	John Hayes North	2017	4575	2182	0.4769	2394	0.5233

Because directional information was available for only two years, a single representative directional distribution was defined for each approach leg as the average of the 2017 and 2022 directional percentages. This averaging reduces sensitivity to any single-year anomaly and produces one stable directional split to apply to the Roadway Inventory AADT series. The averaged directional splits used in subsequent calculations are shown in Table 8 and were computed using Equation below.

$$\overline{\%_{Dir}} = \frac{\%_{Dir,2017} + \%_{Dir,2022}}{2}$$

Table 8. Directional splits applied to Roadway Inventory totals, average of 2017 and 2022

approach leg	direction 1	avg %	direction 2	avg %
Edgemere West	EB	0.5011	WB	0.4989
Edgemere East	EB	0.5009	WB	0.4991

John Hayes South	NB	0.4799	SB	0.5200
John Hayes North	NB	0.4869	SB	0.5132

After directional splits were established, total approach-leg AADT by year was obtained from TxDOT Roadway Inventory. Roadway Inventory provides link-level annual total AADT values for the roadway segments that represent each of the four approach legs. The annual total AADT series selected for this effort is summarized in Table 9. These totals represent combined bidirectional traffic on each selected approach link for each year listed.

Table 9. Roadway Inventory total AADT series used for the four approach legs

approach leg	year	total AADT
Edgemere West	2024	17750
Edgemere West	2023	17750
Edgemere West	2022	17306
Edgemere West	2021	17306
Edgemere West	2020	17306
Edgemere East	2024	12138
Edgemere East	2023	12138
Edgemere East	2022	17306
Edgemere East	2021	17306

Edgemere East	2020	17306
John Hayes South	2024	6838
John Hayes South	2023	6704
John Hayes South	2022	6704
John Hayes South	2021	4253
John Hayes South	2020	3731
John Hayes South	2019	5049
John Hayes South	2018	4615
John Hayes South	2017	4365
John Hayes North	2024	6838
John Hayes North	2023	6704
John Hayes North	2022	6704

John Hayes North	2021	4253
John Hayes North	2020	3731
John Hayes North	2019	5049
John Hayes North	2018	4615
John Hayes North	2017	4365

Directional AADT time series were then computed by combining the Roadway Inventory total AADT values in Table 9 with the averaged directional splits in Table 8. For each approach leg and year, directional AADT was calculated by multiplying the total AADT by the applicable average directional percentage using equation below. Applying such equation 3 across all years in Table 9 produced eight directional AADT time series, two for each approach leg. These eight-directional series form the basis for the 2030 traffic projections summarized in Table 10.

$$AADT_{(Dir)(y)} = AADT_{(Total)(y)} * \overline{\%_{Dir}}$$

Directional AADT values were projected to the 2030 analysis year separately for each of the eight-directional series. For approach legs where the Roadway Inventory totals and the derived directional AADT series behaved consistently over time, a linear trend was fit and extrapolated to 2030 using equation below. This approach was applied independently to Edgemere West eastbound and westbound, John Hayes North northbound and southbound, and John Hayes South northbound and southbound, and the results are reported in Table 10.

$$AADT_{(Dir)(y)} = a * y + b$$

For Edgemere East, the Roadway Inventory totals shown in Table 9 exhibit a discontinuity between the stable 2020 to 2022 period and the lower 2023 to 2024 values. Applying a linear regression through a discontinuous series yields an unrealistically steep decline and implausibly low 2030 estimates. Because a demand collapse of that magnitude is not expected for this corridor and because discontinuities can reflect link definition or segmentation differences rather than true traffic change, a stability override was applied for Edgemere East. Specifically, Edgemere East 2030 directional AADT values were held constant at the stable 2022 directional values computed from the 2022 Roadway Inventory total AADT and the averaged Edgemere East directional split shown in Table 8. This stability assumption is expressed in the equation below, and the resulting Edgemere East directional 2030 values are included in Table 10.

$$AADT_{(EdgE,EB)(2030)} = AADT_{(EdgE,EB)(2022)}$$

$$AADT_{(EdgE,WB)(2030)} = AADT_{(EdgE,WB)(2022)}$$

The methodology above yields eight directional AADT values for 2030, which are listed in Table 10 along with the forecast method used for each directional series. These values provide the directional detail needed for QA and documentation.

Figure 4 summarizes the directional AADT time series and 2030 projections for the Edgemere Road approaches to the roundabout (Edgemere West EB/WB and Edgemere East EB/WB). The plotted points reflect directional AADT developed by applying the averaged TCDS splits (Table 8) to Roadway Inventory totals (Table 9). Edgemere West EB/WB is projected to 2030 using linear extrapolation, while Edgemere East EB/WB is held constant at the stable 2022 level consistent with the stability override; these assumptions support the 2030 values reported in Table 10 and the approach-leg values in Table 11.

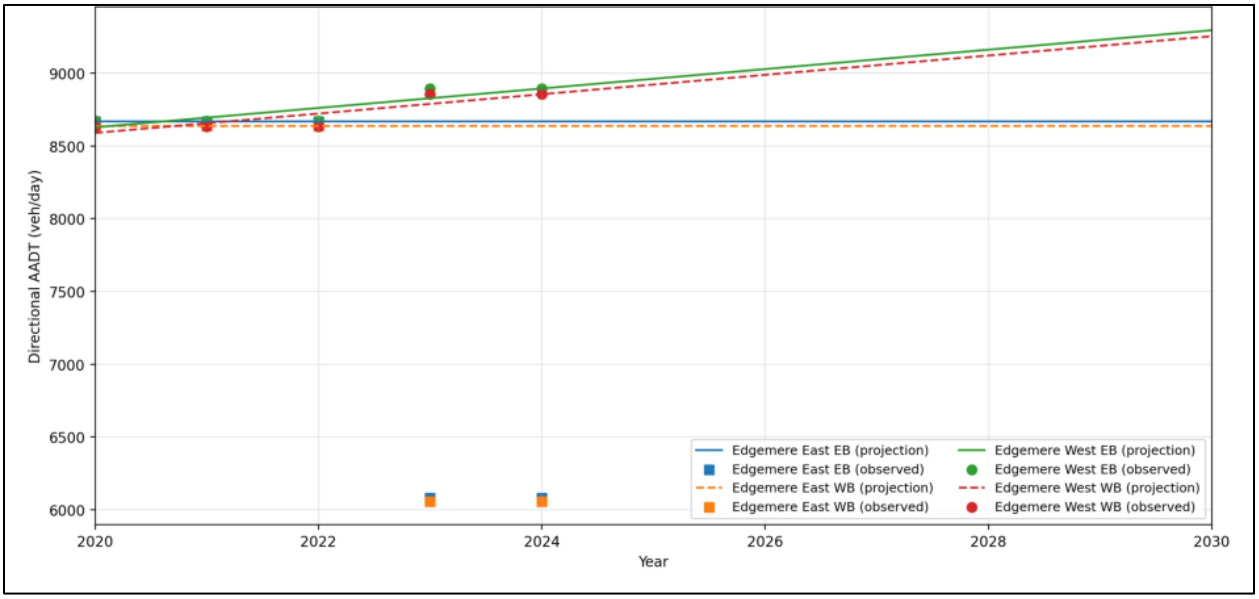

Figure 4. Edgemere Road directional AADT series and 2030 projection (4 directional components)

Table 10. Directional AADT values for 2030, eight directional components

approach leg	direction	2030 directional AADT (vpd)	forecasting method
Edgemere West	EB	9295	linear extrapolation
Edgemere West	WB	9254	linear extrapolation
Edgemere East	EB	8668	hold constant at 2022 stable level
Edgemere East	WB	8638	hold constant at 2022 stable level

John Hayes North	NB	4403	linear extrapolation
John Hayes North	SB	4640	linear extrapolation
John Hayes South	NB	4339	linear extrapolation
John Hayes South	SB	4702	linear extrapolation

Finally, a single approach-leg AADT value was computed for each of the four roundabout approach legs by averaging the two directional AADT values within each approach leg. This averaging step provides the four approach-leg AADT values used for subsequent calculations and reporting while maintaining traceability back to the directional components. The approach-leg averaging calculation is shown in the equation below, and the resulting four 2030 approach-leg AADT values are presented in Table 11.

$$AADT_{(Approach)(2030)} = \frac{AADT_{(Dir1)(2030)} + AADT_{(Dir2)(2030)}}{2}$$

Table 11. Final 2030 roundabout approach-leg AADT values, four values

roundabout approach leg	2030 AADT, average of two directions (vpd)	calculation
West approach, Edgemere West	9274	(9295 + 9254) / 2
East approach, Edgemere East	8653	(8668 + 8638) / 2
North approach, John Hayes North	4522	(4403 + 4640) / 2

South approach, John Hayes South	4520	(4339 + 4702) / 2

3.3 Emissions Factors

Emission factors used in the MOSERS analysis were developed using the EPA MOVES model (version 4.0.3) to remain consistent with the emissions modeling framework used for conformity in the El Paso region. MOVES was executed to generate pollutant- and process-specific emission rates representative of local conditions for the analysis year (2030). The resulting outputs were then post-processed and formatted as emission rate lookup tables (ERLTs) (see Appendix B) so they could be imported into MOSERS and applied directly within the tool. These lookup tables provide the emission factors needed to quantify changes in emissions associated with the project strategies, including running exhaust (used with VMT reductions) and start/trip-end emissions (used with reductions in vehicle trips), ensuring that MOSERS calculations are based on MOVES-derived rates aligned with regional conformity assumptions.

For the Bicycle and Pedestrian strategy, the running exhaust emission factors used in the calculations were obtained from *ERLT_Running*, while the auto trip-end (start) emission factors were obtained from *ERLT_Starts*. For the Roundabouts strategy, the idling emission factors were obtained from *ERLT_Idling*. To develop these ERLTs, MOVES emission-rate runs were completed for both summer and winter seasonal conditions. To represent a conservative analysis, the ERLTs were populated using the maximum emission rate observed across the seasonal runs for each pollutant/process combination.

To retrieve the specific emission factors applied in the MOSERS workbooks (Appendix A), the ERLTs were filtered consistently to match the project context. For all ERLTs, records were filtered by Source Type Name = “Auto” and then limited to Road Type ID = 4, which represents Urban Restricted Access (urban freeway) conditions in MOVES. For *ERLT_Running* (used in the Bicycle and Pedestrian calculations), the table was further filtered by speed to select 35 mph, representing the approximate average operating speed between the assumed peak-hour and off-peak-hour speeds used in the analysis. This consistent filtering approach ensures the emission factors applied by MOSERS reflect the roadway and operating conditions assumed for the Edgemere Blvd. and John Hayes St. project while maintaining alignment with regional MOVES-based conformity inputs

4. SUMMARY OF RESULTS

The emissions analysis results are summarized in Table 12, which presents the estimated daily emission reductions by pollutants for both the Bicycle and Pedestrian strategy and the Roundabouts strategy. These values were taken directly from the MOSERS outputs and reflect the methods described in Section 2, using the project-specific input data and assumptions documented in Section 3. The MOSERS calculation workbooks used to generate these results are included in Appendix A for reference. Overall, the results indicate that implementing the proposed improvements at Edgemere Blvd. and John Hayes St. is expected to produce measurable air quality benefits across the pollutants evaluated.

Table 12. CMAQ Analysis Emissions Reductions

Pollutant	Bicycle and Pedestrian (Kg/day)	Bicycle and Pedestrian (lbs/day)	Roundabouts (Kg/day)	Roundabouts (lbs/day)
CO	6.281	13.847	0.783	1.726
CO_2	853	1,881	1,775.23	3,913.706
NO_x	0.201	0.442	0.184	0.406
VOC	0.148	0.325	0.046	0.1
PM_{10}	0.007	0.015	0.012	0.026

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APPENDIX A: MOSERS WORKBOOKS FOR BICYCLE AND PEDESTRIAN AND ROUNDABOUTS (ELECTRONIC ONLY)

APPENDIX B:
EMISSIONS LOOKUP TABLES (ERLT) FOR MOSERS INPUT (ELECTRONIC ONLY)

Congestion Mitigation and Air Quality (CMAQ) Analysis- Montwood/Sunfire Roundabout

Prepared for City of El Paso

January 2026

Texas A&M Transportation Institute

Texas A&M Transportation Institute

TECHNICAL REPORT

Task 5 – Technical Documentation

DATE: January 16th, 2026

TO: Margaret K. Schroeder
City of El Paso

FROM: Camilo Jurado
Chaoyi Gu, P.E.
Erik Vargas
Texas A&M Transportation Institute (TTI)

FOR MORE INFORMATION:
Erik Vargas
(979) 393-0688
E-vargas@tti.tamu.edu

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1. TASK SUMMARY

The City of El Paso ("City") requested technical assistance from the Texas A&M Transportation Institute (TTI) in developing a Congestion Mitigation and Air Quality (CMAQ) analysis for its roundabout project at Montwood & Sunfire (See Figure 1 for a spatial location). This analysis estimated emissions benefits from the project's key components, including potential improvements to bicycle lanes and roundabouts.

The primary objective of this analysis was to assist the City of El Paso in preparing an updated CMAQ report for submission to the MPO and other relevant agencies. This report included new emissions estimates and a summary of the project's anticipated benefits, supporting the City of El Paso's CMAQ funding application.

The emissions analysis for the project is presented below. The strategy name is given along with a brief description of the project. Data sources and assumptions for the analysis are provided. The equation from the Texas Guide to Accept Mobile Source Emission Reduction Strategies (MOSERs Guide) is provided for the strategy, along with the equation's variables and the equation itself. The results are then computed for the strategy equation.

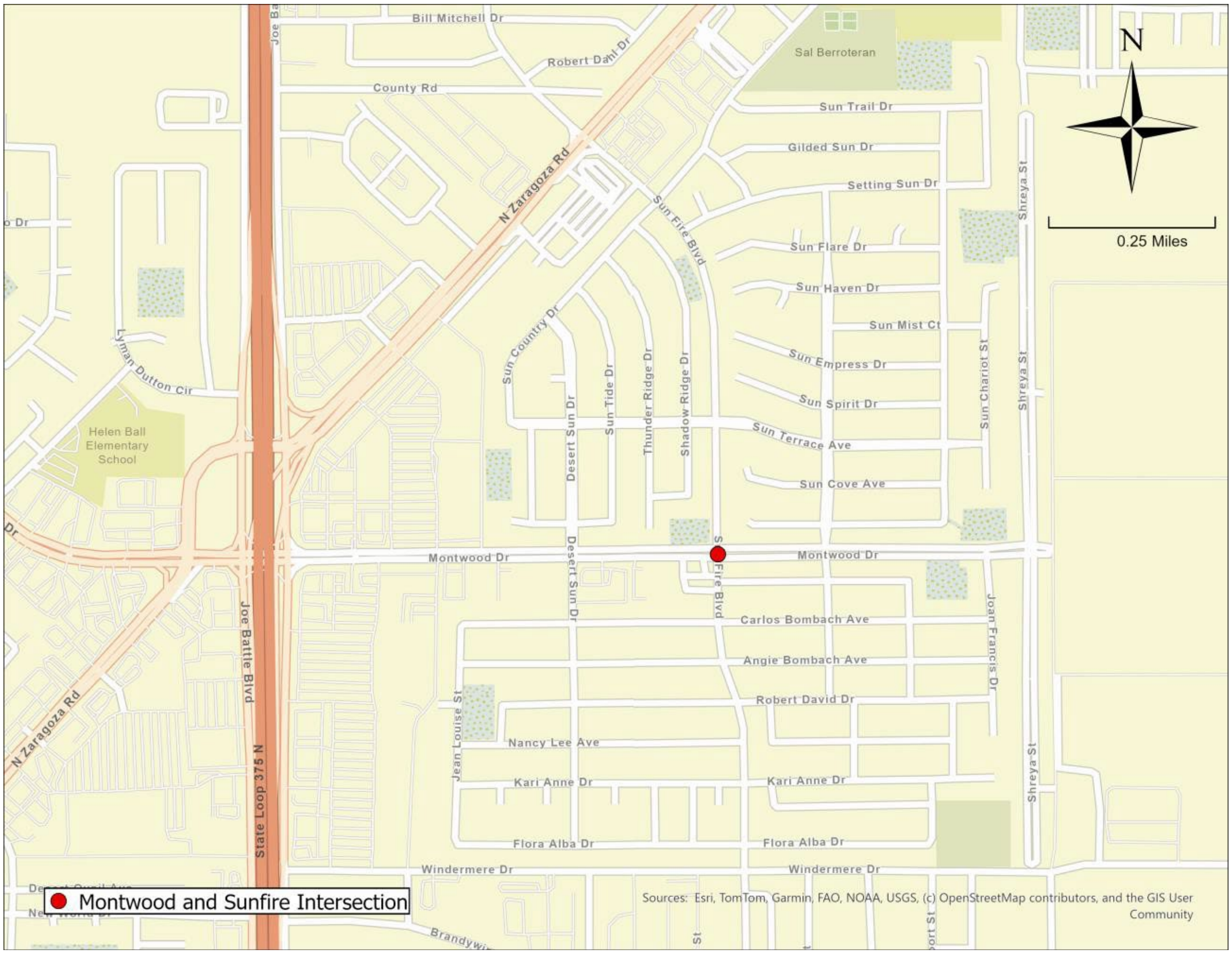

Figure 1. Montwood and Sunfire Intersection

2. STRATEGIES AND METHODOLOGY

The Texas Guide to Accepted Mobile Source Emission Reduction Strategies (commonly known as the MOSERS Guide) is a set of reference documents and tools for Texas transportation practitioners undertaking air quality planning. The intent of MOSERS is to provide guidance and resources for transportation air quality practitioners to understand and evaluate mobile-source emissions-reduction strategies. The MOSERS guide was originally developed by TTI in 2003 and updated subsequently in 2007, and 2020. After a thorough review by the research team, the strategies implemented in the roundabout project at Montwood and Sunfire intersection are “Bicycle and Pedestrian” (strategy 3.2) and “Roundabouts” (strategy 5.8)

2.1 Bicycle and Pedestrian

Bicycle and pedestrian programs reduce vehicle trips, vehicle miles traveled (VMT), and emissions by shifting a portion of short local travel from cars to walking and bicycling. In the context of the Montwood Dr. and Sunfire Blvd, intersection in El Paso, where an all-way stop is being converted to a roundabout, this strategy applies through the addition of bicycle facilities (e.g., a bike path or bike-pedestrian shared path) that provide a safer, more direct, and more comfortable option for cyclists. By improving connectivity and reducing conflicts with vehicle traffic, the bike facility is expected to attract some trips that would otherwise be made by car, particularly short neighborhood-to-commercial or neighborhood-to-neighborhood trips. The emissions benefit is quantified by estimating the number of vehicle trips and VMT that are avoided due to mode shift, then translating those avoided vehicle activities into reductions in pollutants and greenhouse gases using the MOSERS methodology.

This strategy is most applicable in areas with existing or planned bicycle/pedestrian connectivity (sidewalks, trails, low-stress routes, nearby destinations) that can support regular use. The effectiveness depends primarily on how many travelers shift from driving to biking or walking, and on the typical trip lengths replaced, especially during peak periods.

Emissions Equations

$$Daily\ Emission\ Reduction\ (g/day) = A + B$$

Reduction in auto start emissions from reduced trips: $A = VT_R \times TEF_{AUTO}$

Reduction in auto-running exhaust emissions from a reduction in vehicle miles traveled:

$$B = VMT_R \times EF_B$$

Where:

$$VT_R = VT_P + VT_{OP}$$

$$VMT_R = VMT_P + VMT_{OP}$$

Activity (mode-shift) calculations:

$$VT_P = N_{HH} \times n_v \times p_p \times \frac{n_p}{O_{auto}}$$

$$VT_{OP} = N_{HH} \times n_v \times p_{op} \times \frac{n_{op}}{O_{auto}}$$

$$VMT_P = VT_P \times LV_P$$

$$VMT_{OP} = VT_{OP} \times LV_{OP}$$

The calculator requires basic information, such as the area type, area size, and number of households or population of the service area where the new bike-ped facility will be constructed. It also requires trip information, such as the average trip length before the bike-ped program, the average number of trips during peak hours, and the average number of trips during off-peak hours. It also needs an estimated percentage of new program participants who previously were single-occupancy drivers. The methodology assumes that a certain percentage of people are attracted to choose cycling or walking over driving vehicles when a bike-ped facility is available. Bike-ped users are estimated based on the number of households, the number of vehicles per household, and auto occupancy. Trips shifted to bike or walk reduce vehicle trips and associated VMT. All the variables and their definitions are provided in Table 1.

Table 1. Bicycle and Pedestrian Variables and Definitions

Variable	Unit	Definition / Notes
Daily Emission Reduction	g/day	Total daily reduction in emissions from auto activity reduced (sum of trip-end + running).
A	g/day	Reduction in auto trip-end emissions due to fewer auto trips.
B	g/day	Reduction in running exhaust emissions due to fewer auto miles traveled.
TEF_{AUTO}	g/trip	Auto trip-end emission factor (pollutant-specific: NOx, VOC, PM, CO).
EF_B	g/mile	Speed-based running exhaust emission factor for the average pre-project auto speed (pollutant-specific: NOx, VOC, PM, CO).
VT_R	trips/day	Reduction in total daily auto trips (peak + off-peak).

VMT_R	miles/day	Reduction in total daily auto VMT (peak + off-peak).
VT_P	trips/day	Peak-period auto trips reduced due to mode shift.
VT_{OP}	trips/day	Off-peak auto trips reduced due to mode shift.
VMT_P	miles/day	Peak-period auto VMT reduced.
VMT_{OP}	miles/day	Off-peak auto VMT reduced.
N_{HH}	households	Number of households within the bike facility service area.
n_v	vehicles/household	Average vehicles per household (default commonly used: 1.9; local data preferred if available).
O_{auto}	persons/vehicle	Average auto occupancy (default commonly used: 1.13; may be set to 1.0 if assuming SOV only).
p_p	percent	Share of new bike/ped users during peak who would have otherwise driven (SOV).
p_{op}	percent	Share of new bike/ped users during off-peak who would have otherwise driven (SOV).
n_p	trips/participant	Average number of peak-period trips per participant (that are assumed shifted from auto).
n_{op}	trips/participant	Average number of off-peak trips per participant (that are assumed shifted from auto).
LV_P	miles/trip	Average pre-project auto trip length for shifted peak-period trips.
LV_{OP}	miles/trip	Average pre-project auto trip length for shifted off-peak trips.

2.2 ROUNDABOUTS

Roundabouts can reduce emissions at intersections by reducing the time vehicles spend idling and by smoothing stop-and-go traffic. A roundabout operates with vehicles circulating counterclockwise around a central island and entering traffic yielding to vehicles already in the circle. Compared to an all-way stop or a signal, especially under moderate traffic conditions, this yield-on-entry control typically reduces full stops, shortens queues, and lowers average delay. As a result, vehicles spend less time idling and less time accelerating from a stop, which can translate into lower emissions at the intersection.

This strategy is most applicable on arterials or low- to medium-capacity roadways where traffic is currently controlled by stop signs or signals, and where intersection geometry and right-of-way can accommodate a roundabout. In MOSERS, the roundabout method is applied at the individual intersection level to estimate emission benefits associated with reduced delay and idling.

Emissions Equations

$$Daily\ Emission\ Reduction\ (\frac{g}{day}) = A + B$$

$$A = (D_{B,P} - D_{A,P}) \times EF_I \times VD_P$$

$$B = (D_{B,OP} - D_{A,OP}) \times EF_I \times VD_{OP}$$

The variables displayed above are described in Table 2

Table 2. Roundabouts Variables and Definitions

Variable	Unit	Definition
$D_{A,P}$	hour/vehicle	Average vehicle delay at the intersection after implementation during peak hours (convert from sec/veh if needed).
$D_{B,P}$	hour/vehicle	Average vehicle delay at the intersection before implementation during peak hours (convert from sec/veh if needed).

$D_{A,OP}$	hour/vehicle	Average vehicle delay at the intersection after implementation during off-peak hours (convert from sec/veh if needed).
$D_{B,OP}$	hour/vehicle	Average vehicle delay at the intersection before implementation during off-peak hours (convert from sec/veh if needed).
EF_I	grams/hour	Idling emission factor for the pollutant of interest (NOx, VOC, PM, or CO).
VD_P	vehicles/day	Traffic volume represented during peak hours (vehicles processed during peak period).
VD_{OP}	vehicles/day	Traffic volume represented during off-peak hours (vehicles processed during off-peak period).
A	grams/day	Change in idling emissions from reduced vehicle delay during the peak period.
B	grams/day	Change in idling emissions from reduced vehicle delay during the off-peak period.

For the activity methodologies, the following equations were used:

Peak/off-peak hourly volumes (with truck adjustment)

$$V_{P,H} = \frac{V_{P,H,V}}{\frac{1}{1+\frac{T}{100}}}$$

$$V_{OP,H} = \frac{V_D - V_{P,H,V} \times N_P}{N_{OP} \times \frac{1}{1+\frac{T}{100}}}$$

Conflicting volumes (peak and off-peak)

$$V_{C,P} = (1 - P_{RT,n-1}) \times V_{P,n-1} + (P_{LT,n-2} + P_{UT,n-2}) \times V_{P,n-2} + P_{UT,n-3} \times V_{P,n-3}$$

$$V_{C,OP} = (1 - P_{RT,n-1}) \times V_{OP,n-1} + (P_{LT,n-2} + P_{UT,n-2}) \times V_{OP,n-2} + P_{UT,n-3} \times V_{OP,n-3}$$

Capacity (HCM-based form used by the roundabout method)

For this analysis, only equations relevant to two-lane approaches and two-lane circulating roundabouts will be utilized. This is based on observations that the project site's approaches are configured with two lanes (as shown in Figure 2), which is the typical design standard for roundabouts in urban areas.

Figure 2. Montwood and Sunfire intersection, Google Streetview

When $NCL = 2, N = 2$:

$$C_P = 1130 \times e^{-0.7\times10^{-3}\times V_{C,P}} + 1130 \times e^{-0.75\times10^{-3}\times V_{C,P}}$$

$$C_{OP} = 1130 \times e^{-0.7\times10^{-3}\times V_{C,OP}} + 1130 \times e^{-0.75\times10^{-3}\times V_{C,OP}}$$

Delay after implementation (peak and off-peak)

$$D_{A,P} = \frac{3600}{C_P} + 900 \times \left(\frac{V_{P,H}}{C_P} - 1 + \sqrt{\left(\frac{V_{P,H}}{C_P} - 1\right)^2 + \frac{3600 \times \frac{V_{P,H}}{C_P}}{450 \times C_P}} \right) + 5 \times MIN\left(\frac{V_{P,H}}{C_P}, 1\right)$$

$$D_{A,OP} = \frac{3600}{C_{OP}} + 900 \times \left(\frac{V_{OP,H}}{C_{OP}} - 1 + \sqrt{\left(\frac{V_{OP,H}}{C_{OP}} - 1\right)^2 + \frac{3600 \times \frac{V_{OP,H}}{C_{OP}}}{450 \times C_{OP}}} \right) + 5 \times MIN\left(\frac{V_{OP,H}}{C_{OP}}, 1\right)$$

Delay reduction (per vehicle)

$$DR_P = D_{B,P} - D_{A,P}$$

$$DR_{OP} = D_{B,OP} - D_{A,OP}$$

With the equations described above, Table 3 displays the input variables needed for the equations, while Table 4 describes the derived/output variables

Table 3. Roundabouts Input Variables

Input	Unit	Definition / Input Guidance
NCL	—	Number of circulating lanes in the roundabout (e.g., 1-lane or 2-lane circulating).
N	lanes	Number of lanes on the approach being evaluated.
VD	vehicles/day	Approach AADT (or daily volume used for the approach).
$D_{B,P}$	sec/vehicle	Existing (before) peak-hour control delay per vehicle on the approach (convert to hr/veh for emissions equation).
$D_{B,OP}$	sec/vehicle	Existing (before) off-peak control delay per vehicle on the approach (convert to hr/veh for emissions equation).

T	percent	Truck percentage on the approach.
PRT	percent	Right-turn percentage on the approach.
PLT	percent	Left-turn percentage on the approach.
PUT	percent	U-turn percentage on the approach.
N_P	hours/day	Number of peak hours per day (default: 6, unless local data available).
N_{OP}	hours/day	Number of off-peak hours per day (default: 18, unless local data available).
$VP_{H,V}$	vehicles/hour	Default or locally provided peak-hour volume basis used by the method.
EF_I	grams/hour	Idling emission factor for the pollutant and region (NOx, VOC, PM, CO).

Table 4. Roundabouts Derived/Output Variables

Variable	Unit	Definition
VP_H	vehicles/hour	Peak-hour volume adjusted for trucks.
VOP_H	vehicles/hour	Off-peak hourly volume adjusted for trucks.
VC_P	vehicles/hour	Peak-hour conflicting volume used for capacity.
VC_{OP}	vehicles/hour	Off-peak conflicting volume used for capacity.
C_P	vehicles/hour	Peak-hour approach capacity.
C_{OP}	vehicles/hour	Off-peak approach capacity.

$D_{A,P}$	sec/vehicle	Peak-hour delay per vehicle after implementation (roundabout).
$D_{A,OP}$	sec/vehicle	Off-peak delay per vehicle after implementation (roundabout).
DR_{P}	sec/vehicle	Peak-hour delay reduction per vehicle.
DR_{OP}	sec/vehicle	Off-peak delay reduction per vehicle.

For the Montwood Dr. and Sunfire Blvd. intersection in El Paso, the roundabout strategy is evaluated as an operational improvement that reduces intersection control delay. Converting the existing all-way stop to a roundabout is expected to improve traffic flow by reducing full stops and shortening queues, which lowers the average time vehicles spend idling at the intersection. MOSERS estimates daily emission benefits by comparing before- and after-control delays under peak and off-peak conditions and applying an idling emission factor to the traffic volume represented in each period.

The method requires roadway and traffic input for each approach (e.g., approach lanes, circulating lanes, AADT/volumes, existing peak/off-peak delay, and truck percentage). Peak and off-peak approach volumes are estimated using default peak-hour assumptions (or local counts if available). Roundabout approach capacity is calculated using an HCM-based formulation driven by conflicting volumes, and after-implementation delay is then computed from the demand-to-capacity relationship. The difference between before- and after-delays is converted into emission reductions using pollutant-specific idling emission factors appropriate for the project location.

3. INPUT DATA AND ASSUMPTIONS

To estimate emission reductions for the proposed roundabout (and associated bicycle facility) at Montwood Dr. and Sunfire Blvd., the MOSERS tool requires a set of project-specific inputs for each strategy described in Section 2. This section summarizes the input data used in the analysis and documents the key assumptions applied to the Bicycle and Pedestrian Programs strategy and the Roundabouts strategy.

3.1 BICYCLE AND PEDESTRIAN

The input values in Table 5 were developed using a combination of (1) project- and location-specific information from local agencies, (2) nationally recognized travel behavior datasets, (3) prior CMAQ analysis prepared for the El Paso region, and (4) engineering judgment from the TTI research team where local data were not available at the level needed for MOSERS. Specifically, the analysis year reflects the City of El Paso's expected project delivery timeframe. The bike/ped impact area was defined using an estimated service-area population and an average household size to convert to households, which is the required MOSERS input; this approach provides a transparent, replicable method tied to publicly available demographic data. The assumed shares of new bicycle/pedestrian participants who previously drove were based on the El Paso MPO CMAQ supporting documentation, which references the region’s existing bicycle mode share as a reasonable (and intentionally optimistic) basis for participation in new facilities; applying slightly different peak vs. off-peak percentages reflects typical differences in travel patterns by time of day. Where detailed local bicycle trip frequency data were not available, the TTI research team assumed a minimum of a round trip for commuting and a minimum of a round trip for essential non-work travel to avoid overstating benefits. Average pre-project auto trip lengths were taken from the most recent National Household Travel Survey trip-length statistics by trip purpose, which is a standard national reference when corridor-level observed trip lengths are not available. Finally, representative peak and off-peak operating speeds were derived from local arterial speed/profile information to capture congested versus free-flow conditions, ensuring emission factors are applied using speeds that reflect how the corridor actually operates by time period. Overall, the assumptions were selected to be defensible, transparent, and consistent with MOSERS input requirements, while prioritizing local sources whenever feasible and relying on national defaults only when local data were not available.

Table 5. Bicycle and Pedestrian Strategy: MOSERS Inputs, Assumptions, and References

Strategy	Input data Description	Data	Units	Assumption	Source
	Year	2030	-	Estimated completion year of the project	City of El paso

3.2 Bicycle and Pedestrian	Number of households in bike/pedestrian program impact area	1200	household	# of residents/ average persons by household --> 3235/2.7 = 1200	NextDoor and US census data
	Percentage of new bike/pedestrian program participants who previously drove during peak hours	2	percent	In the El Paso MPO CMAQ appendix, It's assumed “the current percent bicycle mode share for the El Paso region is 2.0% and can serve as an optimistic mode share increase for the new bike facilities,” and it's treated 0.02 as new cyclists (vehicle trips replaced), during peak hours	CMAQ Analysis by TTI Jan 2024
	Percentage of new bike/pedestrian program participants who previously drove during off peak hours	1.75	percent	In the El Paso MPO CMAQ appendix, It's assumed “the current percent bicycle mode share for the El Paso region is 2.0% and can serve as an optimistic mode share increase for the new bike facilities,” and it's treated 0.02 as new cyclists (vehicle trips replaced), during off-peak hours	CMAQ Analysis by TTI Jan 2024
	Average number of trips per participant during peak hours	2	trip	At least a round trip from/to home/work	TTI Research Team
	Average number of trips per participant during off peak hours	2	trip	At least a round trip from/to daily necessary locations besides work	TTI Research Team

	Average auto trip length of participants before participating in the bike/pedestrian program during peak hours	13.4	mile	based on 2022 NHTS average person trip length by trip purpose	National Household Travel Survey
	Average auto trip length of participants before participating in the bike/pedestrian program during off-peak hours	12.3	mile	based on 2022 NHTS avg person trip length by trip purpose	National Household Travel Survey
	Average trip speed in the service zone during peak hours	25	mph	congested speed, a fraction of the free flow (posted speed)	2020 arterial segment profiles, ElP MPO
	Average trip speed in the service zone during off-peak hours	35	mph	free-flow uncongested speed	2020 arterial segment profiles, ElP MPO

3.2 Roundabouts

The roundabout inputs in Table 6 were developed using a combination of local project information, official traffic count data, and documented default assumptions from prior research where approach-specific field measurements were not available. The analysis year (2030) reflects the anticipated project delivery timeframe provided by the City of El Paso. Because MOSERS evaluates roundabout benefits at the approach level (north, south, east, and west), the table inputs are applied to each approach; the only approach-specific value is the AADT, while the remaining parameters (geometry, delay assumptions, truck share, and turning movement percentages) are held constant across approaches to maintain consistency and because no evidence suggested materially different conditions by approach for those inputs.

Approach-level AADT for the analysis year was developed from TxDOT traffic count data, projected to 2030 using a linear regression based on historical counts. Geometric inputs such as circulating lanes and approach lanes were defined using a combination of standard roundabout assumptions (circulating lanes) and existing conditions observed in Google Street View (approach lanes). Existing control delay values represent planning-level "before" conditions for an all-way stop at a busier arterial intersection and were selected from published ranges used by TxDOT/VDOT references. The truck percentage (6%) was derived from the El Paso District conformity VMT mix developed for MOVES4.0.3. Specifically, the VMT mix table was filtered to a weekday and time-of-day = "day", then all truck-related MOVES source types were isolated and their VMT mix fractions were summed to obtain the total truck share used as the input in MOSERS. Turning movement percentages (right, left, and U-turn) were taken from published studies and guidance (UT Austin CTR and TTI roundabout research) as reasonable planning-level values. Overall, the assumptions were selected to be transparent, repeatable, and consistent with MOSERS input requirements, relying on local data for volumes and regional conformity inputs where available and using established literature-based defaults for parameters that typically require dedicated turning-movement and delay counts.

Table 6. Roundabouts Strategy: MOSERS Inputs, Assumptions, and References

Strategy	Input data Description	Data	Units	Assumption	Source
5.8 Roundabouts	Year	2030	-	Estimated completion year of the project	City of El paso
	Number of Circulating Roundabout Lanes	2	lanes	average # of lanes in a standard roundabout	TTI
	Number of Lanes	2	lanes	# of lanes spotted in google Streetview	Google Maps
	Annual Average Daily Traffic for the analysis year	Different for each approach	veh/day	AADT projected based on past years, linear regression	Traffic count TxDOT
	Existing Peak-hour Delay per Vehicle	35	sec/veh	based on AWSC for busy roads	TxDOT and VDOT
	Existing Off-Peak hour Delay per Vehicle	15	sec/veh	based on AWSC for non-busy roads	TxDOT and VDOT

	Existing Truck Percentage	6	percent	% estimated based on the VMT Mix used for ELP conformity	TTI VMT Mix
	Existing Right Turn Percentage	10	percent	typical percentage estimated by the source study	UT Austin CTR
	Existing Left Turn Percentage	10	percent	typical percentage estimated by the source study	UT Austin CTR
	Existing U-Turn Percentage	3	percent	Research and Findings on Roundabouts and Innovative Intersections for High-Speed and Rural Locations	TTI

3.2.1 AADT for Each Roundabout approach

Figure 3 shows the TxDOT AADT count locations used to characterize traffic volumes near the Montwood Dr. and Sunfire Blvd. intersection. The northbound and southbound count station is located along Montwood Dr. near the intersection with N. Zaragoza Rd., while the eastbound and westbound count station is located along Montwood Dr. near the intersection with Joe Battle Blvd.

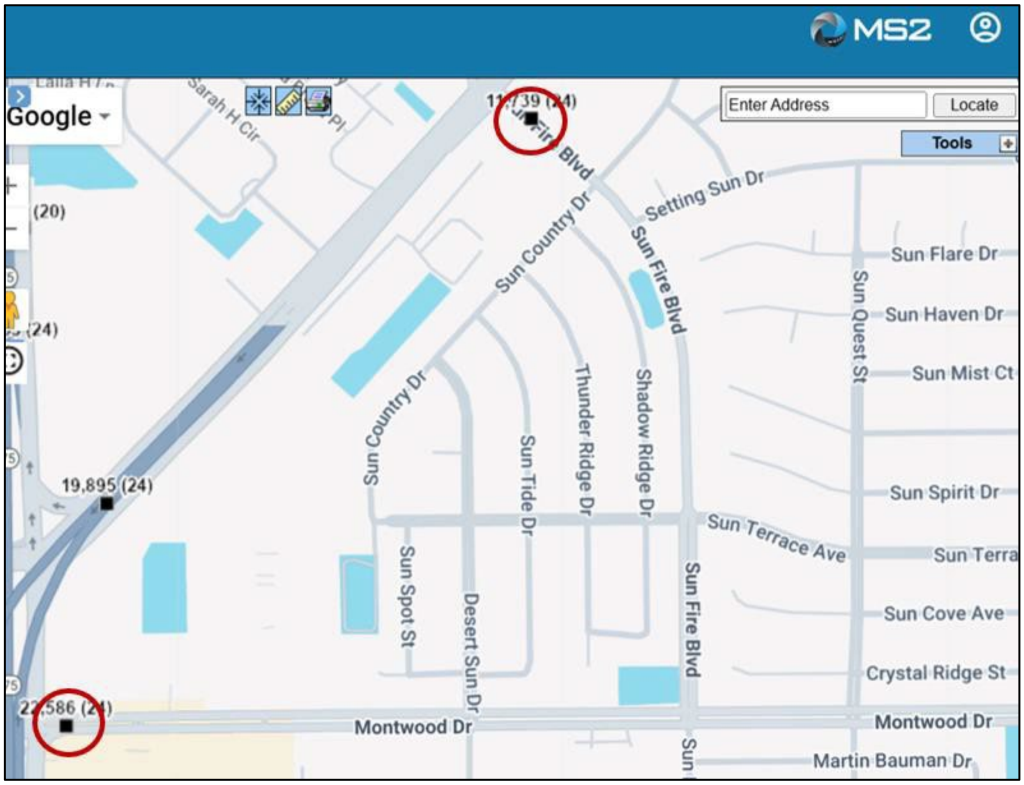

Figure 3. Traffic counter device's location

Table 7 summarizes the historical TxDOT traffic count data extracted from the two nearby AADT stations identified in Figure 3 and organized by approach direction for use in the roundabout analysis. Counts for the northbound (NB) and southbound (SB) approaches come from station 72HP1187A, while counts for the eastbound (EB) and westbound (WB) approaches come from station 72UN189A. For each approach, the table lists the observed AADT by year and the corresponding annual growth rate calculated between consecutive available count years.

Table 7. AADT and Growth rate by TCDS devices

Traffic Count ID	Approach	Year	AADT	Annual Growth
72HP1187A	NB	2017	4805	-
72HP1187A	NB	2018	5568	0.16
72HP1187A	NB	2019	5568	-
72HP1187A	NB	2022	8178	0.14
72HP1187A	NB	2023	4308	-0.47

72HP1187A	NB	2025	-	0.28
72HP1187A	SB	2018	4494	-
72HP1187A	SB	2019	4494	-
72HP1187A	SB	2021	2302	-0.28
72HP1187A	SB	2022	6105	1.65
72HP1187A	SB	2023	3822	-0.37
72HP1187A	SB	2025	-	0.19
72UN189A	EB	2017	11327	-
72UN189A	EB	2020	9451	-0.06
72UN189A	EB	2022	14291	0.23
72UN189A	EB	2023	12225	-0.14
72UN189A	EB	2024	12470	0.02
72UN189A	EB	2025	-	0.28
72UN189A	WB	2017	9326	-
72UN189A	WB	2020	7858	-0.06
72UN189A	WB	2022	11681	0.22
72UN189A	WB	2023	9919	-0.15
72UN189A	WB	2024	10117	0.02
72UN189A	WB	2025	-	0.15

Figure 4 presents the data summarized in Table 7 plotted by year for each approach (NB, SB, EB, and WB). The figure also includes a separate linear regression trendline for each approach, developed using only the years with non-blank observed AADT values. These regressions were used to project approach-level AADT to the analysis year (2030). Based on the fitted trendlines, the projected 2030 AADT values are 7,149 (NB), 4,115 (SB), 14,650 (EB), and 11,760 (WB).

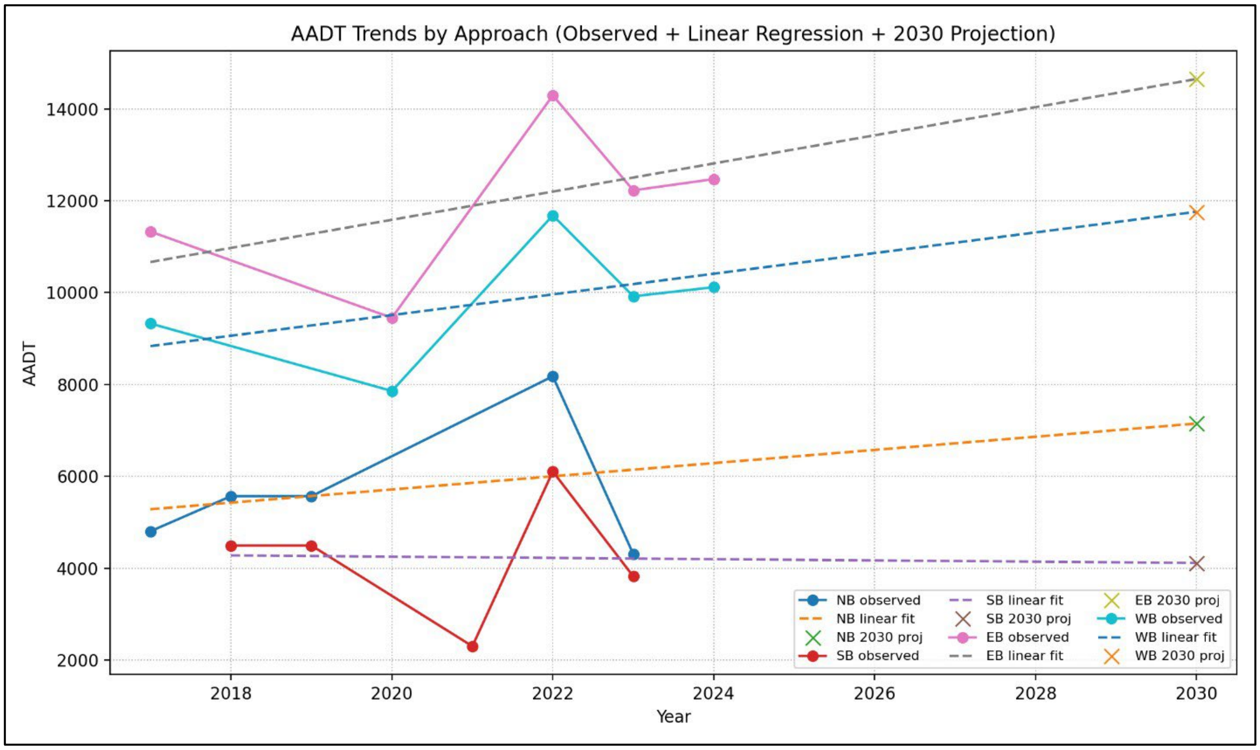

Figure 4. AADT plot and Linear Regression

3.3 EMISSIONS FACTORS

Emission factors used in the MOSERS analysis were developed using the EPA MOVES model (version 4.0.3) to remain consistent with the emissions modeling framework used for conformity in the El Paso region. MOVES was executed to generate pollutant- and process-specific emission rates representative of local conditions for the analysis year (2030). The resulting outputs were then post-processed and formatted as emission rate lookup tables (ERLTs) (see Appendix B) so they could be imported into MOSERS and applied directly within the tool. These lookup tables provide the emission factors needed to quantify changes in emissions associated with the project strategies, including running exhaust (used with VMT reductions) and start/trip-end emissions (used with reductions in vehicle trips), ensuring that MOSERS calculations are based on MOVES-derived rates aligned with regional conformity assumptions.

For the Bicycle and Pedestrian strategy, the running exhaust emission factors used in the calculations were obtained from *ERLT_Running*, while the auto trip-end (start) emission factors were obtained from *ERLT_Starts*. For the Roundabouts strategy, the idling emission factors were obtained from *ERLT_Idling*. To develop these ERLTs, MOVES emission-rate runs were completed for both summer and winter seasonal conditions. To represent a conservative analysis, the ERLTs were populated using the maximum emission rate observed across the seasonal runs for each pollutant/process combination.

To retrieve the specific emission factors applied in the MOSERS workbooks (Appendix A), the ERLTs were filtered consistently to match the project context. For all ERLTs, records were filtered by Source Type Name = "Auto" and then limited to Road Type ID = 4, which represents Urban Restricted Access (urban freeway) conditions in MOVES. For *ERLT_Running* (used in the Bicycle and Pedestrian calculations), the table was further filtered by speed to select 30 mph, representing the approximate average operating speed between the assumed peak-hour and off-peak-hour speeds used in the analysis. This consistent filtering approach ensures the emission factors applied by MOSERS reflect the roadway and operating conditions assumed for the Montwood Dr. and Sunfire Blvd. project while maintaining alignment with regional MOVES-based conformity inputs

4. SUMMARY OF RESULTS

The emissions analysis results are summarized in Table 8, which presents the estimated daily emission reductions by pollutants for both the Bicycle and Pedestrian strategy and the Roundabouts strategy. These values were taken directly from the MOSERS outputs and reflect the methods described in Section 2, using the project-specific input data and assumptions documented in Section 3. The MOSERS calculation workbooks used to generate these results are included in Appendix A for reference. Overall, the results indicate that implementing the proposed improvements at Montwood Dr. and Sunfire Blvd. is expected to produce measurable air quality benefits across the pollutants evaluated.

Table 8. CMAQ Analysis Emissions Reductions

Pollutant	Bicycle and Pedestrian (Kg/day)	Bicycle and Pedestrian (lbs/day)	Roundabouts (Kg/day)	Roundabouts (lbs/day)
CO	5.550	12.236	0.929	2.048
CO_2	729	1,606	2,107	4,645
NO_x	0.162	0.357	0.219	0.482
VOC	0.131	0.290	0.054	0.119
PM_{10}	0.006	0.013	0.014	0.030

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APPENDIX A: MOSERS WORKBOOKS FOR BICYCLE AND PEDESTRIAN AND ROUNDABOUTS (ELECTRONIC ONLY)

APPENDIX B: EMISSIONS LOOKUP TABLES (ERLT) FOR MOSERS INPUT (ELECTRONIC ONLY)

Texas A&M Transportation Institute

Congestion Mitigation and Air Quality (CMAQ) Analysis-McRae Phase 3

Prepared for City of El Paso

February 2026

Texas A&M Transportation Institute

Texas A&M Transportation Institute

TECHNICAL REPORT

Technical Documentation

DATE: February 25th, 2026

TO: Margaret K. Schroeder
City of El Paso

FROM: Camilo Jurado
Chaoyi Gu, P.E.
Erik Vargas
Texas A&M Transportation Institute (TTI)

FOR MORE INFORMATION:
Erik Vargas
(979) 393-0688
E-vargas@tti.tamu.edu

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1. TASK SUMMARY

The City of El Paso requested technical assistance from the Texas A&M Transportation Institute in developing a Congestion Mitigation and Air Quality (CMAQ) analysis for the McRae Phase 3 active transportation project along McRae Boulevard from Montwood Drive to I-10 (See Figure 1 for a spatial location). This analysis estimates emissions benefits associated with implementation of shared-use path and pedestrian-support improvements, including intersection pedestrian upgrades (ADA ramps and striping), illumination, signage, and supporting site amenities.

The primary objective of this effort is to support preparation of CMAQ documentation for submission to the El Paso Metropolitan Planning Organization and other relevant agencies by providing an updated, defensible estimate of air quality benefits. The analysis quantifies reductions in vehicle trips and vehicle miles traveled (VMT) expected to occur when travelers choose to walk or bicycle instead of driving due to improved bicycle and pedestrian facilities and connectivity along the corridor.

The emissions analysis presented in this report follows the Texas Department of Transportation MOSERS methodology using Strategy 3.2 Bicycle and Pedestrian Programs – Option 2 (Facility Needs Index–Based Estimation). Under this approach, the share of travelers attracted to bicycles or walks rather than drives are estimated using the facility needs to index together with service-zone population and employment, corridor and buffer characteristics, and trip parameters. The resulting reduction in vehicle trips and VMT is then converted to pollutant reductions using standard emissions equations and applicable emissions factors. Data sources and assumptions used in the analysis are documented, the MOSERS equation and variables are summarized, and results are presented for the selected strategy.

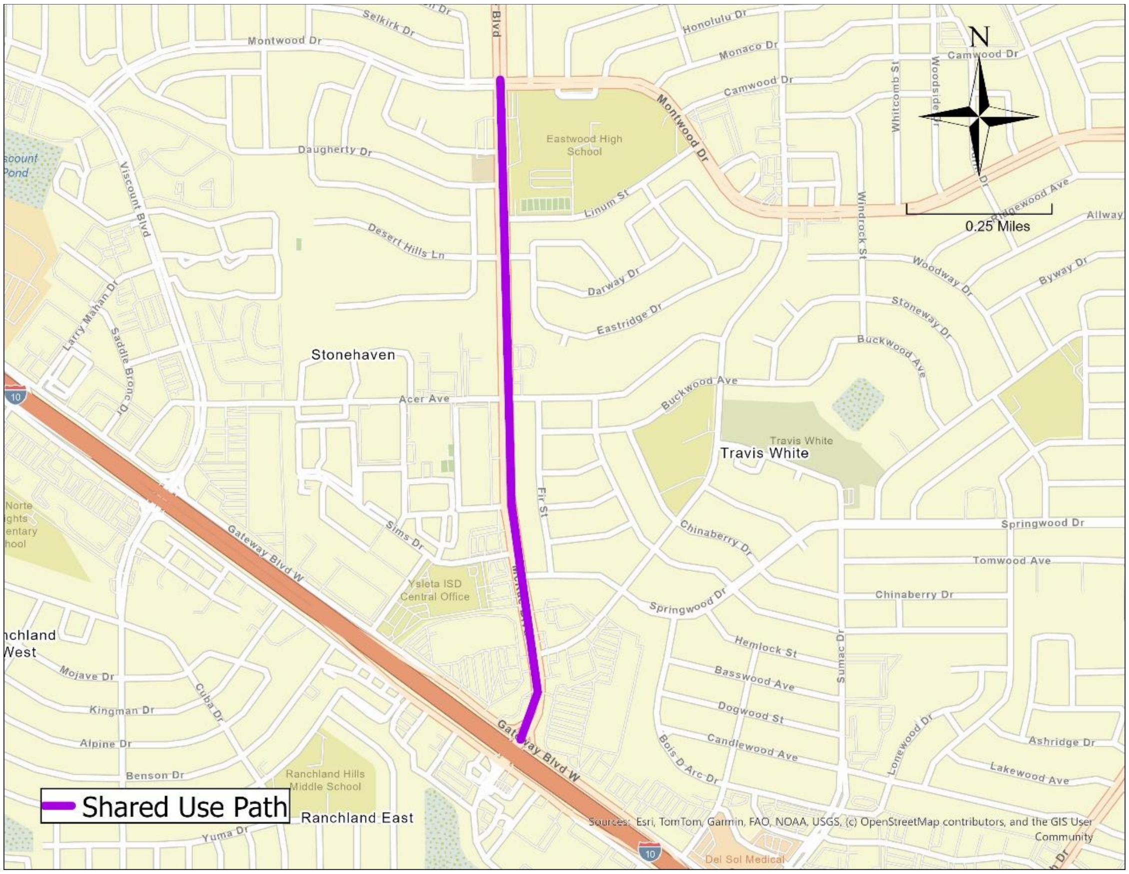

Figure 1. McRae Blvd. from Montwood Dr to I-10

2. STRATEGY AND METHODOLOGY

The Texas Guide to Accepted Mobile Source Emission Reduction Strategies (commonly known as the MOSERS Guide) is a set of reference documents and tools for Texas transportation practitioners undertaking air quality planning. The intent of MOSERS is to provide guidance and resources for transportation of air quality practitioners to understand and evaluate mobile-source emissions-reduction strategies. The MOSERS guide was originally developed by TTI in 2003 and updated subsequently in 2007, and 2020. After a thorough review by the research team, the strategy implemented in the McRae Phase 3 active transportation project is "Bicycle and Pedestrian" (strategy 3.2 option 2).

2.1 Bicycle and Pedestrian (Option 2)

Bicycle and pedestrian programs reduce vehicle trips, vehicle miles traveled (VMT), and associated emissions by encouraging travelers to choose walking or bicycling in place of driving. For McRae Phase 3, the selected strategy is MOSERS Strategy 3.2 – Option 2, which quantifies emissions benefits based on how improved bicycle and pedestrian facilities within a defined service zone attract new walking/biking trips that would otherwise be made by automobile. The McRae Phase 3 project supports this mode shift by enhancing active transportation conditions along McRae Boulevard between Montwood Drive and I-10 through shared-use path and pedestrian-support improvements, including intersection pedestrian upgrades (ADA ramps and striping), illumination, signage, landscaping/irrigation, and related corridor amenities.

Option 2 is a facility-needs-index–based estimation approach. Rather than starting from households, it uses predicted Bicycle Needs Index (BNI) and Pedestrian Needs Index (PNI) values to estimate the percentage of people in the service zone who would be attracted to bicycle or walk after the facility is provided. Participants are estimated using population and employment in the service zone, together with facility lengths, buffer distances, trip characteristics, and auto occupancy. When participants shift trips to walking or bicycling, the associated vehicle trips and VMT are assumed eliminated, and emissions benefits are calculated from the reduced vehicle activity. This method is most applicable in populated areas with existing or planned bicycle/pedestrian connectivity that serves businesses or business centers, where improved facilities can plausibly replace short auto trips

Emissions Equations

$$Daily\ Emission\ Reduction\ (grams/day)\ =\ A\ +\ B$$

Reduction in auto trip-end (start) emissions from reduced trips

$$A\ =\ VT_R\ \times\ TEF_{AUTO}$$

Reduction in running exhaust emissions from reduced auto VMT

$$B\ =\ VMT_R\ \times\ EF_B$$

Where:

VT_R = reduction in number of daily auto vehicle trips (trips/day)

VMT_R = reduction in daily auto vehicle miles traveled (miles/day)

TEF_{AUTO}= auto trip-end emission factor (grams/trip) (pollutant-specific)

EF_B= speed-based running exhaust emission factor for average pre-program auto speed (grams/mile) (pollutant-specific)

Activity Methodology (Facility Needs Index–Based)

Option 2 estimates bicycle and pedestrian facility users in the service zone, then converts those users into reduced vehicle trips and VMT:

$Bicycle\ facility\ users$:

$$U_B = (N_P \cdot I_B + N_E \cdot I_B) \cdot L_B \cdot D_B$$

$Pedestrian\ facility\ users$:

$$U_P = (N_P \cdot I_P + N_E \cdot I_P) \cdot L_P \cdot D_P$$

$Reduced\ daily\ auto\ trips$:

$$VTR = \frac{(U_B + U_P) \cdot N}{O_A}$$

$Reduced\ daily\ auto\ VMT$:

$$VMTR = VTR \cdot L$$

The MOSERS calculator for Strategy 3.2, Option 2 estimates daily emissions benefits by linking expected travel behavior changes to reductions in automobile activity. The process begins by estimating how many people within the defined service zone would be attracted to walk or bicycle after the McRae Phase 3 improvements are implemented. That participation estimate is based on service-zone population and employment, the bicycle and pedestrian needs indices, the length of bicycle and pedestrian facilities available within the zone, assumed buffer distances that represent the area of influence of those facilities, basic trip characteristics, and average vehicle occupancy. Once the expected number of new walk and bike users is calculated, the methodology converts that participation into the number of daily vehicle trips avoided and the daily vehicle miles traveled avoided. These reduced vehicle activities are then translated into pollutant reductions by applying appropriate trip-end and running exhaust emission factors. Table 1 summarizes the variables referenced throughout the activity and emissions calculations, including each variable's unit and definition, to ensure the analysis is transparent and reproducible. Figure 2 presents a Street View image of the McRae corridor, which documents existing site conditions and provides visual context for the corridor improvements and service-zone assumptions used in the analysis.

Table 1. Bicycle and Pedestrian Option 2 Variables and Definitions (McRae Phase 3)

Variable	Unit	Definition / Notes
Daily Emission Reduction	g/day	Total daily reduction in emissions from reduced auto activity (trip-end + running).
A	g/day	Reduction in auto trip-end emissions due to fewer auto trips.
B	g/day	Reduction in running exhaust emissions due to fewer auto miles traveled.
TEF_{auto}	g/trip	Auto trip-end emission factor (pollutant-specific: NOx, VOC, PM, CO).
EF_{β}	g/mile	Speed-based running exhaust emission factor for the average pre-project auto speed (pollutant-specific: NOx, VOC, PM, CO).
VTR	trips/day	Reduction in total daily auto vehicle trips.
VMTR	miles/day	Reduction in total daily auto vehicle miles traveled (VMT).
U_{β}	facility users	Bicycle facility users in the service zone.
U_{p}	facility users	Pedestrian facility users in the service zone.
N_{p}	persons	Estimated population in the service zone.
N_{e}	persons	Estimated total employment in the service zone.
I_{β}	index	Predicted Bicycle Needs Index (BNI) in the service zone.
I_{p}	index	Predicted Pedestrian Needs Index (PNI) in the service zone.

A (service zone area)	sq. mi.	Area of the service zone.
L_{β}	miles	Total length of bicycle facility in the service zone.
L_{p}	miles	Total length of pedestrian facility in the service zone.
D_{β}	miles	Bicycle facility buffer distance (default commonly used: 2.0 miles unless local basis provided).
D_{p}	miles	Pedestrian facility buffer distance (default commonly used: 0.5 miles unless local basis provided).
O_{a}	persons/vehicle	Auto occupancy (default commonly used: 1.13; may be set to 1.0 if assuming SOV only).
N	trips/person/day	Average number of trips per participant per day.
L	miles	Average trip length in the service zone.

Figure 2. McRae Phase 3, Google Streetview

3. INPUT DATA AND ASSUMPTIONS

To estimate emission reductions for the McRae Phase 3 bicycle and pedestrian improvements, the MOSERS tool requires a set of project-specific inputs for the selected strategy described in Section 2. This section summarizes the input data used to characterize the McRae corridor service zone and the proposed shared-use path and pedestrian-support facilities, and it documents the key assumptions applied in the Strategy 3.2 Bicycle and Pedestrian Programs – Option 2 (Facility Needs Index–Based Estimation) methodology.

3.1 BICYCLE AND PEDESTRIAN (OPTION 2)

The MOSERS inputs summarized in Table 2 were developed from project documentation for McRae Phase 3, MOSERS Strategy 3.2 Option 2 guidance, locally documented regional travel characteristics, and nationally recognized demographic sources, with engineering judgment applied where corridor-specific observations were not available for a sketch-planning CMAQ analysis. Inputs were selected to be conservative, transparent, and repeatable, consistent with the intent of Option 2, estimating how improved bicycle and pedestrian facilities within a defined service zone shift a portion of short auto trips to walking and bicycling, reducing vehicle trips, VMT, and associated emissions.

The analysis year and regional context were set to match the CMAQ application materials. The facility length assumptions reflect the project limits along McRae Boulevard from Montwood Drive to I-10, and the project scope (shared-use path and pedestrian-support improvements, including intersection ADA ramps/striping, illumination, signage, and corridor amenities) supports application of the bicycle/pedestrian program methodology to this linear investment. The service zone was defined using a corridor catchment representing practical pedestrian access to improved facilities. A 0.5-mile pedestrian access distance is commonly used in planning applications as a walk shed; applying this buffer along an approximately 1.0-mile corridor yields a service-zone area of 1.8 square miles (Table 2).

Service-zone population was estimated using a planning-level density method: the service-zone area (1.8 square miles) was combined with representative City of El Paso population density from U.S. Census Bureau summary statistics to estimate 4,700 persons. Service-zone employment was estimated using a consistent planning-level employment-intensity assumption appropriate for an urban arterial corridor with nearby commercial and employment-serving land uses, resulting in 2,400 employees within the same boundary.

Because corridor-specific BNI/PNI surfaces were not available, the analysis applied conservative, locally grounded proxy values based on El Paso regional journey-to-work mode shares reported from American Community Survey tabulations. A bicycle commute share of approximately 0.10% and a walk commute share of approximately 1.40% were converted to decimal proportions for the Option 2 inputs, yielding I_{β} = 0.001 and I_{p} = 0.014 (Table 2). This approach anchors participation to observed regional conditions and avoids overstating mode shift in the absence of a locally calibrated needs-index model.

Trip behavior inputs were selected to reflect short, utility-oriented travel most likely to shift with improved facilities. The average trip length was assumed to be 1.0 mile, consistent with corridor-scale walk/bike replacement trips, and national travel survey evidence that many active-mode trips are short. The average trips per participant per day were set to 2.0, representing an out-and-back utility pattern. The average auto trip speed used for speed-dependent running-exhaust factors was set to 35 mph, derived from the posted 40 mph speed limit reduced by 5 mph to reflect typical urban arterial operating conditions where signal control and intersection delay reduce average travel speed. Collectively, these assumptions provide an internally consistent set of MOSERS inputs for applying Strategy 3.2 Option 2 to McRae Phase 3, as summarized in Table 2.

Table 2. Bicycle and Pedestrian Strategy: MOSERS Inputs, Assumptions, and References

Input data Description	Data	Units	Assumption	Source
Metropolitan area	El Paso	—	Project is located within the El Paso metropolitan area as documented in project materials.	McRae Phase 3 project materials / ePRF
Analysis year	2029	year	Analysis year set to align with CMAQ application year identified for the project.	McRae Phase 3 project materials / ePRF
Road type	Urban–Freeway	—	McRae Boulevard is treated as an urban freeway corridor within the project limits for purposes of selecting representative operating conditions.	Project corridor context (McRae Blvd.) and standard functional classification practice
Estimated population in the service zone (N_p)	4,700	persons	Service-zone population estimated using a planning-level density method: service-zone area (1.8 sq mi) multiplied by representative City of El Paso population density, rounded for reporting.	U.S. Census Bureau population density summary (City of El Paso) + service-zone definition
Estimated total employment in the service zone (N_e)	2,400	persons	Service-zone employment estimated at planning level using an employment-intensity assumption appropriate for an urban arterial	U.S. Census Bureau LEHD/LODES workplace-employment framework (conceptual basis)

			corridor with commercial and employment-serving land uses; applied over the defined service-zone area.	
Bicycle Needs Index (BNI) (I_β)	0.001	—	Index set using a conservative, locally grounded proxy based on regional journey-to-work bicycle mode share. Bicycle commute share ≈ 0.10% converted to a decimal proportion (0.10 ÷ 100 = 0.001).	El Paso MPO supporting documentation using American Community Survey commute-mode tabulations + MOSERS Option 2 index input structure
Pedestrian Needs Index (PNI) (I_p)	0.014	—	Index set using a conservative, locally grounded proxy based on regional journey-to-work walk mode share. Walk commute share ≈ 1.40% converted to a decimal proportion (1.40 ÷ 100 = 0.014).	El Paso MPO supporting documentation using American Community Survey commute-mode tabulations + MOSERS Option 2 index input structure
Area of the service zone (A)	1.8	square miles	Service zone defined as a corridor catchment using a 0.5-mile pedestrian access buffer over an approximately 1.0-mile project length; area approximated using a corridor "capsule" geometry and rounded (≈ 1.8 sq mi).	Standard planning walk-shed convention (0.5-mile access) + project limits (Montwood to I-10, ~1 mile)
Total length of the bicycle facility in the service zone (L_β)	1	miles	Bicycle facility length set equal to the project corridor length between Montwood Drive and I-10, representing continuous bicycle-	Project limits (Montwood Drive to I-10) documented in project materials

			support exposure along the McRae Phase 3 limits.	
Total length of the pedestrian facility in the service zone (L_p)	1	miles	Pedestrian facility length is set equal to the project corridor length between Montwood Drive and I-10, representing continuous pedestrian-support exposure along the McRae Phase 3 limits.	Project limits (Montwood Drive to I-10) documented in project materials
Average number of trips per participant per day (N)	2	trips/person/day	Daily participation represented as an out-and-back utility trip pattern (two trips per participant per day), consistent with commute-oriented walk/bike participation assumptions in sketch-planning analyses.	MOSERS sketch-planning application conventions + engineering judgment (conservative utility-trip representation)
Average trip length in the service zone (L)	1	miles	Average replaced auto trip length assumed to be short and corridor-scale, consistent with typical walk/bike replacement trips and the linear extent of the project corridor.	National travel survey evidence that active-mode trips are frequently short + project corridor scale
Average trip speed in the service zone (pre-program auto speed) (v)	35	mph	Average operating speed assumed below posted speed due to signal control and intersection delay typical of urban arterials; set as posted 40 mph minus 5 mph (35 mph) to represent average corridor travel conditions.	Posted speed (field/Street View) + Highway Capacity Manual urban-street concept of average travel speed reflecting control delay

3.2 Emissions Factors

Emission factors used in the MOSERS analysis were developed using the EPA MOVES model (version 4.0.3) to remain consistent with the emissions modeling framework used for conformity in the El Paso region. MOVES was executed to generate pollutant- and process-specific emission rates representative of local conditions for the analysis year (2029). The resulting outputs were then post-processed and formatted as emission rate lookup tables (ERLTs) (see Appendix B) so they could be imported into MOSERS and applied directly within the tool. These lookup tables provide the emission factors needed to quantify changes in emissions associated with the project strategies, including running exhaust (used with VMT reductions) and start/trip-end emissions (used with reductions in vehicle trips), ensuring that MOSERS calculations are based on MOVES-derived rates aligned with regional conformity assumptions.

For the Bicycle and Pedestrian strategy, the running exhaust emission factors used in the calculations were obtained from *ERLT_Running*, while the auto trip-end (start) emission factors were obtained from *ERLT_Starts*. To develop these ERLTs, MOVES emission-rate runs were completed for both summer and winter seasonal conditions. To represent a conservative analysis, the ERLTs were populated using the maximum emission rate observed across the seasonal runs for each pollutant/process combination.

To retrieve the specific emission factors applied in the MOSERS workbooks (Appendix A), the ERLTs were filtered consistently to match the project context. For all ERLTs, records were filtered by Source Type Name = “Auto” and then limited to Road Type ID = 4, which represents Urban Restricted Access (urban freeway) conditions in MOVES. For *ERLT_Running* (used in the Bicycle and Pedestrian calculations), the table was further filtered by speed to select 35 mph, representing the approximate average operating speed used in the analysis. This consistent filtering approach ensures the emission factors applied by MOSERS reflect the roadway and operating conditions assumed for the McRae Phase 3 project while maintaining alignment with regional MOVES-based conformity inputs

4. SUMMARY OF RESULTS

The emissions analysis results are summarized in Table 3, which presents the estimated daily emission reductions by pollutants for the Bicycle and Pedestrian strategy. These values were taken directly from the MOSERS outputs and reflect the method described in Section 2, using the project-specific input data and assumptions documented in Section 3. The MOSERS calculation workbook used to generate these results is included in Appendix A for reference. Overall, the results indicate that implementing the proposed improvements at McRae Phase 3 is expected to produce measurable air quality benefits across the pollutants evaluated.

Table 3. CMAQ Analysis Emissions Reductions

Pollutant	Bicycle and Pedestrian (Kg/day)	Bicycle and Pedestrian (lbs/day)
CO	0.246	0.543
CO_2	21.860	48
NO_x	0.034	0.075
VOC	0.018	0.039
PM_{10}	0.001	0.002

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APPENDIX A: MOSERS WORKBOOK FOR BICYCLE AND PEDESTRIAN OPTION 2 (ELECTRONIC ONLY)

APPENDIX B: EMISSIONS LOOKUP TABLES (ERLT) FOR MOSERS INPUT (ELECTRONIC ONLY)

Texas A&M Transportation Institute

Congestion Mitigation and Air Quality (CMAQ) Analysis-Paul Harvey Park Trail

Prepared for City of El Paso

February 2026

Texas A&M Transportation Institute

TECHNICAL REPORT

Technical Documentation

DATE: February 25th, 2026

TO: Margaret K. Schroeder
City of El Paso

FROM: Camilo Jurado
Chaoyi Gu, P.E.
Erik Vargas
Texas A&M Transportation Institute (TTI)

FOR MORE INFORMATION:
Erik Vargas
(979) 393-0688
E-vargas@tti.tamu.edu

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1. TASK SUMMARY

The City of El Paso requested technical assistance from the Texas A&M Transportation Institute to develop a Congestion Mitigation and Air Quality Improvement Program (CMAQ) analysis for the Paul Harvey Park Trail project (see Figure 1 for the project location). The project consists of construction of a shared-use path connecting Paul Harvey Park to the Westside Natatorium, generally following an existing social trail behind the Bluff Canyon Circle / Bel Mar Avenue area and connecting toward Mesa Hills Drive, with project limits identified from De Leon Drive to Sunland Park.

The primary objective of this effort is to support preparation of CMAQ documentation for submittal to the appropriate MPO and other relevant agencies by providing an updated, defensible estimate of air quality benefits. The analysis quantifies reductions in vehicle trips and vehicle miles traveled (VMT) expected to occur when travelers choose to walk or bicycle instead of driving due to improved bicycle and pedestrian facilities and connectivity provided by the trail project.

The emissions analysis presented in this report follows the Texas Department of Transportation MOSERS methodology using Strategy 3.2 Bicycle and Pedestrian Programs – Option 2 (Facility Needs Index–Based Estimation). Under this approach, the share of travelers attracted to bicycle or walk rather than drive is estimated using the facility needs index together with service-zone population and employment, corridor and buffer characteristics, and trip parameters. The resulting reduction in vehicle trips and VMT is then converted to pollutant reductions using standard emissions equations and applicable emissions factors. Data sources and assumptions used in the analysis are documented, MOSERS equations and variables are summarized, and results are presented for the selected strategy.

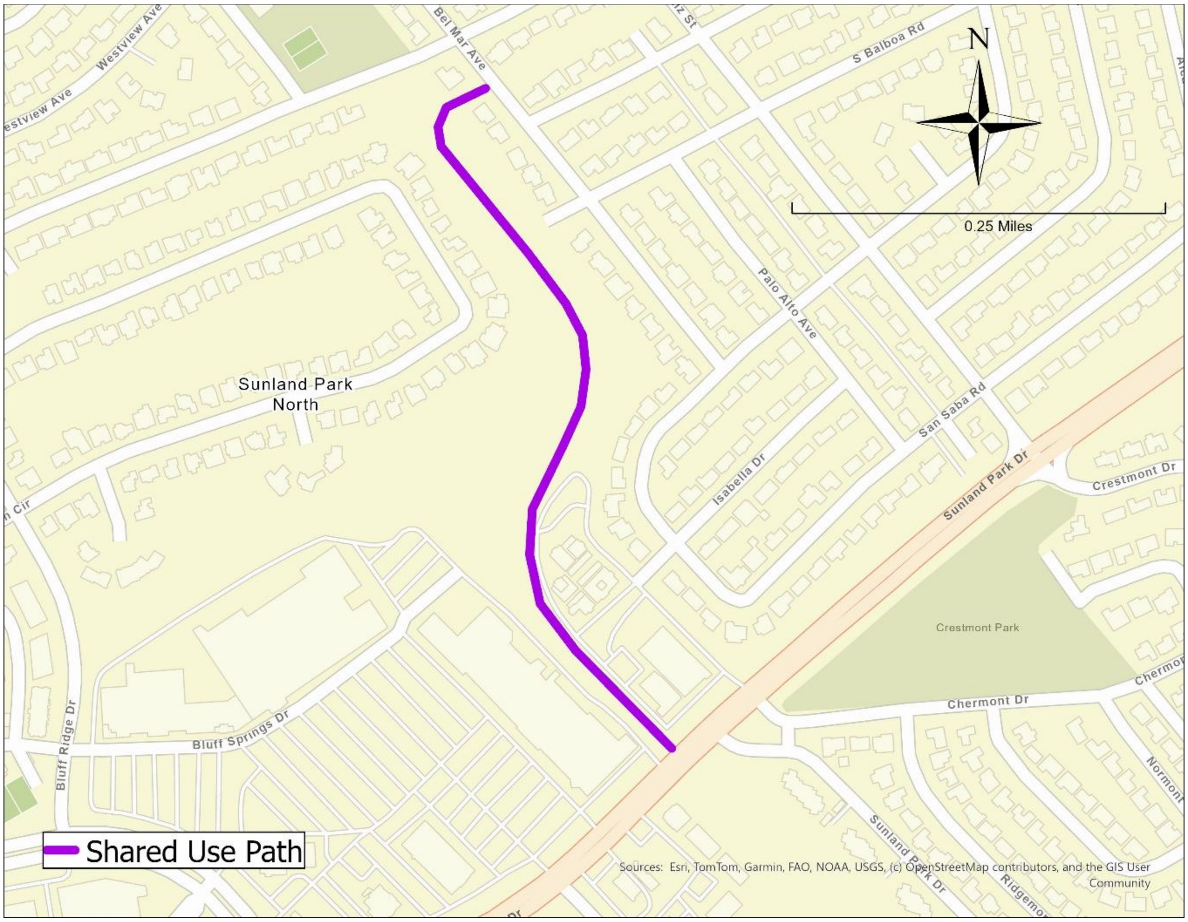

Figure 1. Paul Harvey Park Trail. from De Leon Dr to Sunland Park

2. STRATEGY AND METHODOLOGY

The Texas Guide to Accepted Mobile Source Emission Reduction Strategies (commonly known as the MOSERS Guide) is a set of reference documents and tools for Texas transportation practitioners undertaking air quality planning. The intent of MOSERS is to provide guidance and resources for transportation of air quality practitioners to understand and evaluate mobile-source emissions-reduction strategies. The MOSERS guide was originally developed by TTI in 2003 and updated subsequently in 2007, and 2020. After a thorough review by the research team, the strategy implemented in the Paul Harvey park trail project is “Bicycle and Pedestrian” (strategy 3.2 option 2).

2.1 Bicycle and Pedestrian (Option 2)

Bicycle and pedestrian programs reduce vehicle trips, vehicle miles traveled (VMT), and associated emissions by encouraging travelers to choose walking or bicycling in place of driving, particularly for short, local trips that can reasonably shift modes when safe, comfortable facilities are available. For the Paul Harvey Park Trail project, the selected approach is MOSERS Strategy 3.2 – Option 2 (Facility Needs Index–Based Estimation), which quantifies emissions benefits based on how improved bicycle and pedestrian facilities within a defined service zone attract new walking and bicycling activity that would otherwise be made by automobile. The Paul Harvey Park Trail project supports this mode shift by providing a shared-use path connection between Paul Harvey Park and the Westside Natatorium, improving active transportation connectivity and user comfort by formalizing and enhancing a corridor that currently functions as an informal route.

Option 2 is a facility-needs-index–based estimation approach. Rather than starting from household counts, it uses predicted Bicycle Needs Index (BNI) and Pedestrian Needs Index (PNI) values to estimate the percentage of people in the service zone who would be attracted to bicycle or walk after the facility is provided. Participants are estimated using service-zone population and employment, together with facility lengths, buffer distances, trip characteristics, and auto occupancy. When trips shift to walking or bicycling, the associated vehicle trips and VMT are assumed to be eliminated, and emissions benefits are calculated from the reduced vehicle activity using the MOSERS equations and applicable emission factors. This method is most applicable in populated areas with existing or planned bicycle/pedestrian connectivity—such as park and community destinations—where improved facilities can plausibly replace short trips by providing a direct, continuous, and lower-stress route.

Emissions Equations

$$Daily\ Emission\ Reduction\ (grams/day) = A + B$$

Reduction in auto trip-end (start) emissions from reduced trips

$$A = VT_R \times TEF_{AUTO}$$

Reduction in running exhaust emissions from reduced auto VMT

$$B = VMT_R \times EF_B$$

Where:

VT_R = reduction in number of daily auto vehicle trips (trips/day)

VMT_R = reduction in daily auto vehicle miles traveled (miles/day)

TEF_{AUTO}= auto trip-end emission factor (grams/trip) (pollutant-specific)

EF_B= speed-based running exhaust emission factor for average pre-program auto speed (grams/mile) (pollutant-specific)

Activity Methodology (Facility Needs Index–Based)

Option 2 estimates bicycle and pedestrian facility users in the service zone, then converts those users into reduced vehicle trips and VMT:

$Bicycle\ facility\ users$:

$$U_B = (N_P \cdot I_B + N_E \cdot I_B) \cdot L_B \cdot D_B$$

$Pedestrian\ facility\ users$:

$$U_P = (N_P \cdot I_P + N_E \cdot I_P) \cdot L_P \cdot D_P$$

$Reduced\ daily\ auto\ trips$:

$$VTR = \frac{(U_B + U_P) \cdot N}{O_A}$$

$Reduced\ daily\ auto\ VMT$:

$$VMTR = VTR \cdot L$$

The MOSERS calculator for Strategy 3.2, Option 2 estimates daily emissions benefits by linking expected travel behavior changes to reductions in automobile activity. The process begins by estimating how many people within the defined service zone would be attracted to walk or bicycle after the Paul Harvey Park Trail improvements are implemented. That participation estimate is based on service-zone population and employment, the bicycle and pedestrian needs indices, the length of bicycle and pedestrian facilities available within the zone, assumed buffer distances that represent the area of influence of those facilities, basic trip characteristics, and average vehicle occupancy. Once the expected number of new walk and bike users is calculated, the methodology converts that participation into the number of daily vehicle trips avoided and the daily vehicle miles traveled avoided. These reduced vehicle activities are then translated into pollutant reductions by applying appropriate trip-end and running exhaust emission factors. Table 1 summarizes the variables referenced throughout the activity and emissions calculations, including each variable's unit and definition, to ensure the analysis is transparent and reproducible. Figure 2 presents a Street View image of the Paul Harvey Park Trail corridor, which documents existing site conditions and provides visual context for the proposed trail improvements and service-zone assumptions used in the analysis.

Table 1. Bicycle and Pedestrian Option 2 Variables and Definitions (Paul Harvey Park Trail)

Variable	Unit	Definition / Notes
Daily Emission Reduction	g/day	Total daily reduction in emissions from reduced auto activity (trip-end + running).
A	g/day	Reduction in auto trip-end emissions due to fewer auto trips.
B	g/day	Reduction in running exhaust emissions due to fewer auto miles traveled.
TEF_{auto}	g/trip	Auto trip-end emission factor (pollutant-specific: NOx, VOC, PM, CO).
EF_{β}	g/mile	Speed-based running exhaust emission factor for the average pre-project auto speed (pollutant-specific: NOx, VOC, PM, CO).
VTR	trips/day	Reduction in total daily auto vehicle trips.
VMTR	miles/day	Reduction in total daily auto vehicle miles traveled (VMT).
U_{β}	facility users	Bicycle facility users in the service zone.

U_p	facility users	Pedestrian facility users in the service zone.
N_p	persons	Estimated population in the service zone.
N_e	persons	Estimated total employment in the service zone.
I_β	index	Predicted Bicycle Needs Index (BNI) in the service zone.
I_p	index	Predicted Pedestrian Needs Index (PNI) in the service zone.
A (service zone area)	sq. mi.	Area of the service zone.
L_β	miles	Total length of bicycle facility in the service zone.
L_p	miles	Total length of pedestrian facility in the service zone.
D_β	miles	Bicycle facility buffer distance (default commonly used: 2.0 miles unless local basis provided).
D_p	miles	Pedestrian facility buffer distance (default commonly used: 0.5 miles unless local basis provided).
O_a	persons/vehicle	Auto occupancy (default commonly used: 1.13; may be set to 1.0 if assuming SOV only).
N	trips/person/day	Average number of trips per participant per day.
L	miles	Average trip length in the service zone.

Figure 2. Paul Harvey Park Trail (Start-End), Google Streetview

3. INPUT DATA AND ASSUMPTIONS

To estimate emission reductions for the Paul Harvey Park Trail project, the MOSERS tool requires a set of project-specific inputs for the selected strategy described in Section 2. This section summarizes the input data used to characterize the trail service zone and the proposed shared-use path connection between Paul Harvey Park and the Westside Natatorium, and it documents the key assumptions applied in the Strategy 3.2 Bicycle and Pedestrian Programs – Option 2 (Facility Needs Index–Based Estimation) methodology.

3.1 Bicycle and Pedestrian (Option 2)

The MOSERS inputs summarized in Table 2 were developed from Paul Harvey Park Trail project documentation, MOSERS Strategy 3.2 Option 2 guidance, locally documented regional travel characteristics, and nationally recognized demographic sources, with engineering judgment applied where corridor-specific observations were not available for a sketch-planning CMAQ analysis. Inputs were selected to be conservative, transparent, and repeatable, consistent with the intent of Option 2, estimating how improved bicycle and pedestrian facilities within a defined service zone shift a portion of short auto trips to walking and bicycling, reducing vehicle trips, VMT, and associated emissions.

The analysis year (2031) and regional context (El Paso metropolitan area) were set to align with the CMAQ application materials. Facility inputs reflect the shared-use path connection between Paul Harvey Park and the Westside Natatorium. The trail length used for the bicycle and pedestrian facility inputs was measured in Google Maps using the "Measure distance" tool along the trail alignment. The measured length is 2,421.92 feet, which converts to 0.459 miles (2,421.92 ÷ 5,280). This value is used for both facility-length inputs ($L_{\beta} = L_{p} = 0.46$ miles, rounded), and the measurement approach and endpoints are documented in Figure 3.

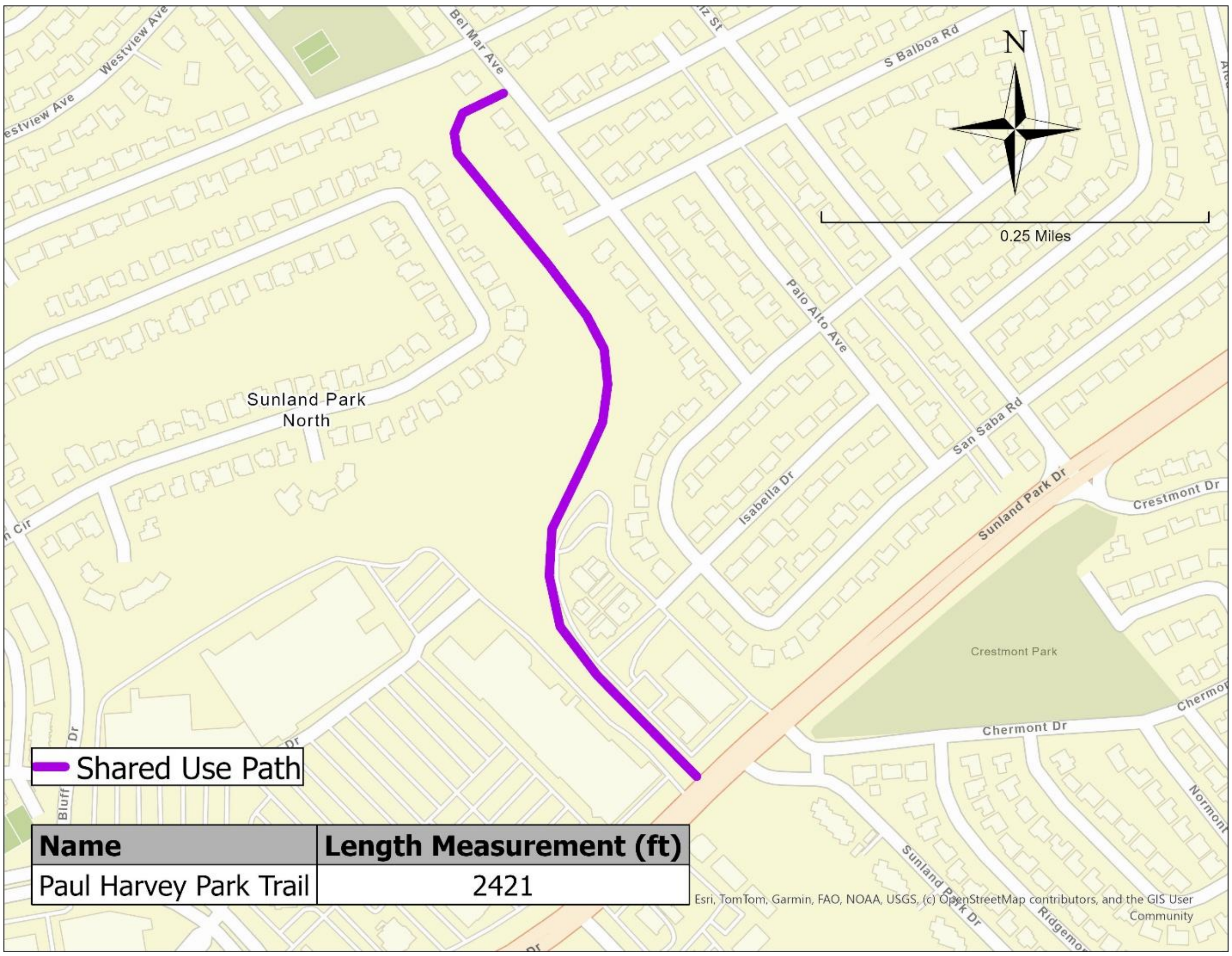

Figure 3. Paul Harvey Park Trail Length Measurement

The service zone was defined using a corridor catchment representing practical pedestrian access to the facility. A 0.5-mile pedestrian access distance is commonly used in planning applications as a walk shed and aligns with buffer-based concepts used in sketch methods for bicycle and pedestrian strategies. Service-zone area was approximated using a "capsule" geometry (a buffered corridor with semicircular ends), computed as A = (2 × r

$\times L) + (\pi \times r^2)$. Using $r = 0.5$ miles and $L = 0.459$ miles, $A = (2 \times 0.5 \times 0.459) + (\pi \times 0.25) = 0.459 + 0.785 = 1.244$, reported as 1.24 square miles in Table 2.

Service-zone population (N_p = 3,200 persons) was estimated using a planning-level density method by applying representative City of El Paso population density from U.S. Census Bureau summary statistics to the calculated service-zone area and rounding for reporting. Service-zone employment (N_e = 750 persons) was estimated using a conservative planning-level employment intensity consistent with the residential/park context and localized commercial activity in the project vicinity, consistent with the conceptual basis of U.S. Census Bureau LEHD/LODES workplace-employment characterization.

Because corridor-specific BNI/PNI surfaces were not available, the analysis applied conservative proxy values based on El Paso regional journey-to-work mode shares reported from American Community Survey commute-mode tabulations and summarized in regional/MPO documentation. A bicycle commute share of approximately 0.10% and a walk commute share of approximately 1.40% were converted to decimal proportions for the Option 2 index inputs, yielding $I_\beta = 0.001$ and $I_p = 0.014$ (Table 2). Trip behavior inputs were selected to reflect short, utility-oriented travel: N = 2.0 trips/person/day represents a conservative out-and-back pattern, and L = 0.7 miles represents the measured pre-program driving distance between key endpoints served by the trail connection. The average auto trip speed (v = 30 mph) represents displaced auto travel on adjacent urban streets; it was derived from the posted 35 mph speed limit reduced by 5 mph to reflect typical urban operating conditions with intersection control and access friction, consistent with standard urban-street concepts of average travel speed inclusive of control delay.

Table 2. Bicycle and Pedestrian Strategy: MOSERS Inputs, Assumptions, and References

Input data Description	Data	Units	Assumption	Source
Metropolitan area	El Paso	—	Project is located within the El Paso metropolitan area as documented in project materials.	Paul Harvey Park Trail project materials / ePRF
Analysis year	2031	year	Analysis year set to align with CMAQ application year identified for the project.	Paul Harvey Park Trail project materials / ePRF
Road type	Urban–Freeway	—	Road type selected to represent the urban street network on which short local auto trips would occur in the absence of the trail connection.	MOSERS input category definitions + project area context
Estimated population in the service zone (N_p)	3,200	persons	Service-zone population estimated using a planning-level density method: service-zone area (A ≈ 1.24 sq mi) multiplied by representative City of El Paso population density; rounded for reporting.	U.S. Census Bureau (City of El Paso population density) + service-zone geometry assumption
Estimated total employment in the service zone (N_e)	750	persons	Service-zone employment estimated using a conservative planning-level employment intensity consistent with a residential/park context with localized commercial nodes; applied over the defined service-zone area and rounded.	U.S. Census Bureau LEHD/LODES framework (method basis) + engineering judgment for land-use context shown in project vicinity

Bicycle Needs Index (BNI) (I_β)	0.001	—	Index set using a locally grounded proxy based on regional journey-to-work bicycle mode share (~0.10%) converted to a decimal proportion for MOSERS Option 2 input (0.10 ÷ 100).	ACS commute-mode tabulations as summarized in El Paso regional/MPO documentation + MOSERS Option 2 index input structure
Pedestrian Needs Index (PNI) (I_p)	0.014	—	Index set using a locally grounded proxy based on regional journey-to-work walk mode share (~1.40%) converted to a decimal proportion for MOSERS Option 2 input (1.40 ÷ 100).	ACS commute-mode tabulations as summarized in El Paso regional/MPO documentation + MOSERS Option 2 index input structure
Area of the service zone (A)	1.24	square miles	Service zone defined as a corridor catchment using a 0.5-mile pedestrian access buffer over the measured trail length (2,421.92 ft = 0.459 mi); area approximated using a corridor "capsule" geometry and rounded.	Standard planning walk-shed convention (0.5-mile access) + Google Maps distance measurement + geometric approximation
Total length of the bicycle facility in the service zone (L_β)	0.46	miles	Bicycle facility length represented by the measured trail alignment length (2,421.92 ft converted to miles).	Google Maps "Measure distance" tool (trail alignment)
Total length of the pedestrian facility in the service zone (L_p)	0.46	miles	Pedestrian facility length represented by the measured trail alignment length (2,421.92 ft converted to miles).	Google Maps "Measure distance" tool (trail alignment)

Average number of trips per participant per day (N)	2	trips/person/day	Daily participation represented as an out-and-back utility trip pattern (two trips per participant per day), consistent with sketch-planning walk/bike participation assumptions.	MOSERS sketch-planning application convention + engineering judgment (conservative utility-trip representation)
Average trip length in the service zone (L)	0.7	miles	Average replaced auto trip length represented by the measured current driving distance between key activity endpoints served by the trail connection.	Google Maps driving distance measurement (project area)
Average trip speed in the service zone (pre-program auto speed) (v)	30	mph	Average operating speed assumed below posted speed due to signal control and intersection delay typical of urban streets; set as posted 35 mph minus 5 mph to represent average travel speed.	Posted speed (field/Street View) + HCM urban-street concept of average travel speed reflecting control delay

3.2 Emissions Factors

Emission factors used in the MOSERS analysis were developed using the EPA MOVES model (version 4.0.3) to remain consistent with the emissions modeling framework used for conformity in the El Paso region. MOVES was executed to generate pollutant- and process-specific emission rates representative of local conditions for the analysis year (2031). The resulting outputs were then post-processed and formatted as emission rate lookup tables (ERLTs) (see Appendix B) so they could be imported into MOSERS and applied directly within the tool. These lookup tables provide the emission factors needed to quantify changes in emissions associated with the project strategies, including running exhaust (used with VMT reductions) and start/trip-end emissions (used with reductions in vehicle trips), ensuring that MOSERS calculations are based on MOVES-derived rates aligned with regional conformity assumptions.

For the Bicycle and Pedestrian strategy, the running exhaust emission factors used in the calculations were obtained from *ERLT_Running*, while the auto trip-end (start) emission factors were obtained from *ERLT_Starts*. To develop these ERLTs, MOVES emission-rate runs were completed for both summer and winter seasonal conditions. To represent a conservative analysis, the ERLTs were populated using the maximum emission rate observed across the seasonal runs for each pollutant/process combination.

To retrieve the specific emission factors applied in the MOSERS workbooks (Appendix A), the ERLTs were filtered consistently to match the project context. For all ERLTs, records were filtered by Source Type Name = "Auto" and then limited to Road Type ID = 4, which represents Urban Restricted Access (urban freeway) conditions in MOVES. For *ERLT_Running* (used in the Bicycle and Pedestrian calculations), the table was further filtered by speed to select 30 mph, representing the approximate average operating speed used in the analysis. This consistent filtering approach ensures the emission factors applied by MOSERS reflect the roadway and operating conditions assumed for the McRae Phase 3 project while maintaining alignment with regional MOVES-based conformity inputs

4. SUMMARY OF RESULTS

The emissions analysis results are summarized in Table 3, which presents the estimated daily emission reductions by pollutants for the Bicycle and Pedestrian strategy. These values were taken directly from the MOSERS outputs and reflect the method described in Section 2, using the project-specific input data and assumptions documented in Section 3. The MOSERS calculation workbook used to generate these results is included in Appendix A for reference. Overall, the results indicate that implementing the new Paul Harvey Park Trail is expected to produce measurable air quality benefits across the pollutants evaluated.

Table 3. CMAQ Analysis Emissions Reductions

Pollutant	Bicycle and Pedestrian (Kg/day)	Bicycle and Pedestrian (lbs/day)
CO	0.080	0.176
CO_2	6.245	13.768
NO_x	0.012	0.027
VOC	0.006	0.013
PM_{10}	0.00025	0.001

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APPENDIX A: MOSERS WORKBOOK FOR BICYCLE AND PEDESTRIAN OPTION 2 (ELECTRONIC ONLY)

APPENDIX B:
EMISSIONS LOOKUP TABLES (ERLT) FOR MOSERS INPUT (ELECTRONIC ONLY)

Texas A&M Transportation Institute

Congestion Mitigation and Air Quality (CMAQ) Analysis-Horizon City TOD

Prepared for Horizon City

February 2026

Texas A&M Transportation Institute

TECHNICAL REPORT

Technical Documentation

DATE: February 27th, 2026

TO: Art Rubio
Terry Quezada
Horizon City

FROM: Camilo Jurado
Chaoyi Gu, P.E.
Erik Vargas
Texas A&M Transportation Institute (TTI)

FOR MORE INFORMATION:
Erik Vargas
(979) 393-0688
E-vargas@tti.tamu.edu

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1. TASK SUMMARY

The Town of Horizon City requested technical assistance from the Texas A&M Transportation Institute (TTI) to develop Congestion Mitigation and Air Quality Improvement Program (CMAQ) analyses for a phased transit initiative supporting a planned Transit Oriented Development (TOD) and associated transit plaza in Horizon City. The Town has identified three implementation stages with anticipated completion in 2026 (local circulator service), 2027 (transit plaza/TOD hub), and 2028 (express transit connection between Horizon City and the University of Texas at El Paso [UTEP]). Consistent with this phased delivery, this report presents three separate CMAQ analyses, one for each stage, to quantify the distinct emissions benefits associated with each scope element and its expected effect on travel behavior and transit operations.

The primary objective of this effort is to support preparation of CMAQ documentation for submission to the appropriate Metropolitan Planning Organization (MPO) and other relevant agencies by providing defensible estimates of air quality benefits. The analyses focus on emissions reductions achieved when a portion of travel demand shifts from automobile travel to transit due to expanded service coverage, improved access to transit, and enhanced passenger facilities associated with the phased program. The transit concept is anchored by a planned plaza site within the TOD area near Rodman Street and Corky Park, co-located with the future City Hall, and includes implementation of two transit routes (an express connection to UTEP and a circulator connection serving local destinations).

The emissions analyses presented in this report follow the Texas Department of Transportation MOSERS methodology using Strategy 1.1 Transit System/Service Expansion and Replacement, applied here as Transit System / New Transit to represent new service introduction rather than a replacement scenario. Under this approach, net daily emissions benefits are estimated by (1) quantifying the reduction in automobile trips and vehicle miles traveled (VMT) associated with new transit ridership and (2) accounting for emissions generated by the added transit vehicle activity. Figures in this report provide spatial context for each stage: Figure 1 depicts the planned circulator service concept,

Figure 2 identifies the proposed transit plaza site location, and Figure 3 illustrates the planned express connection between Horizon City and UTEP.

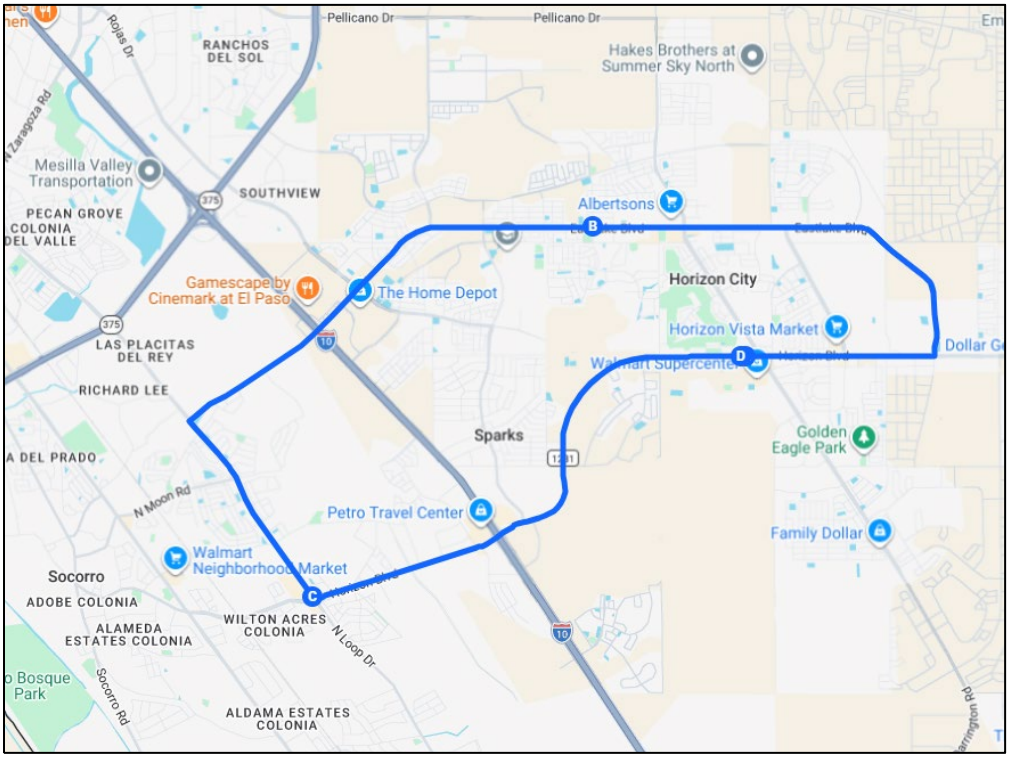

Figure 1. Horizon City to Socorro Circulator

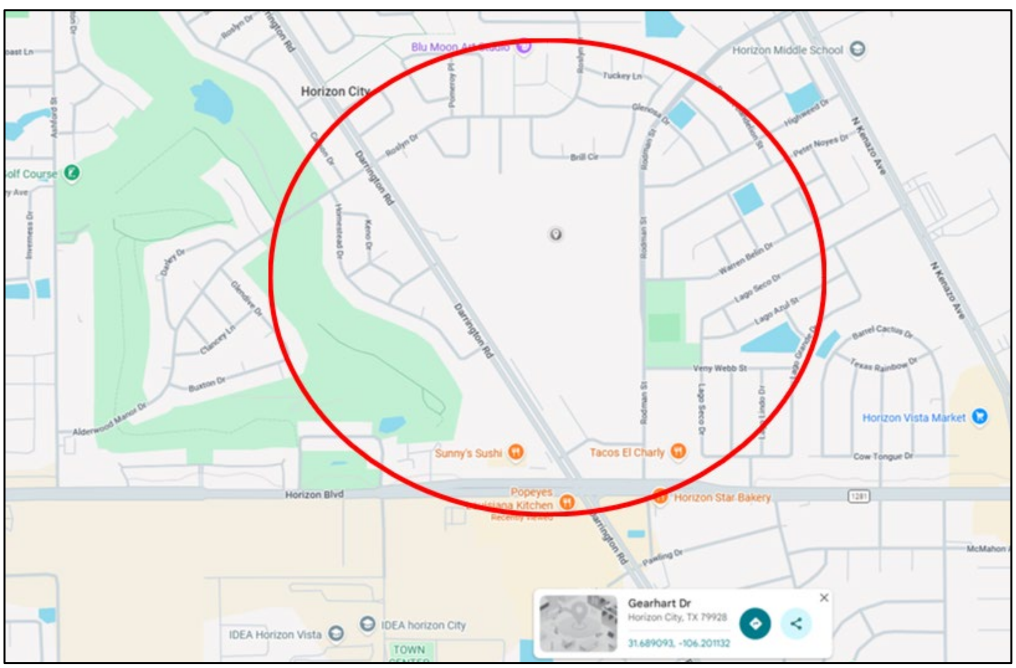

Figure 2. Horizon City transit plaza/TOD

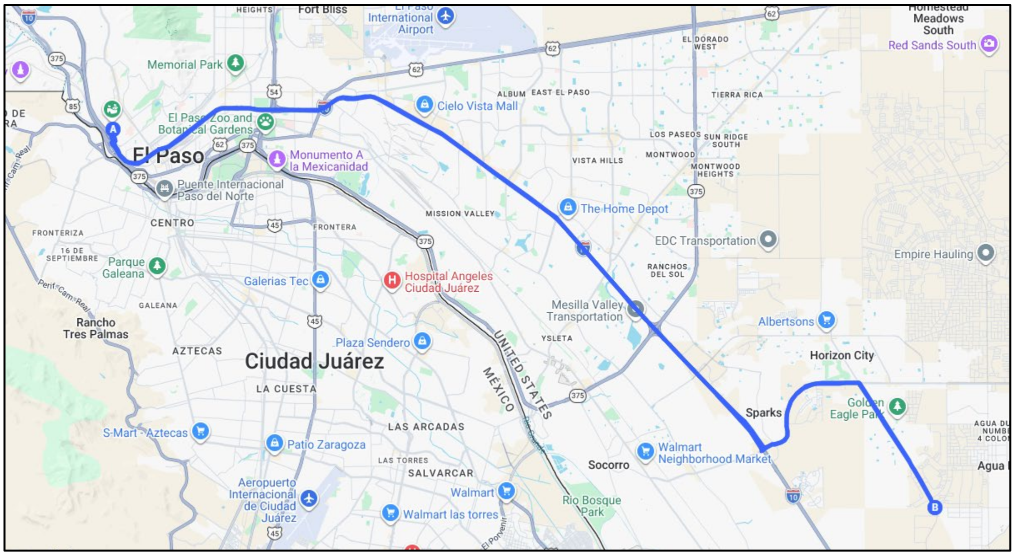

Figure 3. Representative transit service connection from Horizon City to UTEP

2. STRATEGY AND METHODOLOGY

The Texas Guide to Accepted Mobile Source Emission Reduction Strategies (MOSERS) is a set of reference guidance and sketch-planning tools used by Texas transportation and air quality practitioners to develop consistent, defensible estimates of emissions benefits from transportation control measures. MOSERS provides standardized methodologies, input definitions, and calculation procedures to evaluate how changes in travel activity (e.g., shifts in trips and vehicle miles traveled [VMT]) and vehicle operations translate into changes in criteria pollutants and greenhouse gas emissions.

For the Horizon City CMAQ analyses, the selected methodology is MOSERS Strategy 1.1, applied in this report as Transit System / New Transit to represent introduction of new transit service. Under this approach, net daily emissions benefits are quantified by estimating (1) reductions in automobile trips and VMT attributable to new transit ridership and (2) the emissions associated with the added transit vehicle activity required to provide the new service. Because the project is being modeled as new transit service, replacement-related terms and inputs in the MOSERS framework are treated as not applicable (i.e., the “before” service and fleet replacement components are not used), and the analysis focuses on the incremental change attributable to the proposed service.

2.1 Transit System/New Transit

Transit System / New Transit reduces regional emissions by shifting a portion of person-trips from private automobiles to transit, thereby reducing automobile trips and vehicle miles traveled (VMT) within the affected travel market. For Horizon City, the project is intended to introduce enhanced transit connectivity anchored by a proposed transit plaza associated with the planned Transit Oriented Development (TOD). The phased program includes three implementation stages: completion of a local circulator in 2026, construction of the Horizon City transit plaza in 2027, and implementation of an express transit connection between Horizon City and the University of Texas at El Paso (UTEP) in 2028. Collectively, these improvements are intended to increase transit accessibility and attractiveness by improving service availability, connectivity, and passenger facilities, thereby increasing ridership and reducing automobile travel demand.

The methodology estimates emissions impacts by accounting for both the reduction in automobile activity and the increase in transit vehicle activity associated with providing new service. Transit vehicle trips and transit VMT are calculated from the proposed peak and off-peak headways, the service hours in each period, and the one-way corridor length. Daily ridership is then allocated between peak and off-peak periods using ridership factors, and the share of riders assumed to have otherwise traveled by automobile is used to estimate reductions in auto trips and auto VMT within the transit service area. Net emissions benefits are calculated by applying trip-end and running-exhaust emission factors to (1) reduced automobile trips/VMT and (2) added transit vehicle trips/VMT associated with the new service. This approach is most applicable where new transit services can reasonably attract riders from automobile travel, particularly when service connects residential areas to major employment, education, and activity centers and is supported by accessible, well-located passenger facilities such as a central transit plaza.

Emissions Equations

$$Daily\ Emission\ Reduction\ \left(\frac{grams}{day}\right) = A + B - C - D$$

Reduction in auto start emissions from trips reduced

$$B = VMT_{R,P} \times EF_{AUTO,P} + VMT_{R,OP} \times EF_{AUTO,OP}$$

Reduction in auto running exhaust emissions from VMT reductions

$$C = VT_{BUS} \times TEF_{BUS}$$

Increase in emissions from additional bus Starts

$$D = VMT_{BUS,P} \times EF_{BUS,P} + VMT_{BUS,OP} \times EF_{BUS,OP}$$

Increase in emissions from additional bus running exhaust emissions

Activity Methodologies

For transit trips and transit VMT

$$VT_{BUS} = VT_{BUS,P} + VT_{BUS,OP}$$

$$VT_{BUS,P} = \frac{1}{H_{BUS,P}} \times h_P$$

$$VT_{BUS,OP} = \frac{1}{H_{BUS,OP}} \times h_{OP}$$

$$VMT_{BUS,P} = VT_{BUS,P} \times L_{BUS}$$

$$VMT_{BUS,OP} = VT_{BUS,OP} \times L_{BUS}$$

For auto trips and auto VMT

$$VT_R = VT_{R,P} + VT_{R,OP}$$

$$VMT_R = VMT_{R,P} + VT_{R,OP}$$

$$R = R_P + R_{OP}$$

$$R_P = R \times F_P \times h_P$$

$$R_{OP} = R \times F_{OP} \times h_{OP}$$

$$VT_{R,P} = \frac{R_P \times r_R \times (1 - P_C)}{O_A} + \frac{R_P \times r_R \times P_C}{O_C}$$

$$VT_{R,OP} = \frac{R_{OP} \times r_R \times (1 - P_C)}{O_A} + \frac{R_{OP} \times r_R \times P_C}{O_C}$$

$$VMT_{R,P} = VT_{R,P} \times L_A$$

$$VMT_{R,OP} = VT_{R,OP} \times L_A$$

The MOSERS calculator for Strategy 1.1 (Transit System / New Transit) estimates daily emissions benefits by linking changes in travel activity associated with new transit services to changes in both automobile and transit vehicle emissions. The procedure begins by characterizing the proposed transit service in terms of corridor length, service span, and peak and off-peak headways, which are used to estimate the number of transit vehicle trips and transit vehicle miles traveled (VMT) in the "once implemented". Daily ridership is then allocated between peak and off-peak periods using standard ridership factors, and the share of transit riders who would have otherwise traveled by automobile is applied to estimate the reduction in automobile trips and automobile VMT within the service area.

Once the changes in auto activity and transit activity are quantified, the methodology applies trip-end and running-exhaust emission factors to compute net pollutant impacts. Specifically, emissions reductions from decreased automobile Starts and running exhaust are combined with the incremental emissions associated with new transit vehicle starts and transit running exhaust, yielding a net daily emissions benefit consistent with the MOSERS equations. Table 1, Table 2 and Table 3 summarize the project variables inputs used in these activity and emissions calculations

Table 1. Strategy 1.1 (Transit System / New Transit)-Variables and Definitions (Emissions Factors)

Variable	Unit	Definition / Notes
$EF_{AUTO,P}$	grams/mile	Speed-based running exhaust emission factor for affected roadway during peak hours (pollutant-specific: NOx, VOC, PM, CO).
$EF_{AUTO,OP}$	grams/mile	Speed-based running exhaust emission factor for affected roadway during off-peak hours (pollutant-specific).
$EF_{BUS,P}$	grams/mile	Speed-based running exhaust emission factor for transit vehicle during peak hours (pollutant-specific).
$EF_{BUS,OP}$	grams/mile	Speed-based running exhaust emission factor for transit vehicle during off-peak hours (pollutant-specific).

TEF_{AUTO}	grams/trip	Auto trip-end emission factor (trip start / trip-end; pollutant-specific).
TEF_{BUS}	grams/trip	Bus (or other transit vehicle) trip-end emission factor (pollutant-specific).

Table 2. Strategy 1.1 (Transit System / New Transit)-Variables and Definitions (Service Inputs)

Variable	Unit	Definition / Notes
$H_{BUS,P}$	minutes/vehicle	Proposed average transit headway during peak hours
$H_{BUS,OP}$	minutes/vehicle	Proposed average transit headway during off-peak hours
L_{BUS}	mile	Transit corridor length (route length used for the service).
h_P	hour	Proposed service hours during peak hours.
h_{OP}	hour	Proposed service hours during off-peak hours.
R	riders/day	Estimated typical daily transit ridership (total daily riders used by MOSERS).
$r_{R,A}$	percent	Percent of transit riders who would have been auto drivers (mode-shift parameter).
L_A	mile	Average auto trip length within the buffer distance of the new transit service (used to estimate reduced auto VMT).
$v_{B,P}$	mph	Estimated transit speed along the corridor during peak hours.
$v_{B,OP}$	mph	Estimated transit speed along the corridor during off-peak hours.
$v_{A,P}$	mph	Current auto average speed along the corridor during peak hours.
$v_{A,OP}$	mph	Current auto average speed along the corridor during off-peak hours.
O_A	persons/vehicle	Average auto occupancy (MOSERS default: 1.13; local value may be used if available).

O_C	persons/vehicle	Carpool occupancy (MOSERS default: 2.31; local value may be used if available).
P_C	percent	Percent of riders who would have been auto drivers and were carpooled (MOSERS default: 50%).
F_P	—	Peak-hour ridership factor (allocates daily ridership to peak period).
F_{OP}	—	Off-peak ridership factor (allocates daily ridership to off-peak period).

Table 3. Strategy 1.1 (Transit System / New Transit Variables and Definitions (Derived Activity Outputs)

Variable	Unit	Definition / Notes
$VT_{BUS,P}$	trips	Transit vehicle trips during peak hours.
$VT_{BUS,OP}$	trips	Transit vehicle trips during off-peak hours.
VT_{BUS}	trips	Total transit vehicle trips (peak + off-peak).
$VMT_{BUS,P}$	miles	Transit vehicle VMT during peak hours.
$VMT_{BUS,OP}$	miles	Transit vehicle VMT during off-peak hours.
$VT_{R,P}$	trips	Reduction in automobile vehicle trips during peak hours.
$VT_{R,OP}$	trips	Reduction in automobile vehicle trips during off-peak hours.
$VMT_{R,P}$	miles	Reduction in automobile VMT during peak hours.
$VMT_{R,OP}$	miles	Reduction in automobile VMT during off-peak hours.

3. INPUT DATA AND ASSUMPTIONS

To estimate emissions impacts for the proposed Horizon City transit improvements, the MOSERS tool requires a set of project-specific inputs for the selected strategy described in Section 2. This section summarizes the input data used to define the proposed transit service characteristics (e.g., corridor length, headways, service span, ridership, and operating speeds), characterize baseline automobile travel conditions within the transit service area, and document the key assumptions applied in the Strategy 1.1 Transit System/New Transit methodology.

3.1 Transit System/New Transit Inputs

To quantify emissions benefits for the three phased Horizon City transit elements, the MOSERS methodology requires a consistent set of project-specific inputs describing service characteristics, travel conditions, and ridership assumptions. Table 4 summarizes the input values used for each of the three Sub-CMAQ analyses corresponding to the 2026 circulator, 2027 transit plaza, and 2028 express service components. The sections that follow, document the basis for these inputs and describe the key assumptions applied for each phase.

Table 4. Transit System/New Transit: MOSERS Inputs for the three stages project

Input data description	Variable	Circulator	HC Plaza	Express (HC–UTEP)	Units
Metropolitan area	—	El Paso	El Paso	El Paso	—
Analysis year	—	2026	2027	2028	year
Urban or rural with restricted or unrestricted access	—	Urban–Freeway	Urban–Freeway	Urban–Freeway	—
Type of new transit service	—	CNG Bus	CNG Bus	CNG Bus	—
Proposed average transit headway during peak hours	$H_{BUS,P}$	50	50	50	minute/vehicle
Proposed average transit headway during off-peak hours	$H_{BUS,OP}$	55	55	55	minute/vehicle
Proposed one-way transit corridor length	L_{BUS}	16.6	16.6	29	mile
Average one-way auto trip length within the buffer distance of new transit	L_A	16.6	16.6	29	mile

Proposed service hours during peak period of the day	h_P	4	4	6	hour
Proposed service hours during off-peak period of the day	h_{OP}	9	9	11	hour
Estimated increase in typical daily transit ridership	R	800	928	1114	riders/day
Percentage of transit riders who were auto drivers	r_R	56	56	56	percent
Estimated transit speed along the corridor during peak hours	$v_{B,P}$	25	25	45	mph
Current auto average speed along the corridor during peak hours	$v_{A,P}$	25	25	45	mph
Estimated transit speed along the corridor during off-peak hours	$v_{B,OP}$	30	30	60	mph
Current auto average speed along the corridor during off-peak hours	$v_{A,OP}$	30	30	60	mph

3.1.1 Circulator (2026) and Transit Plaza (2027): Input Basis and Assumptions

For the first two project stages—the 2026 circulator and the 2027 transit plaza—the MOSERS inputs are modeled using the same underlying service design assumptions, including corridor definition, vehicle type, headways, service hours, and operating speeds. This reflects that the plaza stage does not fundamentally change the planned circulator service supply, but rather improves passenger access, amenities, and connectivity. Accordingly, the only input varied between the 2026 and 2027 analyses is the estimated typical daily transit ridership (R), which is assumed to increase in 2027 due to the added functionality and attractiveness of the completed transit plaza.

3.1.1.1 Headway

Proposed peak and off-peak headways (50 and 55 minutes per vehicle, respectively) were selected using the existing EPATS/LGC service patterns documented for Routes 30 and 31 as a planning-level benchmark. The published Route 30/31 weekday timetable provides an appropriate local reference for typical bus service spacing in the Horizon City service area, and the selected headways reflect a conservative, service-feasible range consistent with the route concepts described in the TOD materials.

3.1.1.2 Transit corridor length and auto trip length within the service area

L_{BUS} and L_A were set to 16.6 miles based on the proposed circulator alignment shown in Figure 1, which was provided in project materials shared by Town of Horizon City personnel. The circulator route length was measured in Google Maps along the same roadway path. For the circulator stage, L_A was assumed equal to L_{BUS} to represent the typical auto trip length within the travel market directly served by the new circulator.

3.1.1.3 Proposed Service Hours

They were set to 4 peak hours (h_P) and 9 off-peak hours (h_{OP}) based on the published weekday service span for EPATS/LGC Routes 30 and 31, which indicate approximately 13 total hours of operation. For MOSERS inputs, the service day was partitioned into a 4-hour peak period to represent the highest-demand commute window, with the remaining 9 hours assigned to off-peak service to preserve the observed total daily service span while reflecting typical time-of-day demand patterns.

3.1.1.4 Ridership

For the Circulator (2026) and Transit Plaza (2027) stages, the MOSERS ridership input (R) was developed using a transparent, planning-level method that ties the assumed service plan (headways and service hours) to the amount of transit service supplied and then applies a conservative loading assumption grounded in local fleet characteristics. First, the number of bus trips provided per day was estimated from the assumed peak and off-peak headways and service hours. Using the 2026/2027 service plan (50-minute peak headway over 4 peak hours; 55-minute off-peak headway over 9 off-peak hours), the estimated service supply is approximately 4.8 one-way trips per direction during peak ($4\times60/50$) and 9.82 one-way trips per direction during off-peak ($9\times60/55$), for a total of 14.62 trips per direction per day. Accounting for both directions yields approximately 29.24 one-way bus trips per day across the full circulator alignment.

Ridership was then estimated by applying an average passenger load per one-way trip. For the 2026 Circulator stage, the planning-level average load was set using a 29-passenger minimum bus capacity documented in the local fleet reference. Applying a full-capacity load on each one-way trip would yield approximately $29.24\times29 \approx 848$ riders/day. Because MOSERS requires a single typical daily ridership input and to avoid overstating daily utilization at the sketch-planning level, the 2026 ridership input was rounded to a conservative, report-ready planning value of R = 800 riders/day, which remains consistent in magnitude with the capacity-based estimate while providing a simple, transparent input for the CMAQ documentation.

For the 2027 Transit Plaza stage, all operational inputs remain identical to the 2026 Circulator stage; the only change is the ridership input (R) to reflect the added attractiveness and usability created by a dedicated plaza/anchor facility (improved access, passenger amenities, and a stronger transfer focus). Rather than applying an arbitrary percentage increase, the plaza-stage ridership applies a locally grounded uplift factor derived from an observed plaza-anchored circulator analog in Sun Metro's system reporting (approximately 1.16, consistent with the prior benchmarking approach). Accordingly, the 2027 stage ridership input was set to $R = 800\times1.16 = 928$ riders/day (rounded to a whole number). This approach maintains consistency with the assumed service supply while ensuring the "plaza effect" is represented through a benchmark-based uplift rather than an unsubstantiated adjustment.

3.1.1.5 Percentage of transit riders

For the percentage of new transit riders who would otherwise be auto drivers (r_r = 56%), the value was selected to represent a defensible, planning-level "auto substitution" share in the absence of local stated-preference or on-board survey data for the proposed Horizon City services. The assumption is grounded in national passenger travel survey evidence summarized by the U.S. Department of Transportation, Bureau of Transportation

Statistics (BTS), which reports how travelers substitute modes when a preferred mode is unavailable and highlights that a substantial portion of motorized person trips, particularly in auto oriented contexts, would be made by driving (or riding in a household vehicle) if transit were not an option. Using this BTS evidence as a benchmark, 56% was applied as a mid-range, conservative estimate of the share of riders who represent a true reduction in auto activity (i.e., those who would have driven a personal vehicle for the trip absent the new service), with the remaining riders assumed to come from non-driving alternatives (e.g., being a passenger, walking/biking, or not making the trip). This approach aligns with MOSERS intent for sketch-planning analyses by tying the key "mode diversion" parameter to a documented national dataset when locally collected diversion shares are not available.

3.1.1.6 Speeds

For the speed inputs, planning-level average corridor speeds were estimated using the project route geometry and travel times observed in Google Maps. Average speed was computed using the standard distance–time relationship:

$$\text{Speed (mph)} = \text{Distance (miles)} \div \text{Time (minutes)} \times 60$$

For automobile speeds, the proposed Horizon City circulator was traced in Google Maps consistent with the alignment shown in Figure 1 and the project route description, yielding an estimated one-way corridor length of 16.6 miles. A representative off-peak travel time of 35 minutes produced an average auto speed of 16.6 ÷ 35 × 60 = 28.46 mph, which was rounded to 30 mph for the MOSERS input (v_a,OP = 30 mph). A representative peak-period travel time of 45 minutes produced 16.6 ÷ 45 × 60 = 22.13 mph, which was carried forward as a planning-level estimate of 25 mph (v_a,P = 25 mph) to reflect typical peak delay along signalized urban arterials and access corridors.

For transit speeds, the analysis applies the same average corridor speeds used for automobiles for this circulator/plaza service. This is appropriate at the sketch-planning level because the proposed transit service operates on the same roadway network as general traffic and would be subject to the same corridor-level congestion and intersection delay patterns. Accordingly, the MOSERS inputs assume v_β,P = v_a,P = 25 mph for peak conditions and v_β,OP = v_a,OP = 30 mph for off-peak conditions. Using a single, corridor-based speed set for both modes provides a transparent and repeatable basis for selecting speed-dependent emission factors in MOSERS, grounded directly in the mapped corridor geometry and observed Google Maps travel times for the project alignment.

3.1.2 Express Transit Route (HC-UTEP)

This subsection documents the MOSERS input assumptions for the 2028 express-route stage, which differs from the circulator and plaza stages primarily in corridor length, service span, and operating speeds due to the longer, regional connection between Horizon City and UTEP (as depicted in Figure 3). While the analysis continues to apply the same Transit System/New Transit methodology, the express-route inputs reflect higher expected line-haul speeds and a longer one-way travel market, with all assumptions developed from project documentation, mapped corridor characteristics, and defensible planning-level service parameters.

3.1.2.1 Headway

For the express-route stage (2028), the proposed headways are carried forward unchanged from the circulator/plaza assumptions (50 minutes during peak hours and 55 minutes during off-peak hours). This maintains a consistent, documented service-frequency basis across all three Horizon City stages, allowing differences in emissions benefits to be driven by the express route's distinct corridor length, service hours, and operating speeds rather than by changes in assumed frequency.

3.1.2.2 Transit corridor length and auto trip length within the service area

The proposed one-way transit corridor length (L_{BUS}) was set to 29.0 miles based on the project alignment provided by Town of Horizon City personnel and mapped in Google Maps (Figure 3). The same value (29.0 miles) was used for the average one-way auto trip length within the transit service area (L_A) to reflect that the express service is intended to substitute for the same origin–destination travel market (Horizon City to UTEP corridor) that would otherwise be made by automobile along the primary I-10 travel path.

3.1.2.3 Proposed Service Hours

Proposed service hours for the express service were developed using operating-span and peak-period guidance documented in Sun Metro's system materials. As shown in Figure

4, express bus service is characterized as operating from approximately 4:00 AM to 9:00 PM, representing a total daily span of 17 hours. Consistent with the same reference, "peak" service is described as occurring during the morning and afternoon commuter windows (6:00–9:00 AM and 3:00–6:00 PM), yielding 6 total peak hours per weekday. The remaining portion of the 17-hour service day was therefore classified as off-peak, resulting in 11 off-peak hours (17 − 6 = 11). Accordingly, the MOSERS Strategy 1.1 inputs were set to $h_P = 6$ hours and $h_{OP} = 11$ hours for express corridor analysis.[1]

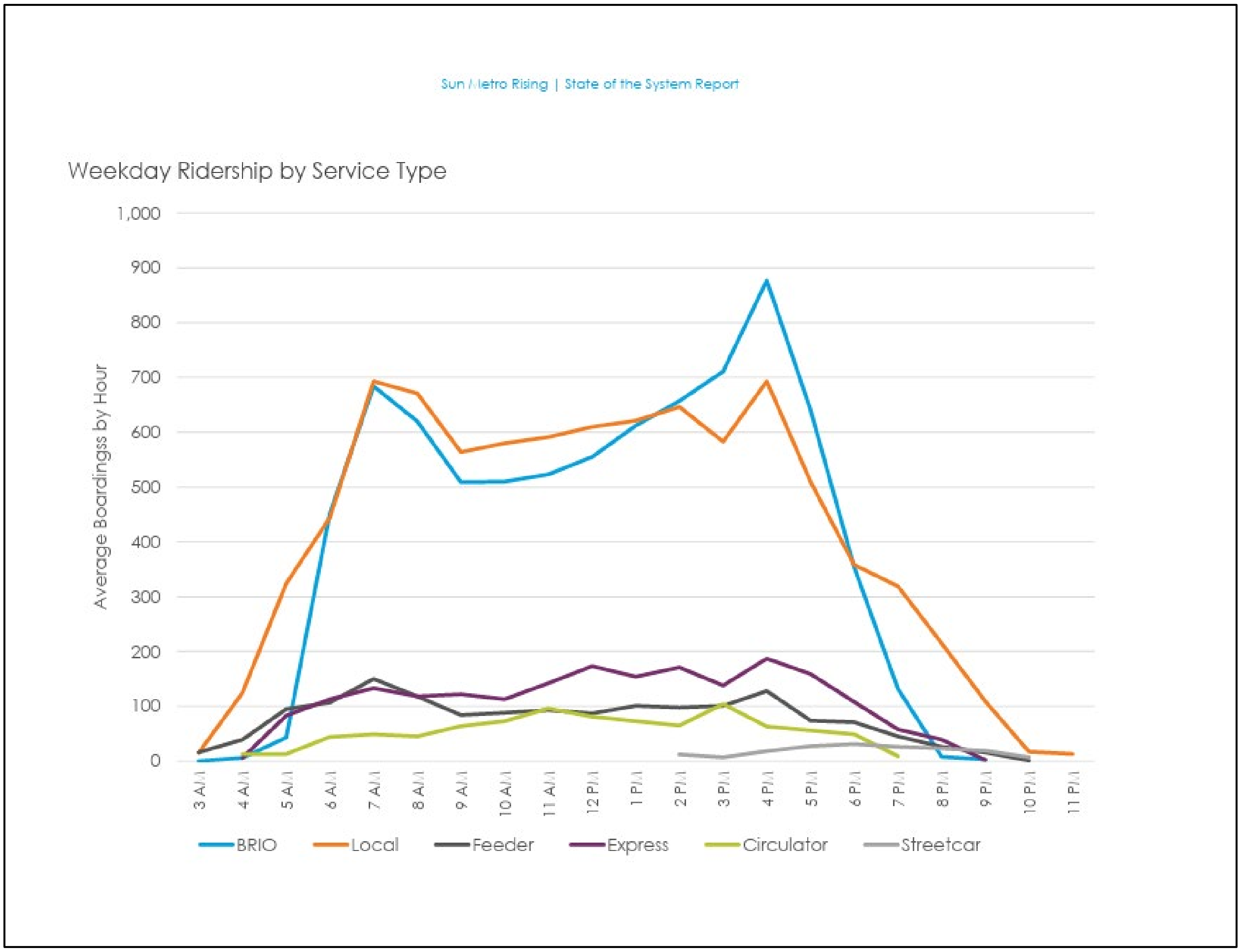

Figure 4. Express service span and peak-period operating characteristics

3.1.2.4 Ridership

For the express service (Stage 3), daily ridership was estimated using the same MOSERS-consistent, service-based calculation framework applied to the earlier stages but updated

[1] City of El Paso | Sun Metro State of the System Report (July 2022), p. 60

to reflect the longer daily service span and the higher-demand nature of a direct Horizon City–UTEP express connection. First, the analysis computed the number of daily one-way bus trips from the assumed headways and service hours. With a 50-minute peak headway over 6 peak hours, the service provides 7.2 one-way trips per direction during peak (6×60/50). With a 55-minute off-peak headway over 11 off-peak hours, the service provides 12.0 one-way trips per direction during off-peak (11×60/55). Summing, these yields 19.2 one-way trips per direction per day, and accounting for both directions yields 38.4 total one-way bus trips per day.

Ridership was then estimated by applying two bounding passenger-load assumptions to this daily service supply: (1) a conservative planning load consistent with the earlier approach, defined as one-half of the minimum seated capacity of a standard Sun Metro bus (29/2 = 14.5 riders per one-way trip), and (2) a "full-capacity" upper bound assuming each one-way trip carries the minimum seated capacity of 29 riders per trip, as documented in the *City of El Paso | Sun Metro State of the System Report (July 2022)*. Under the conservative load case, estimated daily ridership is 38.4×14.5 = 557 riders/day. Under the full-capacity case, estimated daily ridership is 38.4×29 = 1,114 riders/day. To express the closest model to the high demand that the express route might face due to the population in the area plus students needed to commute, the daily ridership was selected as the full capacity of 1,114 riders/day

3.1.2.5 Percentage of transit riders

For the express service, the percentage of transit riders who would otherwise be auto drivers (56%) was held consistent with the circulator and plaza analyses. This maintains methodological consistency across the three staged CMAQ evaluations and reflects the use of the same planning-level default drawn from national passenger survey evidence in the absence of locally collected stated-preference or on-board survey data for the proposed Horizon City services.

3.1.2.6 Speeds

Because the 2028 service is an express connection that operates primarily on the I-10 corridor with limited stops, the analysis assumed equal average operating speeds for transit and autos for both peak and off-peak periods. This assumption is appropriate at a sketch-planning level for an express service where buses and general traffic share the same primary roadway and are expected to experience similar corridor travel conditions.

Average speeds were estimated using a travel-time approach based on the project route mapped in Google Maps using the alignment provided by Horizon City. The corridor length is approximately 29 miles one-way. For the off-peak scenario, the mapped travel time was approximately 30 minutes, yielding an average speed of:

$$v \approx \frac{29 \text{ miles}}{30 \text{ min}} \times 60 \approx 58 \text{ mph} \approx 60 \text{ mph}$$

For the peak scenario, the mapped travel time was approximately 40 minutes, yielding:

$$v \approx \frac{29 \text{ miles}}{40 \text{ min}} \times 60 \approx 39 \text{ mph} \approx 45 \text{ mph}$$

Accordingly, the analysis used 45 mph for peak hours and 60 mph for off-peak hours as representative average corridor speeds for both the express transit service and parallel auto travel.

3.2 Emissions Factors

Emission factors used in the MOSERS analysis were developed using the EPA MOVES model (version 4.0.3) to remain consistent with the emissions modeling framework used for conformity in the El Paso region. MOVES was executed to generate pollutant- and process-specific emission rates representative of local conditions for each analysis year associated with the phased Horizon City project. The resulting MOVES outputs were then post-processed and formatted as emission rate lookup tables (ERLTs) (see Appendix B) so they could be imported into MOSERS and applied directly within the tool. These lookup tables provide the emission factors needed to quantify changes in emissions associated with Transit System / New Transit, including running exhaust emission factors (applied to changes in VMT) and trip-end/start emission factors (applied to changes in vehicle trips), ensuring MOSERS calculations are based on MOVES-derived rates aligned with regional conformity assumptions.

Because the Horizon City CMAQ evaluation is structured as three staged analyses, separate ERLTs were prepared for each analysis year (2026, 2027, and 2028). For each stage, the MOSERS workbook was populated using the ERLTs corresponding to the matching year to maintain consistency between the activity assumptions and the year-specific MOVES emission rates. As in prior El Paso CMAQ applications, MOVES emission-rate runs were completed for both summer and winter seasonal conditions, and ERLT values were populated using the maximum emission rate across the seasonal runs for each pollutant/process combination to provide a conservative representation.

To retrieve the specific emission factors applied in the MOSERS workbooks (Appendix A), the ERLTs were filtered consistently to match the project context and to distinguish between automobile and transit bus emission factors. For automobile-related factors, ERLTs were filtered by Source Type Name = "Auto". For transit service factors, ERLTs were filtered by Source Type Name = "TBus", consistent with the MOSERS transit vehicle category used for Strategy 1.1 calculations. For all ERLTs, records were filtered to Road Type ID = 4 (Urban Restricted Access / urban freeway) to reflect the primary corridor operating context assumed for the Horizon City–UTEP travel market and regional freeway facilities.

Running exhaust emission factors were selected from *ERLT_Running* and trip-end/start emission factors were selected from *ERLT_Starts*. For running factors, the ERLTs were further filtered by speed to match the peak and off-peak operating speeds assumed in the staged analyses. Specifically, auto running emission factors were selected using the peak and off-peak auto speeds for each stage, and transit running emission factors were selected using the corresponding peak and off-peak transit speeds (which are identical to auto speeds for the express stage, and distinct from auto speeds for the circulator/plaza stages). This approach ensures that the emission factors applied in MOSERS are internally consistent with the operating conditions and vehicle types assumed in the activity calculations, while maintaining alignment with MOVES-based, regionally consistent conformity inputs.

4. SUMMARY OF RESULTS

The emissions analysis results are summarized in Table 5, which presents the estimated daily emission reductions by pollutants for each of the three staged Horizon City analyses (2026 circulator, 2027 transit plaza, and 2028 express service). The reported values were taken directly from the MOSERS outputs and reflect the calculation framework described in Section 2, using the project-specific input data and assumptions documented in Section 3. For transparency and reproducibility, the MOSERS calculation workbooks used to generate the staged results are provided in Appendix A, and the corresponding year-specific emission rate lookup tables (ERLTs) are provided in Appendix B. Overall, the results indicate that implementation of the staged transit program is expected to produce measurable air quality benefits, with the magnitude of benefits varying by stage as service characteristics and ridership levels change over time.

Table 5. Transit System/New Transit CMAQ Analysis Emissions Reductions

Pollutant	Circulator (2026) (Kg/day)	Circulator (2026) (lbs/day)	HC Plaza (2027) (Kg/day)	HC Plaza (2027) lbs/day)	Express Transit (2028) (Kg/day)	Express Transit (2028) (lbs/day)
CO	6.823	15.042	7.768	17.125	6.617	14.558
CO_2	925.015	2039	1126.159	2483	1894.246	4176
NO_x	0.133	0.294	0.157	0.346	0.332	0.731
VOC	0.017	0.037	0.039	0.086	0.082	0.182
PM_{10}	0.009	0.02	0.010	0.022	0.018	0.040

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APPENDIX A: MOSERS WORKBOOK FOR TRANSIT SYSTEM/NEW TRANSIT (ELECTRONIC ONLY)

APPENDIX B:
EMISSIONS LOOKUP TABLES (ERLT) FOR MOSERS INPUT (ELECTRONIC ONLY)

Texas A&M Transportation Institute

Congestion Mitigation and Air Quality (CMAQ) Analysis-Playa Drain Shared use Path

Prepared for City of El Paso

April 2026

Texas A&M Transportation Institute

TECHNICAL REPORT

Technical Documentation

DATE: April 13th, 2026

TO: Margaret K. Schroeder
City of El Paso

FROM: Camilo Jurado
Chaoyi Gu, P.E.
Erik Vargas
Texas A&M Transportation Institute (TTI)

FOR MORE INFORMATION:
Erik Vargas
(979) 393-0688
E-vargas@tti.tamu.edu

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1. TASK SUMMARY

The City of El Paso requested technical assistance from the Texas A&M Transportation Institute (TTI) to develop a Congestion Mitigation and Air Quality (CMAQ) analysis for the Playa Drain Shared Use Path (Knights to Midway) project (see Figure 1 for project location and limits). The project consists of constructing approximately 1.75 miles of shared-use path along the Playa Drain corridor from Knights Drive to Midway Drive, including supporting improvements such as signage, sidewalks, landscaping, furnishings, and illumination to enhance safety and connectivity for pedestrians and bicyclists.

The primary objective of this effort is to support preparation of CMAQ documentation for submission to the El Paso Metropolitan Planning Organization (MPO) and other relevant agencies by providing an updated, defensible estimate of air quality benefits. The analysis quantifies reductions in vehicle trips and vehicle miles traveled (VMT) expected to occur when travelers choose to walk or bicycle instead of driving due to improved bicycle and pedestrian facilities and connectivity provided by the shared-use path.

The emissions analysis presented in this report follows the Texas Department of Transportation MOSERS methodology using Strategy 3.2 Bicycle and Pedestrian Programs – Option 2 (Facility Needs Index–Based Estimation). Under this approach, the share of travelers attracted to bicycle or walk rather than drive is estimated using the facility needs index together with service-zone population and employment, corridor and buffer characteristics, and trip parameters. The resulting reduction in vehicle trips and VMT is then converted to pollutant reductions using standard emissions equations and applicable emission factors. Data sources and assumptions used in the analysis are documented, the MOSERS equations and variables are summarized, and results are presented for the selected strategy.

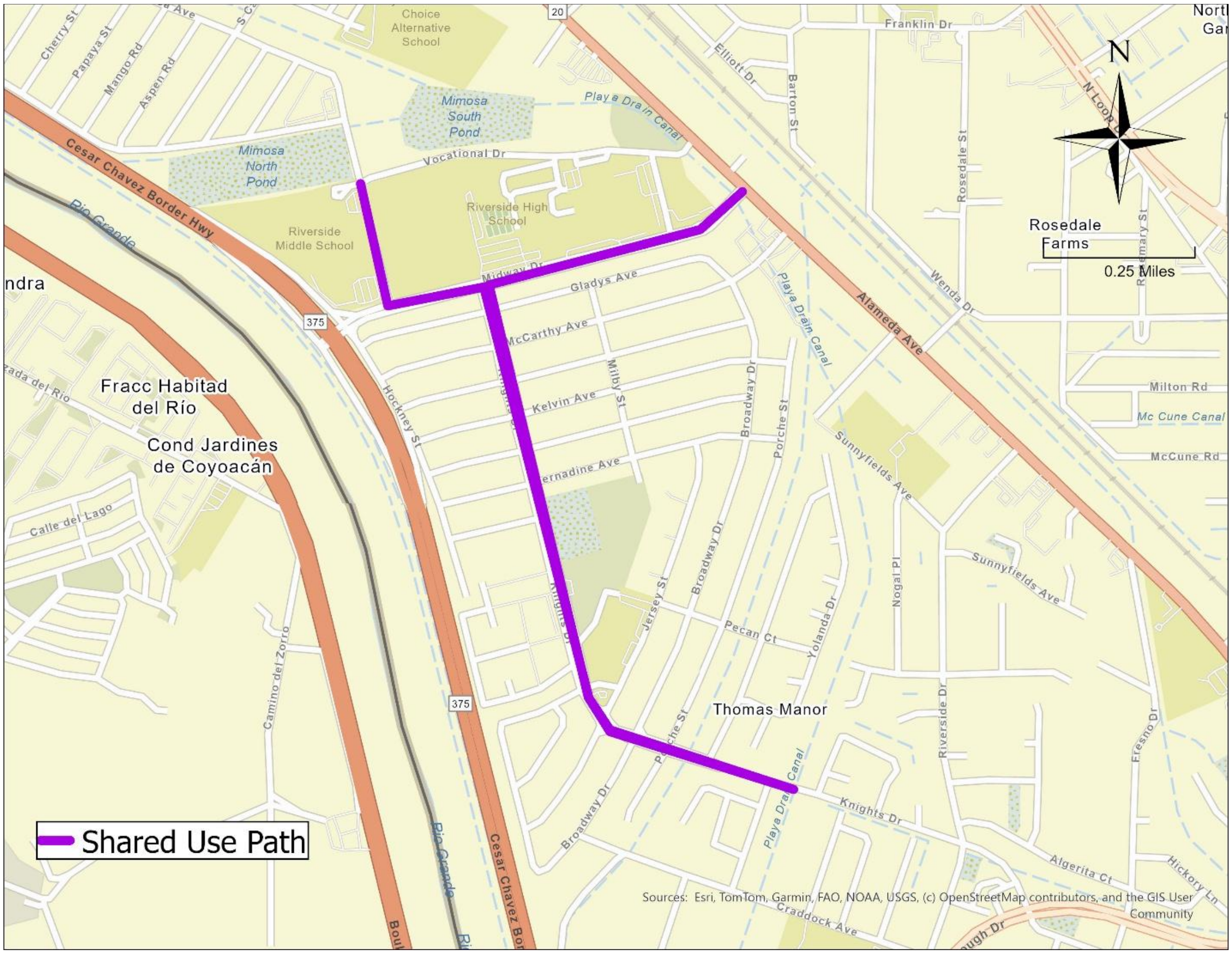

Figure 1. Playa SUP, project limits. Google Maps.

2. STRATEGY AND METHODOLOGY

The Texas Guide to Accepted Mobile Source Emission Reduction Strategies (commonly known as the MOSERS Guide) is a set of reference documents and tools for Texas transportation practitioners undertaking air quality planning. The intent of MOSERS is to provide guidance and resources for transportation of air quality practitioners to understand and evaluate mobile-source emissions-reduction strategies. The MOSERS guide was originally developed by TTI in 2003 and updated subsequently in 2007, and

2020. After a thorough review by the research team, the strategy implemented in the Playa Drain shared use path project is "Bicycle and Pedestrian" (strategy 3.2 option 2).

2.1 BICYCLE AND PEDESTRIAN (OPTION 2)

Bicycle and pedestrian programs reduce vehicle trips, vehicle miles traveled (VMT), and associated emissions by encouraging travelers to choose walking or bicycling in place of driving, particularly for short, local trips that can feasibly shift modes when safe and continuous facilities are available. For the Playa Drain Shared Use Path (Knights to Midway) project, the selected approach is MOSERS Strategy 3.2 – Option 2 (Facility Needs Index–Based Estimation), which quantifies emissions benefits based on how improved bicycle and pedestrian facilities within a defined service zone attract new walking and bicycling trips that would otherwise be made by automobile. The Playa Drain project supports this mode shift by constructing approximately 1.75 miles of shared-use path along the Playa Drain corridor and adding supporting improvements such as signage, sidewalks, landscaping, furnishings, and illumination, which together improve comfort, safety, and connectivity for non-motorized travel.

Option 2 is a facility-needs-index–based estimation approach. Rather than starting from household counts, it uses predicted Bicycle Needs Index (BNI) and Pedestrian Needs Index (PNI) values to estimate the percentage of people in the service zone who would be attracted to bicycle or walk after the facility is provided. Participants are estimated using service-zone population and employment, together with facility lengths, buffer distances, trip characteristics, and auto occupancy. When trips shift to walking or bicycling, the associated vehicle trips and VMT are assumed eliminated, and emissions benefits are calculated from the reduced vehicle activity using the MOSERS equations and applicable emission factors. This method is most applicable in populated areas where improved bicycle and pedestrian connectivity can plausibly replace short auto trips and provide practical access between neighborhoods, schools, parks, and nearby activity centers.

Emissions Equations

$$Daily\ Emission\ Reduction\ (grams/day) = A + B$$

Reduction in auto trip-end (start) emissions from reduced trips

$$A = VT_R \times TEF_{AUTO}$$

Reduction in running exhaust emissions from reduced auto VMT

$$B = VMT_R \times EF_B$$

Where:

VT_R = reduction in number of daily auto vehicle trips (trips/day)

VMT_R = reduction in daily auto vehicle miles traveled (miles/day)

TEF_{AUTO}= auto trip-end emission factor (grams/trip) (pollutant-specific)

EF_B= speed-based running exhaust emission factor for average pre-program auto speed (grams/mile) (pollutant-specific)

Activity Methodology (Facility Needs Index–Based)

Option 2 estimates bicycle and pedestrian facility users in the service zone, then converts those users into reduced vehicle trips and VMT:

$Bicycle\ facility\ users$:

$$U_B = (N_P \cdot I_B + N_E \cdot I_B) \cdot L_B \cdot D_B$$

$Pedestrian\ facility\ users$:

$$U_P = (N_P \cdot I_P + N_E \cdot I_P) \cdot L_P \cdot D_P$$

$Reduced\ daily\ auto\ trips$:

$$VTR = \frac{(U_B + U_P) \cdot N}{O_A}$$

$Reduced\ daily\ auto\ VMT$:

$$VMTR = VTR \cdot L$$

The MOSERS calculator for Strategy 3.2, Option 2 estimates daily emissions benefits by linking expected travel behavior changes to reductions in automobile activity. The process begins by estimating how many people within the defined service zone would be attracted to walk or bicycle after the Playa Drain Shared Use Path (Knights to Midway) improvements are implemented. That participation estimate is based on service-zone population and employment, the bicycle and pedestrian needs indices, the length of bicycle and pedestrian facilities available within the zone, assumed buffer distances that represent the area of influence of those facilities, basic trip characteristics, and average vehicle occupancy. Once the expected number of new walk and bike users is calculated, the methodology converts that participation into the number of daily vehicle trips avoided and the daily vehicle miles traveled avoided. These reduced vehicle activities are then translated into pollutant reductions by applying appropriate trip-end and running exhaust emission factors. Table 1 summarizes the variables referenced throughout the activity and emissions calculations, including each variable's unit and definition, to ensure the analysis is transparent and reproducible. Figure 2 presents a Street View image of Knights Drive, documenting existing site conditions along the primary portion of the project corridor and providing visual context for the shared-use path improvements and service-zone assumptions used in the analysis.

Table 1. Bicycle and Pedestrian Option 2 Variables and Definitions (Playa Dr Path)

Variable	Unit	Definition / Notes
Daily Emission Reduction	g/day	Total daily reduction in emissions from reduced auto activity (trip-end + running).
A	g/day	Reduction in auto trip-end emissions due to fewer auto trips.
B	g/day	Reduction in running exhaust emissions due to fewer auto miles traveled.
TEF_{auto}	g/trip	Auto trip-end emission factor (pollutant-specific: NOx, VOC, PM, CO).
EF_{β}	g/mile	Speed-based running exhaust emission factor for the average pre-project auto speed (pollutant-specific: NOx, VOC, PM, CO).
VTR	trips/day	Reduction in total daily auto vehicle trips.
VMTR	miles/day	Reduction in total daily auto vehicle miles traveled (VMT).
U_{β}	facility users	Bicycle facility users in the service zone.
U_{p}	facility users	Pedestrian facility users in the service zone.

N_p	persons	Estimated population in the service zone.
N_e	persons	Estimated total employment in the service zone.
I_β	index	Predicted Bicycle Needs Index (BNI) in the service zone.
I_p	index	Predicted Pedestrian Needs Index (PNI) in the service zone.
A (service zone area)	sq. mi.	Area of the service zone.
L_β	miles	Total length of bicycle facility in the service zone.
L_p	miles	Total length of pedestrian facility in the service zone.
D_β	miles	Bicycle facility buffer distance (default commonly used: 2.0 miles unless local basis provided).
D_p	miles	Pedestrian facility buffer distance (default commonly used: 0.5 miles unless local basis provided).
O_a	persons/vehicle	Auto occupancy (default commonly used: 1.13; may be set to 1.0 if assuming SOV only).
N	trips/person/day	Average number of trips per participant per day.
L	miles	Average trip length in the service zone.

Figure 2. Playa Dr Path (Knights Dr and Bernandine Av), Google Streetview

3. INPUT DATA AND ASSUMPTIONS

To estimate emission reductions for the Playa Drain Shared Use Path (Knights to Midway) project, the MOSERS tool requires a set of project-specific inputs for the selected strategy described in Section 2. This section summarizes the input data used to characterize the project service zone and the proposed shared-use path and supporting pedestrian/bicycle improvements, and it documents the key assumptions applied in Strategy 3.2 Bicycle and Pedestrian Programs – Option 2 (Facility Needs Index–Based Estimation).

3.1 BICYCLE AND PEDESTRIAN (OPTION 2)

The MOSERS inputs summarized in Table 2 were developed from Playa Drain Shared Use Path project documentation, MOSERS Strategy 3.2 Option 2 guidance, locally documented regional travel characteristics, and nationally recognized demographic sources, with engineering judgment applied where corridor-specific observations were not available for a sketch-planning CMAQ analysis. Inputs were selected to be conservative, transparent, and repeatable, consistent with the intent of Option 2, estimating how improved bicycle and pedestrian facilities within a defined service zone can shift a portion of short auto trips to walking and bicycling, thereby reducing vehicle trips, VMT, and associated emissions.

The analysis year (2028) and regional context (El Paso metropolitan area) were set to align with the CMAQ evaluation timeframe for the project. The facility-length inputs reflect the project scope to construct approximately 1.75 miles of shared-use path along the Playa Drain corridor from Knights Drive to Midway Drive, with supporting improvements such as signage, sidewalks, landscaping, furnishings, and illumination. These project elements are consistent with the type of corridor-scale bicycle and pedestrian investment evaluated under Strategy 3.2 Option 2 and provide the basis for estimating mode shift attributable to improved connectivity, comfort, and safety.

The service zone was defined using a corridor catchment representing practical pedestrian access to the facility. A 0.5-mile pedestrian access distance is commonly used in planning applications as a walk shed and is consistent with the buffer-distance concepts embedded in sketch-planning methods for bicycle and pedestrian strategies. Service-zone area was approximated using a "capsule" geometry (a buffered corridor with semicircular ends), computed as $A = (2 \times r \times L) + (\pi \times r^2)$. Using $r = 0.5$ miles and a facility length $L = 1.75$ miles, the area is $A = (2 \times 0.5 \times 1.75) + (\pi \times 0.25) = 1.75 + 0.785 = 2.535$, reported as 2.54 square miles.

Service-zone population (N_p) was computed using localized demographic conditions rather than a citywide average. The analysis used the American Community Survey (ACS) 5-year profile for ZIP 79915 to obtain a representative population density for the project vicinity and multiplied that density by the calculated service-zone area. Using a density of approximately 3,845 persons per square mile and a service-zone area of 2.54 square miles, the estimated service-zone population is about 9,766 persons, rounded to 9,800 persons. Service-zone employment (N_e) was estimated using a similarly transparent ACS-based proxy. In the absence of a GIS-based workplace-jobs extraction for the exact corridor buffer, the employed population within ZIP 79915 was used to derive an employed-person density (employed persons divided by ZIP land area), which was then scaled to the service-zone area. This produced an estimate of approximately 3,759 employed persons, rounded to 3,800, providing a reproducible, data-driven representation of the activity base within the corridor influence area appropriate for sketch-planning application of Option 2.

Because corridor-specific Bicycle Needs Index (BNI) and Pedestrian Needs Index (PNI) surfaces were not available for the defined service zone, the analysis applied conservative, locally grounded proxy values based on regional journey-to-work mode shares reported from ACS commute-mode tabulations. A bicycle commute share of approximately 0.10% and a walk commute share of approximately 1.40% were converted to decimal proportions for the Option 2 index inputs, yielding $I_\beta = 0.001$ and $I_p = 0.014$. This approach anchors participation to observed regional travel behavior and avoids overstating mode shift in the absence of a locally calibrated needs-index surface.

Trip behavior inputs were selected to reflect short, utility-oriented travel most likely to shift modes when a continuous shared-use path is provided. The average number of trips per participant per day (N = 2.0) represents a conservative out-and-back utility pattern. The average replaced auto trip length (L = 1.2 miles) was selected to reflect a short-trip market while recognizing that the project is explicitly designed to support bicycling as well as walking; this value remains conservative relative to the full corridor length while better representing typical bicycle-access trips than a purely walk-based assumption. Finally, the average auto operating speed (v = 28 mph) was developed from the posted speed environment along the primary streets defining the project area (Knights Drive approximately 30 mph and Midway Drive approximately 35 mph). A representative corridor posted speed (~32.5 mph) was reduced by 5 mph to reflect typical urban operating conditions where intersection control and access friction reduce average travel speed below posted speed, resulting in an assumed 27.5 mph, rounded to 28 mph. Collectively, these assumptions provide an internally consistent and defensible set of MOSERS inputs for applying Strategy 3.2 Option 2 to the Playa Drain Shared Use Path project, as summarized in Table 2.

Table 2. Bicycle and Pedestrian Strategy: MOSERS Inputs, Assumptions, and References

Input data Description	Data	Units	Assumption	Source
Metropolitan area	El Paso	—	Project is located within the El Paso metropolitan area as documented in project materials.	Playa Drain Shared Use Path project materials (SOW / limits).
Analysis year	2028	year	Analysis year set to align with the CMAQ analysis year for this project stage.	CMAQ project context / analysis setup
Road type	Urban–Freeway	—	Road type represented as Urban Restricted Access (Road Type ID = 4 in MOVES/MOSERS filtering) consistent with the established CMAQ/MOVES ERLT filtering convention used in prior El Paso CMAQ applications.	MOVES/MOSERS roadway type convention (Road Type ID = 4)

Estimated population in the service zone (N_p)	9,800	persons	Service-zone population computed using ACS 5-year population density for ZIP 79915 and the service-zone area (A). ZIP 79915 density = 3,845.1 persons/sq mi; A = 2.54 sq mi ⇒ $N_p \approx 3{,}845.1 \times 2.54 = 9{,}766$, rounded to 9,800.	ACS 2024 5-year ZIP profile (population density for 79915). (Census Reporter) + service-zone geometry assumption (see A)
Estimated total employment in the service zone (N_e)	3,800	persons	In absence of a GIS-based LODES workplace extraction for the exact corridor buffer, service-zone employment was estimated using an ACS-based employed-population proxy for ZIP 79915, scaled to the service-zone area. ZIP 79915 employed persons = 13,175 across 8.9 sq mi ⇒ 1,480 employed/sq mi; A = 2.54 sq mi ⇒ $N_e \approx 1{,}480 \times 2.54 = 3{,}759$, rounded to 3,800.	ACS/ZIP profile employment-status summary for 79915 (employed count). (ZIP-Codes.com) + service-zone area (A)
Bicycle Needs Index (BNI) (I_β)	0.001	—	Index set using a conservative proxy based on regional journey-to-work bicycle mode share (~0.10%) converted to a decimal proportion (0.10 ÷ 100).	ACS commute-mode tabulations (regional) + MOSERS Option 2 index input structure

Pedestrian Needs Index (PNI) (I_p)	0.014	—	Index set using a conservative proxy based on regional journey-to-work walk mode share (~1.40%) converted to a decimal proportion (1.40 ÷ 100).	ACS commute-mode tabulations (regional) + MOSERS Option 2 index input structure
Area of the service zone (A)	2.54	square miles	Service zone defined using a 0.5-mile pedestrian access buffer over a 1.75-mile facility length; area approximated using corridor "capsule" geometry: $A = (2\times r\times L) + (\pi\times r^2)$ with r=0.5 mi and L=1.75 mi ⇒ $A=(2\times0.5\times1.75)+(\pi\times0.25)=1.75+0.785=2.535 \approx 2.54$ sq mi.	Standard planning walk-shed convention (0.5-mile access) + project length from project materials.
Total length of the bicycle facility in the service zone (L_β)	1.75	miles	Bicycle facility length set equal to the shared-use path project length along the Playa Drain corridor.	Project scope and limits (SOW / limits).
Total length of the pedestrian facility in the service zone (L_p)	1.75	miles	Pedestrian facility length set equal to the shared-use path project length along the Playa Drain corridor.	Project scope and limits (SOW / limits).

Average number of trips per participant per day (N)	2	trips/person/day	Daily participation represented as an out-and-back utility pattern (two trips per participant per day), consistent with conservative sketch-planning applications for walk/bike facilities.	MOSERS sketch-planning convention + engineering judgment
Average trip length in the service zone (L)	1.2	miles	Average replaced auto trip length set to 1.2 miles to reflect bicycle-support emphasis and a slightly longer typical substituted trip than a purely walk-based assumption, while remaining within a short-trip, neighborhood-scale range appropriate for mode shift.	National travel survey evidence that many walk/bike trips are short + project context emphasizing bicycling (engineering judgment)
Average trip speed in the service zone (pre-program auto speed) (v)	28	mph	Representative operating speed derived from posted speeds on Knights (30 mph) and Midway (35 mph), reduced to reflect intersection delay/access friction. Corridor average posted speed ≈ 32.5 mph; minus 5 mph ≈ 27.5 mph; rounded to 28 mph.	Posted-speed corridor context (Knights/Midway) + HCM concept of average travel speed inclusive of control delay

3.2 Emissions Factors

Emission factors used in the MOSERS analysis were developed using the EPA MOVES model (version 4.0.3) to remain consistent with the emissions modeling framework used for conformity in the El Paso region. MOVES was executed to generate pollutant- and process-specific emission rates representative of local conditions for the analysis year (2029). The resulting outputs were then post-processed and formatted as emission rate lookup tables (ERLTs) (see Appendix B) so they could be imported into MOSERS and applied directly within the tool. These lookup tables provide the emission factors needed to quantify changes in emissions associated with the project strategies, including running exhaust (used with VMT reductions) and start/trip-end emissions (used with reductions in vehicle trips), ensuring that MOSERS calculations are based on MOVES-derived rates aligned with regional conformity assumptions.

For the Bicycle and Pedestrian strategy, the running exhaust emission factors used in the calculations were obtained from *ERLT_Running*, while the auto trip-end (start) emission factors were obtained from *ERLT_Starts*. To develop these ERLTs, MOVES emission-rate runs were completed for both summer and winter seasonal conditions. To represent a conservative analysis, the ERLTs were populated using the maximum emission rate observed across the seasonal runs for each pollutant/process combination.

To retrieve the specific emission factors applied in the MOSERS workbooks (Appendix A), the ERLTs were filtered consistently to match the project context. For all ERLTs, records were filtered by Source Type Name = “Auto” and then limited to Road Type ID = 4, which represents Urban Restricted Access (urban freeway) conditions in MOVES. For *ERLT_Running* (used in the Bicycle and Pedestrian calculations), the table was further filtered by speed to select 28 mph, representing the approximate average operating speed used in the analysis. This consistent filtering approach ensures the emission factors applied by MOSERS reflect the roadway and operating conditions assumed for the Playa drain shared use path project while maintaining alignment with regional MOVES-based conformity inputs

4. SUMMARY OF RESULTS

The emissions analysis results are summarized in Table 3, which presents the estimated daily emission reductions by pollutants for the Bicycle and Pedestrian strategy. These values were taken directly from the MOSERS outputs and reflect the method described in Section 2, using the project-specific input data and assumptions documented in Section 3. The MOSERS calculation workbook used to generate these results is included in Appendix A for reference. Overall, the results indicate that implementing the proposed improvements at Playa drain shared path is expected to produce measurable air quality benefits across the pollutants evaluated.

Table 3. CMAQ Analysis Emissions Reductions

Pollutant	Bicycle and Pedestrian (Kg/day)	Bicycle and Pedestrian (lbs/day)
CO	0.746	1.645
CO_2	65.020	143
NO_x	0.083	0.184
VOC	0.045	0.099
PM_{10}	0.002	0.004

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APPENDIX A: MOSERS WORKBOOK FOR BICYCLE AND PEDESTRIAN OPTION 2 (ELECTRONIC ONLY)

APPENDIX B: EMISSIONS LOOKUP TABLES (ERLT) FOR MOSERS INPUT (ELECTRONIC ONLY)

Congestion Mitigation and Air Quality (CMAQ) Analysis-Solar Panel Equipped Carports

Prepared for Project Amistad

February 2026

Technical Report

DATE: February 23, 2026

TO: Celia R. Garcia

Project Amistad

FROM: Claudia E Valles Sosa PhD

El Paso Metropolitan Planning Organization

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1. TASK SUMMARY

Project Amistad requested technical assistance from the El Paso Metropolitan Planning Organization (EPMPO) to develop a Congestion Mitigation and Air Quality (CMAQ) analysis for its Solar Panel-Equipped Carports Project at the transportation parking facility located at 3210 Dyer (See Figure 1 for location).

The proposed project consists of installing solar panel-equipped carports over 40 existing parking spaces, as shows on the Figure 1.

The primary objective of this analysis is to support Project Amistad in preparing a CMAQ report for submission to the MPO and other relevant agencies. This report includes emissions estimates and a summary of the project's anticipated benefits to support the CMAQ funding application.

The project involves the design and installation of solar panel-equipped carports and intended to:

- Provide shaded parking for vehicles
- Generate renewable solar energy for on-site use or grid-tied power
- Reduce facility operating costs and greenhouse gas emissions carbon
- Support state and local climate and energy goals

For CMAQ eligibility purposes, it is assumed that the solar installation project will support the EV fleet. The key assumption for the emissions analysis is as follows:

- Solar-generated electricity will displace the electricity grid at 100 percent; therefore, no additional emissions will be attributed to grid power generation.

The emissions analysis for the project is presented below. The strategy name and a brief project description are provided, along with the data sources and assumptions used in the analysis. The methodology includes the equations applied to calculate emission reductions.

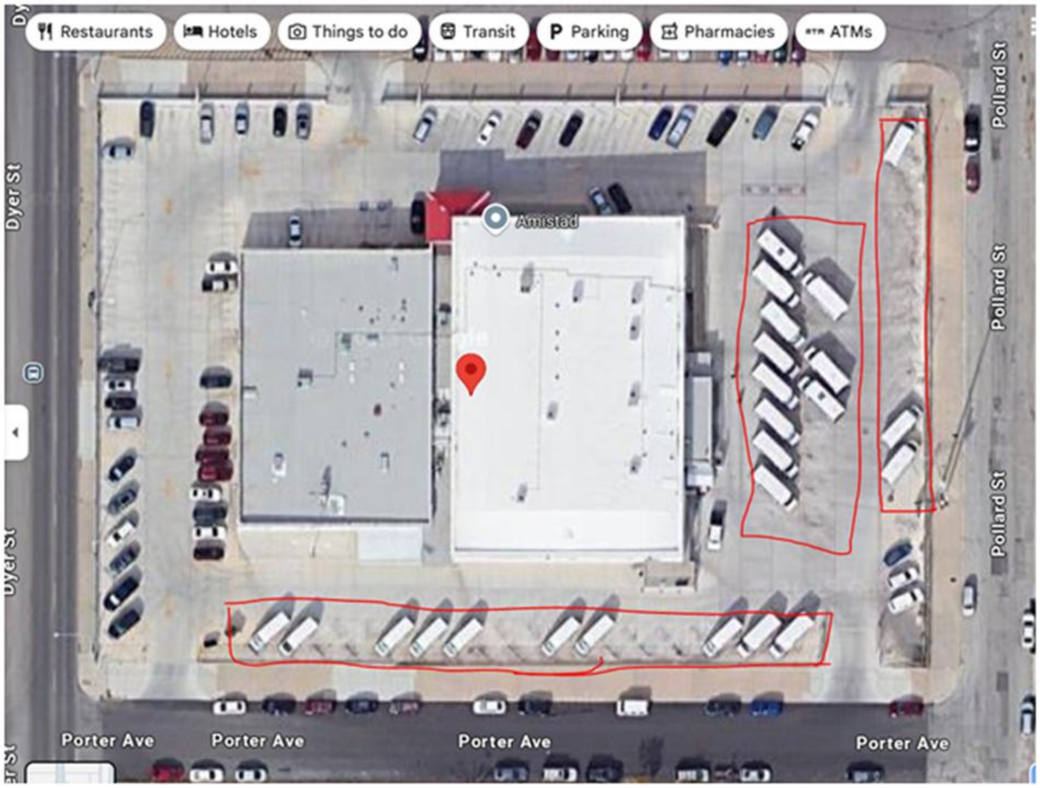


Figure 1. Transportation Parking area (3210 Dyer)

2. PROJECT DESCRIPTION

This project involves the design and installation of solar carports on Project Amistad's property. The initiative supports environmental, economic, and community-centered goals through the following:

- Provide shaded, weather-protected parking for the transportation fleet
- Generate renewable solar energy to offset facility electricity use and/or support grid-tied power
- Reduce the commercial demand charges on the electric bill
- Lower long-term utility costs, allowing more budget allocation toward mission-driven programs
- Reduce the organization's carbon footprint, contributing to a healthier local environment

- Support city and state sustainability targets, including El Paso’s climate and clean energy goals

- Demonstrate environmental leadership as a nonprofit, inspiring others to adopt clean technologies

- Improve energy resiliency, helping maintain operations during grid disruptions or peak pricing

- Maximize underutilized land (parking lot) for clean energy generation without impacting building space

- The system is designed to produce 246,000 kilowatt hours annually

- This project will help relieve the costs associated with continuously rising electric rates putting more money back into Project Amistad.

3. STRATEGIES AND METHODOLOGY

For this analysis two parts of the potential CMAQ-related emission benefits will be calculated:

- Estimate the annual electricity demand from charging that should be offset by the solar part.
- Estimate the facility's potential to promote the vehicle replacement from gasoline vehicles to EVs.

Step 1 — Assume Charging Use Scenario

Conservative planning assumption for Level 2 workplace charging:

- 25 kWh per vehicle per day
- 200 charging days per year
- 40 spaces

$$25 \times 200 \times 40 = 200{,}000 \text{ kWh/year}$$

That aligns closely with the solar system production (~246,000 kWh/year), which is convenient structurally.

Step 2 — Assume Vehicle Replacement

If the 40 EV spaces help promote the replacement of gasoline vehicles, assume the structure will promote 40 new EVs.

Typical gasoline vehicle on the road:

- ~0.10 g/mile NOx (MOVES4-based urban estimate, close to passenger/bus mixed average)

If each EV drives 15,000 miles/year:

40 vehicles × gasoline NOx ≈ 0.066 tons NOx/year avoided on the road

Annual NOx Reduction: 0.066 tons/year

Project Life (20 years)

$$0.066 \times 20 = 1.3 \text{ tons}$$

Total Lifetime NOx Reduction: 1.3 tons
Cost Effectiveness (20 years) based on NOx

$$497{,}818 \div 1.3 = 382{,}936 \text{ per ton NOx}$$

Daily reductions

Pollutant	Reduction (kg/day)
VOC	0
CO	0
NOx	0.165
PM_{10}	0

Appendix B: Performance Based Planning and Programming

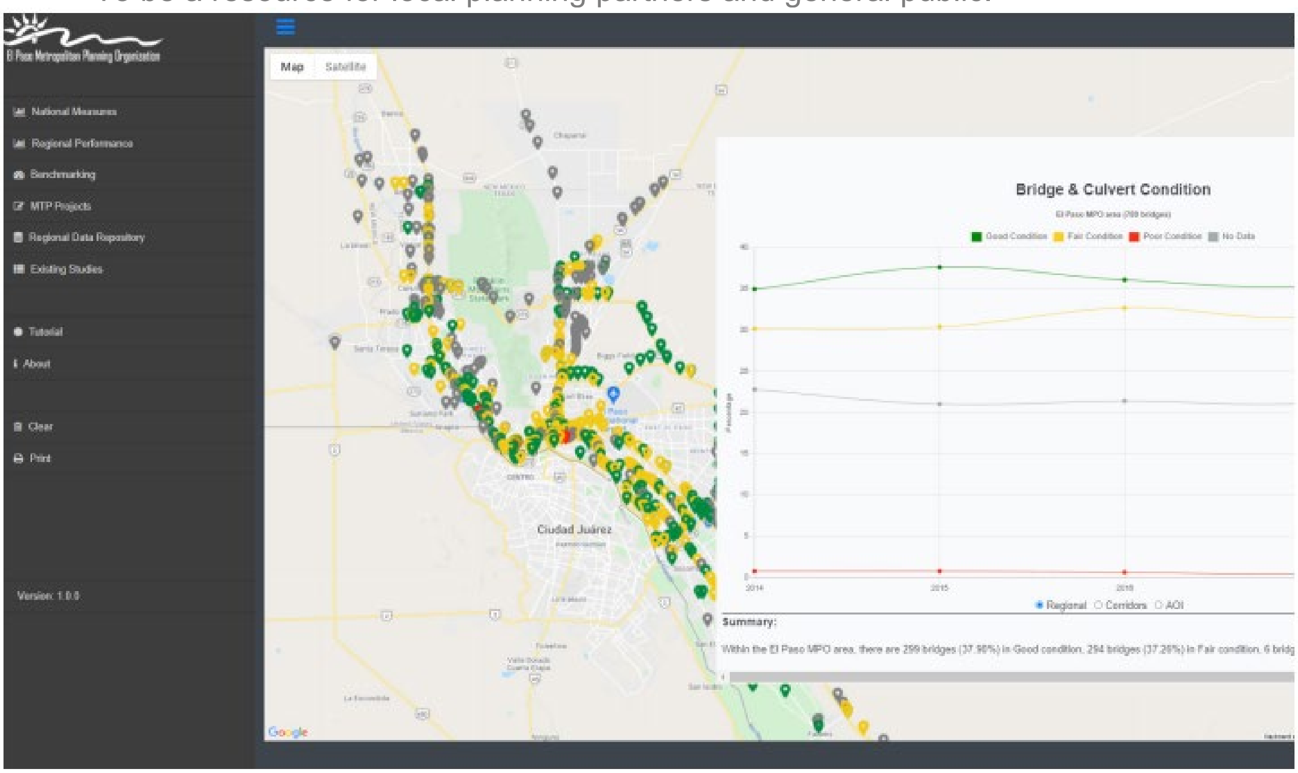
PERFORMANCE MEASURES

Measuring and tracking the performance of the region's transportation system is a fundamental component of the RMS 2050 MTP and the performance-based planning process. Performance measurement allows planners to assess the current state of the system to develop recommendations for improvements, evaluate the effectiveness of recently implemented improvements, and forecast the effectiveness of planned improvements. EPMPO monitors two kinds of performance as part of its performance-based planning efforts: Observed Performance and Forecasted or Modeled Performance.

Observed Performance: Performance is measured based on information from various sources (national, state, local) and reported via a web-based application tool developed for geospatial visualization of performance of the transportation network. This webtool can be found at https://www.elpasompo.org/Links through the "EPMPO Performance Measures Tool" link.

The objectives of the Web Tool are:

- To track transportation performance over time
- To support identification of gaps in infrastructure across transportation modes
- To provide performance-based information for planning and programming decisions and
- To be a resource for local planning partners and general public.



The Multimodal Web Tool shows performance of transportation networks in the El Paso region captured by multimodal performance measures that were identified from Destino 2045 Metropolitan Transportation Plan (2018), Congestion Management Process (2019), and FHWA National Performance Measures (2017), and updated based on available local, state, and national data.

Forecasted or Modeled Performance: Using EPMPO's TDM, planners can forecast the performance of the region's transportation system, considering both planned system improvements and forecasted demographics. Performance-based planning using these measures was initiated with the development of the Destino 2045 MTP, and additional measures were incorporated during the development of the RMS 2050 TDM and the reporting output summary has been improved.

NATIONAL PERFORMANCE REQUIREMENTS

Federal legislation passed in 2012 introduced a new requirement to incorporate a performance-based approach into the transportation planning process. The federal transportation bill Moving Ahead for Progress in 21st Century Act (MAP-21) required state Departments of Transportation, MPOs, and transit authorities to set coordinated targets, report on a required set of performance measures, and prioritize projects using a coordinated performance-based planning process. These performance requirements were continued under subsequent federal transportation laws. The federal performance measures fall into three main categories—safety, maintenance, and performance. Safety measures track highway and transit deaths and injuries and include transit incidents like fires or crashes. Maintenance measures look at the age of transit fleets and the condition of roads and bridges. System performance measures look at highway congestion and reliability, freight movement, and environmental sustainability, including air quality.

TABLE 2.2: FEDERAL PERFORMANCE MEASURE CATEGORIES

Safety	Highway Safety
	Transit Safety (Public Transportation Agency Safety Plan)
Maintenance	Highway Pavement and Bridge Conditions
	Transit Asset Management (TAM)
System Performance	National Highway System (NHS) Congestion
	Freight
	Congestion Management and Air Quality (CMAQ) Program

Federal performance measure final rules establish deadlines for target setting and reporting for each of the required performance measures. For the measures identified in each final rule, MPOs are required to adopt targets and baseline performance measures, and to report progress toward achieving the targets in Regional Performance adopted two years after the effective date of the final rule. The five performance measures' current final rules were established at different times, and therefore have different target-setting and implementation deadlines, as seen in Table 2.3 below. As of the adoption of RMS 2050 MTP in 2022, target setting, monitoring, and reporting are now required for all five performance measures on the reporting period and schedule shown:

TABLE 2.3: SUMMARY OF INITIAL PERFORMANCE MEASURE IMPLEMENTATION TIMELINES

FINAL RULE	FINAL RULE EFFECTIVE DATE	TARGET SETTING DEADLINE			REQUIRED TO BE INCLUDED IN MTP BY	REPORTING PERIOD	REPORTING SCHEDULE
		STATE DOT	TRANSIT PROVIDER	MPO			
***PM 1:* Safety**	4/14/2016	8/31/2017	-	2/16/2018	5/27/2018	Annually	Annually
***PM 2:* Infrastructure** ***PM 3:* System Performance**	5/20/2017	5/20/2018	-	11/16/2018	5/20/2019	2-and 4-year performance period	Biannually (2026, 2028, etc.)
Transit Asset Management (TAM)	10/1/2016	10/1/2017	-	12/27/2017	10/1/2018	Complete updated TAM Plan by Oct 2022	
Public Transportation Agency Safety Plan (PTSAP)	7/19/2018	-	07/20/2020 (extended to 12/31/2020)	1/20/2021	7/20/2021	Updated and certified by transit agency annually	

REQUIRED PERFORMANCE MEASURES AND TARGETS

A summary of the required National Performance Measures aligned with the seven National Goals is presented below in Table 3. EPMPO has adopted targets set by the states (TxDOT and NMDOT) for all National Performance Measures. This section summarizes the adopted targets for each of the measures and provides a performance target assessment. Certain performance measures may be updated on an annual basis.

TABLE 2.3: NATIONAL GOALS AND METRICS

NATIONAL GOAL	NATIONAL PERFORMANCE MEASURE(S)	
Safety	- Fatalities (# and rate)	
	- Serious injuries (# and rate)	
	- Number of non-motorized fatalities and serious injuries	
Infrastructure Condition	- % of Interstate pavements in Good & Poor condition - % of non-Interstate NHS pavements in Good & Poor condition	*National Highway System = NHS*

	- % of NHS bridges classified as in Good & Poor condition	
Congestion Reduction	- Annual hours of PHED per capita - % Non-SOV Travel	*Peak Hour Excessive Delay = PHED*
System Reliability	- % of PMT on the Interstate that are reliable - % of PMT on non-Interstate that are reliable	*Passenger Miles Traveled = PMT*
Freight Movement & Economic Vitality	- TTTR Index on the Interstate System	*Truck Travel Time Reliability Index = TTTRI*
Environmental Sustainability	- % Change in CO2 Emissions on NHS Compared to Calendar year 2017	
Reduced project delivery delays	- No national measures in current legislation	

SAFETY (PM1)

State Targets adopted by EPMPO Transportation Policy Board for previous fiscal years up to the most recently adopted targets in FY 2026 are presented in the tables below for Texas and New Mexico respectively (Table 4 and Table 5).

TABLE 2.4: SAFETY – TEXAS STATE TARGETS BY CALENDAR YEAR

PM1: SAFETY	2022	2023	2024	2025	2026
Number of fatalities	3,563	3,682	3,567	3,046	4,506
Rate of fatalities	1.27	1.38	1.36	1.14	1.44
Number of serious injuries	16,677	17,062	17,062	17,062	18,884
Rate of serious injuries	5.76	6.39	6.39	6.39	6.30
Number of non-motorized fatalities and serious injuries	2,367	2,357	2,357	2,357	2,802

TABLE 2.5: SAFETY – NEW MEXICO STATE TARGETS BY CALENDAR YEAR

PM1: SAFETY	2022	2023	2024	2025	2026
Number of fatalities	421.9	446.6	450.0	445.0	445.0
Rate of fatalities	1.645	1.695	1.689	1.644	1.644
Number of serious injuries	1,030.5	995.4	1018.6	1,010.0	1,010.0
Rate of serious injuries	3.842	3.801	3.800	3.800	3.800
Number of non-motorized fatalities and serious injuries	190.6	199.4	200	200.0	200.0

On February 20, 2026, the Transportation Policy Board approved a resolution to support the updated 4-year target (previously adopted January 24, 2025), for both Texas Department of Transportation (TxDOT) and the New Mexico Department of

Transportation (NMDOT). By agreeing to support the states' HSIP targets, EPMPO agrees to:

- Work with the states and safety stakeholders to address areas of concern for fatalities or serious injuries within the metropolitan planning area.
- Coordinate with the states and include the safety performance measures and the states' HSIP targets for those measures in the long-range regional transportation plan (RTP).
- Integrate into the metropolitan transportation planning process, the safety goals, objectives, performance measures and targets described in other state safety transportation plans and processes such as applicable portions of the HSIP, including the SHSP.
- Include a description in the TIP (Transportation Improvement Program) of the anticipated effect of the TIP toward achieving HSIP targets in the RTP, linking investment priorities in the TIP to those safety targets.

ANALYSIS OF TRANSPORTATION IMPROVEMENT PROGRAM (TIP) FY 2027 – FY 2030; SAFETY PROJECTS

Several projects programmed in the RMS 2050 MTP and the 2027-2030 TIP have been identified to have a safety element as part of the project selection criteria which includes a section based on safety and thus help work towards the safety targets. These projects include:

- Buffalo Soldier Street Improvements from Edgemere Blvd to Montana Ave. The project includes complete roadway reconstruction, parkway improvements, sidewalks, bicycle facilities, street illumination, landscaping and irrigation and striping.
- Delake Street Construction. The project includes construction of a two-lanes roadway with enhanced pedestrian facilities, bike lanes and illumination to provide access to the Horizon City Transit Oriented Town Center.
- Downtown 10 Executive to Copia Segment 1 Construction - Widen from 3/5 to 4/6 lanes each direction, add 2-lane frontage roads each direction, ramp and operational improvements, and bike/ped paths.
- ELP Safety Service Patrol –Highway Emergency Response Operations (HERO) FYs 2027, 2028, 2029, 2030
- I-10 Frontage Roads from FM1110 (Clint Rd) to FM793 (Fabens Rd)* - Construct frontage roads 2 lanes each direction
- Montwood and Sunfire Roundabout - Two-lane roundabout at Montwood and Sunfire. Includes pedestrian improvements, hawks, signage, striping, bicycle lanes on all roundabouts, and ramps for cyclists.
- Paul Harvey Park Trail - Construction of a shared-use path from Paul Harvey Park to the Westside Natatorium. Project runs on social trail behind Bluff Canyon Circle/Bel Mar Ave on to Mesa Hills Dr
- Playa Drain Hike and Bike Trail (Knights to Midway) - Pedestrian and bicycle facilities with signage, sidewalks, landscaping, furnishings and Illumination.

- Saul Kleinfeld Street Improvements - Project includes complete roadway reconstruction, parkway improvements, bicycle facilities, landscaping and irrigation, and striping on Saul Kleinfeld Dr from Montwood Dr to Pebble Hills Blvd.
- San Elizario Intersection Safety Improvements Construction Phase - Proposed improvements for four intersections in San Elizario with crash rates higher than the statewide crash rates.
- Sunland Park Hike and Bike Shared Use Path – Construction of a pedestrian and bicycle facility with associated signage, landscaping and irrigation, furnishings, and illumination.
- Sun Valley Gateway North to Kenworthy - Project includes complete roadway reconstruction, road diet, parkway improvements, bike facilities, street illumination, landscaping & irrigation, & striping on Sun Valley from Gateway Blvd N to Kenworthy St.
- US 62/180 (Montana Ave.) Expressway & Frontage Roads Phase II. Construct 6 lane (expressway) main lanes eastbound/westbound with auxiliary lanes and grade separations at intersections from Tierra Este Rd. to FM 659 (Zaragoza Rd). Build 2 lane westbound/eastbound frontage roads in each direction from Tierra Este Rd to FM 659 (Zaragoza Rd.). Reconstruct 6 lane westbound/eastbound mainlanes from Global Reach Dr. to Lee Trevino Dr. to include auxiliary lanes and grade separation at intersection. Reconstruct existing eastbound frontage road from Global Reach Dr. to Tierra Este Rd in concrete (no added capacity). Work includes drainage, advanced signing, striping
- US 62/180 (Montana Ave.) Expressway & Frontage Roads Phase IIA.- Construction of bridge overpass

SUMMARY OF STATE SAFETY (PM1) PERFORMANCE MEASURES AND TARGETS FOR TXDOT AND NMDOT

The following provides a summary of the Highway Safety Improvement Program's (HSIP) safety performance measures and State safety performance targets. State DOTs and MPOs are expected to establish and report Safety performance measure targets annually. The safety performance targets should be data-driven, realistic, and attainable, and should align with the performance management framework and legislative intent.

TxDOT (PM1) TRENDS AND TARGETS

TxDOT has set more aggressive fatality and fatality rate reduction targets since 2020, in response to the Texas Transportation Commission's goal of reaching zero fatalities on Texas roads by the year 2050. EPMPO Transportation Policy Board also adopted this goal for the El Paso Metropolitan Planning Area when it adopted the Borderplex Safe Mobility Plan on November 21, 2025. TxDOT's annual fatality reduction target is based solely on actual crash data, ensuring consistency and reliability in setting targets for improving road safety.

FIGURE 1: NUMBER OF FATALITIES IN TEXAS

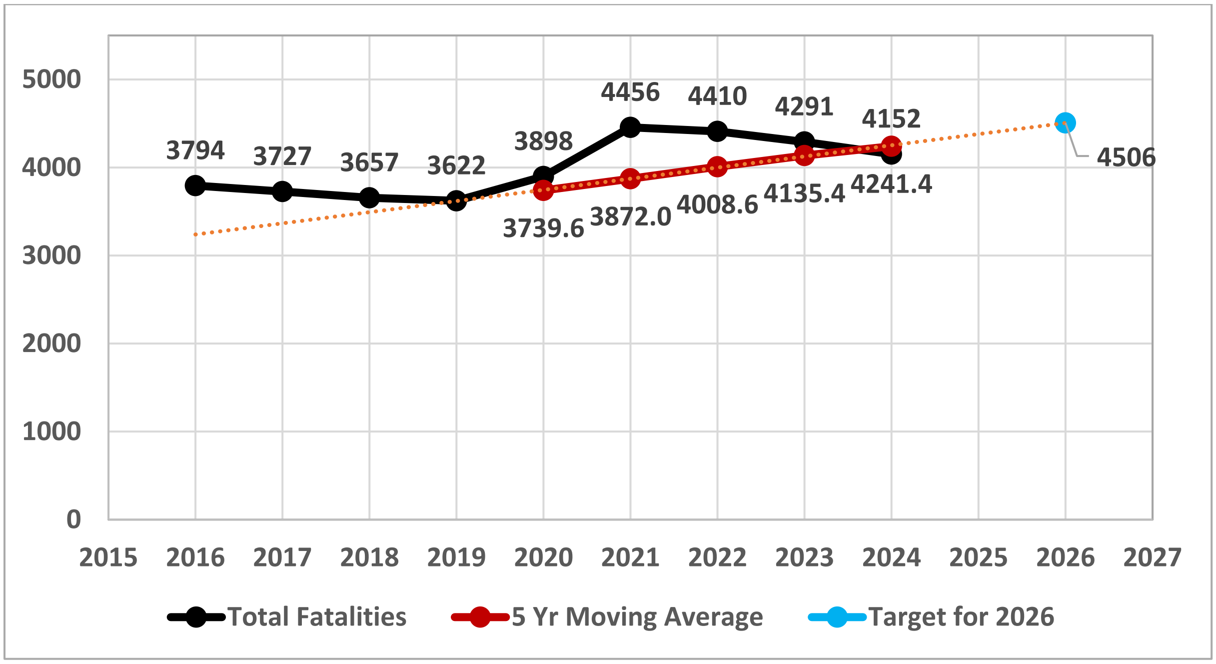


FIGURE 2: FATALITY RATE (PER 100 MILLION VMT) IN TEXAS

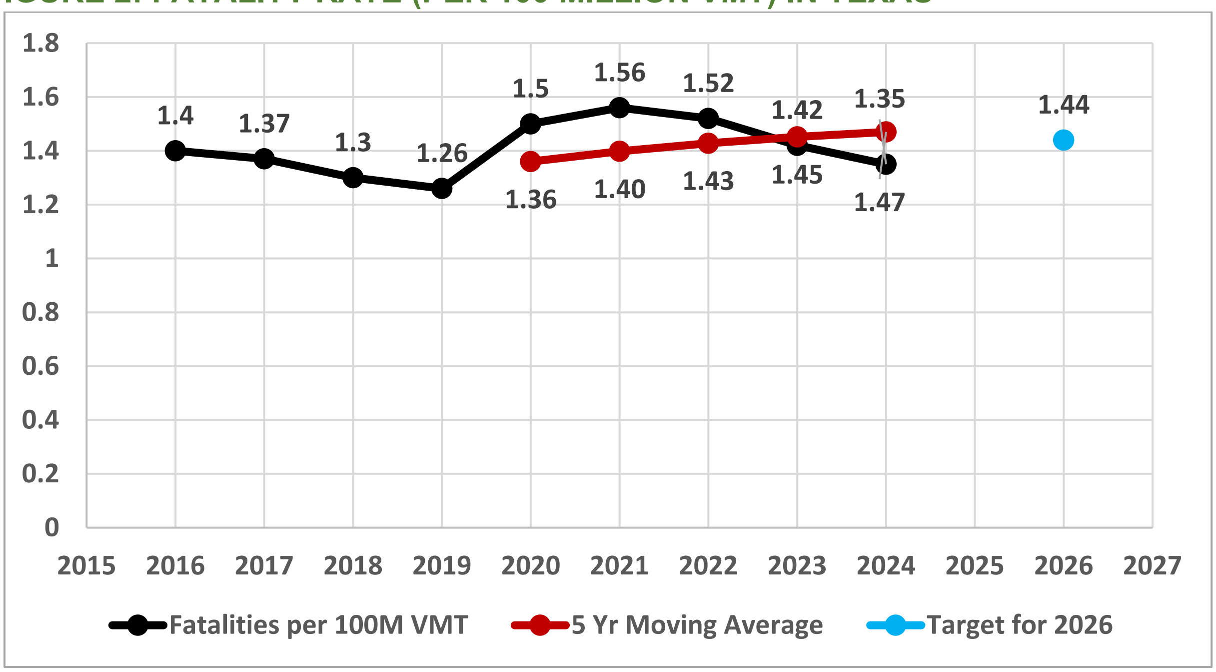


FIGURE 3: NUMBER OF FATALITIES IN TEXAS PORTION OF EL PASO MPO REGION

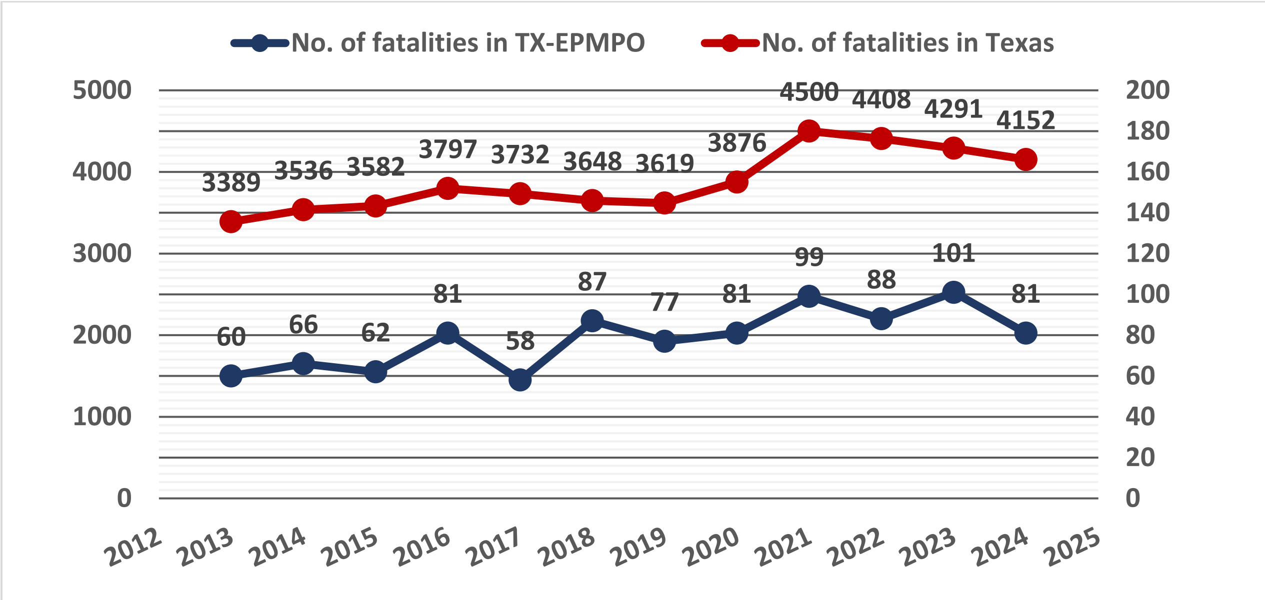


FIGURE 4: NUMBER OF SERIOUS INJURIES IN TEXAS

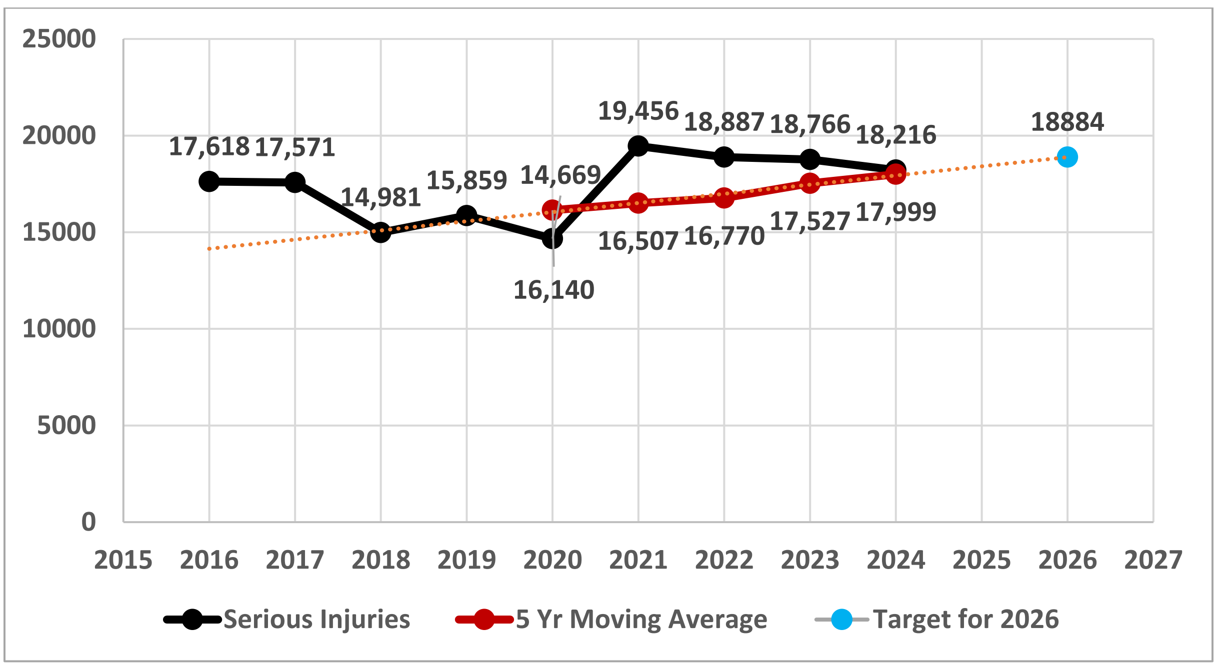


FIGURE 5: RATE OF SERIOUS INJURIES (per 100 million VMT) IN TEXAS

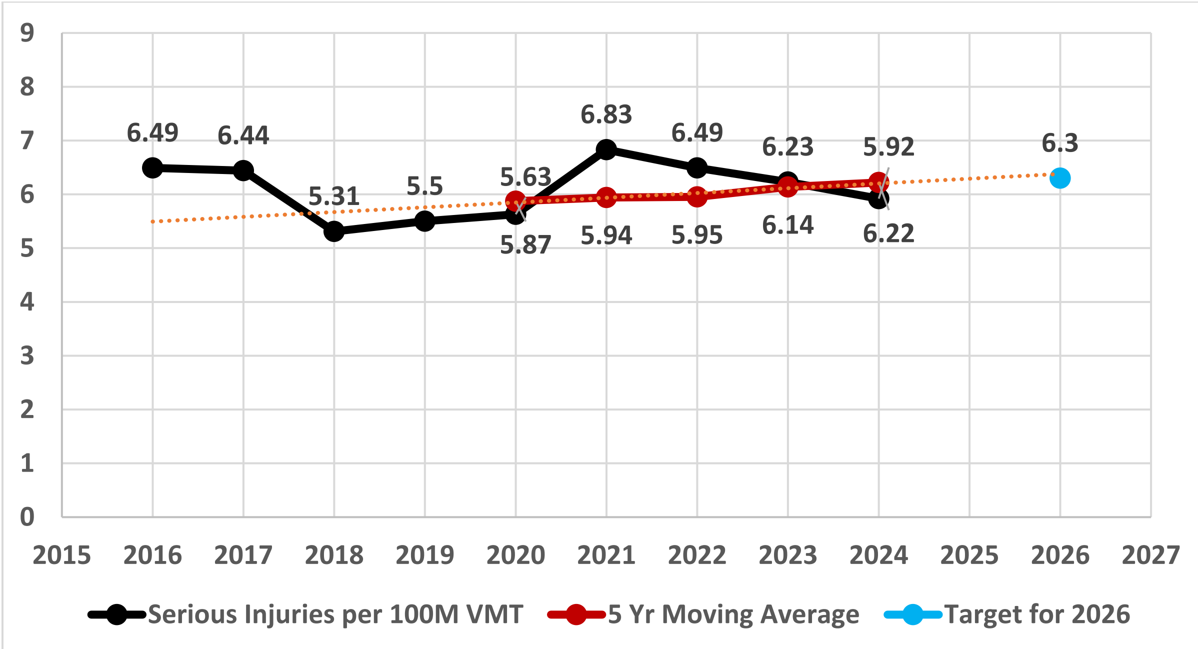


FIGURE 6: NUMBER OF SERIOUS INJURIES IN TEXAS PORTION OF EL PASO MPO

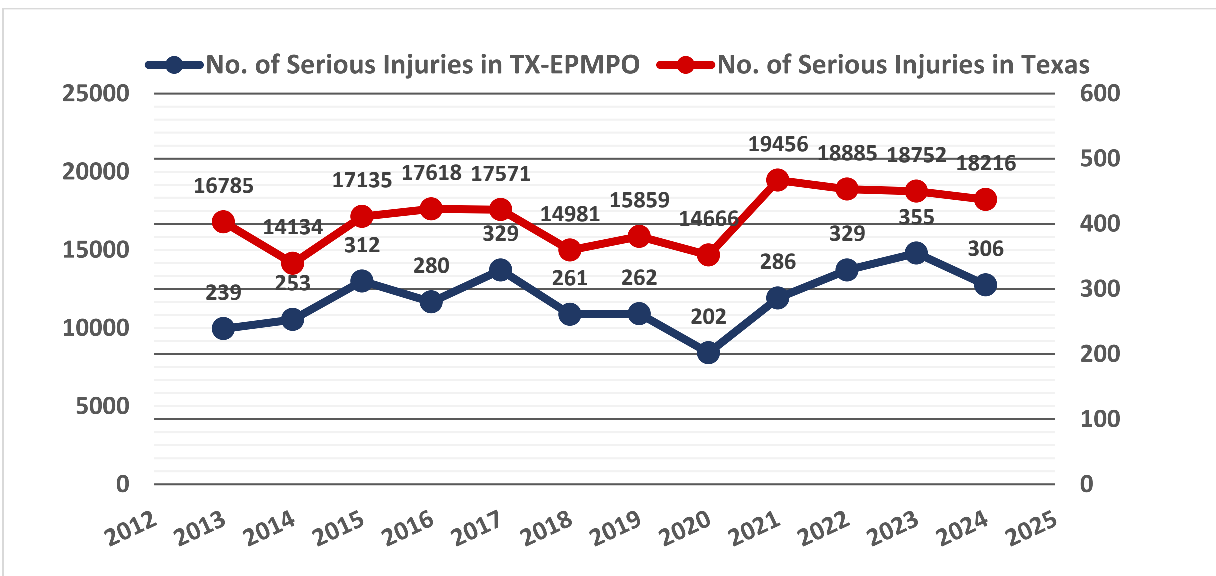


FIGURE 7: NUMBER OF NON-MOTORIZED FATALITIES AND SERIOUS INJURIES IN TEXAS

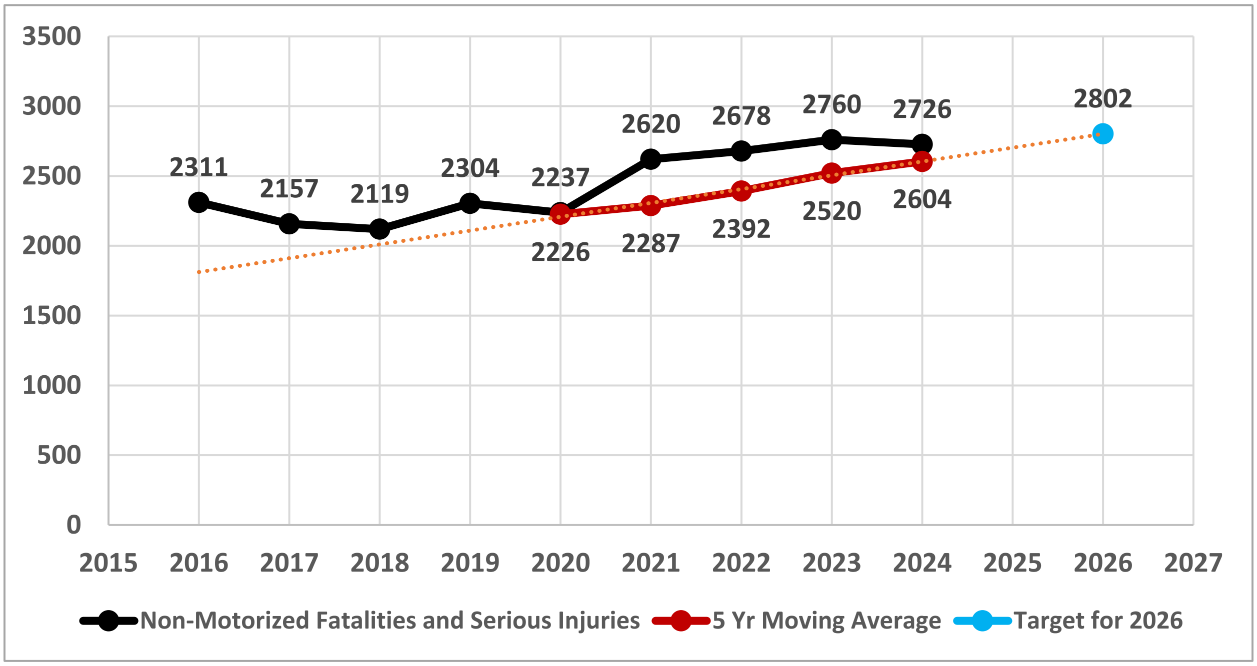


FIGURE 8: NUMBER OF NONMOTORIZED FATALITIES AND INJURIES IN TEXAS PORTION OF EL PASO MPO REGION

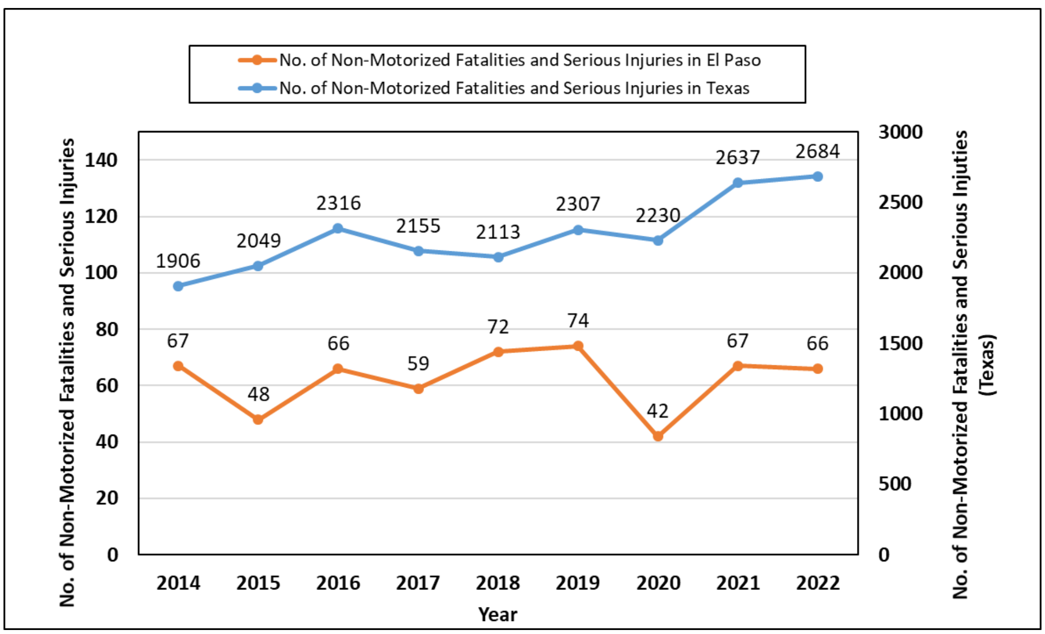


TABLE 2.6: TEXAS - 2023 SAFETY PERFORMANCE TARGET ASSESSMENT

Performance Measure	Desired Trend	Original Targets 2019-2023	Baseline[1] 2019-2023	New Targets 2026
Number of Fatalities	⬇	3,682	4138.8	4,506
Fatality Rate (per 100 million VMT)	⬇	1.38	1.456	1.44
Number of Serious Injuries	⬇	17,062	17,523	18,884
Rate of Serious Injuries (per 100 million VMT)	⬇	6.39	6.138	6.3
Number of Non-Motorized Fatalities and Serious Injuries	⬇	2,357	2525.6	2,802

[1]Baseline is the actual 5y Average.
Baseline numbers colored in red means the target was not met.
Baseline numbers colored in green means the target was met.

NMDOT (PM1) TRENDS AND TARGETS

In setting the 2026 safety targets, NMDOT and stakeholders did not rely solely on the crash data projections but used the data in combination with their discussions regarding other relevant factors and their assessment of the potential safety impacts of various strategies and projects. Since NMDOT's Target Zero 2050 initiative implementation is still underway, targets were not yet changed. Efforts are being made to reflect the anticipated decline in crashes as the initiative advances.

FIGURE 9: NUMBER OF FATALITIES IN NEW MEXICO

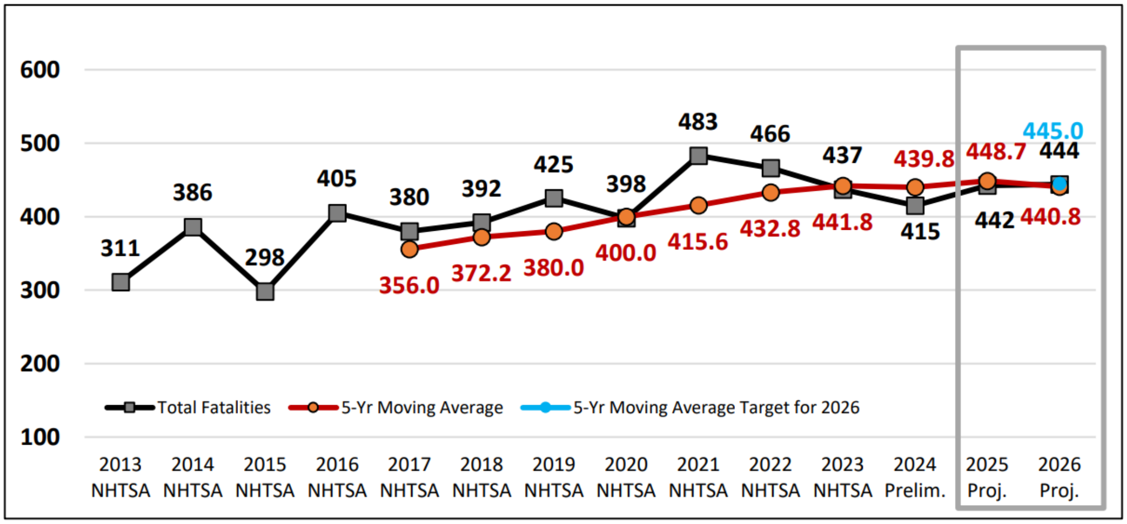


Figure 1 Total Fatalities

NMDOT 2026 Target for Total Fatalities: 445.0

FIGURE 10: FATALITY RATE (PER 100 MILLION VMT) IN NEW MEXICO

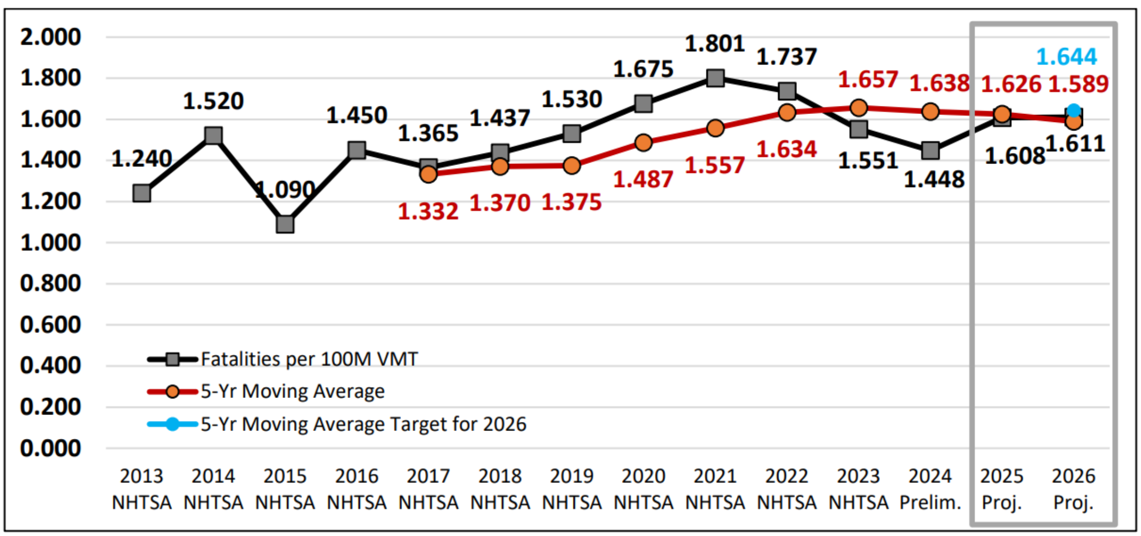


Figure 3 Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)

NMDOT 2026 Target for Rate of Fatalities: 1.644

FIGURE 11: NUMBER OF FATALITIES IN NEW MEXICO PORTION OF EL PASO MPO REGION

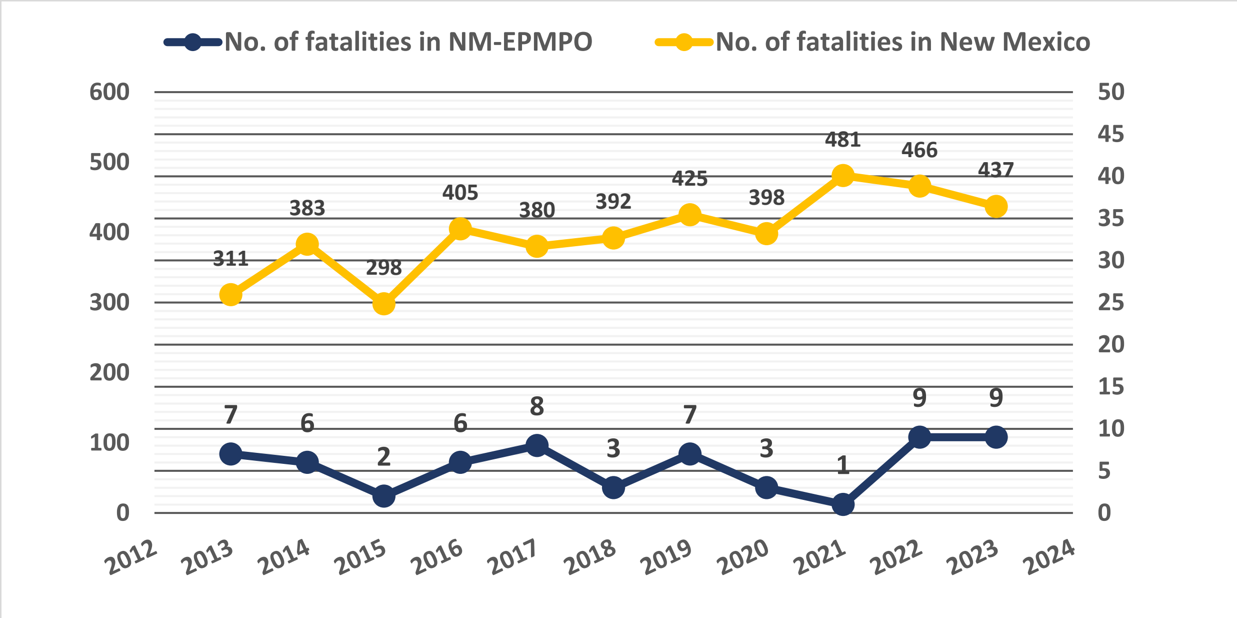


FIGURE 12: NUMBER OF SERIOUS INJURIES IN NEW MEXICO

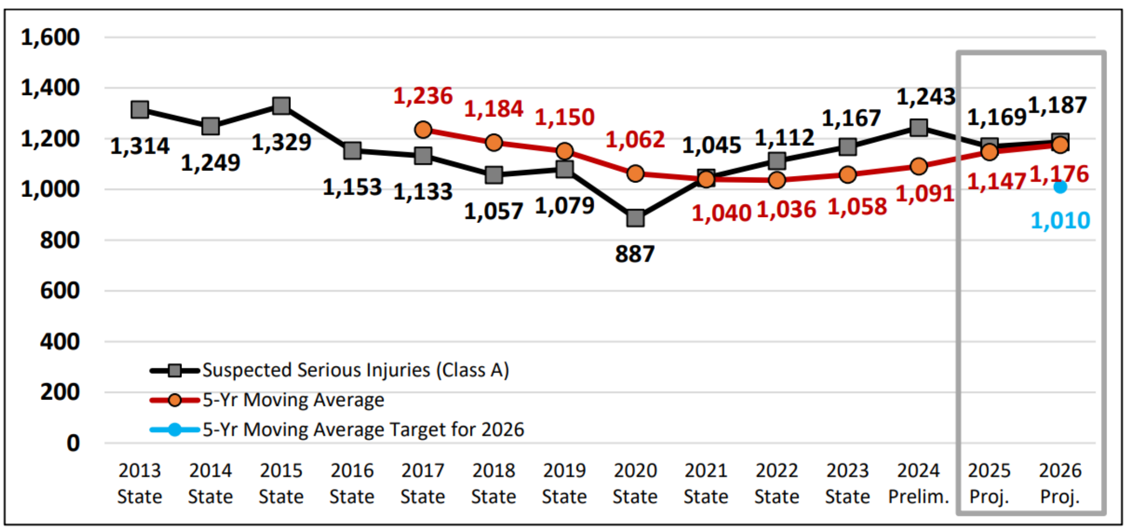


Figure 2 Total Serious Injuries

NMDOT 2026 Target for Serious Injuries: 1,010.0

FIGURE 13: RATE OF SERIOUS INJURIES (per 100 million VMT) IN NEW MEXICO

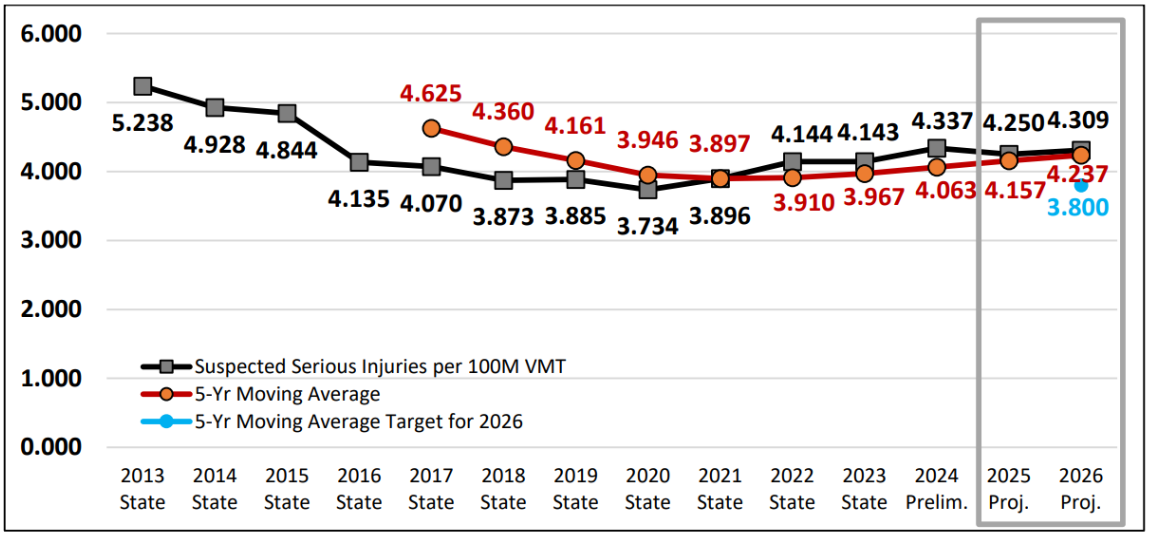


Figure 4 Rate of Serious Injuries per 100 million Vehicle Miles Traveled (VMT)

NMDOT 2026 Target for Rate of Serious Injuries: 3.800

FIGURE 14: NUMBER OF SERIOUS INJURIES IN NEW MEXICO PORTION OF EL PASO MPO REGION

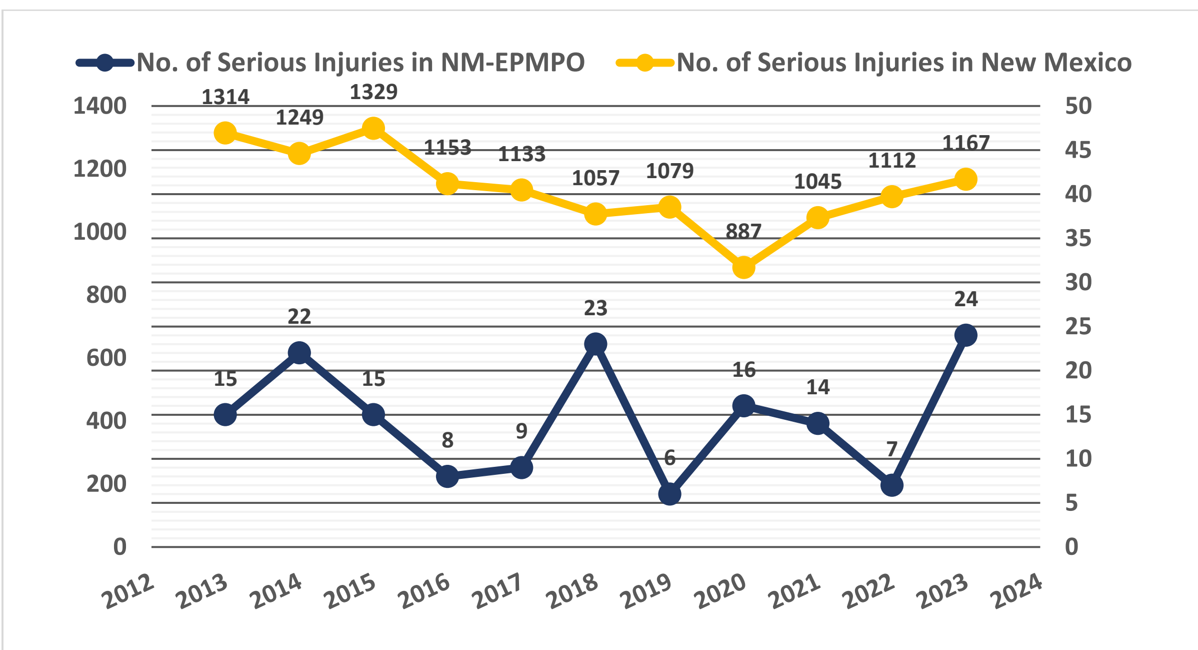


FIGURE 15: NUMBER OF NONMOTORIZED FATALITIES AND SERIOUS INJURIES IN NEW MEXICO

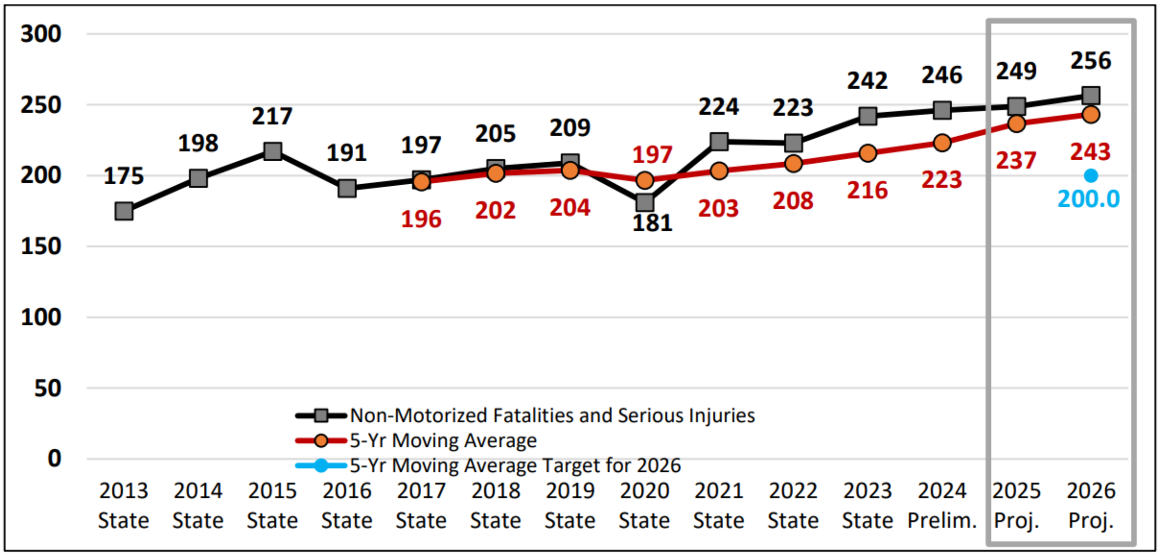


Figure 5 Total Non-Motorized Fatalities and Serious Injuries

NMDOT 2026 Target for Number of Non-motorized Fatalities and Serious Injuries: 200.0

FIGURE 16: NUMBER OF NON-MOTORIZED FATALITIES AND SERIOUS INJURIES IN NEW MEXICO PORTION OF EL PASO MPO REGION

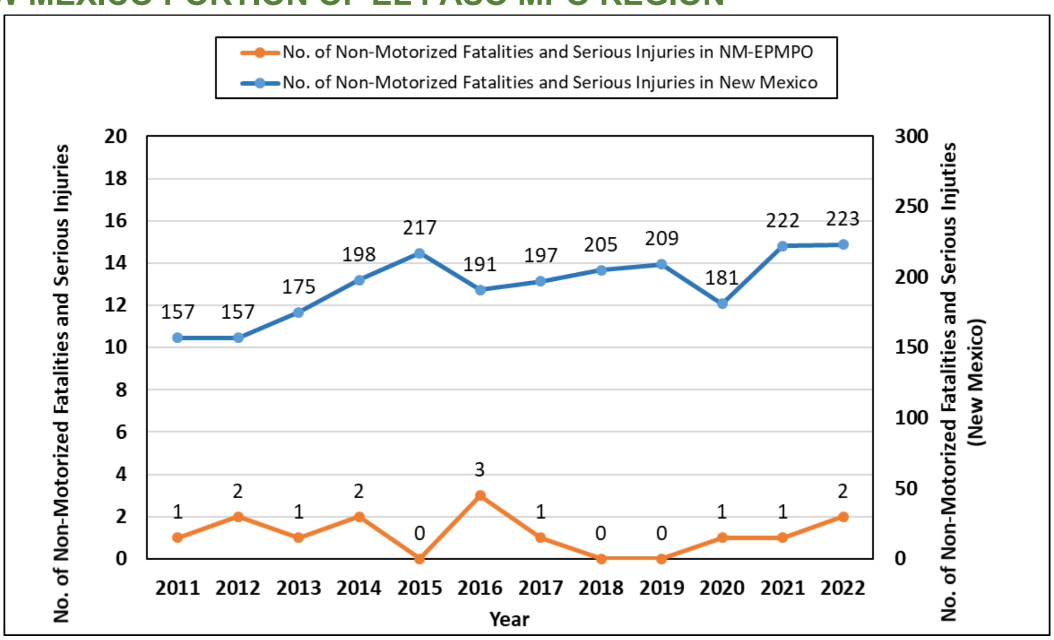


TABLE 2.7: NEW MEXICO- 2023 SAFETY PERFORMANCE TARGET ASSESSMENT

Performance Measure	Desired Trend	Original Targets 2019-2023	Baseline[2] 2019-2023	New Targets 2026
Number of Fatalities	↓	446.6	441.8	445
Fatality Rate (per 100 million VMT)	↓	1.695	1.660	1.644
Number of Serious Injuries	↓	995.4	1,058	1010
Rate of Serious Injuries (per 100 million VMT)	↓	3.801	3.960	3.8
Number of Non-Motorized Fatalities and Serious Injuries	↓	199.4	215	200.0

[2]Projected value obtained from NMDOT Performance Measure (PM) Target Report- PM1 2026 Safety Targets.
Baseline numbers colored in red means the target was not met.
Baseline numbers colored in green means the target was met

INFRASTRUCTURE CONDITION (PM2)

Texas state targets for Infrastructure Condition adopted by EPMPO Transportation Policy Board are presented in the Table 8. 2-year and 4-year targets for FY 2024 and FY 2026 were adopted on May 19, 2023 and revised on March 21, 2025 at the midpoint performance review. EPMPO chose to continue supporting state's targets for the second performance period.

TABLE 2.8: INFRASTRUCTURE CONDITION – TEXAS STATE TARGETS

PM2: INFRASTRUCTURE CONDITION	Baseline	2-Yr Target	4-Yr Target
	2022	2024	2026
Percent of Pavements of the Interstate System in Good Condition	64.5%	63.9%	63.6%
Percent of Pavements of the Interstate System in Poor Condition	0.1%	0.2%	0.2%
Percent of Pavements of the Non-Interstate NHS in Good Condition	51.7%	45.5%	46.0%
Percent of Pavements of the Non-Interstate NHS in Poor Condition	1.3%	1.5%	2.5%
Percent of NHS Bridges Classified as in Good Condition	49.2%	48.5%	47.6%
Percent of NHS Bridges Classified as in Poor Condition	1.1%	1.5%	1.5%

The New Mexico state 2-year and 4-year targets for FY 2024 and FY 2026 were adopted by the Transportation Policy Board on May 19, 2023 and revised by that body on March 21, 2025 at the midpoint performance review. EPMPO chose to continue supporting state's targets for the second performance period (Table 9). State DOTs will report third performance period PM2 2-year and 4-year performance targets and baseline condition by October 2026. EPMPO will then have the option to support new state targets or establish their owned target.

TABLE 2.9: INFRASTRUCTURE CONDITION – NEW MEXICO STATE TARGETS

PM2: INFRASTRUCTURE CONDITION	Baseline	2-Yr Target	4-Yr Target
	2022	2024	2026
Percent of Pavements of the Interstate System in Good Condition	54.0%	42.7%	37%
Percent of Pavements of the Interstate System in Poor Condition	1.7%	3.2%	3.8%
Percent of Pavements of the Non-Interstate NHS in Good Condition	36.7%	40.6%	38.4%
Percent of Pavements of the Non-Interstate NHS in Poor Condition	2.6%	3.2%	3.9%
Percent of NHS Bridges Classified as in Good Condition	36.2%	30.8%	25.0%
Percent of NHS Bridges Classified as in Poor Condition	2.4%	4.1%	5.0%

By agreeing to support the PM2 states' targets the El Paso MPO agrees to:

- Work with the states and relevant stakeholders to address areas of concern for pavement and bridge condition within the metropolitan planning area.
- Coordinate with the states and include the infrastructure condition targets for those measures in the long-range regional transportation plan (MTP).
- Integrate into the metropolitan transportation planning process, the infrastructure goals, objectives, performance measures and targets described in other state transportation plans and processes.
- Include a description in the TIP (Transportation Improvement Program) of the anticipated effect of the TIP toward achieving pavement and bridge condition targets in the MTP, linking investment priorities in the TIP to those infrastructure condition targets.

ANALYSIS OF TRANSPORTATION IMPROVEMENT PROGRAM (TIP) FY 2027 – FY 2030; INFRASTRUCTURE CONDITION PROJECTS

Several projects programmed in the Amended RMS 2050 MTP and the 2027-2030 TIP have been identified to have an infrastructure condition element as part of the project selection criteria and thus help work towards maintaining the highway infrastructure asset system in a state of good repair. These projects include:

- Buffalo Soldier Street Improvements from Edgemere Blvd to Montana Ave. The project includes complete roadway reconstruction, parkway improvements, sidewalks, bicycle facilities, street illumination, landscaping and irrigation and striping.

- Delake Street Construction. The project includes construction of a two-lanes roadway with enhanced pedestrian facilities, bike lanes and illumination to provide access to the Horizon City Transit Oriented Town Center.
- FM1110 Widening Phase 1 – FM76 (North Loop) to I-10* - Construct and upgrade to 4 lane divided arterial
- FM1110 Widening Phase 2 New Location – SH20 (Alameda to FM76 North Loop* - Construct a new 4 lane divided arterial
- I-10 Frontage Roads from FM1110 (Clint Rd) to FM793 (Fabens Rd)* - Construct frontage roads 2 lanes each direction
- I-10 Frontage Roads from FM793 (Fabens Rd) to FM3380 (Aguilera International Highway)*- Construct frontage roads 2 lanes each direction
- Saul Kleinfeld Street Improvements - Project includes complete roadway reconstruction, parkway improvements, bicycle facilities, landscaping and irrigation, and striping on Saul Kleinfeld Dr from Montwood Dr to Pebble Hills Blvd.
- Sun Valley Gateway North to Kenworthy - Project includes complete roadway reconstruction, road diet, parkway improvements, bike facilities, street illumination, landscaping & irrigation, & striping on Sun Valley from Gateway Blvd N to Kenworthy St.
- US 62/180 (Montana Ave.) Expressway & Frontage Roads Phase II. Construct 6 lane (expressway) main lanes eastbound/westbound with auxiliary lanes and grade separations at intersections from Tierra Este Rd. to FM 659 (Zaragoza Rd). Build 2 lane westbound/eastbound frontage roads in each direction from Tierra Este Rd to FM 659 (Zaragoza Rd.). Reconstruct 6 lane westbound/eastbound mainlanes from Global Reach Dr. to Lee Trevino Dr. to include auxiliary lanes and grade separation at intersection. Reconstruct existing eastbound frontage road from Global Reach Dr. to Tierra Este Rd in concrete (no added capacity). Work includes drainage, advanced signing, striping
- US 62/180 (Montana Ave.) Expressway & Frontage Roads Phase IIA.- Construction of bridge overpass

SUMMARY OF STATE INFRASTRUCTURE CONDITION PERFORMANCE MEASURES AND TARGETS FOR TXDOT AND NMDOT

The information below summarizes the Highway Infrastructure performance measures, which include four pavement condition measures and two bridge condition measures. Per 23 CFR 490, State Departments of Transportation (DOTs) are required to establish 2- and 4-year targets for these measures. The targets should represent the anticipated condition/performance at the mid-point and end of the 4-year performance period.

State DOTs establish targets at the beginning of each 4-year performance period, and report on progress every two years. When establishing targets, State DOTs have the flexibility to use the methodology they deem most appropriate. FHWA encourages States to review data sets and trends and consider factors that may affect targets. Performance targets should be data-driven, realistic, and attainable and should align with the performance management framework and legislative intent.

TxDOT (PM2) TRENDS AND TARGETS

Interstate pavements are evaluated based on International Roughness Index (IRI) and pavement surface distress (Rutting, Faulting and Cracking Percent).

For Non-Interstate NHS system pavements there was a transition provision due to the existing pavement data collection cycles. For the first performance period DOTs had the option to set the target based on IRI only or IRI and other surface distresses. Moving forward, TXDOT will be using all distress measures as required by FHWA. However, for the first performance period, TxDOT set the targets using the IRI measure only.

TABLE 2.10: SUMMARY OF PAVEMENT MEASURES TRENDS IN TEXAS

Highway	Performance Measure	2019	2020	2021	2022
IH	Good	65.7%	66.6%	65.8%	64.5%
	Poor	0.2%	0.1%	0.1%	0.1%
Non-IH (NHS)	Good (IRI* Only)		55.2%	54.5%	57.8%
	Good	46.8%	49.2%	48.5%	51.7%
	Poor (IRI* Only)		13.5%	13.7%	11.6%
	Poor	1.2%	1.4%	1.3%	1.3%

For the percent of NHS Bridges classified as in good condition, TxDOT acknowledges the fact that the percent of bridges continue to be on a downward trend and that trend is expected to continue in the short term. TxDOT has renewed its efforts in pursuing more maintenance activities (preservation and rehabilitation) for bridges and tracking those activities, but the results of those efforts may not be seen in the data for a few years.
Fort the percent of NHS Bridges classified as in poor condition, TxDOT has a few large deck area bridges that are in fair condition and approaching poor condition. A consequence of having such low percentage of bridges in poor condition in the EPMPO planning area is that only a few bridges approaching poor condition can have a noticeable impact on the total percentage.

FIGURE 17: PERECENT OF NHS BRIDGES CLASSIFIED AS IN GOOD CONDITION IN TEXAS

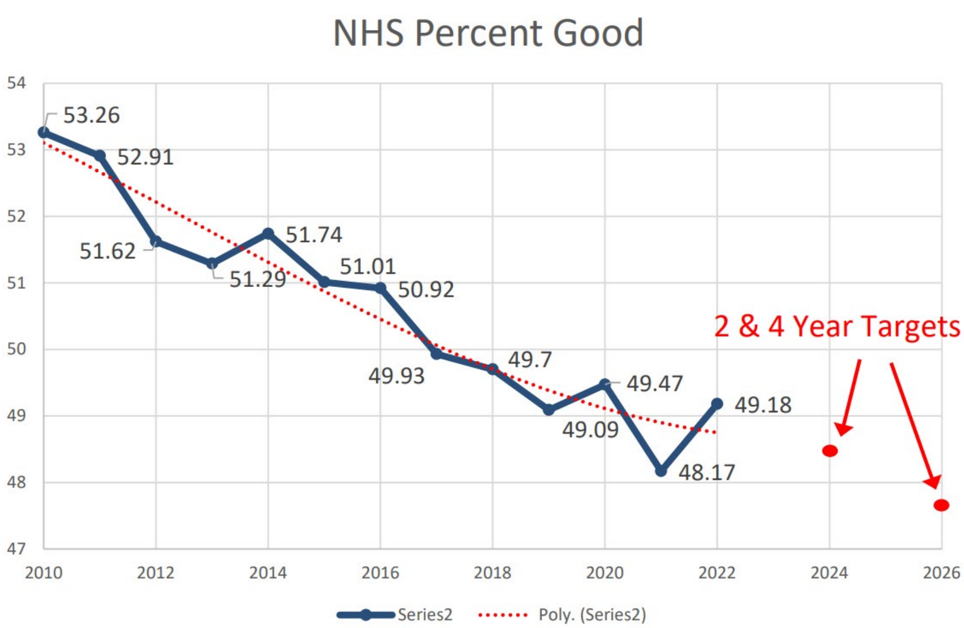


FIGURE 18: PERECENT OF NHS BRIDGES CLASSIFIED AS IN POOR CONDITION IN TEXAS

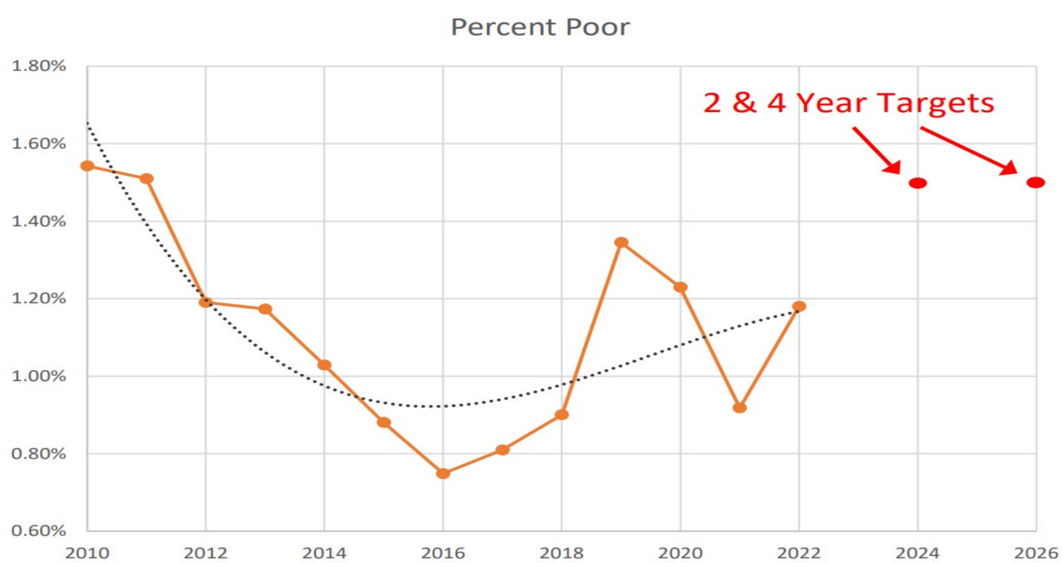


TABLE 11: TEXAS- 2026 INFRASTRUCTURE PERFORMANCE TARGET ASSESSMENT

Performance Measure	Desired Trend	Original Targets (Revised 2025)		Baseline (2022)	New Targets Forecast/Trend	
		2024	2026		2024	2026
Percent of IH Pavements in Good Condition	↗	63.9%	63.6%	64.5%	63.9%	63.6%
Percent of IH Pavements in Poor Condition	↘	0.2%	0.2%	0.1%	0.2%	0.2%
Percent of Non-IH (NHS) Pavements in Good Condition (IRI Only)				57.8%		
Percent of Non-IH (NHS) Pavements in Good Condition	↗	45.5%	46%	51.7%	45.5%	46%
Percent of Non-IH (NHS) Pavements in Poor Condition (IRI Only)				11.6%		
Percent of Non-IH (NHS) Pavements in Poor Condition	↘	1.5%	1.5%	1.3%	1.5%	2.5%
NHS Bridges – Good	↗	48.5%	47.6%	49.2%	47.6%	47.6%
NHS Bridges – Poor	↘	1.5%	1.5%	1.1%	1.5%	1.5%

Baseline numbers colored in red means the target was not met.
Baseline numbers colored in green means the target was met

NMDOT (PM2) TRENDS AND TARGETS

NMDOT established the targets based on anticipated future revenue for the next ten years. All distresses and IRI were used for the first performance period as well as the second performance period targets. Annual funding allocation is entered to predict an annual pavement condition rating for each system. The future condition was based on data collected during calendar years 2016-2021 and predicting future condition each year for the ten-year analysis period. Tables 12 and 13 show the collected data for years 2018-2022.

TABLE 12: SUMMARY OF PAVEMENT MEASURES TRENDS IN NEW MEXICO

Highway	Performance Measure	2018	2019	2020	2021	2022
IH	Good	70.8	55	56.4	54	61.1
	Poor	0.3	0.9	1.2	1.7	1.3
Non-IH (NHS)	Good	--	35.8	38.9	36.7	40.1
	Poor	--	2.5	2.5	2.6	3.0

TABLE 2.13: SUMMARY OF BRIDGE MEASURES TRENDS IN NEW MEXICO

Performance Measure	2018	2019	2020	2021	2022
NHS Bridges - Good	38%	37.6%	36.8%	36.2%	35.0
NHS Bridges - Poor	3.1%	3.1%	2.9%	2.4%	2.7

TABLE 2.14: NEW MEXICO - 2026 INFRASTRUCTURE PERFORMANCE TARGET ASSESSMENT

Performance Measure	Desired Trend	Original Targets (4yr Revised 2025)		Baseline (2021)	New Targets Forecast/Trend	
		2023	2025		2023	2025
Percent of IH Pavements in Good Condition	↗	42.7%	37%	54.0%	42.7%	37%
Percent of IH Pavements in Poor Condition	↘	3.2%	3.8%	1.7%	3.2%	3.8%
Percent of Non-IH (NHS) Pavements in Good Condition	↗	40.6%	37.4%	36.7%	40.6%	38.4%
Percent of Non-IH (NHS) Pavements in Poor Condition	↘	3.2%	3.9%	2.6%	3.2%	3.9%
NHS Bridges – Good	↗	30.8%	32.9%	36.2%	30.8%	25%
NHS Bridges – Poor	↘	4.1%	5.5%	2.4%	4.1%	5.0%

Baseline numbers colored in red means the target was not met.
Baseline numbers colored in green means the target was met

SYSTEM RELIABILITY MEASURES (PM3)

Texas state targets for system performance and freight adopted by EPMPO Transportation Policy Board are presented in Table 15. 2-year and 4-year targets for FY 2024 and FY 2026 were adopted on May 19, 2023 and reaffirmed on March 21, 2025.

TABLE 2.15: SYSTEM RELIABILITY – TEXAS STATE TARGETS

PM3: SYSTEM RELIABILITY	Original Target	Baseline	2-Yr Target	4-Yr Target
	(Revised 2021)	2022	2024	2026
Interstate Reliability	70%	84.6%	70%	70%
Non-Interstate Reliability	70%	90.3%	70%	70%
Truck Travel Time Reliability	1.76	1.39	1.55	1.55

The New Mexico state 2-year and 4-year targets for FY 2024 and FY 2026 were adopted by the Transportation Policy Board on May 19, 2023 and reaffirmed on March 21, 2025. (Table 16). State DOTs will report third performance period PM3 2-year and

4-year performance targets and baseline condition by October 2026. EPMPO will then have the option to support new state targets or establish their owned target.

TABLE 2.16: SYSTEM RELIABILITY – NEW MEXICO STATE TARGETS

PM3: SYSTEM RELIABILITY	Original Target (Revised 2025)	Baseline 2022	2-Yr Target 2024	4-Yr Target 2026
Interstate Reliability	95.1%	98.5%	95.1%	90%
Non-Interstate Reliability	90.4%	97.5%	94.1%	90%
Truck Travel Time Reliability	1.15	1.23	1.30	1.40

By agreeing to support the System Performance & Freight (PM3) states' targets the El Paso MPO agrees to continue implementation of policies and programs aimed at maximizing the existing system capacity, reducing demand through implementation of travel demand management strategies, and strategically adding new interstate capacity.

ANALYSIS OF TRANSPORTATION IMPROVEMENT PROGRAM (TIP) FY 2027 – FY 2030; SYSTEM PERFORMANCE & FREIGHT PROJECTS

Several projects programmed in the RMS 2050 MTP and the 2023-2026 TIP have been identified to have a system performance/freight element as part of the project selection criteria and thus work towards improving the efficiency of the surface transportation system to meeting the targets. These projects include:

- Railroad Dr. Widening and Reconstruction. Addition of one lane in each direction from Purple Heart Highway to Shrub Oak to increase capacity from two to four lanes. The project includes road rehabilitation and reconstruction of existing roadway from Purple Heart Highway to Shrub Oak Drive.
- US54 (Patriot Fwy) Mainlanes (Kenworthy to FM2529) and Ramp Reconfiguration - Build 4 lane (2-lanes each direction) divided hwy and grade separations and ramp reconfiguration. Existing 3- lane arterials will become the frontage roads with connecting ramps
- Downtown 10 Executive to Copia Segment 1 Construction - Widen from 3/5 to 4/6 lanes each direction, add 2-lane frontage roads each direction, ramp and operational improvements, and bike/ped paths.
- FM1110 Widening Phase 1 – FM76 (North Loop) to I-10* - Construct and upgrade to 4 lane divided arterial
- FM1110 Widening Phase 2 New Location – SH20 (Alameda to FM76 North Loop* - Construct a new 4 lane divided arterial
- I-10 Frontage Roads from FM1110 (Clint Rd) to FM793 (Fabens Rd)* - Construct frontage roads 2 lanes each direction
- I-10 Frontage Roads from FM793 (Fabens Rd) to FM3380 (Aguilera International Highway)* - Construct frontage roads 2 lanes each direction
- Nuevo Hueco Tanks Extension – FM76 (North Loop) to SH20 (Alameda) - Build 4 lane roadway and shared-use path
- Sun Valley Gateway North to Kenworthy - Project includes complete roadway reconstruction, road diet, parkway improvements, bike facilities, street illumination,

landscaping & irrigation, & striping on Sun Valley from Gateway Blvd North to Kenworthy St.

- Quejette Rd Extension - The Quejette Rd Extension builds a two-lane paved road tying into north–south frontage roads, adding lighting, sidewalks, and stormwater upgrades to enhance mobility and multimodal safety
- US 62/180 (Montana Ave.) Expressway & Frontage Roads Phase II. Construct 6 lane (expressway) mainlanes EB/WB with auxiliary lanes and grade separations at intersections from Tierra Este Rd. to FM 659 (Zaragoza Rd). Build 2 lane WB/EB frontage roads in each direction from Tierra Este Rd to FM 659 (Zaragoza Rd). Reconstruct 6-lane WB/EB mainlanes from Global Reach Dr. to Lee Trevino Dr. to include auxiliary lanes and grade separation at intersection. Reconstruct existing eastbound frontage roads from Global Reach Dr. to Tierra Este Rd in concrete (no added capacity). Work includes drainage, advanced signing, striping
- US 62/180 (Montana Ave.) Phase II-A (Global Reach Dr.) Construction of Bridge Overpass – Construction of bridge overpass..

SUMMARY OF STATE SYSTEM RELIABILITY MEASURES AND TARGETS FOR TXDOT AND NMDOT

The information below summarizes the Transportation Performance Management (TPM) System Reliability performance measures, which includes two highway reliability measures and one truck travel time reliability measure. Per 23 CFR 490, State DOTs are required to establish 2- and 4-year targets for these measures.

The targets should represent the anticipated condition/performance at the mid-point and end of the 4-year performance period. State DOTs establish targets at the beginning of each 4-year performance period, and report on progress every two years. When establishing targets, State DOTs have the flexibility to use the methodology they deem most appropriate. FHWA encourages States to review data sets and trends and consider factors that may affect targets. Performance targets should be data-driven, realistic, and attainable, and should align with the performance management framework and legislative intent.

TxDOT (PM3) TRENDS AND TARGETS

For the system performance and freight (PM3) targets for TxDOT, the data showed fluctuations that cannot be accounted for with other similar data. As such, consistency, trends, or new norms cannot be established after the analysis. It is anticipated that the COVID-19 pandemic had a great impact on the ability to see a trend, and the traffic “bounce-back” (i.e., new normal) from the pandemic is unknown, so a conservative approach was applied.

FIGURE 19: INTERSTATE RELIABILITY IN TEXAS

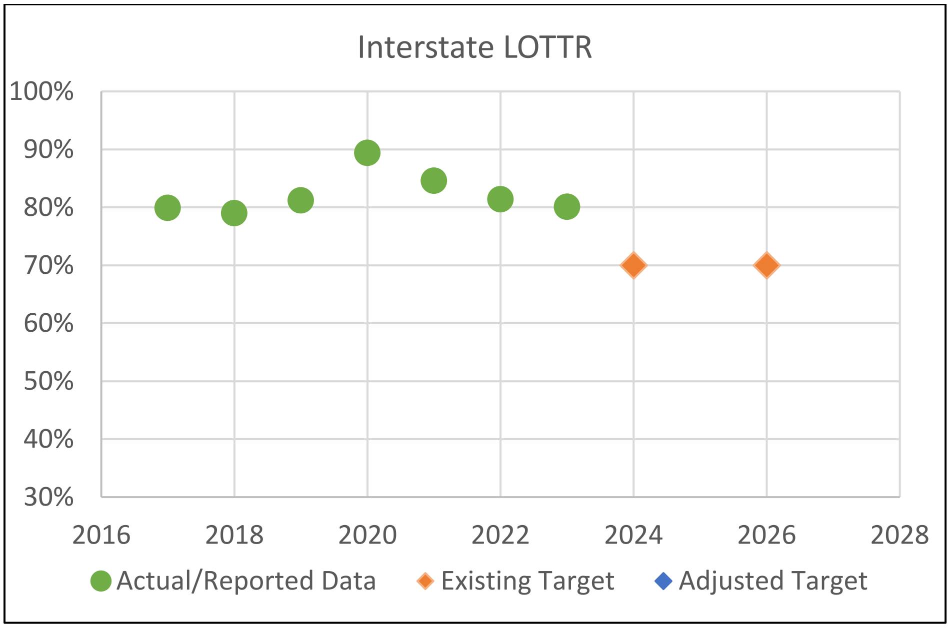


FIGURE 20: NON-INTERSTATE RELIABILITY IN TEXAS

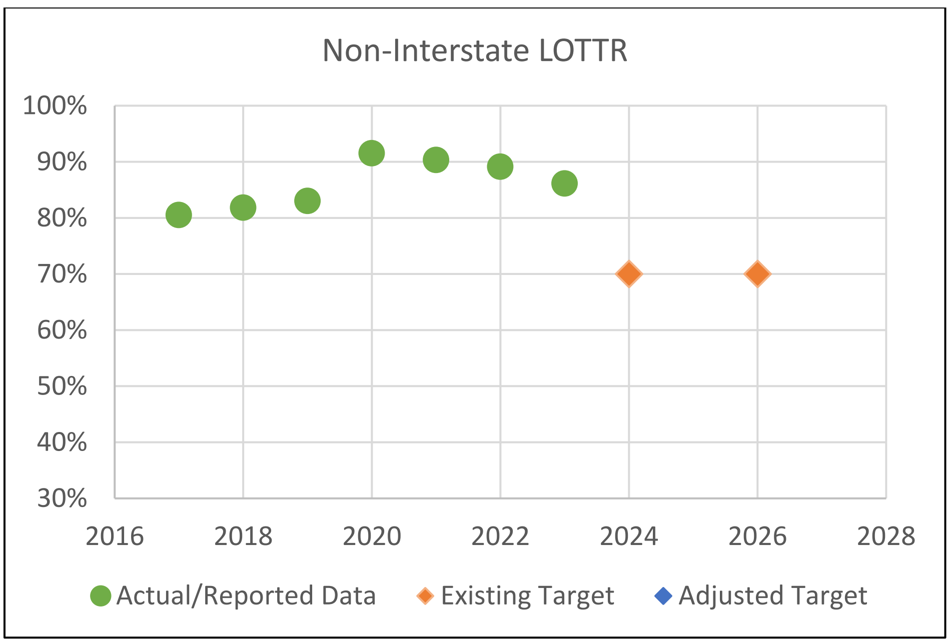


FIGURE 21: TRUCK TRAVEL TIME RELIABILITY IN TEXAS

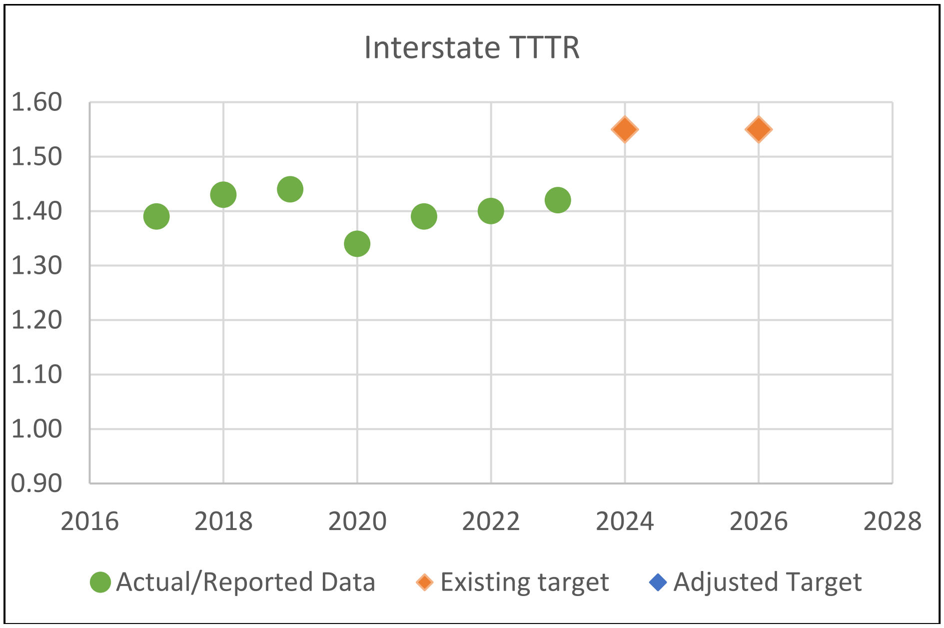


TABLE 2.17: TEXAS – SYSTEM RELIABILITY TARGET ASSESSMENT

Performance Measure	Desired Trend	Original Targets (Revised 2021)		Baseline[1] (2021)	New Targets Forecast/Trend	
		2010	2022		2024	2026
Interstate Reliability	↗	61.20%	70%	84.6%	70%	70%
Non-Interstate Reliability	↗	--	70%	90.3%	70%	70%
Truck Travel Time Reliability	↘	1.7	1.76	1.39	1.55	1.55

[1]Baseline is the actual 5y Average.
Baseline numbers colored in red means the target was not met.
Baseline numbers colored in green means the target was met.

NMDOT (PM3) TRENDS AND TARGETS

For NMDOT's Interstate Reliability target, the actual/reported data assisted in NMDOT's decision to retain the prior target of 95.1% for both the 2- and 4-year targets. The Non-Interstate Reliability target is 1% less than the Interstate targets. NMDOT believes this represents an acceptable level of reliability and investment in reliability.

FIGURE 22: INTERSTATE RELIABILITY IN NEW MEXICO

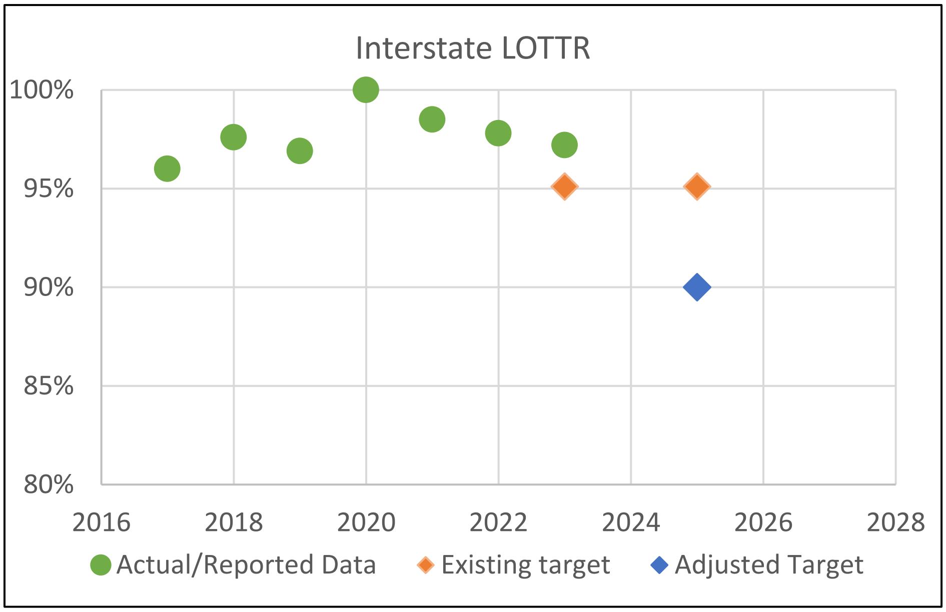


FIGURE 23: NON-INTERSTATE RELIABILITY IN NEW MEXICO

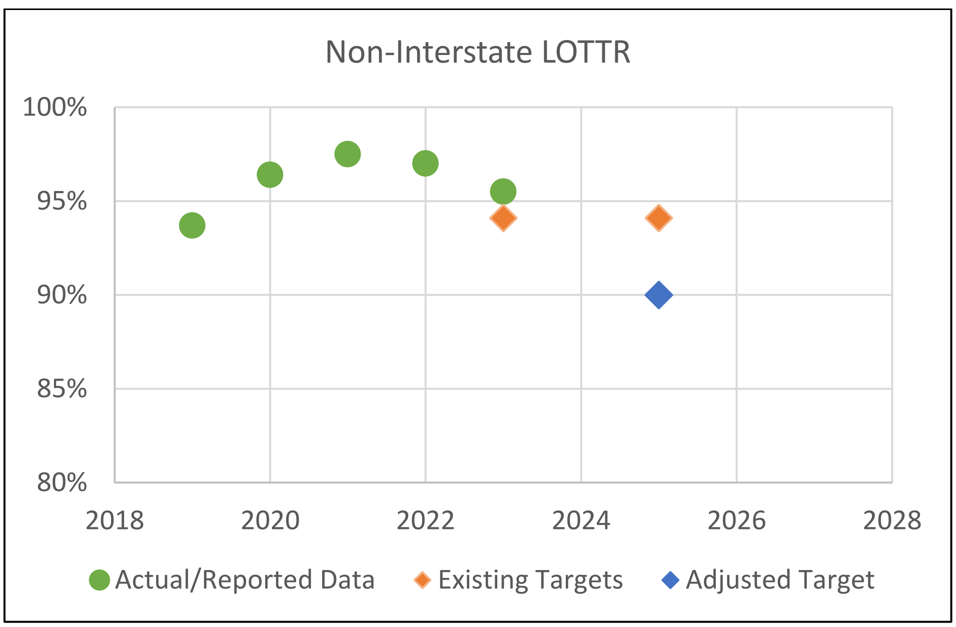


FIGURE 24: TRUCK TRAVEL TIME RELIABILITY IN NEW MEXICO

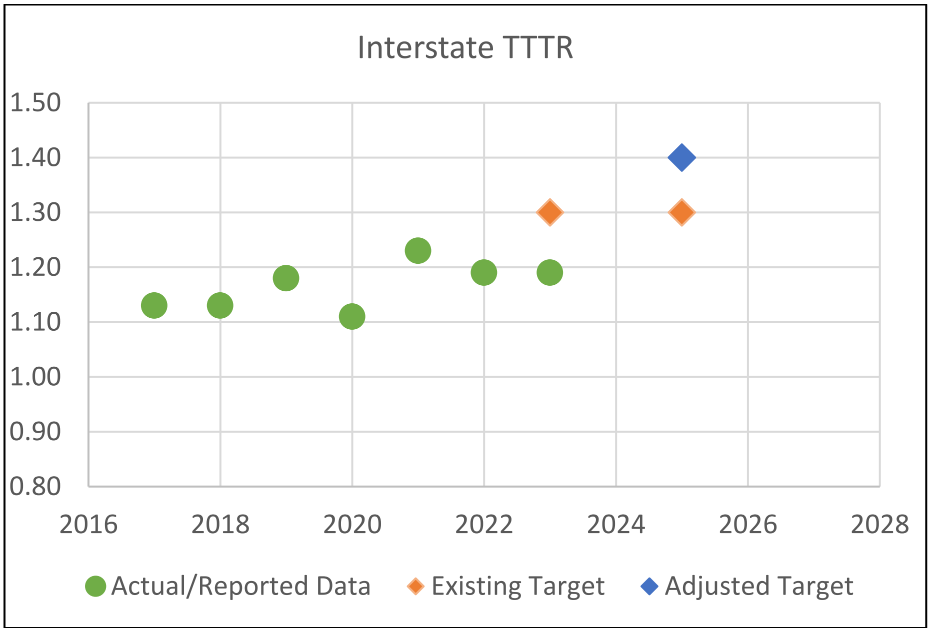


TABLE 2.18: NEW MEXICO – SYSTEM RELIABILITY TARGET ASSESSMENT

Performance Measure	Desired Trend	Original Targets (Revised 2021)	Baseline[1] (2021)	New Targets Forecast/Trend	
				2023	2025
Interstate Reliability	↗	95.1%	98.5%	95.1%	90%
Non-Interstate Reliability	↗	90.4%	97.5%	94.1%	90%
Truck Travel Time Reliability	↘	1.15	1.23	1.30	1.40

[1]Baseline is the actual 5y Average.
Baseline numbers colored in red means the target was not met.
Baseline numbers colored in green means the target was met.

TRAFFIC CONGESTION & ON-ROAD MOBILE SOURCE EMISSIONS REDUCTION (CMAQ) PERFORMANCE MEASURES (PM3)

Nonattainment MPOs are required to establish targets and report progress for the performance measures related to the Congestion Mitigation and Air Quality (CMAQ) program as established in 23 CFR Part 490 (§ 490.707 and § 490.807) for on-road mobile source emissions. As of the effective date for pollutant target setting, EPMPO was the only Carbon Monoxide (CO) and Particulate Matter-10 (PM-10) nonattainment area in

Texas and the only PM-10 and Ozone (NOx, VOC) nonattainment area in New Mexico. Methodologies and Emission Targets for these measures have been mutually agreed upon by EPMPO, TxDOT-Transportation Planning and Programming Division and NMDOT-Planning Division.

The effectiveness of the Congestion Mitigation and Air Quality Improvement Program is gauged by the following measures:

- Annual Hours of Peak Hour Excessive Delay Per Capita (PHED)
- Percent of Non-SOV travel
- Total Emissions Reduction: Ozone (NOx, VOC)
- Total Emissions Reduction: Particulate Matter less than or equal to 10 microns (PM-10)
- Total Emissions Reduction: Carbon Monoxide (CO)

Unlike the other measures, the CMAQ traffic congestion measures initially only applied to urbanized areas of more than one million population, in all or part of a nonattainment or maintenance area for ozone, carbon monoxide or particulate matter. For the second performance period, the population threshold for the congestion measure dropped to 200,000. Therefore, this is the first time EPMPO is required to establish emission targets for the two traffic congestion measures. The second performance period for the two traffic congestion measures (PHED and Non-Single Occupancy Vehicle Travel, or SOV) began on January 1, 2022, and ran through December 31, 2025. (23 CFR 490.105 (e)(4)). EPMPO will report PHED and Non-Single Occupancy Vehicle Travel baseline condition and 2-year and 4-year targets for the full third performance period by October 1, 2026

Traffic congestion and on-road mobile source emission reduction targets adopted by EPMPO Transportation Policy Board on August 19, 2022 are presented below. The traffic congestion targets are presented in Tables 19 and On-Road Mobile Source Emission Targets are presented in Tables 20 and 21.

Given that there is currently no penalty associated with a failure to achieve PHED targets, and that EPMPO can adjust them at the mid-performance report (with the benefit of two more years of data), EPMPO is recommending the 4-8 p.m. peak period and therefore setting a target of no more than nine hours of peak hour excessive delay for the 2-year target, and then hours for the 4-year target as suggested by the analysis developed by the Texas A &M Transportation Institute (TTI).

For Non-SOV, the MPO is using the American Community Survey (ACS) to establish targets. Looking at the estimates provided by TTI, EPMPO proposed to set both the 2-year and 4-year targets at 20%. On August 23, 2024, the MPO proposed to adjust the 4-year target to 22% based on the latest data available. Using these targets, the goal for this performance period will be to maintain current mode shares. These targets can be adjusted when additional data is available at the mid-performance period report in two years.

TABLE 2.19: TRAFFIC CONGESTION TARGETS – EL PASO, TX-NM URBANIZED AREA

PM3: TRAFFIC CONGESTION	2022 Baseline Score (2021 Actual)	2-Yr Target 2023	4-Yr Target 2025
Annual Hours of Peak Hour Excessive Delay (PHED)	8.4	9	10
Percent of Non-Single Occupancy Vehicle (Non-SOV)	20.2%	20%	22%

SUMMARY OF STATE ON-ROAD MOBILE SOURCE EMISSIONS REDUCTION MEASURES AND TARGETS FOR TXDOT AND NMDOT

The information below summarizes the Transportation Performance Management (TPM) On-Road Mobile Source Emissions Reductions performance measures.

The first performance period for the on-road mobile source emissions measure was from October 1, 2017 through September 30, 2021. The second performance period was from October 1, 2021, and continued through September 30, 2025. The list of urban areas in the United States as defined by the United States Census Bureau, ordered according to their 2020 census populations ranks El Paso TX-NM as 23rd, with a population of 841,286. For this current performance period, EPMPO is not subject to 2-year targets or the requirement of a CMAQ Performance Plan because its population is less than the minimum threshold of 1 million people.

Due to the applicability tables being released before the Ozone determination for El Paso County, EPMPO does not need to report Ozone emissions (VOC, NOX) for Texas for the Second Performance Period, only for the New Mexico which applies exclusively to Sunland Park, NM. For Texas, the Ozone emissions and targets will be reported for the Full Third Performance Period due October 1, 2026.

In order to establish EPMPO emissions targets for the Texas portion of the MPO, EPMPO and Texas DOT established a methodology that compares CMAQ project emissions from the FHWA User Profile and Access Control System (UPACS) and EPMPO Transportation Improvement Program (TIP) over the past 4-years to develop targets for the future 4-year CMAQ program. The EPMPO applied most recent data available and updated 4-year target on September 2024. The latest observed values and adopted targets are reported in Table 2.20

TABLE 2.20: CMAQ – TEXAS STATE TARGETS

PM3: TRAFFIC CONGESTION	Baseline 2022	2-Yr Target 2023	4-Yr Target 2025
Total Emissions Reduction: PM-10 (KG/DAY)	5.42	4.54	170.05
Total Emissions Reduction: CO (KG/DAY)	216.50	175.75	1374.38

New Mexico is included in the list of 42 State DOTs required to establish targets and report performance for On-road Mobile Source Emissions (Total Emissions Reduction measure for Criteria Pollutants). The measure is limited to nonattainment or maintenance areas, which in New Mexico applies exclusively to the Sunland Park, Anthony and southern Doña Ana County area, which is within the EPMPO planning area. Specifically, this area is in non-attainment for PM 10 and Ozone. For the Ozone non-attainment designation, EPMPO and NMDOT are required to establish targets and monitor performance for the two precursor pollutants – Nitrogen Oxide (NOx) and Volatile Organic Compounds (VOC).

EPMPO coordinates with NMDOT on programming New Mexico CMAQ funds allocated to EPMPO. It was, therefore, mutually agreed upon by NMDOT and EPMPO to develop 4-year targets for applicable criteria pollutants – in this case PM 10, NOx and VOC- for the state of New Mexico by developing a benefit ratio analysis using the ratio of benefits reported in 2018 to those reported in 2021 for the Texas and New Mexico EPMPO portion and applying the ESTABLISHED emission targets for Texas (second performance period) to estimate future emissions targets in the New Mexico portion of EPMPO planning area.

By using the Texas methodology as a base, EPMPO and NMDOT are making assumptions that the future (2 years and 4 years) New Mexico CMAQ project(s) quantifiable emissions will be the same in New Mexico as in Texas based on type of projects, methodology used to quantify projects, data, assumptions, etc. This is not likely to be the case, but this methodology gives EPMPO and NMDOT reasonable projections in order to set targets for this reporting period.

These targets and this methodology may be examined and additional data gathered at the mid-point of the performance period. At the time the 4-year target may be adjusted if more reliable data is available (23CFR Part 490 Subparts A, E, F, G & H). These quantifiable targets are reflective of the anticipated cumulative emission reductions for EPMPO to be reported in the CMAQ Public Access System as required in 23 CFR 490.105 for establishing targets for MPOs. The EPMPO used the most recent data available and updated 4-year target on September 2024. The latest observed values and adopted targets are reported in Table 2.21

TABLE 2.21: CMAQ – NEW MEXICO STATE TARGETS

PM3: TRAFFIC CONGESTION	Baseline 2022	2-Yr Target 2023	4-Yr Target 2025
Total Emissions Reduction: PM-10 (KG/DAY)	0.009	0.0021	0.078
Total Emissions Reduction: VOC (KG/DAY)	0.057	0.0108	0.080
Total Emissions Reduction: NOX (KG/DAY)	0.036	0.0032	0.0043

ANALYSIS OF TRANSPORTATION IMPROVEMENT PROGRAM (TIP) FY 2027-2030; TRAFFIC CONGESTION & CMAQ PROJECTS

Several projects programmed in the RMS 2050 MTP and the 2027-2030 TIP have been identified as part of the project selection criteria to enhance the performance of the transportation system while protecting and enhancing the natural environment and thus work towards meeting the CMAQ targets. These projects include:

- Edgemere and John Hayes Roundabout – This project consists of construction of new two-lane roundabout at Edgemere and John Hayes. Includes pedestrian improvements, hawks, signage, striping, and ramps for cyclists.
- 4-D Tigua Spur of Paso del Norte Trail - A 12-foot shared-use path for bicyclists and pedestrian along the Franklin Feeder canal (4-B Socorro Spur of PDN Trail)
- Montwood and Sunfire Roundabout – entails two-lane roundabout at Montwood and Sunfire. Includes pedestrian improvements, hawks, signage, striping, bicycle lanes on all roundabouts, and ramps for cyclists.
- Paul Harvey Park Trail - Construction of a shared-use path from Paul Harvey Park to the Westside Natatorium. Project runs on social trail behind Bluff Canyon Circle/Bel Mar Ave on to Mesa Hills Dr
- Playa Drain Hike and Bike Trail (Knights to Midway) - Pedestrian and bicycle facilities with signage, sidewalks, landscaping, furnishings and Illumination.
- Saul Kleinfeld Street Improvements - Project includes complete roadway reconstruction, parkway improvements, bicycle facilities, landscaping and irrigation, and striping on Saul Kleinfeld Dr from Montwood Dr to Pebble Hills Blvd.
- Sunland Park Hike and Bike Shared Use Path – Construction of a pedestrian and bicycle facility with associated signage, landscaping and irrigation, furnishings, and illumination.

TRANSIT ASSET MANAGEMENT (TAM)

Initial targets were adopted in September 2018 in cooperation with local and state partners. In February 2023, the EPMPO TPAC reviewed the existing plans and recommended that the TPB adopt an updated mixture of targets from TxDOT and Sun Metro for the EPMPO. These new targets include track segment performance, to reflect the opening of the El Paso Streetcar. Sun Metro may have agency-level targets that differ from the EPMPO adopted targets. These agency-level targets may better meet their needs in planning for state of good repair for Sun Metro. EPMPO will continue to coordinate with Sun Metro to report, track, and adjust the targets over time to meet the El Paso MPO targets.

TABLE 2.22: EPMPO TRANSIT ASSET MANAGEMENT 4 YEAR TARGETS

TAM 2026 TARGET	TxDOT	NMDOT	SUN METRO	ETA
% revenue vehicles at or exceeding useful life benchmark	<15%	<20%	• <15% Buses • <10% Articulated buses, cutaway buses, and automobiles • <20% Streetcar	• 5% Cutaway Buses • 0% Van
% service vehicles (non-revenue) at or exceeding useful life benchmark	<15%	<20%	<15%	0%
% facilities rated below 3 on condition scale (TERM)	<15%	<20%	<15%	75%
% track segments with performance restrictions	N/A	N/A	>95%	N/A

As part of the FAST Act, performance measures were incorporated for transit agencies, primarily through the TAM assessment and planning requirements. Sun Metro's TAM plan was developed to meet that requirement. Sun Metro continuously seeks grants through the regional MPO in order to supplement the competitive and formula funding grants available from the FTA. Primarily Sun Metro applies for FHWA Congestion Mitigation and Air Quality (CMAQ) and Surface Transportation Program (STP) funding through the MPO. Funding from these grants are crucial to the agency's State of Good Repair program and the resulting TAM Plan. CMAQ funds provide for new and replacement bus funding, to include vehicles needed for new and extended services. Funding also allows for new or enhancements of terminals and stops to include accessibility and passenger amenities if associated with new or extended services. STP provides similar funding but without the new or extended service requirements. This grant funding not only permits Sun Metro to provide efficient and dependable service but supplements funding from other sources necessary to maintain State of Good Repair standards.

As a Tier II public transportation provider, South Central Regional Transit District (SCRTD) elects to participate in a group TAM plan developed by NMDOT. In February 2023 EPMPO adopted TAM targets for the New Mexico portion of the MPO planning area that match those included in the NMDOT Group TAM plan.

PUBLIC TRANSPORTATION AGENCY SAFETY PLAN (PTASP)

The sixth revision to Sun Metro's Agency Safety Plan was adopted by its Mass Transit Board on January 6, 2026. Sun Metro developed their PTASP in compliance with the requirements on 49 CFR 673.11(a) (1-6). The performance measures adopted in this PTASP for fix route, streetcar and paratransit per every 100,000 miles are for:

- Fatalities
- Injuries
- Safety Events
    - Vehicular Collisions
    - Pedestrian Collisions
    - Assaults on Workers
- System Reliability

TABLE 2.23: PERFORMANCE MEASURES ADOPTED IN THE SUN METRO PTASP

PERFORMANCE MEASURES-FIXED ROUTE PER EVERY 100,000 MILES		FISCAL YEAR			
		2023	2024	2025	2026
Fatalities		0	1	0	0
Injuries		46	43	41	40
Safety Events	Vehicular Collisions	103	96	141	134
	Pedestrian Collisions	4	0	0	0
	Assaults on Workers	1	2	7	6
System Reliability (Mean Distance Between Failures)		238,000	189,244	240,000	250,000

PERFORMANCE MEASURES- STREETCAR PER EVERY 100,000 MILES		FISCAL YEAR			
		2023	2024	2025	2026
Injuries		9	7	6	5
Safety Events	Vehicular Collisions	8	26	7	7
	Pedestrian Collisions	0	0	0	0
	Assaults on Workers	0	1	0	0
System Reliability (Mean Distance Between Failures)		39,812	22,277	19,766	21,802

PERFORMANCE MEASURES- PARATRANSIT PER EVERY 100,000 MILES		FISCAL YEAR			
		2023	2024	2025	2026
Injuries		4	3	2	2
Safety Events	Vehicular Collisions	16	18	11	14
	Pedestrian Collisions	0	1	0	0
	Assaults on Workers	0	0	0	0
System Reliability (Mean Distance Between Failures)					

TABLE 2.24: PERFORMANCE MEASURES ADOPTED IN THE ETA PTASP

PERFORMANCE MEASURES- PER EVERY 100,000 MILES		FISCAL YEAR			
		2023	2024	2025	2026
Fatalities		-	-	-	0
Injuries		-	-	-	1
Safety Events	Vehicular Collisions	-	-	-	6
	Pedestrian Collisions	-	-	-	0
	Assaults on Workers	-	-	-	0
System Reliability (Mean Distance Between Failures)		-	-	-	206,512*

**Derived from the FY 2026 Safety Targets of 6 major events, 6 collisions, 6 vehicular collisions, 6 injuries, and 6 transit worker injuries divided by 6,195,374 annual vehicle revenue miles*

Appendix C: Consultative Process

Metropolitan transportation planning is a cooperative process conducted by the MPO in conjunction with the Texas and New Mexico DOTs, transit operators, stakeholders, and the public to create a vision for the future of the community. The process, which is prescribed by federal regulations, is designed to assist the MPO in prioritizing short-and long-term investments in the regional transportation system over the time period covered by the MTP.

23 U.S.C. 134(g) & (i)(5)-(6) and 23 CFR 450.316(b-e) set forth requirements for consultation in developing the MTP and TIP. Consultation is also addressed specifically in connection with the MTP in 23 CFR 450.324(g)(1-2) and in 23 CFR 450.324(f)(10) related to environmental mitigation.

In developing the MTP and TIP, the MPO shall, to the extent practicable, develop a documented process that outlines roles, responsibilities, and key decision points for consulting with other governments and agencies as described below:

- *Agencies and officials responsible for other planning activities (State, local, economic development, environmental protection, airport operations, or freight)*
- *Other providers of transportation services*

Regional Planning Environment

Local Governments and Tribe: Within the El Paso MPO region, there are seven municipalities and one county in Texas, two municipalities and two counties in New Mexico, and one tribal government. Local governments and the tribe participate in the transportation planning process via membership in TPAC and/or TPB, as well as through regional stakeholder groups organized around various topics. The MPO is also a participant in these groups as further described below.

Transit Entities: Sun Metro is the oldest transit provider in El Paso County, primarily serving the City of El Paso, but with a coverage area extending slightly eastward and west of the municipal boundary. It provides both fixed-route and paratransit services. Sun Metro serves on TPAC and TPB, and participates in WTEP. The City of Socorro operates a small paratransit fleet and began operating on-demand micro-transit service in July 2025. A nonprofit organization, Project Amistad provides paratransit services within the El Paso region. South Central Regional Transit District (SCRTD) provides fixed-route services in Southern New Mexico, with connections into the City of El Paso via Sun Metro transit centers. El Paso County and the smaller cities within the El Paso MPO, excluding the City of Socorro, participate in the El Paso Area Transportation Services Local Government Corporation (EPATS-LGC), and the both the MPO and Sun Metro participate via ex-officio membership on the LGC board of directors. The MPO coordinates with all the local paratransit providers within our region through administration of the FTA 5310 funding program, which provides funds for paratransit capital purchases and operations.

El Paso International Airport (EPIA): EPIA is owned and operated by the City of El Paso. It has its own Capital Improvements Plan (CIP) separate from the City of El Paso, which contains its planned infrastructure improvements, to include transportation. The CIP overseen by a division of EPIA staff. The El Paso International Airport director serves on TPB.

The Rio Grande Council of Governments (RGCOG): RGCOG is a voluntary association of local governments formed under Texas law. It includes: El Paso, Hudspeth, Culberson, Jeff Davis, Presidio, and Brewster Counties in Texas, and Doña Ana County and its local governments in New Mexico. The Rio Grande COG is active in local planning endeavors in the El Paso Region. It participates in several regional stakeholder groups and is working with the smaller communities within El Paso County to offer technical assistance and guidance on infrastructure projects and funding, to include transportation.

The Camino Real Regional Mobility Authority (CRRMA): The CRRMA is a political subdivision of the State of Texas, created to give El Paso communities flexibility in funding their local transportation needs. The CRRMA collaborates with the MPO and local governmental authorities to assist in the development and construction of infrastructure projects that help address regional congestion problems.

The Texas Commission on Environmental Quality (TCEQ): The Texas Commission on Environmental Quality is the environmental agency for the State of Texas. It has oversight over air quality monitoring in the State of Texas, in compliance with the Federal Clean Air Act's National Ambient Air Quality Standards. The MPO coordinates with TCEQ in its congestion and air quality analyses, Congestion Management Process Document, and modeling activities associated with the Metropolitan Transportation Plan.

The New Mexico Environment Department (NMED): NMED enforces state regulations and federal laws relating to protection of the environment, resources, and public health and safety. The MPO coordinates with NMED in its congestion and air quality analyses, Congestion Management Process Document, and modeling activities associated with the Metropolitan Transportation Plan.

TxDOT: The TxDOT El Paso District office participates in the TPAC and TPB and works closely with the MPO on its project prioritization and long-range planning efforts.

NMDOT: The NMDOT District 1 office participates in the TPAC and TPB, and works closely with the MPO on its project prioritization and long-range planning efforts.

FHWA and FTA: The MPO works closely with FHWA and FTA field representatives in both Texas and New Mexico to ensure that MPO work is carried out in a timely manner and to the requirements of relevant federal regulations. The MPO schedules a monthly coordination meeting with FHWA, FTA, and state DOT representatives to ensure clear communication.

International Bridges Steering Committee: The International Bridges Steering Committee is hosted by the City of El Paso and is comprised of public and private stakeholders on both sides of the international border to facilitate coordinated problem-solving and decision-making. Its participants include GSA, CBP, Texas DPS, New Mexico Border Authority, local governments in both the United States and Mexico, CRRMA, the El Paso MPO, the El Paso delegation to the Texas State House of Representatives and Senate, the El Paso region's representatives in U.S. Congress, the Mexican Consulate in El Paso, the Chihuahua state government, local stakeholder groups like the El Paso Community Foundation, and the Border Industrial Association.

UTEP: As one of the largest public land-owners and employers in the El Paso region, UTEP has a significant presence. A member of its leadership serves on TPAC.

Fort Bliss: Planning and infrastructure activities at the military base are conducted by its garrison command. Fort Bliss and TxDOT conduct monthly coordination meetings, which the MPO attends.

MTP and TIP coordination and consultation process:

- ***MTP:*** The development process begins with visioning sessions conducted with various groups of community stakeholders and the general public. These visioning sessions are used to develop the Vision Statement, Goals and Objectives for the MTP, which are then adopted by TPB. Once adopted, they serve as the basis for scoring criteria, which are developed and approved by the TPAC. A project call is then held allowing the municipalities, departments of transportation, and transit providers to submit projects for consideration. Submitted projects are given numerical scores based on the adopted scoring criteria. Projects are selected in consultation with the local municipalities and state department of transportation district offices. TPB approves the project selections following stakeholder outreach.

  Once the project selections have been approved, a system-level analysis is performed to determine the potential environmental impacts of the proposed projects. This analysis is performed by the MPO, utilizing environmental and cultural resources data from various sources including the Federal Emergency Management Agency (FEMA), the National Register of Historic Places, and state and federal agencies via online mapping tools. This analysis includes consideration of environmental justice factors, identified via the Environmental Justice Index. The results of this analysis are presented to TPAC and TPB as part of the MTP system level evaluation.

  A Plan document is then drafted based on the information developed in the project selection and systems level analysis. Following a public involvement process consistent with the MPO's adopted Public Participation Plan that includes public outreach, stakeholder consultation, and a public comment period, the document is adopted by the TPB. Following adoption and conformity review, this MTP serves as the basis for the TIPs developed for the years covered by the MTP. More information is presented in the following section about specific outreach conducted for the adoption of recent MTPs.

- **TIP:** TIPs that are developed in conjunction with MTPs have a more involved and robust development process than those that occur between MTP development cycles. A project call is held, and coordination meetings are conducted with stakeholders to determine regional priorities. TIPs developed between MTP adoptions function more as continuations of the implementation of the most recently adopted MTP, and are limited to projects from the current network year as developed in that document. Individual meetings are held with each municipality and transit provider in the MPO region to confirm their projects. Cost estimates are updated, and projects are moved as required to achieve fiscal constraint. In all TIPs, once the draft, fiscally constrained project list is developed, communication is held first with each entity with projects in the list, and then with TPAC for its recommendation and finally TPB to adopt the final TIP project list. Once the project list is adopted, the MPO staff conducts analysis of the proposed projects' likely air quality impacts and how they are anticipated to impact EPMPO's adopted performance measures. This information is then compiled into the TIP document, which is brought to TPAC and TPB for adoption following a thirty-day public comment period.

Specific Collaboration Conducted for our Current Adopted Plans

RMS 2052 Plan (MTP) Outreach:

- ***Roles:***
  - Lead: MPO
    - *Conducted analysis, created RMS 2052 MTP document*
  - Stakeholders: EP County, EP County Transit, COEP, Horizon, Socorro, Vinton, San Elizario, Ysleta del Sur, Anthony, NM, Sunland Park, NM, Doña Ana County, Sun Metro, TxDOT and NMDOT local district offices, general public
    - *Provided input, discussions on funding prioritization*
  - Adoption: TPAC and TPB
- ***Responsibilities:***
  - *Data gathering and analysis:* MPO
  - *Project Selection:* MPO in coordination with local municipal governments and state department of transportation district offices
  - *Plan adoption:* TPB
  -
- ***Decision points:***
  - *Visioning process:* A series of public visioning workshops was conducted during the spring of 2025 to identify the priorities and

needs of the region. (Refer to Chapter 10 of the RMS 2052 MTP for more information)

- Additionally, after obtaining demographic information from the US Census Bureau and Texas Demographic Center, a Delphi process was conducted to determine likely future growth patterns in the region and inform the development of the RMS 2052 Travel Demand Model. These panel members were recruited from regional government agencies; community organizations; the real estate and development communities; area employers; financial institutions; educational institutions; transit agencies, and other organizations. Invitations were sent to the following community agencies and organizations. For more detailed information on the Delphi process, please see Appendix F-TDM Demographic Development.pdf (elpasompo.org)
- *Project selection:* The proposed project evaluation and prioritization process was presented to the TPAC and TPB in the spring of 2025. This included the draft criteria to be used for the projects. A project call was then conducted to allow municipalities, departments of transportation, and transit providers to submit projects for consideration in the RMS 2052 MTP. MPO staff coordinated with sponsoring entities to submit updated Project Request Forms for their proposed projects. Projects were scored via the adopted scoring criteria that was approved as part of the prioritization process. Final project selection was then made based on these scores and collaboration with sponsoring entities to determine agency needs, with final selection made based on fiscal constraint.
- *Project list adoption:* TPAC recommended for approval at their November 5 2025 meeting, and TPB approved the fiscally constrained list at their November 21 2025 meeting
- *Plan adoption:* April 24, 2026

- ***RMS 2052 Environmental Analysis:*** For the system level analysis of potential environmental impacts, MPO staff gathered environmental and cultural resources data from various sources including the Federal Emergency Management Agency (FEMA), the National Register of Historic Places, and state and federal agencies via online mapping tools.

  The systems-level analysis of potential environmental impacts is intended to function as a resource for agencies and elected officials responsible for project implementation. The results of the analysis were present during TPAC and TPB presentation of the final document.

- ***RMS 2052 Outreach:*** EPMPO held a series of workshops in different areas throughout the planning area during the visioning phase of the MTP's development. The MPO also conducted public meetings at key points in the development process, as well as a Delphi exercise.

TIP 2027 – 2030

TIP 2027 – 2030 was developed in conjunction with RMS 2052 MTP and the public processes for both documents were intertwined to ensure proper coordination between the documents.

- ***Roles:***
  - Lead: MPO
    - *Conducted analysis, created 2027 - 2030 document*
  - Stakeholders: EP County, EPATS-LGC, COEP, Horizon, Socorro, Vinton, San Elizario, Ysleta del Sur, Anthony, NM, Sunland Park, NM, Doña Ana County, Sun Metro, TxDOT and NMDOT local district offices
    - *Provided input, discussions on funding prioritization*
  - Adoption: TPAC and TPB
  - Final Approval: TxDOT, NMDOT, FHWA, FTA
- ***Responsibilities:***
  - *Project Call:* MPO
  - *Data gathering and analysis:* MPO
  - *Project Selection:* MPO in coordination with local municipal governments and state department of transportation district offices
  - *Plan adoption:* TPB
- ***Decision points:***
  - *Project call:* Through the project call conducted for the development of the RMS 2052 MTP, MPO staff conducted individual meetings with sponsoring entities to identify their priority projects. The meetings with each of the sponsoring entities also allowed the MPO to coordinate in the review of the scope of the projects to determine cost estimates and the eligible funding categories.
  - *Project selection:* Once priority projects had been identified, all projects submitted in the project call were evaluated and scored utilizing the criteria developed and adopted by TPAC for the RMS 2052 MTP project call. MPO staff conducted several workgroup meetings with representatives from the TPAC to review the draft project list during the summer and fall of 2025 and determine scheduling of the projects to ensure fiscal constraint.
  - *Project list adoption:* Project list for the TIP was presented alongside the review of the RMS 2052 MTP project list. TPAC recommended for approval at their November 5, 2025 meeting, and TPB approved the fiscally constraint list at their November 21, 2025 meeting.
  - *Plan adoption:* April 25, 2026.
- ***Outreach:*** Pre-TIP development outreach was intertwined with the RMS 2052 MTP outreach meetings, workshops, and entity coordination meetings. In conjunction with the EPMPO's adopted PPP, a public comment

period was held between April 18 and May 17 during which five open house format public meetings were conducted.

Specific Collaboration Conducted for our Previous Adopted Plans:

RMS 2020 Plan Outreach

- ***Roles:***
  - Lead: MPO
    - *Conducted analysis, created RMS 2020 document*
  - Stakeholders: EP County, EP County Transit, COEP, Horizon, Socorro, Vinton, San Elizario, Ysleta del Sur, Anthony, NM, Sunland Park, NM, Doña Ana County, Sun Metro, TxDOT and NMDOT local district offices
    - *Provided input, discussions on funding prioritization*
  - Adoption: TPAC and TPB
- ***Responsibilities:***
  - *Data gathering and analysis:* MPO
  - *Project Selection:* MPO in coordination with local municipal governments and state department of transportation district offices
  - *Plan adoption:* TPB
- ***Decision points:***
  - *Plan goals:* presented to TPB August 19, 2019. Presentation included purpose of the document and a tentative schedule.
  - *Project selection:* Project selection criteria was determined based on the previously approved project selection process (approved by the TPB June 6, 2014). The approved criteria included the National Goals Carbon Mitigation Plan strategies as well as project readiness. Scores were developed by MPO staff and then subsequently given to each project based on these criteria.
  - Several internal MPO meetings were conducted from October-November 2019 to review Project Request Forms for priority projects submitted by sponsoring entities to determine the scoring of criteria. Final scoring was divided between local government projects and TXDOT projects and presented to the TPAC and TPB along with the recommendation to adopt the RMS 2020 Plan.
  - Project list presented to TPB: October 18, 2019, as a report item
  - Plan adoption: December 13, 2019
- ***Meetings conducted for RMS 2020 Outreach:***
  - Village of Vinton, RMS 2020 Strategic Plan
  - CRRMA Board, RMS 2020 Strategic Plan
  - Texas Society of Professional Engineers, RMS 2020
  - Congresswoman Escobar, RMS 2020
  - Rotary Club of El Paso, RMS 2020
  - Mobility Coalition of the El Paso Chamber, RMS 2020

- Texas Secretary of State, RMS 2020
- Hispanic Chamber of Commerce of El Paso, RMS 2020

RMS 2050 Plan (MTP) Outreach:

- ***Roles:***
  - Lead: MPO
    - *Conducted analysis, created RMS 2050 MTP document*
  - Stakeholders: EP County, EP County Transit, COEP, Horizon, Socorro, Vinton, San Elizario, Ysleta del Sur, Anthony, NM, Sunland Park, NM, Dona Ana County, Sun Metro, TXDOT and NMDOT local district offices, general public
    - *Provided input, discussions on funding prioritization*
  - Adoption: TPAC and TPB
- ***Responsibilities:***
  - *Data gathering and analysis:* MPO
  - *Project Selection:* MPO in coordination with local municipal governments and state department of transportation district offices
  - *Plan adoption:* TPB
  -
- ***Decision points:***
  - *Visioning process:* A virtual public visioning workshop was conducted during the summer 2020 to identify the priorities and needs of the region. (Refer to Appendix E of the RMS 2050 MTP for more information)
  - Additionally, after obtaining demographic information from the US Census Bureau and Texas Demographic Center, a Delphi process was conducted to determine likely future growth patterns in the region and inform the development of the RMS 2050 Travel Demand Model. Invitation letters were sent to approximately 94 community leaders to participate in the Delphi panel. Recipients represented entities throughout the El Paso region with expertise in a variety of areas. Of those invited, 74 accepted the invitation. These panel members were recruited from regional government agencies; community organizations; the real estate and development communities; area employers; financial institutions; educational institutions; transit agencies, and other organizations. Invitations were sent to the following community agencies and organizations. For more detailed information on the Delphi process, please see Appendix F-TDM Demographic Development.pdf (elpasompo.org)
  - *Project selection:* The proposed project evaluation and prioritization process was presented to the TPAC and TPB in July 2020 . This included the draft criteria to be used for the projects. In August 2020, the TPB members participated in a pairwise comparison to determine

the relative weights of the criteria which was recommended by the TPAC at the August 5, 2020 meeting and approved by the TPB on September 18, 2020. MPO staff coordinated with sponsoring entities to submit updated Project Request Forms for their proposed projects to evaluate utilizing Decision Lens.

    - *Project list adoption:* TPAC recommended for approval at their September 1, 2021 meeting, and TPB approved the fiscally constrained list at their September 17, 2021 meeting
    - *Plan adoption:* March 25, 2022

- ***RMS 2050 Environmental Analysis:*** For the system level analysis of potential environmental impacts, MPO staff gathered environmental and cultural resources data from various sources including the Federal Emergency Management Agency (FEMA), the National Register of Historic Places, and state and federal agencies via online mapping tools.

  The systems-level analysis of potential environmental impacts is intended to function as a resource for agencies and elected officials responsible for project implementation. The results of the analysis were present during TPAC and TPB presentation of the final document.

  In addition, as stated in the MTP, the Environmental Justice populations (low-income and minority groups) were identified via the Environmental Justice Index, and the capacity expansion projects that may impact identified Environmental Justice areas were presented to TPAC and TPB as part of the MTP system level evaluation.

- ***RMS 2050 Outreach:*** RMS 2050 Plan coordination required outreach and coordination for the visioning exercise during the COVID-19 Pandemic and its virtual public engagement environment. The MPO reached out to multiple entities for virtual, one-on-one meetings and charettes. The MPO also conducted virtual public meetings at key points in the development process. The following meetings were also held with area stakeholders towards this endeavor:
    - American Council of Engineering Companies, RMS 2050 visioning
    - Greater El Paso Association of Realtors, RMS 2050 MTP
    - University of Texas at El Paso - ASPIRE Cohort, RMS 2050

TIP 2021 – 2024:

TIPs that do not share implementation years with MTP updates, like the 2021 – 2024 TIP, function more as continuations of the implementation of the most recently adopted MTP, and are limited to projects from the current network year as developed in that document. Individual meetings are held with each project sponsoring entity in the MPO region to confirm their projects. Cost estimates are updated, and projects are moved as required to achieve fiscal constraint. Once the draft fiscally constrained list is developed, communication is held first with each entity with projects in the list, and then with TPAC and TPB to finalize the TIP project list.

- ***Roles:***
  - Lead: MPO
    - *Conducted analysis, created 2021 - 2024 document*
  - Stakeholders: EP County, EP County Transit, COEP, Horizon, Socorro, Vinton, San Elizario, Ysleta del Sur, Anthony, NM, Sunland Park, NM, Doña Ana County, Sun Metro, TXDOT and NMDOT local district offices
    - *Provided input, discussions on funding prioritization*
  - Adoption: TPAC and TPB
- ***Responsibilities:***
  - *Data gathering and analysis:* MPO
  - *Project Selection:* MPO in coordination with local municipal governments and state department of transportation district offices
  - *Plan adoption:* TPB
- ***Decision points:***
  - Project list approval:
    - 21-24 TIP: was approved as the implementation stage for part of RMS 2020 approval on December 13, 2019
  - Plan adoption: TPB date:
    - 21-24 TIP: May 22, 2020

TIP 2023 – 2026

TIP 2023 – 2026 was developed in conjunction with RMS 2050 Plan and the public processes for both documents were intertwined to ensure proper coordination between the documents.

- ***Roles:***
  - Lead: MPO
    - *Conducted analysis, created 2023 - 2026 document*
  - Stakeholders: EP County, EP County Transit, COEP, Horizon, Socorro, Vinton, San Elizario, Ysleta del Sur, Anthony, NM, Sunland Park, NM, Doña Ana County, Sun Metro, TxDOT and NMDOT local district offices
    - *Provided input, discussions on funding prioritization*
  - Adoption: TPAC and TPB
  - Final Approval: TXDOT, NMDOT, FHWA, FTA
- ***Responsibilities:***
  - *Project Call:* MPO
  - *Data gathering and analysis:* MPO

        - *Project Selection:* MPO in coordination with local municipal governments and state department of transportation district offices
        - *Plan adoption:* TPB
    - ***Decision points:***
        - *Project call:* Through the project call conducted for the development of the RMS 2020 Plan and the RMS 2050 MTP, MPO staff conducted individual meetings with sponsoring entities to identify the priority projects to be implemented during the years of the 2023-2026 TIP. The meetings with each of the sponsoring entities also allowed the MPO to coordinate in the review of the scope of the projects to determine cost estimates and the eligible funding categories.
        - *Project selection:* Once priority projects had been identified, all projects submitted in the project call were evaluated and scored utilizing *Decision Lens* software. The scoring of the projects in Decision Lens was reviewed with each of the sponsoring entities. MPO staff conducted several workgroup meetings with representatives from the TPAC to review the draft project list during the summer of 2021 and determine scheduling of the projects to ensure fiscal constraint.
        - *Project list adoption:* Project list for the TIP was presented through the review of the RMS 2050 MTP project list. TPAC recommended for approval at their September 1, 2021 meeting, and TPB approved the fiscally constraint list at their September 17, 2021 meeting.
        - *Plan adoption:* March 25, 2022.
    - ***Outreach:*** A 2023 – 2026 working group was convened to prioritize projects and develop a consensus-based fiscally constrained project list for the 2023 – 2026 TIP. The working group was comprised of representatives of entities with sponsored projects within the proposed document. The following entities participated in the working group: ELP District TxDOT, COEP, EP County, PDN Foundation, Socorro, Horizon, Vinton, Sun Metro, NMDOT.

TIP 2025 – 2028:

The 2025 – 2028 TIP functioned as a continuation of the implementation of the most recently adopted MTP, RMS 2050, and was limited to projects from the current network year as developed in that document. Individual meetings were held with each project sponsoring entity in the MPO region to confirm their projects in September of 2023. Cost estimates were updated, and projects were moved as required due to readiness, prioritization, and to achieve fiscal constraint. Once the draft fiscally constrained list was developed, a second round of meetings took place with each entity with projects in the list, and then with TPAC and TPB to finalize the TIP project list.

    - ***Roles:***
        - Lead: MPO
            - *Conducted analysis, created 2025 - 2028 document*

- Stakeholders: EP County, EP County Transit, COEP, Horizon, Socorro, Vinton, San Elizario, Ysleta del Sur, Anthony, NM, Sunland Park, NM, Dona Ana County, Sun Metro, TXDOT and NMDOT local district offices
  - *Provided input, discussions on funding prioritization*
- Adoption: TPAC and TPB

- ***Responsibilities:***
  - *Data gathering and analysis:* MPO
  - *Project Selection:* MPO in coordination with local municipal governments and state department of transportation district offices
  - *Plan adoption:* TPB
  -
- ***Decision points:***
  - Project list approval:
    - 25-28 TIP Project List: was approved on November 17, 2023
  - Plan adoption: TPB date:
    - 25-28 TIP: April 19, 2024

Ongoing public involvement and coordination:

MPO public hearings:

- Transportation Policy Board: comprised of local elected leadership, state legislative representatives, El Paso Airport leadership, transit provider leadership, and TxDOT and NMDOT district senior leadership
- Transportation Policy Advisory Committee: comprised of local elected leadership, technical staff, TXDOT and NMDOT district leadership, transit provider technical staff, local university leadership, and tribal government
- Executive Committee: comprised of local elected leadership

Project sponsor public meetings/hearings:

MPO staff attends public meetings and public hearings conducted by project sponsors to provide comment and to aid with information about MPO processes.

Recurring coordination meetings

- Monthly coordination meetings with the City of El Paso & TxDOT District Office
- Bi-weekly coordination meetings with TxDOT District Office
- Monthly coordination meetings with El Paso County Public Works staff
- Monthly coordination meetings with FHWA/FTA/state DOTs
- Monthly District Design Review meetings
- Monthly TxDOT/Ft Bliss coordination meetings

Regularly scheduled meetings for local entities which MPO staff attends regularly

- Camino Real Regional Mobility Authority Board of Directors

- El Paso Area Transportation Services Local Government Corporation Board
- El Paso County Commissioners Court
- El Paso City Council
- Sun Metro Mass Transit Board
- West Texas/El Paso Regional Transportation Coordination Committee
- Project management meetings for the upcoming Nuevo Hueco Tanks and Arterial One construction projects

Regional coordination groups in which the MPO participates

- Borderland Expressway Coalition
- Quarterly Traffic Management Team meetings
- Mission Trails Alliance – stakeholder group comprised of leadership and technical staff from El Paso County, Rio Grande COG, El Paso Chamber of Commerce, El Paso Community Foundation, City of El Paso, City of Socorro, City of San Elizario, Mission Trails Historical Society, TxDOT, Ysleta del Sur Pueblo tribal government

Meetings which MPO staff does not regularly attend, but does habitually review the posted agendas to keep informed on their activities:

- City of El Paso Bicycle Advisory Committee
- Mesilla Valley MPO Policy Board, Technical Advisory Committee, and Bicycle and Pedestrian Facilities Advisory Committee
- South Central Regional Transit District Board of Directors

Outreach conducted in conjunction with other regional plans:

- El Paso Chamber, Border Transportation Master Plan
- Consejo de Desarrollo Económico Regional (CODER) in Ciudad Juárez, Border Transportation Master Plan
- Binational Border Infrastructure Roundtable, Cross-Border Coordination

Appendix D: Environmental Clearance Projects

ENVIRONMENTAL CLEARANCE PROJECT LIST

Appendix D contains a list of projects which are undergoing environmental analysis consistent with early project development. The intent of this appendix is to identify projects that are not planned for construction within the four-year time-frame of the Transportation Improvement Program (TIP). Consistency with the Amended RMS 2050 MTP will be verified as alternatives are explored in these studies and environmental clearance efforts.

The Federal Highway Administration (FHWA) requires these projects to be referenced in the TIP to complete the feasibility and environmental analysis phases. This appendix contains projects that are shown in the Amended RMS 2050 MTP and not programmed in the RMS 2027-2030 TIP. This appendix in no way implies that these projects are programmed in the RMS 2027-2030 TIP.

TABLE 3-1: ENVIRONMENTAL CLEARANCE PROJECT LIST

MPO ID	CSJ	SPONSOR	PROJECT NAME	LIMITS FROM	TO	DESCRIPTION	FISCAL YEAR
I061X-CAP-2	CSJ 2121-02-177	TXDOT	IH 10 Frontage Roads from Executive to Sunland Park	Executive	Sunland Park	Construct 2-lane Eastbound Frontage Road, Frontage Road Improvements and Ramp Improvements	2033