

# APPENDIX: PERFORMANCE BASED PLANNING & PROGRAMMING



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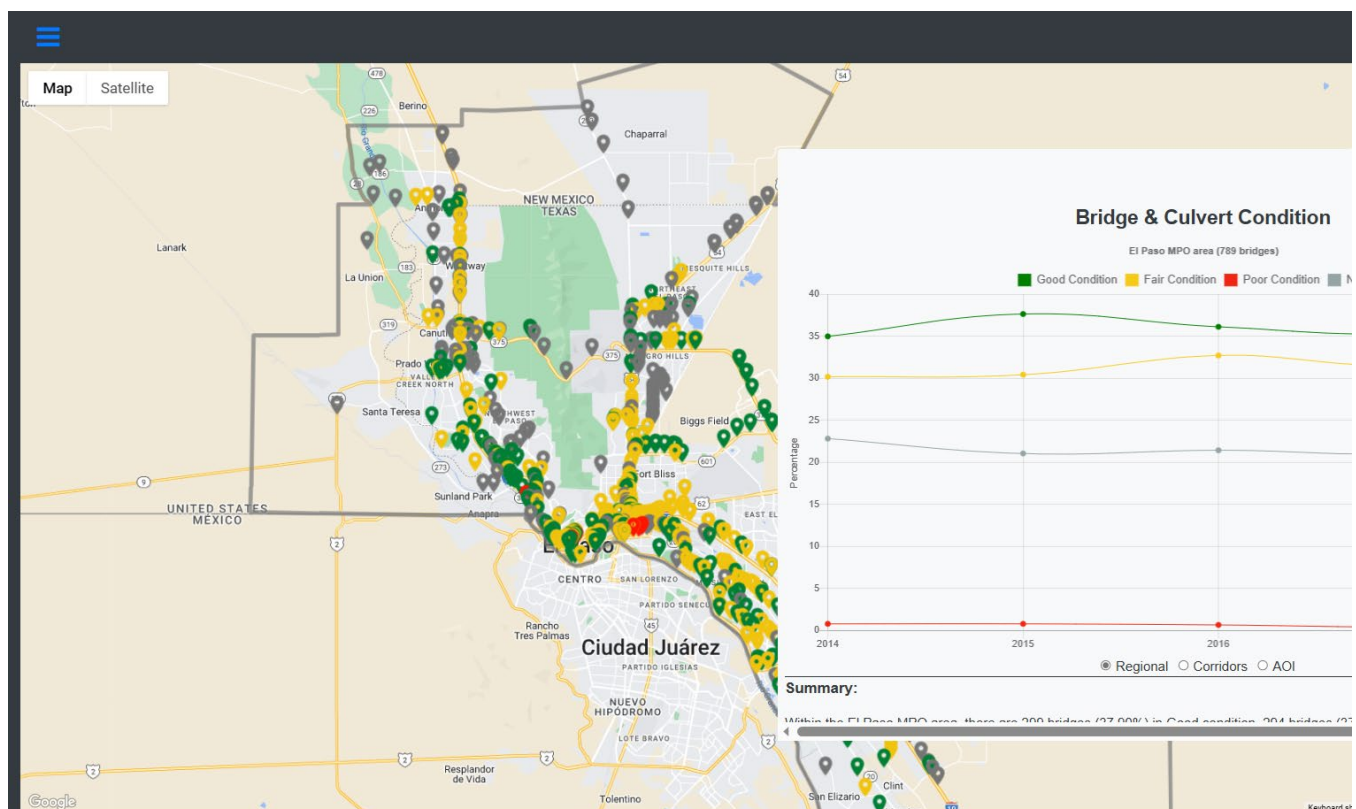
## PERFORMANCE MEASURES

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. The EPMPPO 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 "EPMPPO 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 (2013), and FHWA National Performance Measures (2017), and 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 previous MTP (Destino 2045 MTP), and additional measures have been incorporated as part of the development of the RMS 2050 TDM and the reporting output summary has been improved.

A System Level Performance Evaluation is presented in Chapter 5 of the RMS 2050 MTP. Based on the adopted series of performance measures, the system level evaluation of the proposed projects compared the performance measures calculated for the 2017 Base Year and 2050 "No Build" Scenarios to the performance of the 2050 "Build" Scenario.

In general, the Build Scenario improves on almost every performance measure when compared to the No-Build scenario, although there is a moderate increase in the total and per-capita VMT (and subsequently a modest increase in the estimated average trip cost).

The complete results of the scenario analysis and performance measure comparison table are presented in page 5-21 of the RMS 2050 MTP.

## **NATIONAL PERFORMANCE REQUIREMENTS**

Federal legislation passed in 2012 introduced a new requirement to incorporate a performancebased 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 and bolstered by the Fixing America's Surface Transportation (FAST) Act, which was signed into law in 2015.

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 1: FEDERAL PERFORMANCE MEASURE CATEGORIES**

<b>Safety</b>	Highway Safety
	Transit Safety (Public Transportation Agency Safety Plan)
<b>Maintenance</b>	Highway Pavement and Bridge Conditions
	Transit Asset Management (TAM)
<b>System Performance</b>	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' final rules currently effective were established at different times, and therefore have different target-setting and implementation deadlines, as seen in Table 2 below. At the adoption date of RMS 2050 MTP, all five performance measure rules are effective, and the adoption of official targets is required and must be reported

**TABLE 2: SUMMARY OF 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	5/20/2017	5/20/2018	-	11/16/2018	5/20/2019	2-and 4-year performance period	Biannually (2018, 2020, etc.)
PM 3: System Performance							
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. The 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 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	<i>National Highway System = NHS</i>
	- % of non-Interstate NHS pavements in Good & Poor condition	
	- % of NHS bridges classified as in Good & Poor condition	
Congestion Reduction	- Annual hours of PHED per capita	<i>Peak Hour Excessive Delay = PHED</i>
	- % Non-SOV Travel	
System Reliability	- % of PMT on the Interstate that are reliable	<i>Passenger Miles Traveled = PMT</i>
	- % of PMT on non-Interstate that are reliable	
Freight Movement & Economic Vitality	- TTTR Index on the Interstate System	<i>Truck Travel Time Reliability Index = TTTRI</i>
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 the EPMPPO Transportation Policy Board for previous fiscal years up to the most recently adopted targets in FY 2024 are presented in the tables below for Texas and New Mexico respectively (Table 4 and Table 5).

**TABLE 4: SAFETY – TEXAS STATE TARGETS BY CALENDAR YEAR**

PM1: SAFETY	2020	2021	2022	2023	2024
Number of fatalities	3,840	3,687	3,563	3,682	3,046
Rate of fatalities	1.406	1.33	1.27	1.38	1.14
Number of serious injuries	17,394	17,151	16,677	17,062	17,062
Rate of serious injuries	6.286	6.06	5.76	6.39	6.39
Number of non-motorized fatalities and serious injuries	2,285	2,346.4	2,367	2,357	2,357

**TABLE 5: SAFETY – NEW MEXICO STATE TARGETS BY CALENDAR YEAR**

PM1: SAFETY	2020	2021	2022	2023	2024
Number of fatalities	401.9	411.6	421.9	446.6	450.0
Rate of fatalities	1.429	1.486	1.645	1.695	1.689
Number of serious injuries	1,074.2	1,030.5	1,030.5	995.4	1,018.6
Rate of serious injuries	3.820	3.722	3.842	3.801	3.800
Number of non-motorized fatalities and serious injuries	204.0	200.0	190.6	199.4	200.0

On January 19, 2024, the Transportation Policy Board approved a resolution to support the updated 4-year target (previously adopted January 20, 2023), for both Texas Department of Transportation (TxDOT) and the New Mexico Department of Transportation (NMDOT).

By agreeing to support the states' HSIP targets, the EPMPPO 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 2023 – FY 2026; SAFETY PROJECTS

Several projects programmed in the RMS 2050 MTP and the 2023-2026 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:

- Border Highway West Shared Use Path between Racetrack and Executive Center. The project includes installation of an 11-foot asphalt pavement hike and bike trail with irrigated landscaping.
- 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.
- Carolina Street Improvements from Stiles Dr to North Loop Dr. The project includes complete roadway reconstruction, parkway improvements, bicycle facilities, street illumination and striping on Carolina Dr. from Stiles Dr. to North Loop Dr.
- Dilley Road and Delake Street Construction. The project includes construction of two roadways, each with two lanes, enhanced pedestrian facilities, bike lanes and illumination to provide access to the Horizon City Transit Oriented Town Center.
- Downtown Bicycle Improvements. Construct bike facilities downtown to include: buffered bike lanes, conventional bike lanes, bike boulevards, shared lane markings, & protected bike lanes. The project will include road diets, associated signage, wayfinding, striping, & intersection treatments.
- Dyer Pedestrian Sidewalk Improvements from Gateway Boulevard North to Hercules Ave. Project includes sidewalk improvements to pedestrian connectivity and accessibility on Dyer St from Gateway to Hercules Ave. Improves access to BRIO stations at Dyer and Hercules.
- Horizon at Darrington Intersection Improvements. The Project includes intersection & operational improvements consisting of left and right turn lanes, directional islands and medians as well as traffic signal improvements.
- Interstate Highway 10 Frontage Road Extension from Executive Blvd. to Sunland Park Dr. The project includes construction of 2-lane westbound frontage road and frontage road improvements.
- Operational Improvements at SH 178 interchange. The project includes interchange improvements to include grade separation(s), rebuild I-10 overpass, U-turns, 4 direct connectors (DC).
- US 62/180 (Montana Ave.) Expressway & Frontage Roads. Project will construct 6-lane expressway and grade separations at intersections from Tierra Este Rd to FM 659 (Zaragoza Rd). In addition, the project will build 2 lane WB/EB FRs in each direction from Tierra Este Rd to FM 659 Zaragoza Rd. and will include auxiliary lanes and grade separation at intersection. Work includes drainage, advanced signing, striping, transitional and incidental work (operation improvements) up to FM 659 (Zaragoza Rd).
- Valley Chile Rd. Reconstruction from Doniphan Dr. to IH-10. The project includes the reconstruction of roadway with sidewalks, drainage, lighting and illumination, landscaping, and irrigation.
- Ysleta POE Pedestrians Safety Improvements. The project includes the design and construction of pedestrian safety improvements; pedestrian drop-off/pick-up zones, shade canopies, improved



crosswalks, pedestrian illumination, signs, signals, traffic calming, streetlights, landscaping, seating, screening walls, CCTVs, bus stop, and wayfinding.

- NM 273/Airport Rd. Intersection lighting. The project will install luminaries at intersection NM 273/Airport Road.
- NM 213 widening from NM 404 to TX State Line. The project will widen NM 213 from 2 to 4 lanes.

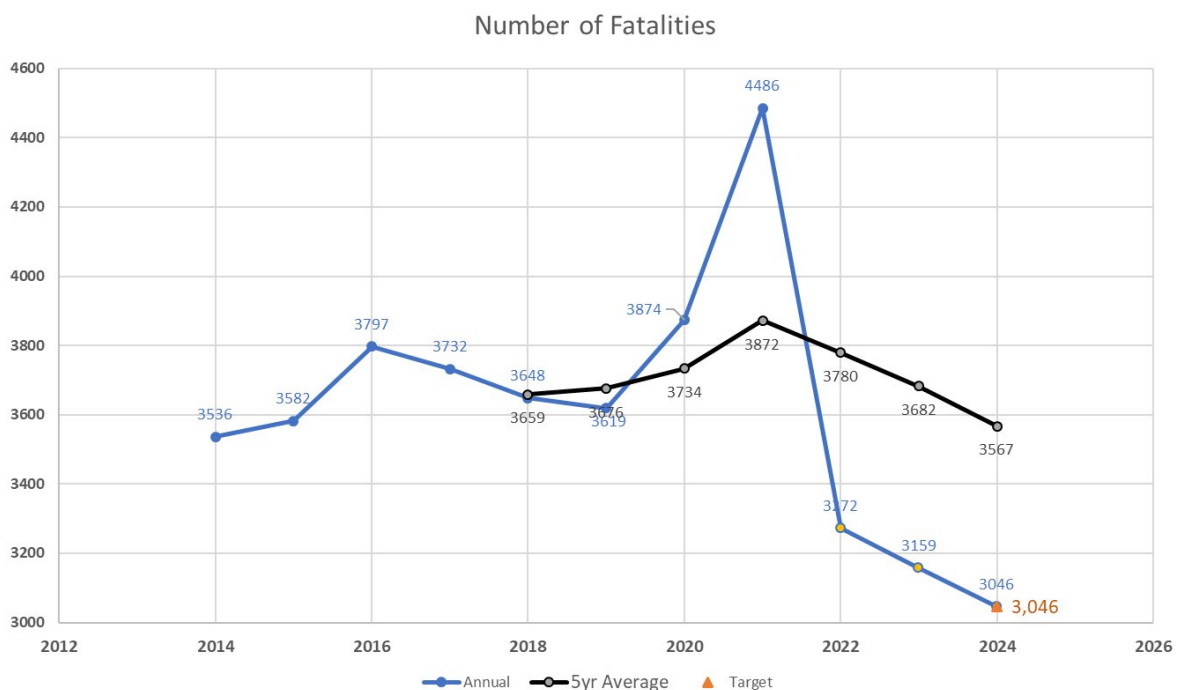
## SUMMARY OF STATE SAFETY (PM1) PERFORMANCE MEASURES AND TARGETS FOR TXDOT AND NMDOT

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

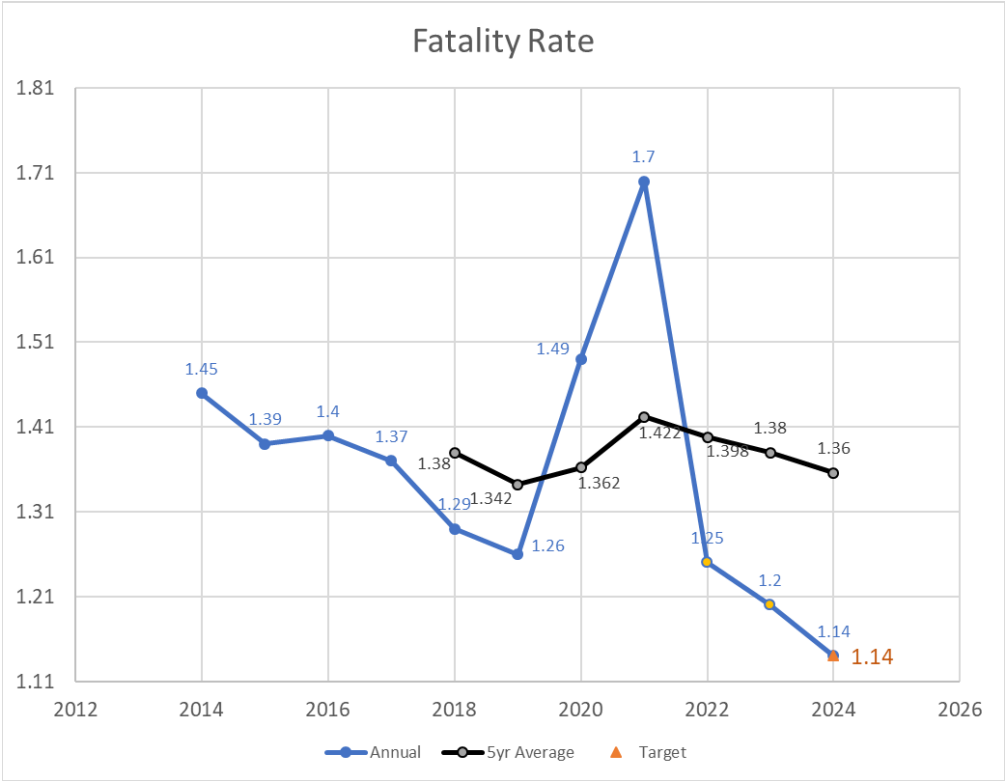
TxDOT has set more aggressive fatality and fatality rate reduction targets for 2020 and beyond, in response to the Texas Transportation Commission's adoption of the goal of reaching zero fatalities on Texas roads by the year 2050. To decrease the expected rise of fatalities to no more than five-year average of 3,567 fatalities in 2024. TxDOT adopted the calendar year target for 2024 as 3,046 fatalities.

**FIGURE 1: NUMBER OF FATALITIES IN TEXAS**



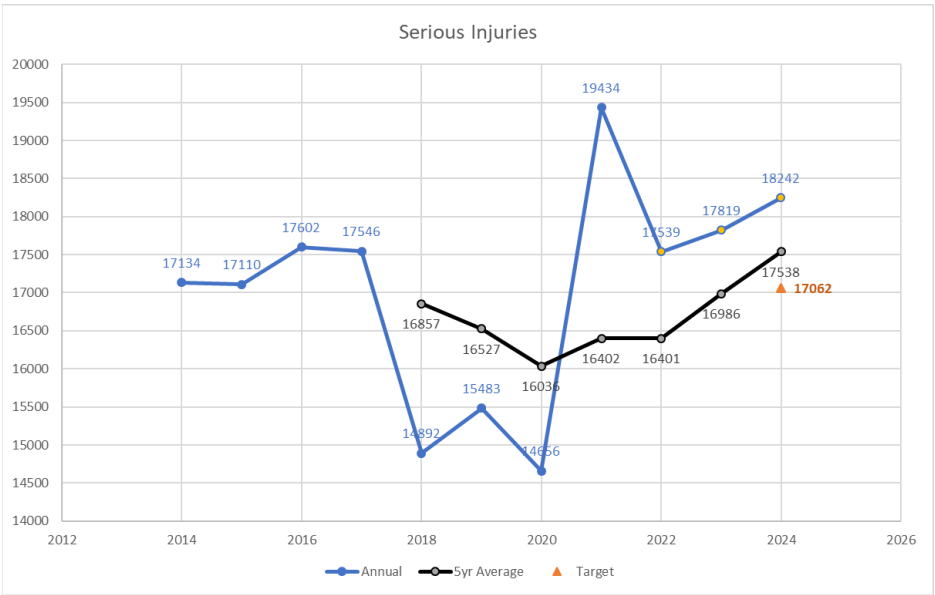
To decrease the expected rise of fatalities per 100 MVMT to not more than a five-year average of 1.36 fatalities per 100 MVMT in 2024. TxDOT’s adopted calendar year target for 2024 would be 1.14 fatalities per 100 MVMT.

**FIGURE 2: FATALITY RATE (PER 100 MILLION VMT) IN TEXAS**



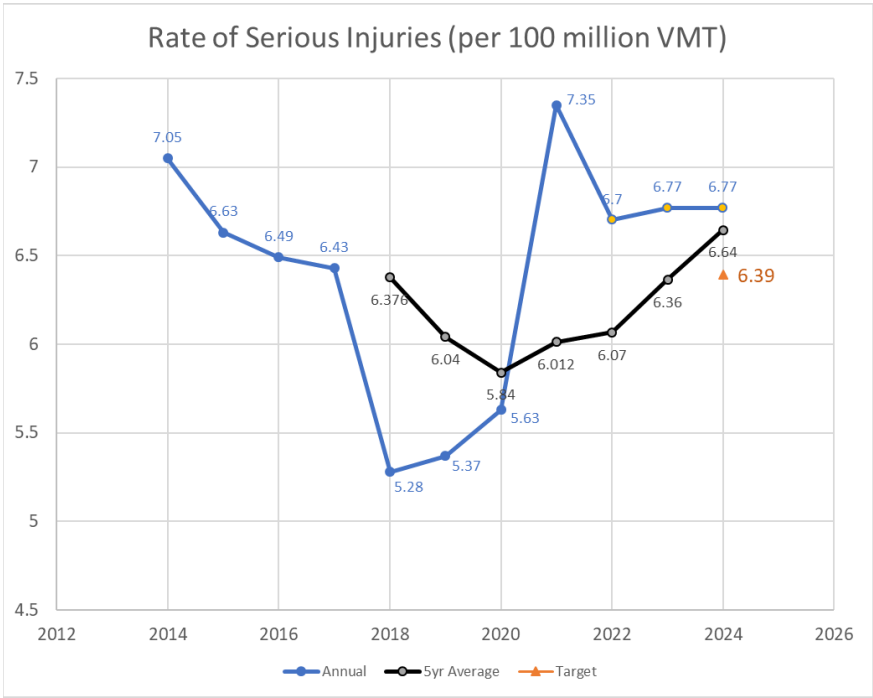
To decrease the expected rise of serious injuries to not more than a five-year average of 17,062 fatalities in 2024. The calendar year target for 2024 would be 18,242 serious injuries. The 2024 Target expressed as 5-year avg. remains 17,062.

FIGURE 3: NUMBER OF SERIOUS INJURIES IN TEXAS



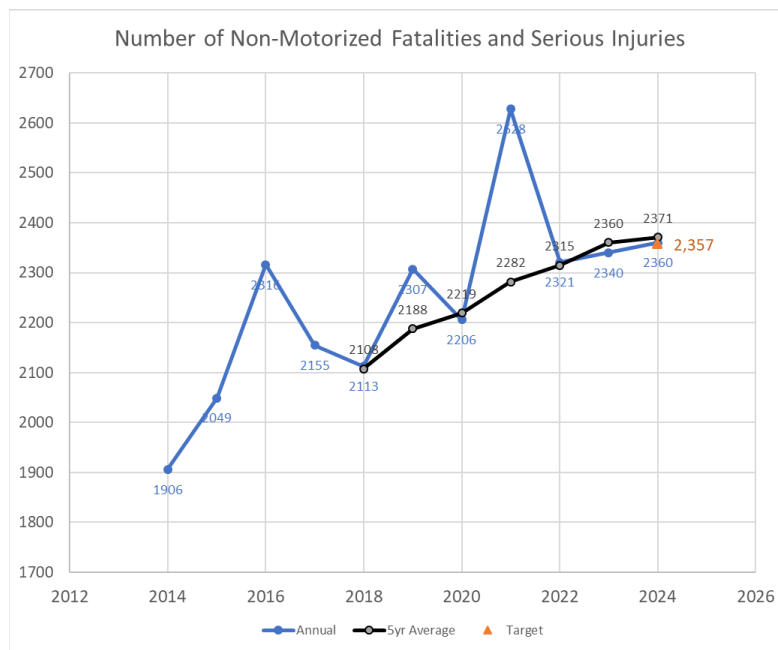
The calendar year target for Rate of serious injuries for 2024 would be 6.77 serious injures per 100 MVMT. The five-year average increases to 6.64 but based on the BIL requirements the targets are to remain the same or decrease from the previous years. The 2024 Target expressed as 5-year avg. remains 6.39.

FIGURE 4: RATE OF SERIOUS INJURIES (per 100 million VMT) IN TEXAS



To decrease the expected rise of non-motorized fatalities and serious injuries to not more than a five-year average of 2,357 fatalities and serious injuries in 2024. The five-year average increase to 2,371 but based on the BIL requirements the targets are to remain the same or decrease from the previous years. The 2024 Target expressed as 5-year avg. remains 2,357.

**FIGURE 5: NUMBER OF NON-MOTORIZED FATALITIES AND SERIOUS INJURIES IN TEXAS**



**TABLE 6: TEXAS - SAFETY PERFORMANCE TARGET ASSESSMENT**

Performance Measure	Desired Trend	Original Targets 2018-2022	Baseline <sup>1</sup> 2018-2022	New Targets 2023	New Targets 2024
Number of Fatalities	↓	3,734	3950.2	3,682	3,046
Fatality Rate (per 100 million VMT)	↓	1.27	1.438	1.38	1.14
Number of Serious Injuries	↓	16,677	16,441	17,062	17,062
Rate of Serious Injuries (per 100 million VMT)	↓	5.76	5.968	6.39	6.39
Number of Non-Motorized Fatalities and Serious Injuries	↓	2,367	2,365.6	2,357	2,357

<sup>1</sup>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 2024 safety targets, NMDOT's method will now hold steady or show declining targets for fatalities and serious injuries for the three-year period.

**FIGURE 6: NUMBER OF FATALITIES IN NEW MEXICO**

### NMDOT PM 1 (Safety) 2024 Targets

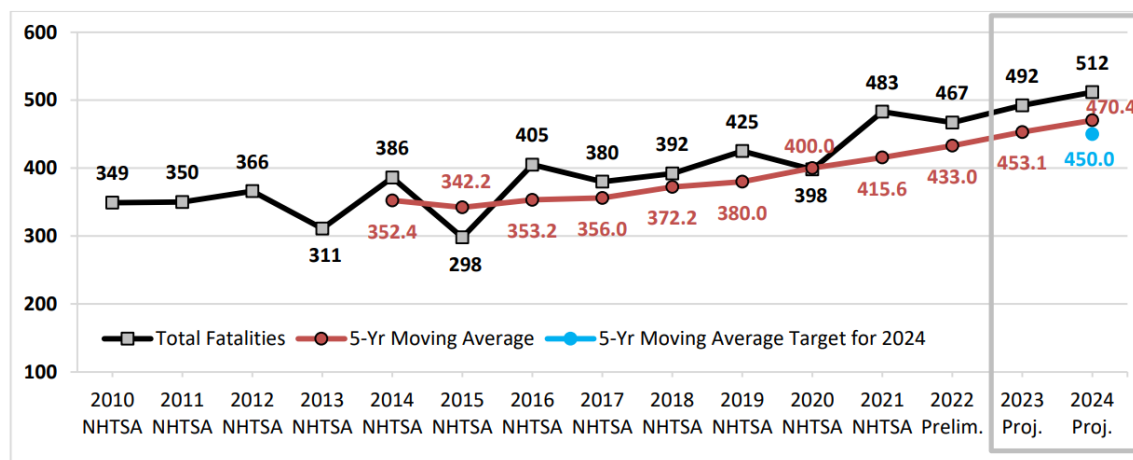


Figure 1 Total Fatalities

**NMDOT 2024 Target for Total Fatalities: 450.0**

**FIGURE 7: FATALITY RATE (PER 100 MILLION VMT) IN NEW MEXICO**

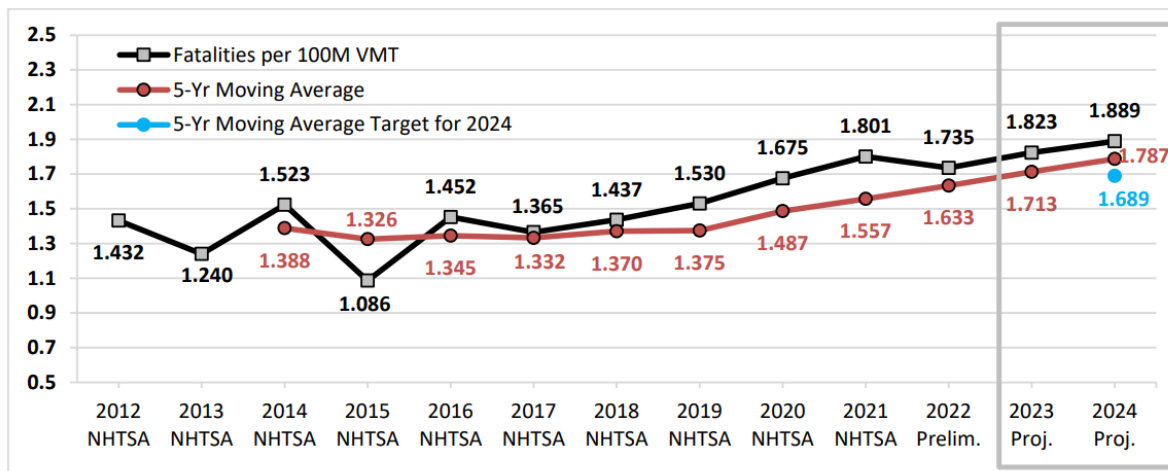


Figure 3 Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)

**NMDOT 2024 Target for Rate of Fatalities: 1.689**

**FIGURE 8: NUMBER OF SERIOUS INJURIES IN NEW MEXICO**

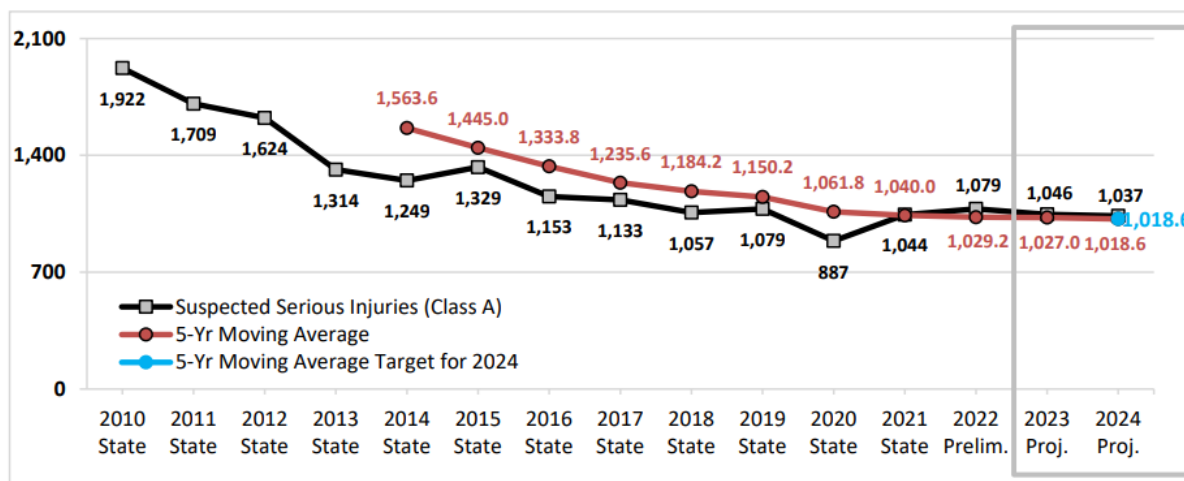


Figure 2 Total Serious Injuries

**NMDOT 2024 Target for Serious Injuries: 1,018.6**

**FIGURE 9: RATE OF SERIOUS INJURIES (per 100 million VMT) IN NEW MEXICO**

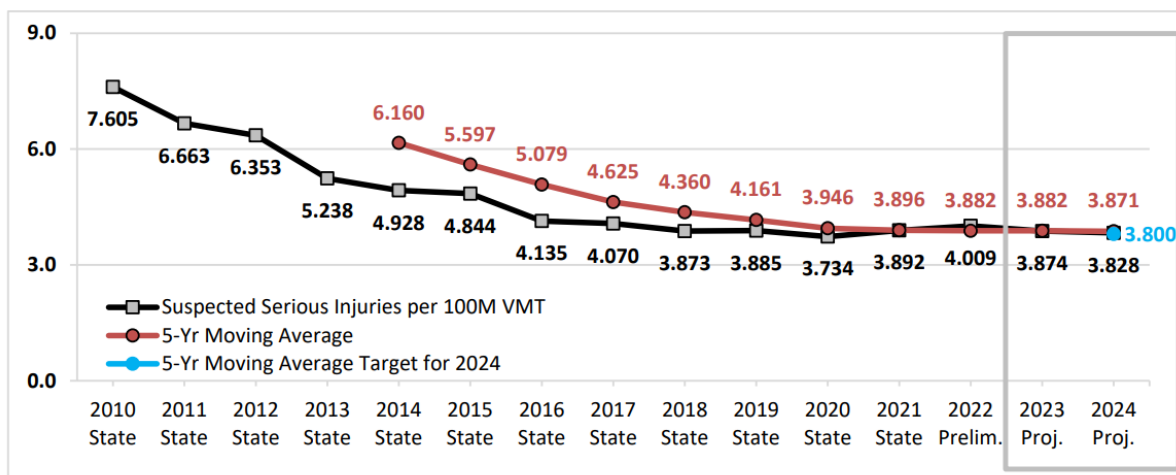


Figure 4 Rate of Serious Injuries per 100 million Vehicle Miles Traveled (VMT)

**NMDOT 2024 Target for Rate of Serious Injuries: 3.800**

**TABLE 7: NEW MEXICO- SAFETY PERFORMANCE TARGET ASSESSMENT**

Performance Measure	Desired Trend	Original Targets 2018-2022	Baseline <sup>2</sup> 2018-2022	New Targets 2023	New Targets 2024
Number of Fatalities	↓	421.9	430.6	446.6	450.0
Fatality Rate (per 100 million VMT)	↓	1.645	1.626	1.695	1.689
Number of Serious Injuries	↓	1,030.5	983.9	995.4	1,018.6
Rate of Serious Injuries (per 100 million VMT)	↓	3.842	3.716	3.801	3.800
Number of Non-Motorized Fatalities and Serious Injuries	↓	196.6	200.1	199.4	200.0

<sup>2</sup>Projected value obtained from NMDOT Performance Measure (PM) Target Report- PM1 2023 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 the EPMPPO 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.

**TABLE 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%	1.5%
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 2023 and FY 2025 were adopted by the Transportation Policy Board on May 19, 2023. (Table 9).

**TABLE 9: INFRASTRUCTURE CONDITION – NEW MEXICO STATE TARGETS**

PM2: INFRASTRUCTURE CONDITION	Baseline	2-Yr Target	4-Yr Target
	2021	2023	2025
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%	37.4%
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%	32.9%
Percent of NHS Bridges Classified as in Poor Condition	2.4%	4.1%	5.5%

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 2023 – FY 2026; INFRASTRUCTURE CONDITION PROJECTS**

Several projects programmed in the RMS 2050 MTP and the 2023-2026 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:

- Horizon at Darrington Intersection Improvements. The Project includes intersection & operational improvements consisting of left and right turn lanes, directional islands and medians as well as traffic signal improvements.
- US 62/180 (Montana Ave.) Expressway & Frontage Roads. Project will construct 6-lane expressway and grade separations at intersections from Tierra Este Rd to FM 659 (Zaragoza Rd). In addition, the project will build 2 lane WB/EB FRs in each direction from Tierra Este Rd to FM 659 Zaragoza Rd. and will include auxiliary lanes and grade separation at intersection. Work includes drainage,



advanced signing, striping, transitional and incidental work (operation improvements) up to FM 659 (Zaragoza Rd).

- NM 213 widening from NM 404 to TX State Line. The project will widen NM 213 from 2 to 4 lanes.

## 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 10: SUMMARY OF PAVEMENT MEASURES TRENDS IN TEXAS**

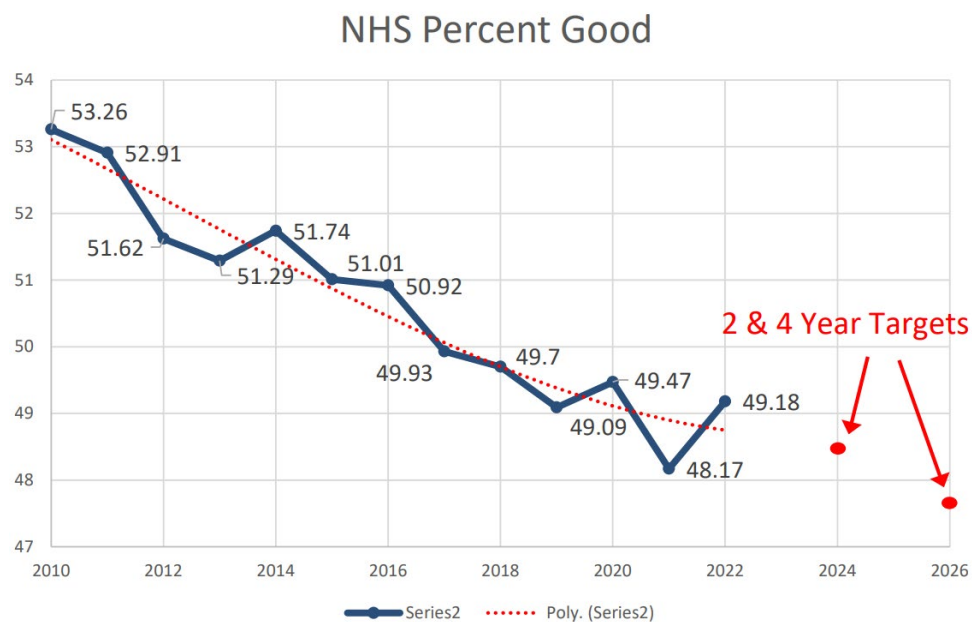
Highway	Performance Measure	2019	2020	2021	2022
IH	Good	65.7%	66.6%	65.8%	64.5%
	Poor	0.2%	0.1%	0.1%	0.1%
Non-IH (NHS)	Good (IRI* Only)		55.2%	54.5%	57.8%
	Good	46.8%	49.2%	48.5%	51.7%
	Poor (IRI* Only)		13.5%	13.7%	11.6%
	Poor	1.2%	1.4%	1.3%	1.3%

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

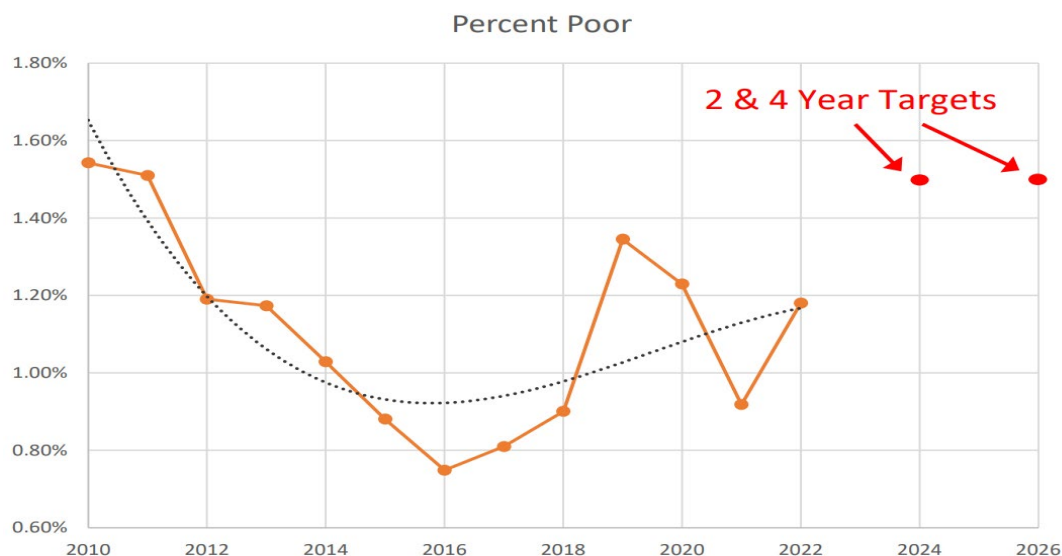
rehabilitation) for bridges and tracking those activities, but the results of those efforts may not be seen in the data for a few years.

For the percent of NHS Bridges classified as in poor condition, TxDOT has a few large deck area bridges that are in fair condition and close to turning to poor condition. A consequence of having such low percent of poor bridges turning poor can have a noticeable impact on the percent poor.

**FIGURE 10: PERCENT OF NHS BRIDGES CLASSIFIED AS IN GOOD CONDITION IN TEXAS**



**FIGURE 11: PERCENT OF NHS BRIDGES CLASSIFIED AS IN POOR CONDITION IN TEXAS**



**TABLE 11: TEXAS- 2022 INFRASTRUCTURE PERFORMANCE TARGET ASSESSMENT**

Performance Measure	Desired Trend	Original Targets (Revised 2021)		Baseline (2022)	New Targets Forecast/Trend	
		2020	2022		2024	2026
Percent of IH Pavements in Good Condition	↑	--	66.5%	64.5%	63.9%	63.6%
Percent of IH Pavements in Poor Condition	↓	--	0.2%	0.1%	0.2%	0.2%
Percent of Non-IH (NHS) Pavements in Good Condition (IRI Only)	↑	52%	54.1%	57.8%		
Percent of Non-IH (NHS) Pavements in Good Condition	↑	--	--	51.7%	45.5%	46%
Percent of Non-IH (NHS) Pavements in Poor Condition (IRI Only)	↓	14.3%	14.2%	11.6%		
Percent of Non-IH (NHS) Pavements in Poor Condition	↓	--	--	1.3%	1.5%	1.5%
NHS Bridges – Good	↑	50.60%	50.40%	49.2%	48.5%	47.6%
NHS Bridges – Poor	↓	0.80%	1.50%	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. The future condition is based on data collected during calendar years 2016-2021 and predicting condition for calendar years 2022 through 2031. Tables 12 and 13 show the collected data for years 2018-2021.

**TABLE 12: SUMMARY OF PAVEMENT MEASURES TRENDS IN NEW MEXICO**

Highway	Performance Measure	2018	2019	2020	2021
IH	Good	70.8	55	56.4	54
	Poor	0.3	0.9	1.2	1.7
Non-IH (NHS)	Good	--	35.8	38.9	36.7
	Poor	--	2.5	2.5	2.6

**TABLE 13: SUMMARY OF BRIDGE MEASURES TRENDS IN NEW MEXICO**

Performance Measure	2018	2019	2020	2021
NHS Bridges - Good	38%	37.6%	36.8%	36.2%
NHS Bridges - Poor	3.1%	3.1%	2.9%	2.4%

**TABLE 14: NEW MEXICO - 2022 INFRASTRUCTURE PERFORMANCE TARGET ASSESSMENT**

Performance Measure	Desired Trend	Original Targets (4yr Revised 2020)		Baseline (2021)	New Targets Forecast/Trend	
		2019	2021		2023	2025
Percent of IH Pavements in Good Condition	↑	--	55.0%	54.0%	42.7%	37%
Percent of IH Pavements in Poor Condition	↓	--	5.00%	1.7%	3.2%	3.8%
Percent of Non-IH (NHS) Pavements in Good Condition	↑	35.6%	34.20%	36.7%	40.6%	37.4%
Percent of Non-IH (NHS) Pavements in Poor Condition	↓	9%	12.00%	2.6%	3.2%	3.9%
NHS Bridges – Good	↑	36%	30%	36.2%	30.8%	32.9%
NHS Bridges – Poor	↓	3.3%	3.3%	2.4%	4.1%	5.5%

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 the EPMPO Transportation Policy Board are presented in the Table 15. 2-year and 4-year targets for FY 2024 and FY 2026 were adopted on May 19, 2023.



**TABLE 15: SYSTEM RELIABILITY – TEXAS STATE TARGETS**

PM3: SYSTEM RELIABILITY	Original Target	Baseline	2-Yr Target	4-Yr Target
	(Revised 2021)	2021	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 2023 and FY 2025 were adopted by the Transportation Policy Board on May 19, 2023. (Table 16).

**TABLE 16: SYSTEM RELIABILITY – NEW MEXICO STATE TARGETS**

PM3: SYSTEM RELIABILITY	Original Target	Baseline	2-Yr Target	4-Yr Target
	(Revised 2021)	2021	2023	2025
Interstate Reliability	95.1%	98.5%	95.1%	95.1%
Non-Interstate Reliability	90.4%	97.5%	94.1%	94.1%
Truck Travel Time Reliability	1.15	1.23	1.30	1.30

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 2023 – FY 2026; 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:

- Horizon at Darrington Intersection Improvements. The Project includes intersection & operational improvements consisting of left and right turn lanes, directional islands and medians as well as traffic signal improvements.
- Interstate Highway 10 Frontage Road Extension from Executive Blvd. to Sunland Park Dr. The project includes construction of 2-lane westbound frontage road and frontage road improvements.
- ITS Infrastructure @ Zaragoza and Bridge of the Americas (BOTA) Port of Entry (POE) The project includes the design, construction, and installation of intelligent transportation systems (ITS) at the Bridge of the Americas (BOTA) and Zaragoza Ports of Entry.

- 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 road from Purple Heart Highway to Shrub Oak Drive.
- Operational Improvements at SH 178 interchange. The project includes interchange improvements to include grade separation(s), rebuild I-10 overpass, U-turns, 4 direct connectors (DC).
- Spur 320 Borderland Expressway Phase I. Construct 2-lane Frontage Roads in each direction and Intersections between BU54 (Dyer) to Railroad Drive.
- Traffic Management Center Upgrade Phase 2-5. The project includes the upgrade of the City of El Paso (COEP) Traffic Management Center and Traffic Signal controller equipment citywide. Phase 1 is the design phase. Phase 2-5 are implementation and construction phases.
- US 62/180 (Montana Ave.) Expressway & Frontage Roads. Project will construct 6-lane expressway and grade separations at intersections from Tierra Este Rd to FM 659 (Zaragoza Rd). In addition, the project will build 2 lane WB/EB FRs in each direction from Tierra Este Rd to FM 659 Zaragoza Rd. and will include auxiliary lanes and grade separation at intersection. Work includes drainage, advanced signing, striping, transitional and incidental work (operation improvements) up to FM 659 (Zaragoza Rd).

## **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 12: INTERSTATE RELIABILITY IN TEXAS

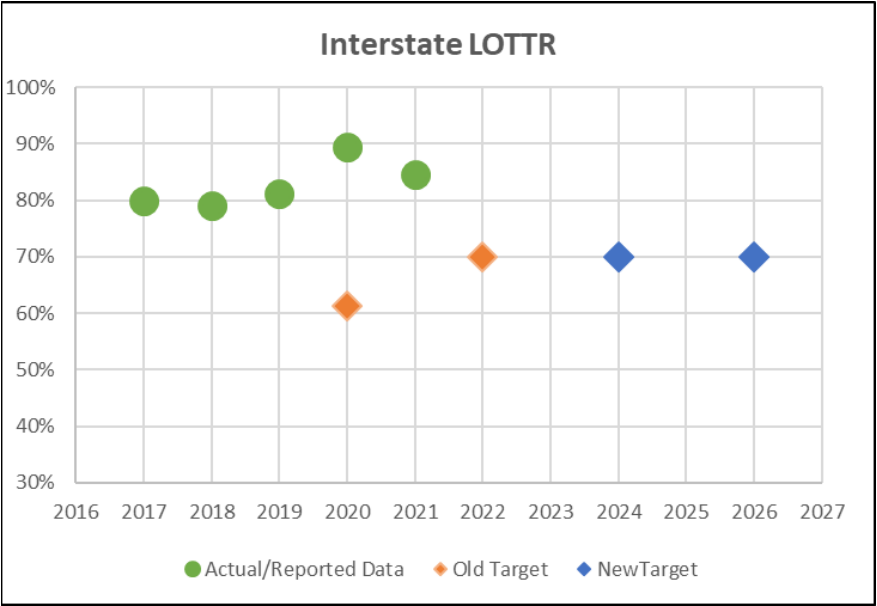
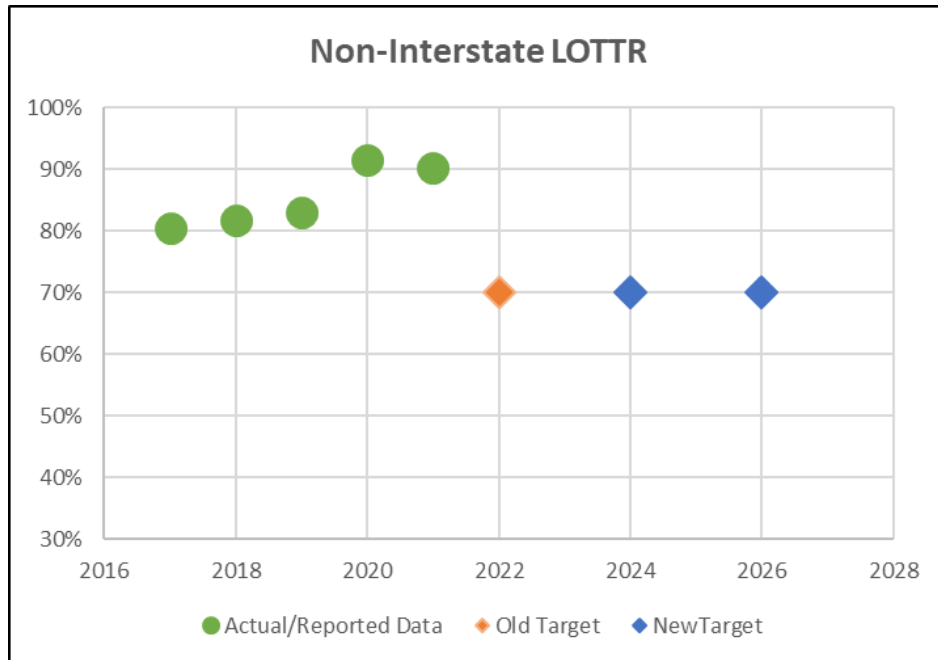
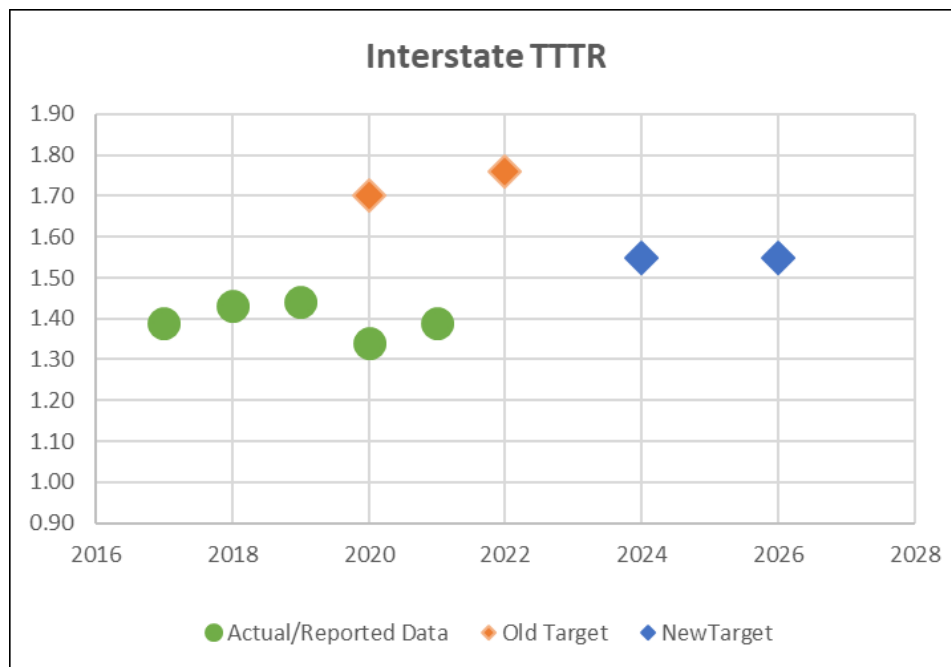


FIGURE 13: NON-INTERSTATE RELIABILITY IN TEXAS



**FIGURE 14: TRUCK TRAVEL TIME RELIABILITY IN TEXAS**





**TABLE 17: TEXAS – SYSTEM RELIABILITY TARGET ASSESSMENT**

Performance Measure	Desired Trend	Original Targets (Revised 2021)		Baseline <sup>1</sup> (2021)	New Targets Forecast/Trend	
		2019	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

<sup>1</sup>Baseline is the actual 5y Average.

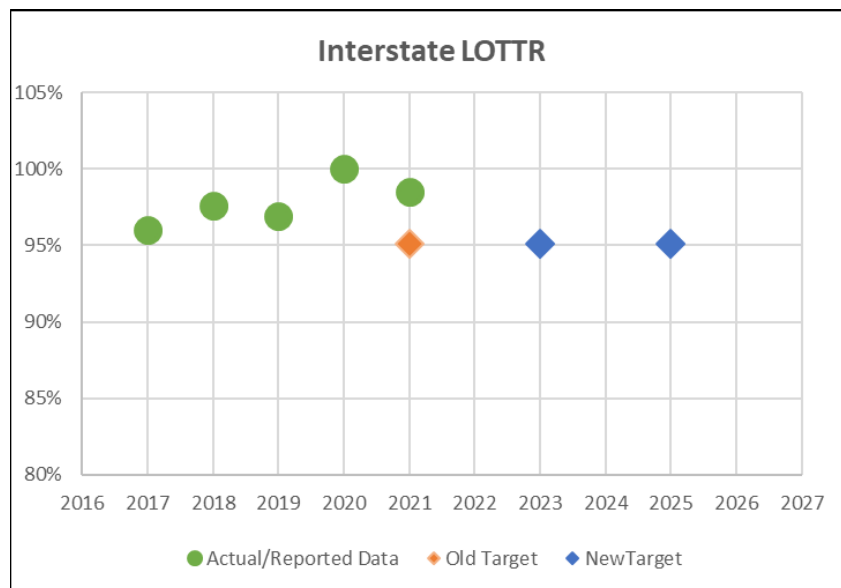
Baseline numbers colored in red means the target was not met.

Baseline numbers colored in green means the target was met.

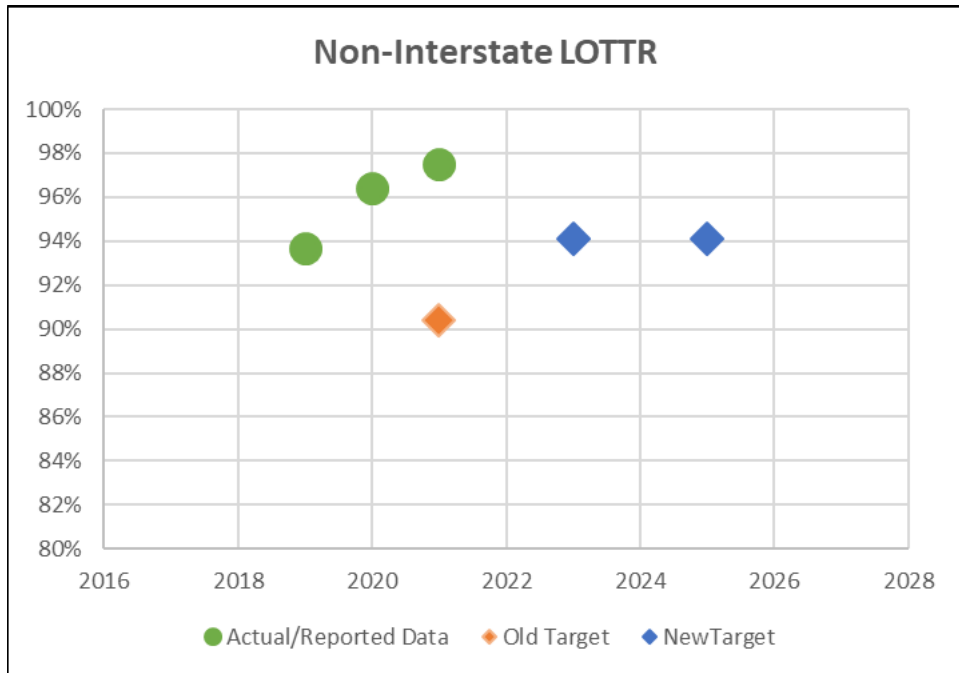
### NMDOT (PM3) TRENDS AND TARGETS

For NMDOT, Interstate Reliability targets, the reliable actual performance assisted in NMDOT's decision to retain the prior target of 95.1% for both the 2- and 4-year targets. For Non-Interstate Reliability targets, the target is 1% less than the Interstate targets. NMDOT believes this represents an acceptable level of reliability and investment in reliability.

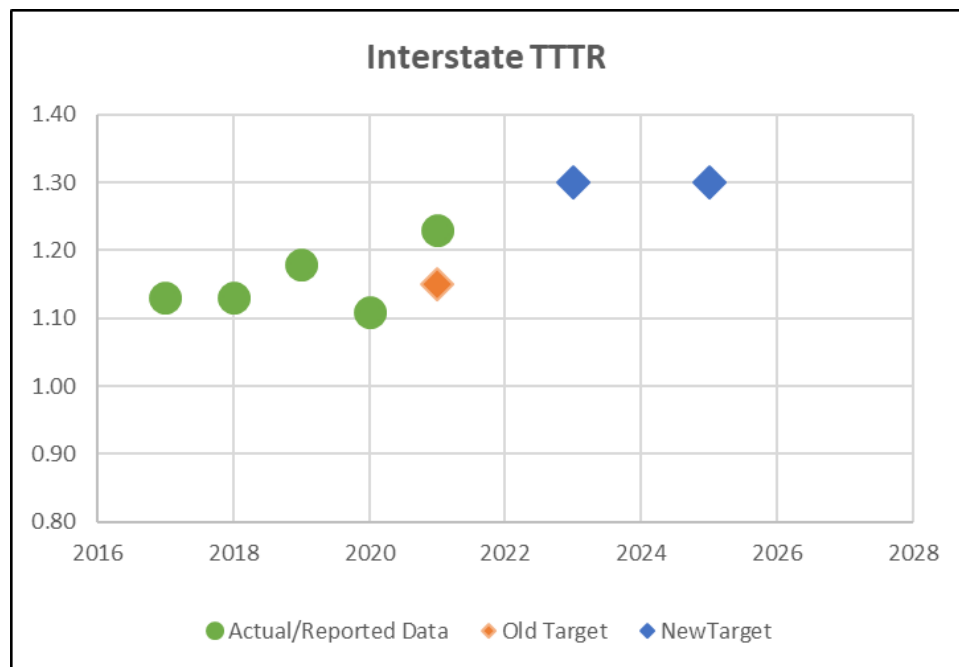
**FIGURE 15: INTERSTATE RELIABILITY IN NEW MEXICO**



**FIGURE 16: NON-INTERSTATE RELIABILITY IN NEW MEXICO**



**FIGURE 17: TRUCK TRAVEL TIME RELIABILITY IN NEW MEXICO**



**TABLE 18: NEW MEXICO – SYSTEM RELIABILITY TARGET ASSESSMENT**

Performance Measure	Desired Trend	Original Targets (Revised 2021)	Baseline <sup>1</sup> (2021)	New Targets Forecast/Trend	
				2023	2025
Interstate Reliability	↑	95.1%	98.5%	95.1%	95.1%
Non-Interstate Reliability	↑	90.4%	97.5%	94.1%	94.1%
Truck Travel Time Reliability	↓	1.15	1.23	1.30	1.30

<sup>1</sup>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, the 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
- 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 the 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 runs through December 31, 2025. (23 CFR 490.105 (e)(4)).

Traffic congestion and on-road mobile source emission reduction targets adopted by the 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 proposes to set both the 2-year and 4-year targets at 20%. 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 19: TRAFFIC CONGESTION TARGETS – EL PASO, TX-NM URBANIZED AREA**

PM3: TRAFFIC CONGESTION	2022 Baseline Score	2-Yr Target	4-Yr Target
	(2021 Actual)	2023	2025
Annual Hours of Peak Hour Excessive Delay (PHED)	8.4	9	10
Percent of Non-Single Occupancy Vehicle (Non-SOV)	20.2%	20%	20%

#### **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 has been completed and was from October 1, 2017 through September 30, 2021. This second performance period is from October 1, 2021, and continues 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 performance period

the EPMPO is not subject to 2-year targets or the requirement of a CMAQ Performance Plan its minimum population threshold of population of greater than 1 million.

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 Performance Period due Oct 1, 2026.

In order to establish the 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 the EPMPO Transportation Improvement Program (TIP) over the past 4-years to develop targets for the future 4-year CMAQ program.

**TABLE 20: CMAQ – TEXAS STATE TARGETS**

PM3: <b>TRAFFIC CONGESTION</b>	Baseline	2-Yr Target	4-Yr Target
	2021	2023	2025
Total Emissions Reduction: PM-10 (KG/DAY)	5.42	4.54	8.90
Total Emissions Reduction: CO (KG/DAY)	216.50	175.75	367.10

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 El Paso MPO (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).

The EPMPO coordinates with NMDOT on programming New Mexico CMAQ funds allocated to the EPMPO. It was, therefore, mutually agreed upon by NMDOT and the 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 the 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) NM CMAQ project (s) quantifiable emissions will be the same in NM as in TX 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 the 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 the EPMPO to be reported in the CMAQ Public Access System as required in 23 CFR 490.105 for establishing targets for MPOs.

**TABLE 21: CMAQ – NEW MEXICO STATE TARGETS**

PM3: <b>TRAFFIC CONGESTION</b>	Baseline	2-Yr Target	4-Yr Target
	2022	2023	2025
Total Emissions Reduction: PM-10 (KG/DAY)	0.0071	0.0021	0.0041
Total Emissions Reduction: VOC (KG/DAY)	0.064	0.0108	0.0218
Total Emissions Reduction: NOX (KG/DAY)	0.120	0.0032	0.0060

### **ANALYSIS OF TRANSPORTATION IMPROVEMENT PROGRAM (TIP) FY 2023-2026; TRAFFIC CONGESTION & CMAQ PROJECTS**

Several projects programmed in the RMS 2050 MTP and the 2023-2026 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:

- Border Highway West Shared Use Path between Racetrack and Executive Center. The project includes installation of an 11-foot asphalt pavement hike and bike trail with irrigated landscaping.
- Downtown Bicycle Improvements. Construct bike facilities downtown to include: buffered bike lanes, conventional bike lanes, bike boulevards, shared lane markings, & protected bike lanes. The project will include road diets, associated signage, wayfinding, striping, & intersection treatments.
- Dyer Pedestrian Sidewalk Improvements from Gateway Boulevard North to Hercules Ave. Project includes sidewalk improvements to pedestrian connectivity and accessibility on Dyer St from Gateway to Hercules Ave. Improves access to BRIO stations at Dyer and Hercules.
- ITS Infrastructure @ Zaragoza and Bridge of the Americas (BOTA) Port of Entry (POE) The project includes the design, construction and installation of intelligent transportation systems (ITS) at the Bridge of the Americas (BOTA) and Zaragoza Ports of Entry.
- Montana RTS Operating Assistance The projects includes the operations for Montana RTS.

- **Regional Transit Start-Up Assistance** The project will establish Transit Service to provide a more efficient, single, seamless, transit system in El Paso County, Horizon City, Vinton, Anthony, San Elizario, Clint, and Socorro.
- **Traffic Management Center Upgrade Phase 2-5** The project included the upgrade of the COEP Traffic Management Center and Traffic Signal controller equipment citywide. Phase-1 is the design phase. Phase-2 to Phase-5 are implementation and construction phases.
- **Ysleta POE Pedestrian Safety Improvements** The project will design and construct pedestrian safety improvements; pedestrian drop-off/pick-up zones, shade canopies, improved crosswalks, pedestrian illumination, signs, signals, traffic calming, streetlights, landscaping, seating, screening walls, CCTVs, bus stop, and wayfinding.

## TRANSIT ASSET MANAGEMENT (TAM)

On September 21, 2018 the Transportation Policy Board approved two new MPO Planning Memorandums of Understanding (MOU), one for Texas and one for New Mexico. The MOUs outline the roles and responsibilities of the states, the MPO, and the mass transit provider, Sun Metro, in carrying out the metropolitan transportation planning process and associated performance measures. Based on the federal performance measure final rule on Transit Asset Management (TAM) issued in July 2016, MPOs are required to coordinate with transit providers to set performance targets and integrate individual transit providers' performance targets and TAM plans into planning documents.

Initial targets were adopted in September 2018 in cooperation with local and state partners. In February 2023, The El Paso MPO Transportation Project Advisory Committee (TPAC) reviewed the existing plans and recommended that the El Paso MPO Transportation Policy Board (TPB) adopt an updated mixture of targets from TxDOT and Sun Metro for the El Paso MPO. 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 El Paso MPO 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 22: EL PASO TRANSIT ASSET MANAGEMENT 4 YEAR TARGETS**

TRANSIT ASSET MANAGEMENT	2023 TARGET
% revenue vehicles at or exceeding useful life benchmark	<15%
% service vehicles (non-revenue) at or exceeding useful life benchmark	<15%
% facilities rated below 3 on condition scale (TERM)	<15%
% track segments with performance restrictions	>95%

As part of the FAST Act, performance measures were incorporated for transit agencies, primarily through the Transit Asset Management (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 (SGR) program and the resulting Transit Asset Management Plan (TAM). 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. In FY2019 CMAQ, the federal funding portion obtained through the regional MPO, will total approximately \$5.5M for operating assistance (Dyer and Alameda BRT's and Streetcar services) plus replacement funding for three buses. As of October 2018, Sun Metro had been awarded approximately \$7.1M of funds for new revenue vehicles that were unspent or pending, including grants obtained through the CMAQ program and other grant programs.

#### **PUBLIC TRANSPORTATION AGENCY SAFETY PLAN (PTASP)**

On September 18, 2020 the El Paso MPO adopted the mass transit provider Sun Metro's PTASP. 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
  - Accidents
  - Incidents
  - Occurrences
- System Reliability

**TABLE 23: PERFORMANCE MEASURES ADOPTED IN THE PTASP**

PERFORMANCE MEASURES-FIXED ROUTE PER EVERY 100,000 MILES	FISCAL YEAR			
	2019	2020	2021	2022
<b>Fatalities</b>	0	0	0	0
<b>Injuries</b>	50	45	40	35

Safety Events	Accidents	178	50	45	45
	Incidents	-	78	70	65
	Occurrences	-	50	45	45
System Reliability (Mean Distance Between Failures)		82,864 miles	90,000 miles	95,000 miles	100,000 miles

PERFORMANCE MEASURES-STREETCAR PER EVERY 100,000 MILES		FISCAL YEAR			
		2019	2020	2021	2022
Injuries		9	7	6	5
Safety Events	Accidents	2	1	1	0
	Incidents	9	7	6	5
	Occurrences	9	7	6	5
System Reliability (Mean Distance Between Failures)		2,879 hrs.	2,900 hrs.	2,950 hrs.	3,000 hrs.

PERFORMANCE MEASURES-PARATRANSIT PER EVERY 100,000 MILES		FISCAL YEAR			
		2019	2020	2021	2022
Injuries		8	8	6	5
Safety Events	Accidents	20	17	15	12
	Incidents	25	22	19	15
	Occurrences	32	25	23	20
System Reliability (Mean Distance Between Failures)		87,019 miles	88,000 miles	90,000 miles	91,000 miles