



FY 2023-2026 Statewide Transportation Improvement Program - STIP

**STIP INTRODUCTION - Appendix A Update
Performance Measures 08/2023**

APPENDIX A

Summary of Performance Measures and Targets (2023-2026 STIP)

PM1 – Safety

TxDOT updates safety performance measures and targets on an annual basis. In 2019, the Texas Transportation Commission adopted Minute Order 115481, directing TxDOT to work towards the goal of reducing the number of deaths on Texas roadways in half by the year 2035 and reducing the number of deaths to zero by the year 2050. TxDOT has modified its performance measures and target calculations accordingly. TxDOT adopted the Safety Performance Targets, shown below, in the *FY 2023 Strategic Highway Safety Plan*. Sources include the Fatality Analysis Reporting System (FARS) for fatality data and TxDOT’s Crash Records Information System (CRIS) for serious injury data. The VM-2 table from the 2019-2021 FHWA Highway Statistics Series was used for vehicle miles traveled information. For all performance measures, the most recent year of available data is shown.

Table 1
Summary of Performance Measures and Targets for Safety

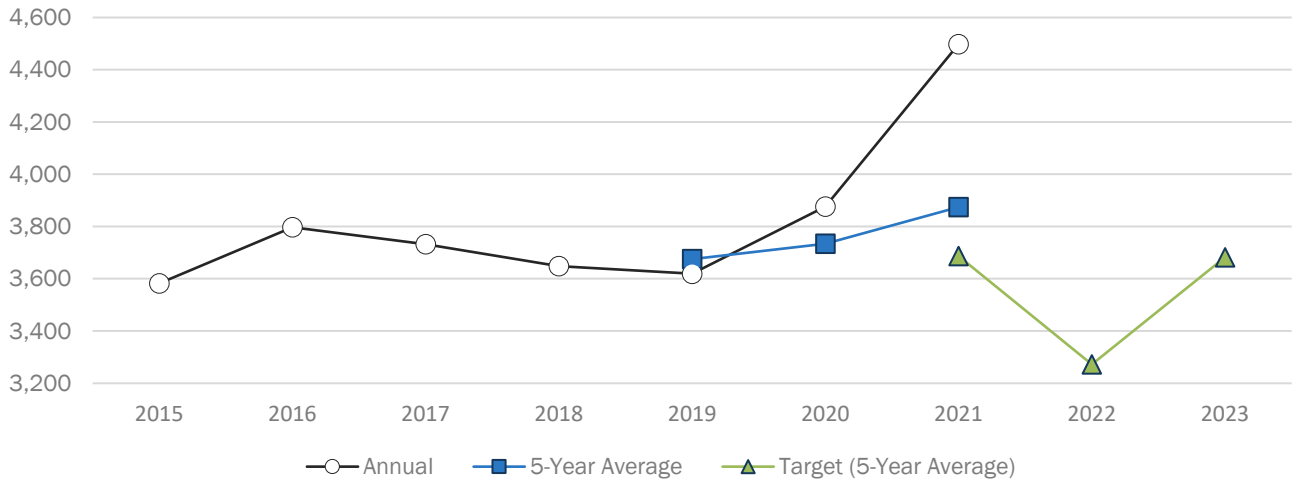
Performance Measures	2019 Actual	2020 Actual	2021 Actual	2022 Target	2023 Target	2023 Target as 5-Year Average
Total Number of Traffic Fatalities	3,619	3,874	4,486	3,272	3,159	3,682
Fatalities per 100 MVMT	1.26	1.49	1.70	1.25	1.20	1.38
Total Number of Serious Injuries	15,858	14,659	19,434	17,539	17,819	17,062
Serious Injuries per 100 MVMT	5.50	5.63	7.35	6.70	6.77	6.39
Total Number of Non-Motorized Fatalities and Serious Injuries	2,291	2,206	2,628	2,321	2,340	2,357

The following sections describe actual results as compared to the performance period targets for each performance measure.

Performance Measure: Total Number of Traffic Fatalities

The 2023 target for this performance measure is to decrease the expected rise of fatalities to no more than a five-year average of 3,682 fatalities for 2023. Data from 2021 shows a total number of 4,498 fatalities and a five-year average of 3,874, both of which exceeded the 2023 target of 3,682 total traffic fatalities. Between 2016 and 2019, total traffic fatalities saw a slight reduction; however, fatalities have increased each year since 2019. Both the chart and table below present the total number of fatalities per year, the five-year averages, and the target five-year averages.

Figure 1
Total Number of Traffic Fatalities

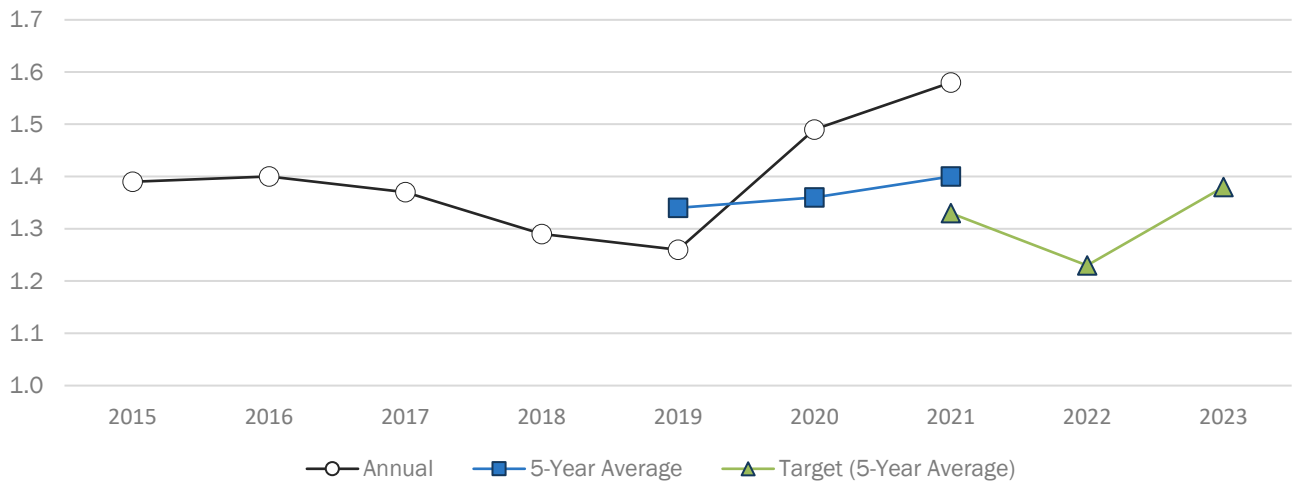


Traffic Fatalities	2015	2016	2017	2018	2019	2020	2021	2022	2023
Annual (Actual)	3,582	3,797	3,732	3,648	3,619	3,876	4,498	--	--
5-Year Average (Actual)	--	--	--	--	3,675	3,734	3,874	--	--
5-Year Average (Target)	--	--	--	--	--	--	3,687	3,272	3,682

Performance Measure: Fatalities per 100 Million Vehicle Miles Traveled (MVMT)

The 2023 target for this performance measure is to decrease the expected rise of fatalities per 100 MVMT to no more than a five-year average of 1.38 fatalities per 100 MVMT for 2023. Fatality data from 2021 shows a total of 1.58 fatalities per 100 MVMT and a five-year average of 1.40 fatalities per 100 MVMT, both of which exceeded the 2023 target of 1.38 fatalities per 100 million MVMT. Between 2016 and 2019, the fatalities decreased; however, fatalities have trended upward since 2019. Both the chart and table below present the total number of fatalities per 100 MVMT, the five-year averages, and the target five-year averages.

Figure 2
Fatalities per 100 MVMT

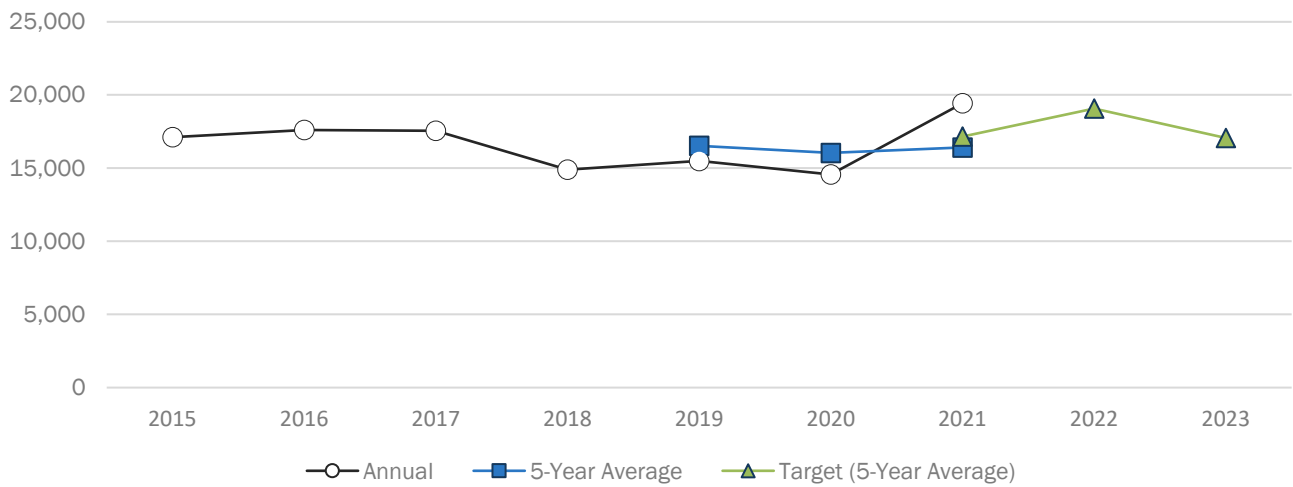


Fatalities per 100 MVMT	2015	2016	2017	2018	2019	2020	2021	2022	2023
Annual (Actual)	1.39	1.40	1.37	1.29	1.26	1.49	1.58	--	--
5-Year Average (Actual)	--	--	--	--	1.34	1.36	1.40	--	--
5-Year Average (Target)	--	--	--	--	--	--	1.33	1.23	1.38

Performance Measure: Total Number of Serious Injuries

The 2023 target for this performance measure is to decrease the expected rise of serious injuries to no more than a five-year average of 17,062 serious injuries for 2023. The 2023 target of 17,062 total serious injuries is similar to the target of 17,151 total serious injuries in 2021. It is worth noting that the 2021 target was achieved with a five-year average in 2021 of 16,402 serious injuries – a 4% difference. Annual serious injuries decreased between 2017 and 2018, remained stable between 2018 and 2020, and saw a 33% spike in 2021. The total number of serious injuries, the five-year averages, and the target five-year averages are presented in the chart and table below.

Figure 3
Total Number of Serious Injuries

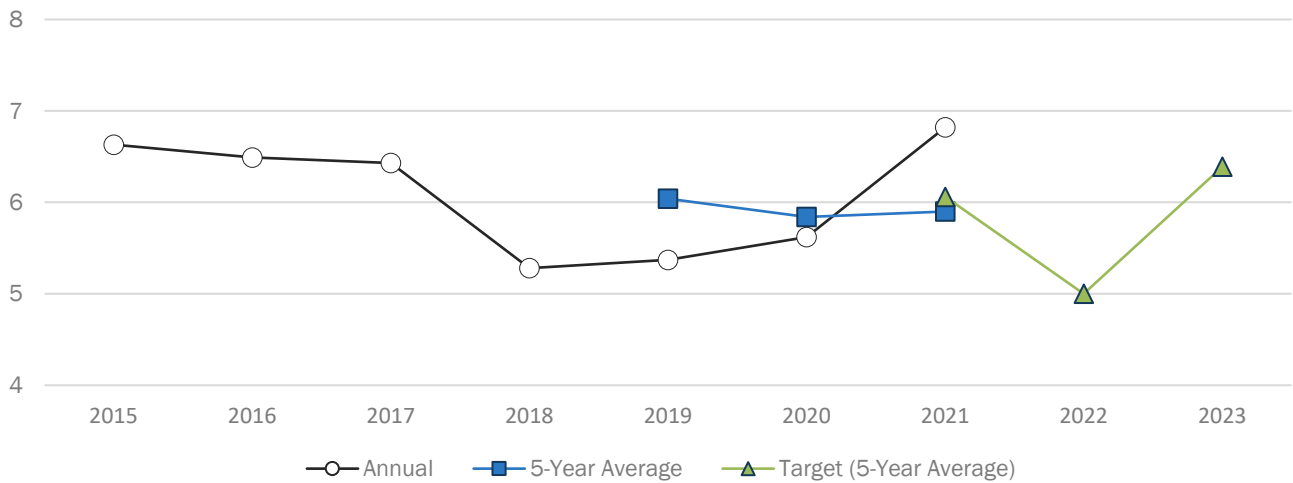


Total Serious Injuries	2015	2016	2017	2018	2019	2020	2021	2022	2023
Annual (Actual)	17,110	17,602	17,546	14,892	15,483	14,565	19,434	--	--
5-Year Average (Actual)	--	--	--	--	16,526	16,035	16,402	--	--
5-Year Average (Target)	--	--	--	--	--	--	17,151	19,065	17,062

Performance Measure: Serious Injuries per 100 MVMT

The 2023 target for this performance measure is to decrease the serious injuries per 100 MVMT to no more than a five-year average of 6.39 serious injuries per 100 MVMT. The 2021 five-year average for rate of serious injury was 5.90 per 100 MVMT, which is below the 2021 target of 6.06 serious injuries per 100 MVMT; however, the annual rate is trending upwards and exceeding the five-year average target by 12.5%. Actual past performance, rolling five-year averages, and targets are shown below.

Figure 4
Serious Injuries per 100 MVMT

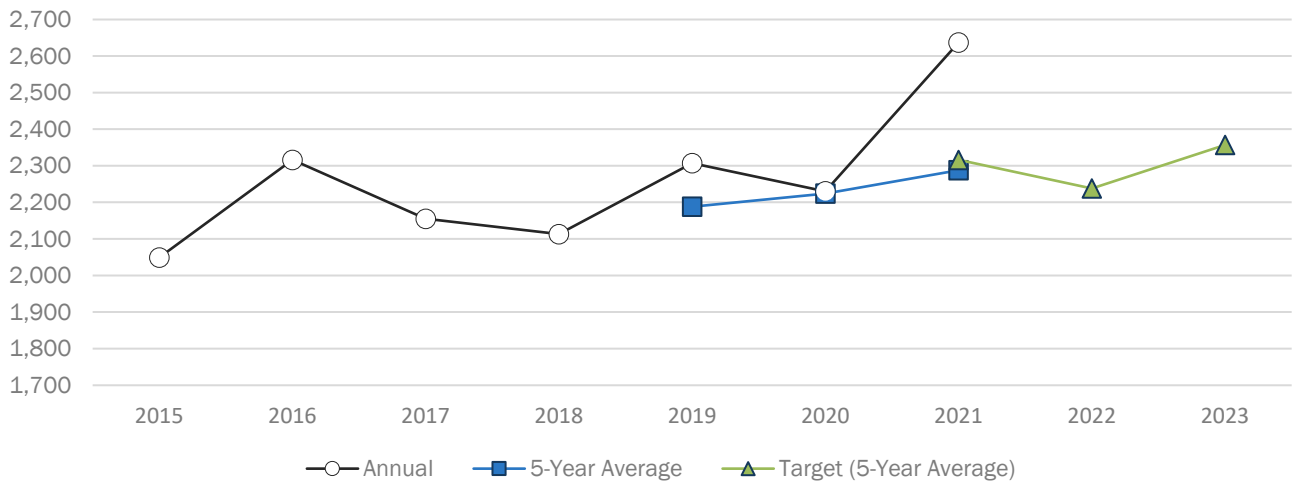


Serious Injuries per 100 MVMT	2015	2016	2017	2018	2019	2020	2021	2022	2023
Annual (Actual)	6.63	6.49	6.43	5.28	5.37	5.62	6.82	--	--
5-Year Average (Actual)	--	--	--	--	6.04	5.84	5.90	--	--
5-Year Average (Target)	--	--	--	--	--	--	6.06	5.00	6.39

Performance Measure: Total Number of Non-Motorized Fatalities & Serious Injuries

The 2023 target for this performance measure is to decrease the expected rise of non-motorized fatalities and serious injuries to no more than a five-year average of 2,357 non-motorized fatalities and serious injuries for 2023. As noted in the table below, the target for 2023 is 2,357 non-motorized fatalities and serious injuries. For 2021, the five-year average of 2,288 was 1.2% below the target of 2,316; however, 2021 annual numbers trended up and exceed targets. Actual past performance, rolling five-year averages, and targets are shown below.

Figure 5
Total Number of Non-Motorized Fatalities and Serious Injuries



Total Non Motorized Fatalities and Serious Injuries	2015	2016	2017	2018	2019	2020	2021	2022	2023
Annual (Actual)	2,049	2,316	2,155	2,113	2,307	2,230	2,637	--	--
5-Year Average (Actual)	--	--	--	--	2,188	2,224	2,288	--	--
5-Year Average (Target)	--	--	--	--	--	--	2,316	2,238	2,357

Safety Performance Measures: Conclusion

Through 2019, the State of Texas experienced several years of stable or modestly declining trends in safety issues, as presented by the performance data. In 2020 and 2021, these trends began to reverse, with increases seen in the measured values across all five safety performance measures. Most notably, in the case of *Total Number of Traffic Fatalities and Fatalities per 100 MVT*, these increases pushed the actual five-year averages above the target five-year averages. These changing trends mirror the safety challenges experienced in many states across the country during this period. In the coming years, TxDOT will continue to prioritize investments in safety, progressing towards its long-term goal of zero roadway fatalities by 2050.

PM 2 – Pavement and Bridges on the National Highway System

23 CFR 490.307 and 23 CFR 490.407 establish performance measures to evaluate the condition of National Highway System (NHS) pavements and bridges. TxDOT established two- and four-year statewide targets for two four-year performance periods. The first performance period was from October 1, 2017 to September 30, 2021, and the second performance period is from October 1, 2021 to September 30, 2025. These performance periods were used for the PM 2 and PM 3 sections.

For the performance measures related to the condition of Interstate System pavement in the first performance period, the 2019 two-year actual measurement serves as the baseline value [23 CFR 490.105(e)(7)(iii) and 23 CFR 490.107(b)(2)(ii)(A)]. For other performance measures in this section, the baseline values are collected from the beginning of the 2017 and 2021 performance periods.

The data for the 2017-2021 performance period reflect values from TxDOT’s 2022 Full Performance Period Progress Report (FPP) and from prior performance reports submitted by TxDOT to the Federal Highway Administration (FHWA), as documented on FHWA’s State Performance Dashboard for Texas. The data for the 2021-2025 performance period reflects values from the 2022 Baseline Performance Period Report (BPP). The methodology to rate the non-Interstate NHS pavements changed for the 2021-2025 performance period, as noted in the table below. The subsequent results sections include more details about the rationale of this change.

Table 2
Summary of Performance Measures and Targets for Pavements and Bridges on the NHS

Performance Measures	2017 Actual	2019 Actual	2021 Actual (New Baseline)	2-Year Target (2023)	4-Year Target (2025)
PAVEMENT					
Percentage of Pavements of the Interstate System in Good Condition*	--	66.6%	64.5%	63.9%	63.6%
Percentage of Pavements of the Interstate System in Poor Condition*	--	0.1%	0.1%	0.2%	0.2%
Percentage of Pavements of the Non-Interstate NHS in Good Condition**	54.5%	55.2%	51.7%**	45.5%	46.0%
Percentage of Pavements of the Non-Interstate NHS in Poor Condition**	14.0%	13.5%	1.3%**	1.5%	1.5%
BRIDGES					
Percentage of NHS Bridges Classified as in Good Condition	50.7%	50.7%	49.2%	48.5%	47.6%
Percentage of NHS Bridges Classified as in Poor Condition	0.9%	1.3%	1.1%	1.5%	1.5%
*Per federal guidelines, baseline condition is not required for the Pavements on the Interstate System measures for the first performance period only.					
**The methodology for rating these performance measures changed for the 2021-2025 performance period. More details can be found in the results sections below.					

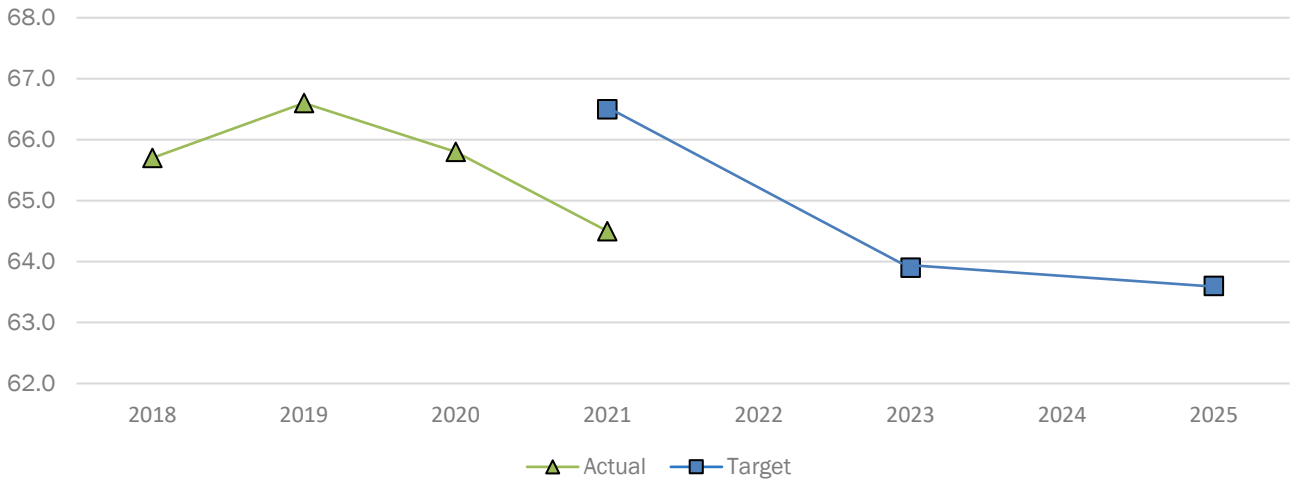
The following sections describe actual results as compared to the performance period targets for each performance measure.

Performance Measure: Percentage of Pavements of the Interstate System in Good Condition

For the 2017-2021 performance period, the actual 2021 four-year Percentage of Pavements of the Interstate System in Good Condition (64.5%) was lower than the four-year target of 66.5%, thus the 2021 four-year target for this performance measure was not met. Rutting is the main contributor to the drop in this performance measure. Though cracking, International Roughness Index (IRI), and faulting maintained stable trends, more lane miles were categorized as fair or poor condition due to increased rutting. TxDOT’s data collection vendor adjusted their rutting postprocessing algorithm in 2022, which may have caused slightly higher rutting reported on Interstates. TxDOT will monitor this for consideration in mid-cycle reporting. TxDOT has continued to improve pavement management, maintenance, and rehabilitation techniques through core programs such as the four-year pavement management plan and District peer reviews. TxDOT will continue these efforts to achieve the future target for Interstate pavements in good condition.

For the 2021-2025 performance period, the most recent four years of pavement condition data and the moving-average method were used to establish the Good Condition target.

Figure 6
Percentage of Pavements of the Interstate System in Good Condition



Percentage of Pavements of the Interstate System in Good Condition	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	--	65.7	66.6	65.8	64.5	-- ¹	--	--	--
Target	--	--	--	--	66.5	--	63.9	--	63.6

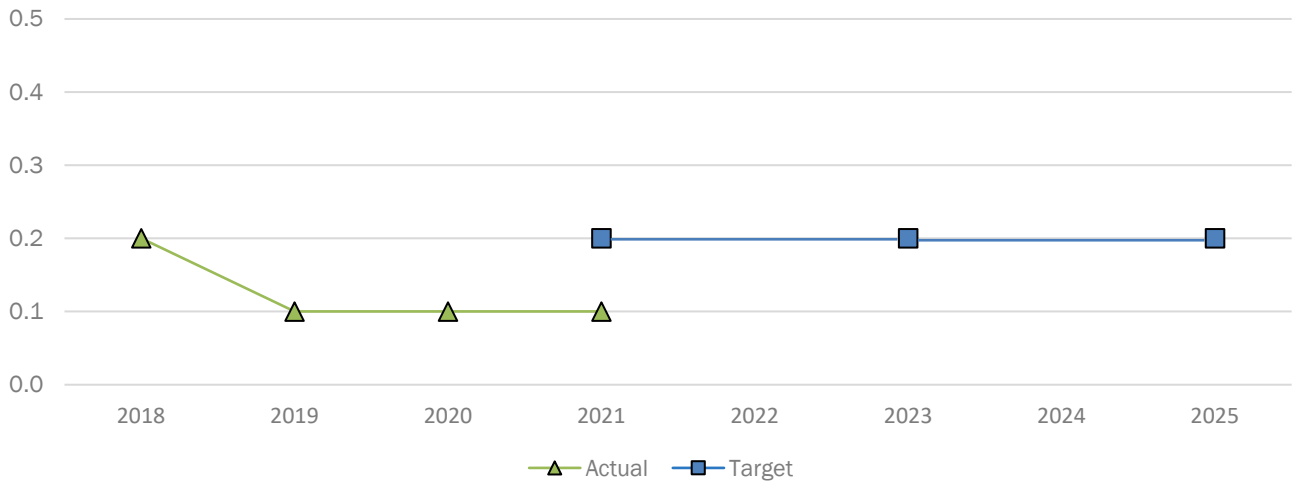
¹ TxDOT is in the process of collecting and verifying actual 2022 data for several Performance Measures.

Performance Measure: Percentage of Pavements of the Interstate System in Poor Condition

For the 2017-2021 performance period, the actual four-year Percentage of Pavements of the Interstate System in Poor Condition (0.1%) was lower than the four-year target of 0.2%, meaning the 2021 target for this performance measure was met. TxDOT has continued to improve pavement management, maintenance, and rehabilitation techniques, successfully contributing towards this performance measure. In particular, the pavement rehabilitation strategy has lowered the percentage of Interstate System pavements in poor condition to a level below that outlined in the four-year target.

For the 2021-2025 performance period, the most recent four years of pavement condition data and the moving-average method were used to establish the Poor Condition target.

Figure 7
Percentage of Pavements of the Interstate System in Poor Condition



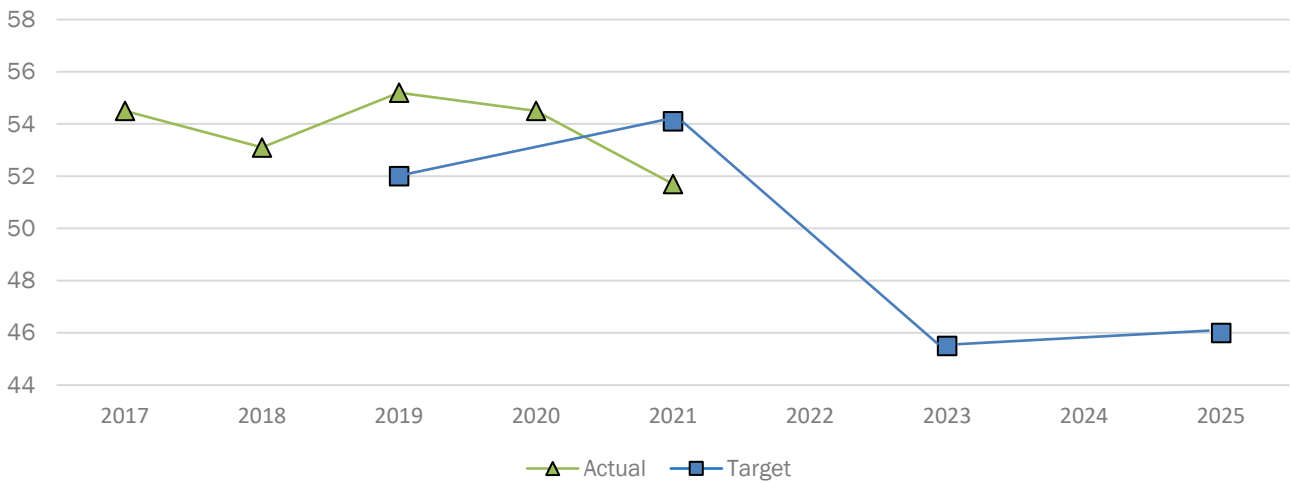
Percentage of Pavements of the Interstate System in Poor Condition	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	--	0.2	0.1	0.1	0.1	--	--	--	--
Target	--	--	--	--	0.2	--	0.2	--	0.2

Performance Measure: Percentage of Pavements of the Non-Interstate NHS in Good Condition

For the 2017-2021 performance period, the actual four-year Percentage of Pavements of the Non-Interstate NHS in Good Condition (51.7%) did not meet the four-year target of 54.1%. The pavement targets were set based on the historical federal performance measure data using the four-year moving average approach. TxDOT uses state measures to manage the state-owned pavement network. Performance measures established by FHWA were used to calculate asset condition for NHS assets. TxDOT’s performance measure showed overall pavement condition has consistently improved in the last four years. In 2001, the Texas Transportation Commission established the statewide pavement condition goal, and in 2021 the percentage of lane miles in Good or better condition reached a record high. Because of the different performance measures used by FHWA, TxDOT’s performance measure may not consistently align with FHWA performance measures.

The 2022 TxDOT Transportation Asset Management Plan (TAMP) Chapter 4 shows 2031 performance projections for Interstate Highway (IH) and TxDOT owned non-IH NHS pavements, which used life cycle planning analysis based on TxDOT’s performance measures. In the TAMP, TxDOT performed a statistical analysis to correlate the FHWA measure and the TxDOT’s performance measure. The TAMP prediction was over a 10-year period and the performance variation for 0.1-mile sections may have been smoothed out using the statistical analysis approach. The federal targets are two- and four-year prediction intervals where this conversion may have more impact on the predicted value. Therefore, TxDOT used the historical four-year moving average approach to determine the two- and four-year target values.

Figure 8
Percentage of Pavements of the Non-Interstate NHS in Good Condition



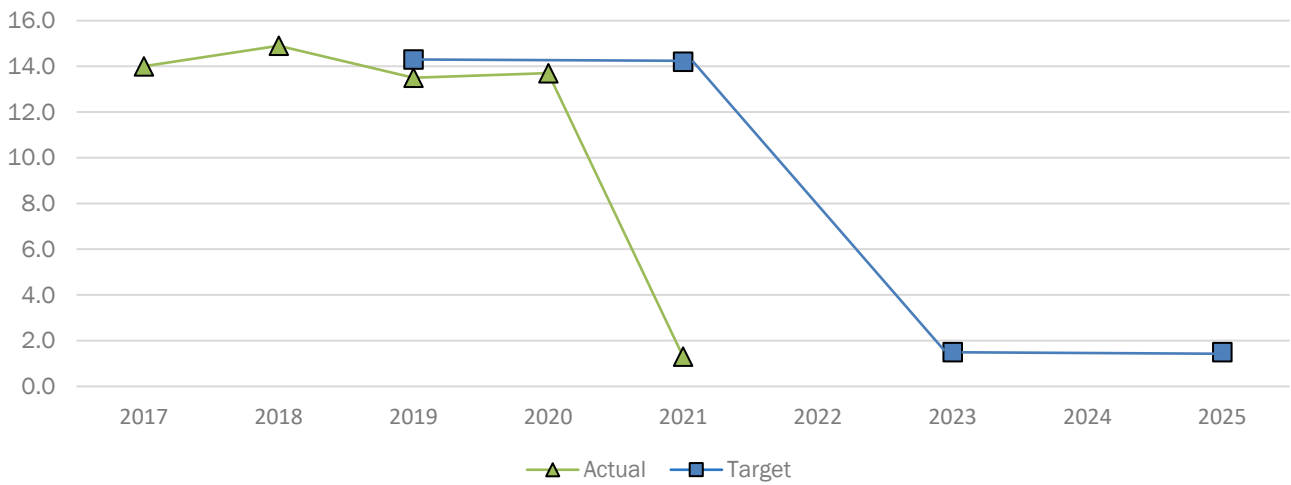
Percentage of Pavements of the Non-Interstate NHS in Good Condition	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	54.5	53.1	55.2	54.5	51.7	-	-	-	-
Target	-	-	52.0	-	54.1	-	45.5	-	46.0

Performance Measure: Percentage of Pavements of the Non-Interstate NHS in Poor Condition

For the 2017-2021 performance period, the actual four-year Percentage of Pavements of the Non-Interstate NHS in Poor Condition (11.6%) was lower than the four-year target of 14.2%, meaning TxDOT successfully met its 2021 target for this performance measure. TxDOT has continued to improve pavement management, maintenance, and rehabilitation techniques in the last four years. In particular, TxDOT’s pavement rehabilitation strategy has lowered the percentage of pavements in poor condition to a level below that outlined in the four-year target.

As mentioned in the previous section, the methodology to rate non-Interstate NHS pavement changed for the 2021-2025 performance period, resulting in a large reduction in target values for the new performance period.

Figure 9
Percentage of Pavements of the Non-Interstate NHS in Poor Condition



Percentage of Pavements of the Non-Interstate NHS in Poor Condition	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	14.0	14.9	13.5	13.7	1.3	--	--	--	--
Target	--	--	14.3	--	14.2	--	1.5	--	1.5

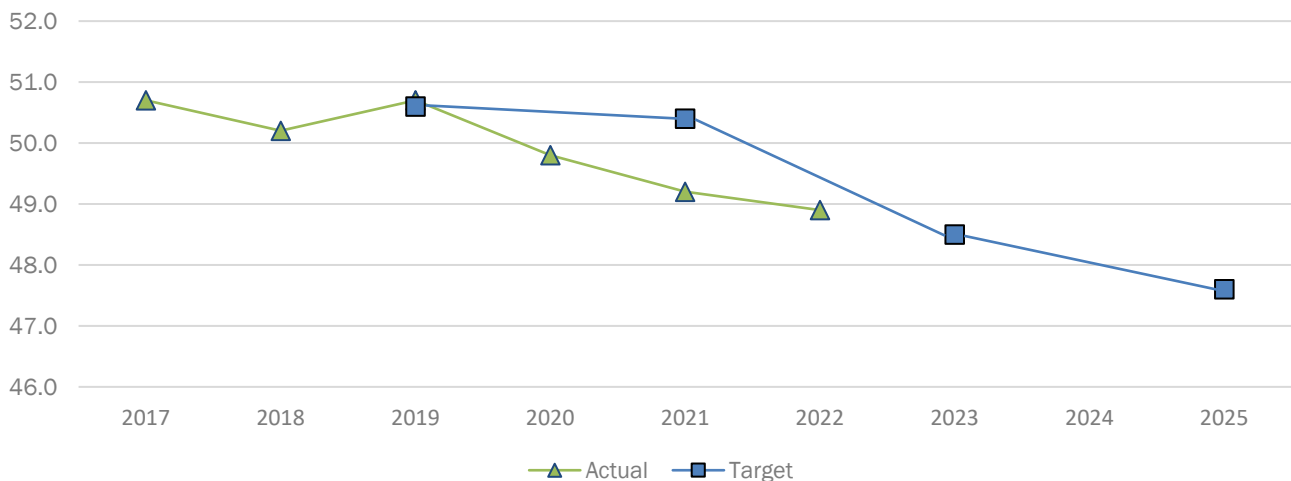
Performance Measure: Percentage of NHS Bridges Classified as in Good Condition

For the 2017-2021 performance period, the four-year actual performance of 49.2% NHS bridges classified as in Good Condition did not meet the four-year target of 50.4% in 2021. Previous investments were largely focused on bridges in poor condition. However, over the past several years, TxDOT shifted focus away from a “worst first” approach to prioritizing maintenance of the entire inventory of bridges, regardless of condition. While bridges in poor condition have been and always will be a priority, TxDOT also significantly increased the amount of funding dedicated to repairing bridges in fair condition. Some of those bridges will be returned to good condition, while others will be maintained such that they will not deteriorate to poor condition in the foreseeable future. This shifted focus will be beneficial for all categories (good, fair, and poor), though it will take several years for the data to reflect.

Failure to meet the reported target for the 2017-2021 performance period is primarily due to two factors: (1) set targets were overly aggressive given that the trends are difficult to reverse with such an expansive bridge inventory; and (2) although effective, the new strategies to maintain the entire inventory will take several years to be reflected in the numbers.

The two-year and four-year targets for the 2021-2025 performance period were established by plotting the performance of the percent good over the last 10 years and analyzing the trend of that performance. The targets for the percent good acknowledge the fact that the percentage of bridges in good condition 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 for bridges and tracking those activities, but the results of those efforts may not be seen in the data for a few years. TxDOT has also procured a bridge management program that will allow for more sophisticated predictions, but it will take several years before it has been populated such that it can be used in lieu of the current methods.

Figure 10
Percentage of NHS Bridges Classified as in Good Condition



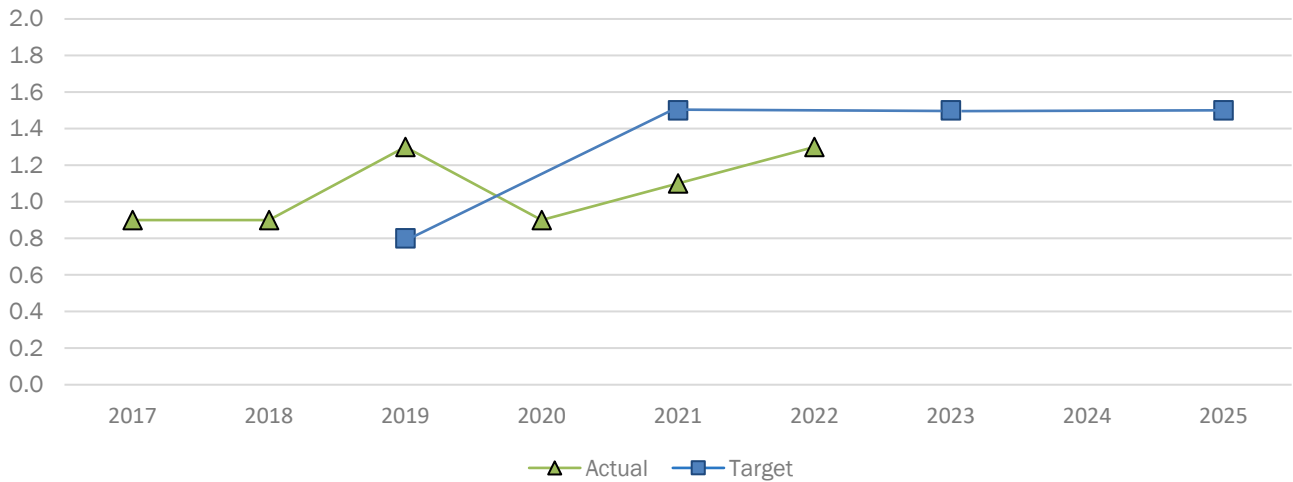
Percentage of NHS Bridges Classified as in Good Condition	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	50.7	50.2	50.7	49.8	49.2	48.9	--	--	--
Target	--	--	50.6	--	50.4	--	48.5	--	47.6

Performance Measure: Percentage of NHS Bridges Classified as in Poor Condition

For the 2017-2021 performance period, the four-year actual performance of 1.1% of NHS bridges classified as in Poor Condition successfully surpassed the 1.5% target set for 2021 in the Mid Performance Period Progress Report. Current investments have shown as effective in achieving the desired performance.

The two-year and four-year targets for the 2021-2025 performance period were determined by plotting the percent of bridges in poor condition over the last 10 years. TxDOT anticipates the percentage of bridges in poor condition to remain near 1% with some fluctuation but acknowledges that one or two large deck area bridges turning to poor condition could cause a significant fluctuation in the percentage. The bridge management program mentioned in the prior section will allow for more sophisticated predictions in the future.

Figure 11
Percentage of NHS Bridges Classified as in Poor Condition



Percentage of NHS Bridges Classified as in Poor Condition	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	0.9	0.9	1.3	0.9	1.1	1.3	--	--	--
Target	--	--	0.8	--	1.5	--	1.5	--	1.5

Pavement and Bridges on the NHS Performance Measures: Conclusion

The four-year targets for Interstate and non-interstate NHS pavement in good condition were not met during the first performance period. Reasons include incomplete data due to construction, adjustments in rutting processing algorithms affecting measurements, and timing lags between completed treatments and data collection. TxDOT continues efforts to improve pavement management and aims to achieve future targets for pavement in good condition. Monitoring and adjustments will be made based on vendor algorithm changes and condition improvements.

TxDOT prioritizes maintenance of the entire inventory of bridges, regardless of condition. While bridges in poor condition have been and always will be a priority, TxDOT is continuing to invest funding for repairing bridges in fair condition. TxDOT is aggressive in addressing fair- and poor-rated structures, either through rehabilitation to address the deficiency or, in many cases, by replacing those bridges. TxDOT evaluates each to identify if the deficiencies can be improved in a cost-effective manner before embarking on a project.

The two-year and four-year targets that were established for the 2021-2025 Performance Period for the Statewide Bridges on the NHS support the long-term national infrastructure condition performance goal of maintaining the highway infrastructure asset system in a state of good repair identified in 23 U.S.C. §150(b). The targets continue to keep a focus on the bridges in both poor and fair condition in an effort to keep the percentage of bridges in poor condition low. While those efforts to keep the percentage of poor condition bridges low have been successful, TxDOT realizes that there were tradeoffs in other areas, including a decreasing percentage of bridges in good condition. Moving from a “worst first” approach to focusing on the state’s entire bridge inventory, TxDOT has increased efforts in routine maintenance and early repair actions, regardless of condition, and has increased funding for rehabilitation of bridges in fair condition. TxDOT is confident that these actions will be effective, however it will take several years for these efforts to be demonstrated in the numbers. These targets are aligned with the state asset management plan, which also shows a continued decline in the percentage of good bridges.

PM 3 – System Reliability, Freight, and Congestion

Performance measures assessing the reliability of the NHS are established in 23 CFR 490.507 and 23 CFR 490.607. There are two measures that assess the general reliability of the NHS, including the Percent of the Person-Miles Traveled on the Interstate that are Reliable and the Percent of Person-Miles Traveled on the Non-Interstate NHS that are Reliable. An additional measure, the Truck Travel Time Reliability (TTTR) Index, assesses the reliability of freight movement on the Interstate. For all three measures, travel time reliability is defined as the consistency of travel times on a given roadway across days or times of day. Roadways with greater variability of travel times across days or times of day are considered less reliable.

Relatedly, 23 CFR 490.707 establishes national performance measures to assess traffic congestion in urbanized areas. The two performance measures included in this assessment are Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita and Percent of Non-Single Occupancy Vehicle (SOV) Travel. For the PHED Performance Measure, excessive delay is defined as the additional time spent in congested roadway conditions at travel speeds lower than a normal threshold for delay. This rule sets the excessive delay speed threshold at 20 miles per hour or 60% of the posted speed limit, whichever is greater. The Percent of Non-Single Occupancy Vehicle (SOV) Travel Performance Measure defines non-SOV travel as travel by any mode other than driving alone, including travel avoided by telecommuting.

23 CFR 490.703 states that Traffic Congestion performance measures are applicable to all urbanized areas (UZAs) that include NHS mileage with a population over 1 million for the first performance period and in UZAs with a population over 200,000 for the second period as well as all other performance periods. These UZAs must be, in all or part, designated as nonattainment or maintenance areas based on the National Ambient Air Quality Standards (NAAQS) for ozone (O₃), carbon monoxide (CO), or particulate matter (PM₁₀ and PM_{2.5}). Due to these requirements, some UZAs do not include any data for the 2017-2021 performance period.

TxDOT established two- and four-year statewide targets for two four-year performance periods: 2017-2021 and 2021-2025. Data in this section reflect values from TxDOT's 2022 Full Performance Period Progress Report and from prior performance reports submitted by TxDOT to FHWA, as documented on FHWA's State Performance Dashboard for Texas. The data for the 2021-2025 performance period reflects values from 2022 Baseline Performance Period Report (BPP).

Table 3
Summary of Performance Measures and Targets for System Reliability, Freight, and Congestion

Performance Measures	2017 Actual	2019 Actual	2021 Actual (New Baseline)	2-Year Target (2023)	4-Year Target (2025)
HIGHWAY SYSTEM PERFORMANCE					
Percent of the Person-Miles Traveled on the Interstate that are Reliable	79.5%	81.2%	84.6%	70.0%	70.0%
Percent of the Person-Miles Traveled on the Non-Interstate NHS that are Reliable*	--	83.0%	90.3%	70.0%	70.0%
FREIGHT RELIABILITY (MOVEMENT) PERFORMANCE					
Truck Travel Time Reliability (TTTR) Index	1.40	1.44	1.39	1.55	1.55
PHED PER CAPITA PERFORMANCE					
Annual Hours of PHED Per Capita: Dallas – Fort Worth – Arlington	12.2	--	11.4	12.9	12.5
Annual Hours of PHED Per Capita: Houston	13.4	--	13.5	16.0	16.0
Annual Hours of PHED Per Capita: Conroe – The Woodlands**	--	--	8.0	8.0	8.0
Annual Hours of PHED Per Capita: Denton – Lewisville**	--	--	4.7	4.1	3.7
Annual Hours of PHED Per Capita: El Paso**	--	--	8.4	9.0	10.0
Annual Hours of PHED Per Capita: McKinney**	--	--	1.9	1.3	0.9
Annual Hours of PHED Per Capita: San Antonio**	--	--	10.6	15.0	16.0
PERCENT OF NON-SOV TRAVEL					
Percent of Non-SOV Travel: Dallas – Fort Worth – Arlington	19.5%	19.5%	22.2%	22.7%	23.0%
Percent of Non-SOV Travel: Houston	20.1%	19.6%	21.4%	21.1%	22.0%
Percent of Non-SOV Travel: Conroe – The Woodlands	--	--	19.7%	20.0%	20.0%
Percent of Non-SOV Travel: Denton – Lewisville	--	--	22.7%	22.8%	22.9%
Percent of Non-SOV Travel: El Paso	--	--	20.2%	20.0%	20.0%
Percent of Non-SOV Travel: McKinney	--	--	22.7%	22.8%	22.9%
Percent of Non-SOV Travel: San Antonio	--	--	23.1%	20.0%	20.0%
*Per federal guidelines, baseline condition is not required for the non-Interstate NHS reliability measure for the first performance period only.					
**In accordance with 23 CFR 490.703, these urbanized areas were not required to report CMAQ Traffic Congestion performance measures during the 2017-2021 performance period.					

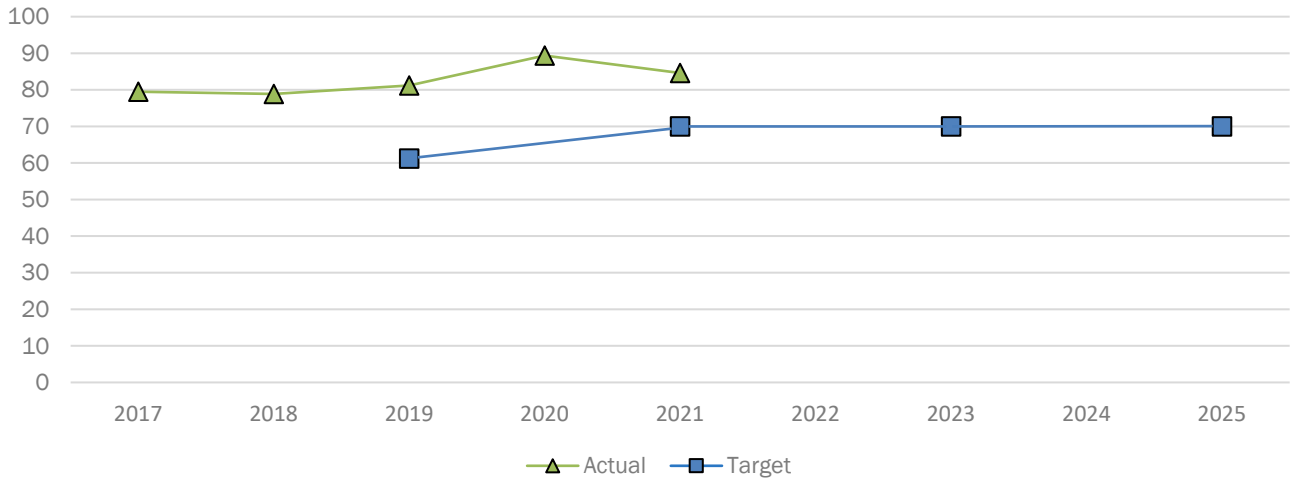
The following sections describe actual results as compared to the performance period targets for each performance measure.

Performance Measure: Percent of the Person-Miles Traveled on the Interstate that are Reliable

For the 2017-2021 performance period, the actual four-year performance for the percent of the person-miles traveled on the Interstate that are reliable (84.6%) exceeded the four-year target of 70.0% by a margin of 14.6%. This performance is due to TxDOT selecting and ranking eligible projects according to their ability to address the state’s goals and improve the transportation system’s overall performance, including system reliability. Significant progress was made from the 2017 baseline figure of 79.5%, and TxDOT expects reliability performance to remain strong as investments in system reliability are prioritized in the state’s long-range planning process. When prioritizing investments in reliability and improving mobility, TxDOT evaluates projects based on location-specific conditions such as truck percentage, average daily traffic, traffic volume projections, current and future lane configurations, functional classification, and other factors. Consideration of these criteria in project evaluation allows TxDOT to not only identify areas that have the most congested road segments, but also to direct funding and prioritize projects that address congestion and improve travel time reliability in these areas. As a result of its long-range planning efforts, intergovernmental coordination, project selection, and deployment of technology enhancements, TxDOT successfully meets its target for this performance measure by pursuing activities that both increase the efficiency of existing infrastructure and add additional capacity where needed.

For the 2021-2025 performance period, TxDOT 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 was unknown. Because of these uncertainties, TxDOT took a conservative approach to target-setting and applied a consistent value of 70% for both the two-year and four-year targets.

Figure 12
Percent of the Person-Miles Traveled on the Interstate that are Reliable



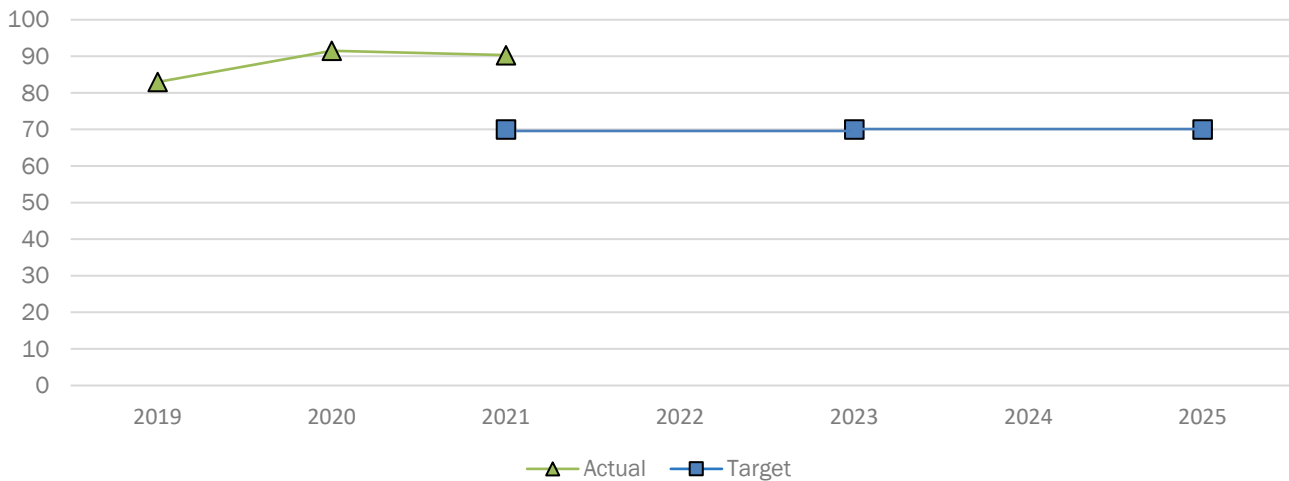
Percent of the Person-Miles Traveled on the Interstate that are Reliable	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	79.5	78.9	81.2	89.4	84.6	--	--	--	--
Target	--	--	61.2	--	70.0	--	70.0	--	70.0

Performance Measure: Percent of the Person-Miles Traveled on the Non-Interstate NHS that are Reliable

For the 2017-2021 performance period, the actual four-year performance for the percent of the person-miles traveled on the non-Interstate NHS that are reliable (90.3%) exceeded the four-year target (70.0%) by 20.3% and, as a result, TxDOT met its performance measure target. The data show an increase in reliability of 7.3% in person-miles traveled on non-Interstate NHS roadways in 2021 over the 2019 figure of 83.0%. This performance is due to TxDOT selecting and ranking eligible projects according to their ability to address the state’s goals and improve the transportation system’s overall performance, including system reliability. TxDOT pursues a similar strategy for non-Interstate NHS roadways as outlined above for Interstate projects, prioritizing the funding of projects statewide that promote reliability along corridors with the worst congestion.

Like the previous performance measure, TxDOT took a conservative approach to 2021-2025 performance period target-setting due to the COVID-19 pandemic and applied a consistent value of 70% for both the two-year and four-year targets.

Figure 13
Percent of the Person-Miles Traveled on the Non-Interstate NHS that are Reliable



Percent of the Person-Miles Traveled on the Non-Interstate NHS that are Reliable	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	--	--	83.0	91.5	90.3	--	--	--	--
Target	--	--	--	--	70.0	--	70.0	--	70.0

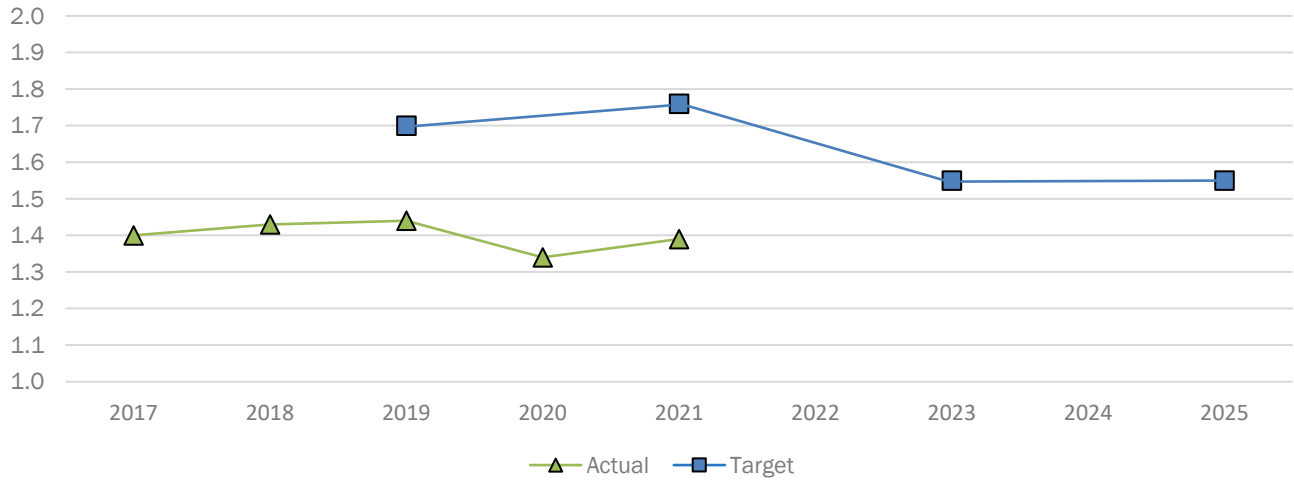
Performance Measure: Truck Travel Time Reliability (TTTR) Index

For the 2017-2021 performance period, the actual four-year performance for truck travel time reliability (1.39) met the four-year target of 1.76, representing an improvement over the 2017 baseline for this performance measure (1.40). TxDOT has implemented several strategies in recent years to support progress towards this measure. These strategies include planning efforts like the State Freight Plan, which documents truck bottlenecks and critical supply chain corridors, helping to prioritize investments in the most impactful locations through the MPO TIPs and the STIP. The 2020 Freight Network Technology and Operations Plan also identifies technology and operational strategies to address congestion and safety challenges. Technology solutions that support freight travel time reliability include Transportation System Management and Operations initiatives, truck parking availability systems, freight flow forecasting tools, and the Freight Investment Prioritization Tool.

Additional planning efforts include regional freight mobility plans for the Rio Grande Valley and the Permian Basin, as well as the Texas-Mexico Border Master Plan, which allows the state to focus on strategies that support the enormous amount of freight moving across the border with the nation's largest trading partner, Mexico. TxDOT's Freight Branch has also increased staffing levels to enhance freight planning and stakeholder engagement capacity, including key parties like the Supply Chain Working Group, the Texas Freight Advisory Committee, and the Texas Transportation Institute (TTI). Collectively, these strategies demonstrate TxDOT's commitment to improving truck travel time reliability through a multi-faceted and collaborative statewide approach.

Like the previous performance measures, TxDOT took a conservative approach to 2021-2025 performance period target-setting due to the COVID-19 pandemic and applied a consistent value of 1.55 for both the two-year and four-year targets.

Figure 14
Truck Travel Time Reliability Index



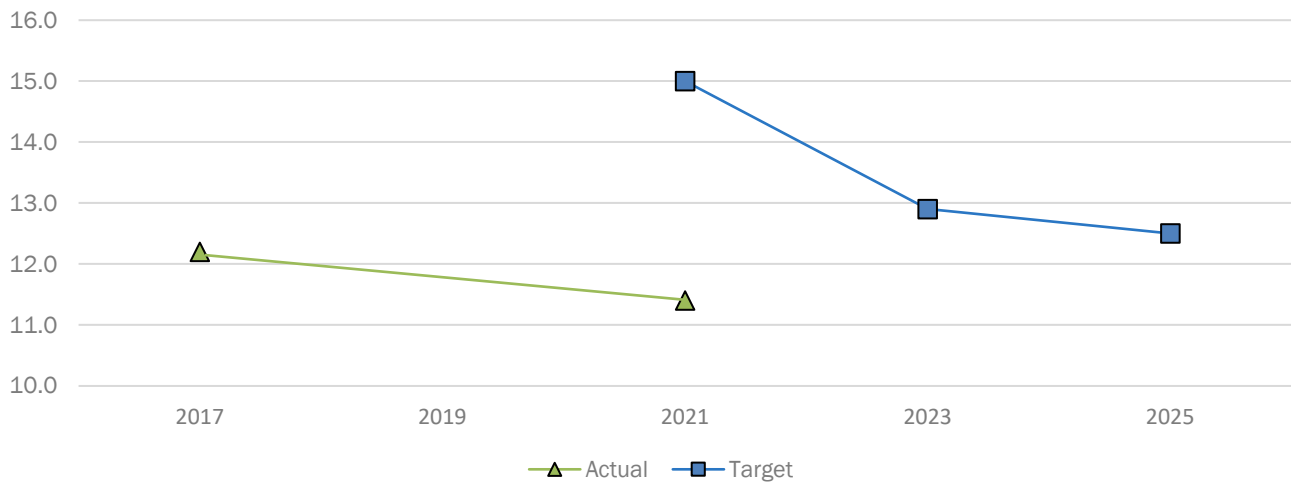
Truck Travel Time Reliability Index	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	1.40	1.43	1.44	1.34	1.39	--	--	--	--
Target	--	--	1.70	--	1.76	--	1.55	--	1.55

**Performance Measure: Annual Hours of Peak Hour Excessive Delay Per Capita:
Dallas – Fort Worth – Arlington**

For the 2017-2021 performance period, the actual four-year performance of 11.4 hours for Annual Hours of Peak Hour Excessive Delay (PHED) per Capita in the Dallas – Fort Worth – Arlington region was 3.6 hours less than the four-year target of 15.0 hours. Thus, TxDOT successfully met its 2021 target for this performance measure. While some of this reduction may be attributed to the COVID-19 pandemic, TxDOT also encourages flexible working hours, telecommuting, and alternative modes of transportation such as walking or biking to help reduce the demand on the roadway system and control excessive delay at peak commuting hours. Additionally, TxDOT and its partners, including the North Central Texas Council of Governments (NCTCOG) in the Dallas – Fort Worth – Arlington region, consider delay reduction as a goal when assessing the anticipated outcome of a project and making investment decisions. Thus, NCTCOG recommends, programs, and implements projects that reduce recurring congestion, which include widenings of freeway facilities, interchange reconstruction, bottleneck removal, and asset optimization.

For the 2021-2025 performance period, the two-year and four-year targets for PHED were established using a best-fit least squares trend analysis of observed data from 2016-2019 (the period of time for which reliable data is available, excluding the COVID-19 pandemic). The targeted decrease in PHED over four years illustrates an improvement in this measure in line with NCTCOG's recent implementation of multiple congestion-relief projects.

Figure 15
Annual Hours of PHED Per Capita: Dallas – Fort Worth – Arlington



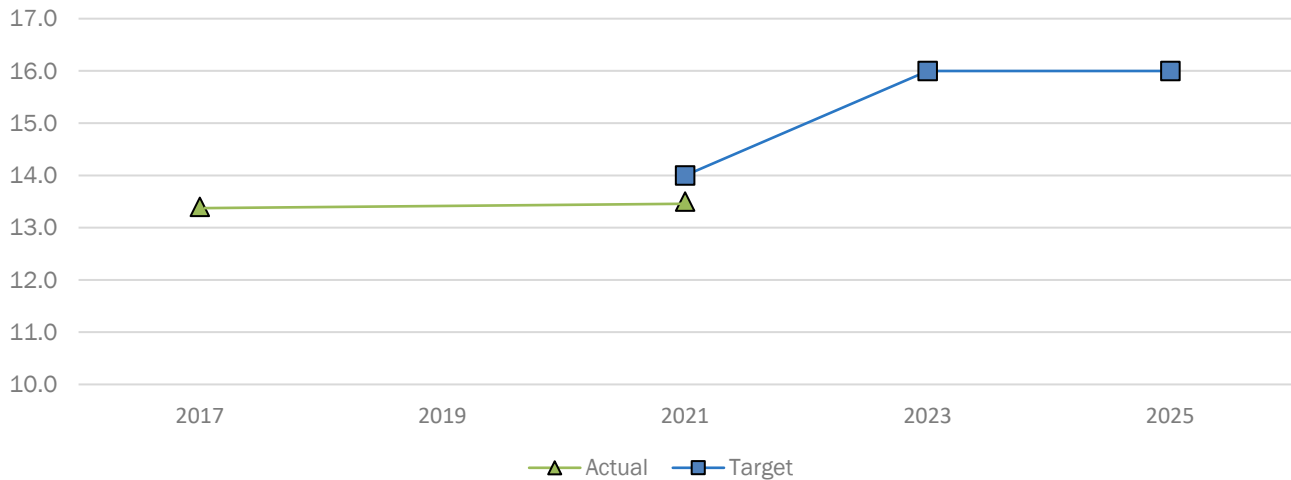
Annual Hours of PHED Per Capita: Dallas – Fort Worth – Arlington	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	12.2	--	--	--	11.4	--	--	--	--
Target	--	--	--	--	15.0	--	12.9	--	12.5

Performance Measure: Annual Hours of Peak Hour Excessive Delay Per Capita: Houston

For the 2017-2021 performance period, the actual four-year performance for Annual Hours of Peak Hour Excessive Delay per Capita in the Houston region of 13.5 hours was 0.5 hours less than the four-year target of 14.0 hours, meaning the 2021 target for this performance measure was successfully met. Despite significant growth in the Houston region during the performance period and an overall increase in vehicle miles traveled, the four-year performance represents only a slight 0.1-hour increase over the 2017 baseline and remains below the target threshold. To support progress towards the four-year target, the Houston – Galveston Area Council (H-GAC) has included this travel delay measure in the Regional Transportation Plan (RTP), Transportation Improvement Program (TIP), and other planning initiatives, policies, and projects, prioritizing projects that reduce congestion in the region.

The PHED two-year and four-year targets for the 2021-2025 performance period were formulated through an extensive evaluation of traffic data, using a trend analysis of past performance for the years of 2016 to 2022. Traffic data was obtained from the National Performance Management Research Data Set at the University of Maryland Center for Advanced Transportation Technology Lab. The analysis considered the years impacted by the COVID pandemic to be outliers and were excluded due to its unusual nature. Established targets acknowledged the PHED evening peak period change from the 4 PM to 8 PM period to the 3 PM to 7 PM period. This change produces one additional hour of peak period delay because the 7 PM – 8 PM hour is outside of the defined afternoon peak period. However, the PM peak of 3 PM to 7 PM more accurately captures congestion that occurs during the evening peak period.

Figure 16
Annual Hours of PHED Per Capita: Houston



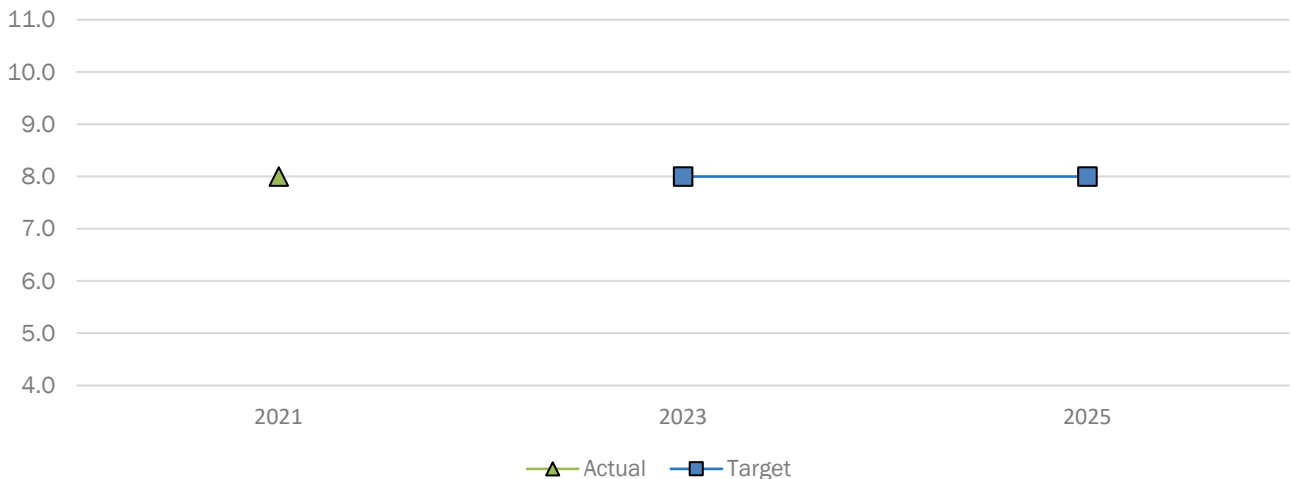
Annual Hours of PHED Per Capita: Houston	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	13.4	--	--	--	13.5	--	--	--	--
Target	--	--	--	--	14.0	--	16.0	--	16.0

Performance Measure: Annual Hours of Peak Hour Excessive Delay Per Capita: Conroe – The Woodlands

In accordance with 23 CFR 490.703, TxDOT did not collect PHED data for the Conroe – The Woodlands urbanized area (UZA) for the 2017-2021 performance period.

For the 2021-2025 performance period, the PHED two-year and four-year targets were formulated with an extensive evaluation of traffic data and utilizing a trend analysis of past performance for the years of 2016 to 2022. Traffic data was obtained from the National Performance Management Research Data Set at the University of Maryland Center for Advanced Transportation Technology Lab. The analysis considered the years impacted by the COVID pandemic to be outliers and were excluded due to its unusual nature. Established targets acknowledged the PHED evening peak period change from the 4 PM to 8 PM period to the 3 PM to 7 PM period. This change produces one additional hour of peak period delay because the 7 PM – 8 PM hour is outside of the defined afternoon peak period. However, the PM peak of 3 PM to 7 PM more accurately captures congestion that occurs during the evening peak period.

Figure 17
Annual Hours of PHED Per Capita: Conroe – The Woodlands



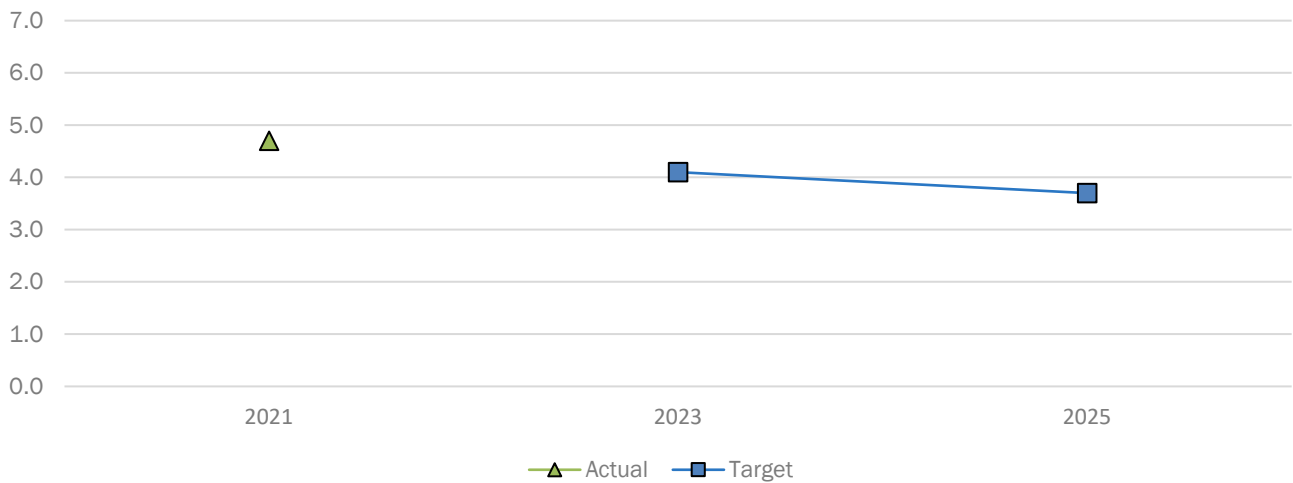
Annual Hours of PHED Per Capita: Conroe – The Woodlands	2021	2022	2023	2024	2025
Annual (Actual)	8.0	--	--	--	--
Target	--	--	8.0	--	8.0

Performance Measure: Annual Hours of Peak Hour Excessive Delay Per Capita: Denton – Lewisville

In accordance with 23 CFR 490.703, TxDOT did not collect PHED data for the Denton – Lewisville UZA for the 2017-2021 performance period.

For the 2021-2025 performance period, the two-year and four-year targets for PHED in the Denton-Lewisville UZA were established using a trend analysis that uses the same trend/slope from the least-squares trend analysis used for the Dallas-Fort Worth-Arlington UZA, adjusted to intercept the most recent observed value in 2021 for Denton-Lewisville. More nuanced analysis of this small, data-limited UZA will take place for subsequent performance periods when a stronger data trend is available. This trend illustrates a slow but steady improvement in this measure in line with NCTCOG's recent steady implementation of multiple congestion-relief projects.

Figure 18
Annual Hours of PHED Per Capita: Denton – Lewisville



Annual Hours of PHED Per Capita: Denton – Lewisville		2021	2022	2023	2024	2025
Annual (Actual)		4.7	--	--	--	--
Target		--	--	4.1	--	3.7

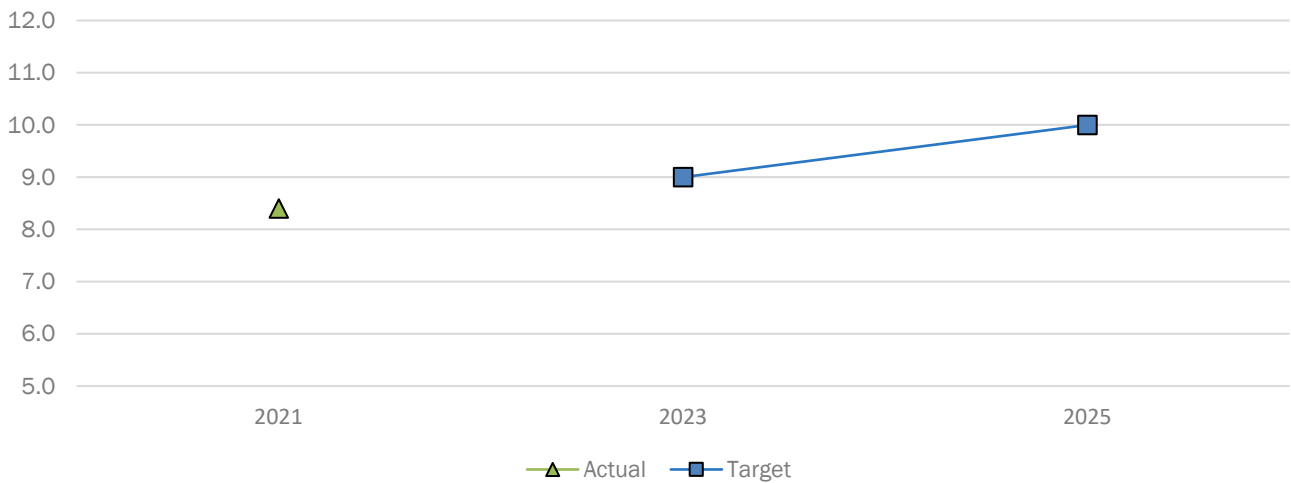
Performance Measure: Annual Hours of Peak Hour Excessive Delay Per Capita: El Paso

In accordance with 23 CFR 490.703, TxDOT did not collect PHED data for the El Paso UZA for the 2017-2021 performance period.

For the 2021-2025 performance period, the two-year and four-year PHED targets are higher than the calculated baseline. However, the 2017-2021 observed PHED values show a significant drop in 2019 and 2020, likely due to pandemic-related reductions in travel. Since this is the first time the El Paso Metropolitan Planning Organization (EPMPO) is required to set targets, and the data is not consistent enough to forecast a reliable target, these were set at a two-year target of 9.0 annual hours per capita and a four-year target of 10.0 annual hours per capita. This is conservative considering the expected demographic growth.

Targets were established first by looking at PHED trends for years 2017 through 2021, computed from the National Performance Management Research Data Set (NPMRDS) Analytics Dashboard which utilizes INRIX data. Once the trends were established and a probable value projected for years 2024 and 2026, the EPMPO in consultation with local partners and the Texas Transportation Institute (TTI), agreed on a value that, through projects and/or policies, could be reached locally and contribute nationally to improve PHED goals. Such projects and policies should become a main element of the long range plan for the region. The EPMPO is looking into adding data from additional years in order to develop a more consistent trend (isolate pandemic effects); once this is achieved, the EPMPO might be able to revise the targets.

Figure 19
Annual Hours of PHED Per Capita: El Paso



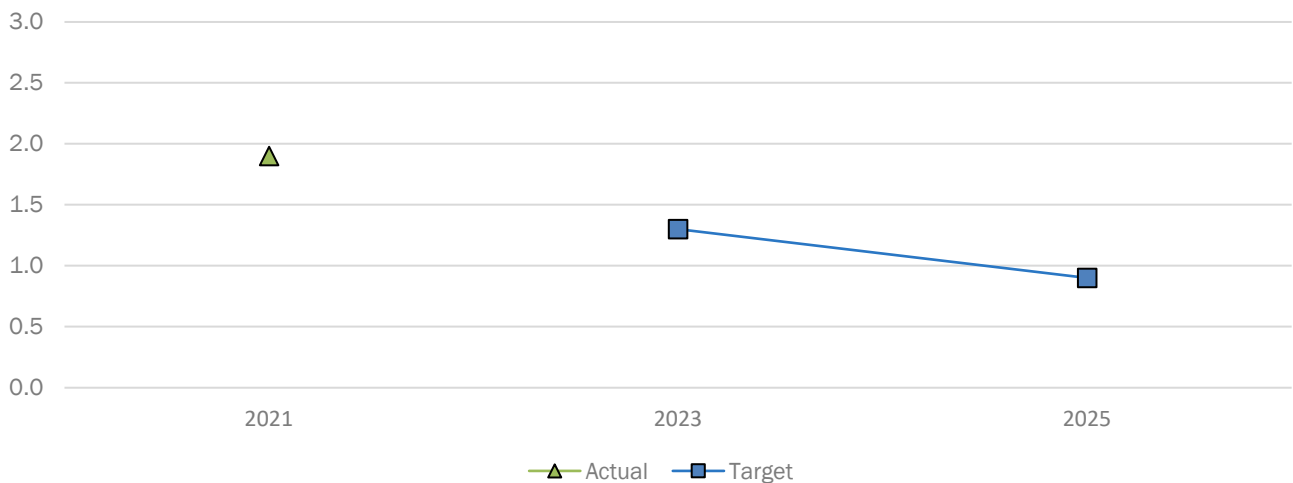
Annual Hours of PHED Per Capita: El Paso	2021	2022	2023	2024	2025
Annual (Actual)	8.4	--	--	--	--
Target	--	--	9.0	--	10.0

Performance Measure: Annual Hours of Peak Hour Excessive Delay Per Capita: McKinney

In accordance with 23 CFR 490.703, TxDOT did not collect PHED data for the McKinney UZA for the 2017-2021 performance period.

For the 2021-2025 performance period, the two-year and four-year targets for PHED in the McKinney UZA were established using a trend analysis that uses the same trend/slope from the least-squares trend analysis used for the Dallas-Fort Worth-Arlington UZA, adjusted to intercept the most recent (2021) observed value for McKinney. More nuanced analysis of this small, data-limited UZA will take place for subsequent performance periods when a stronger data trend is available. This trend illustrates a slow but steady improvement in this measure in line with NCTCOG's recent steady implementation of multiple congestion-relief projects.

Figure 20
Annual Hours of PHED Per Capita: McKinney



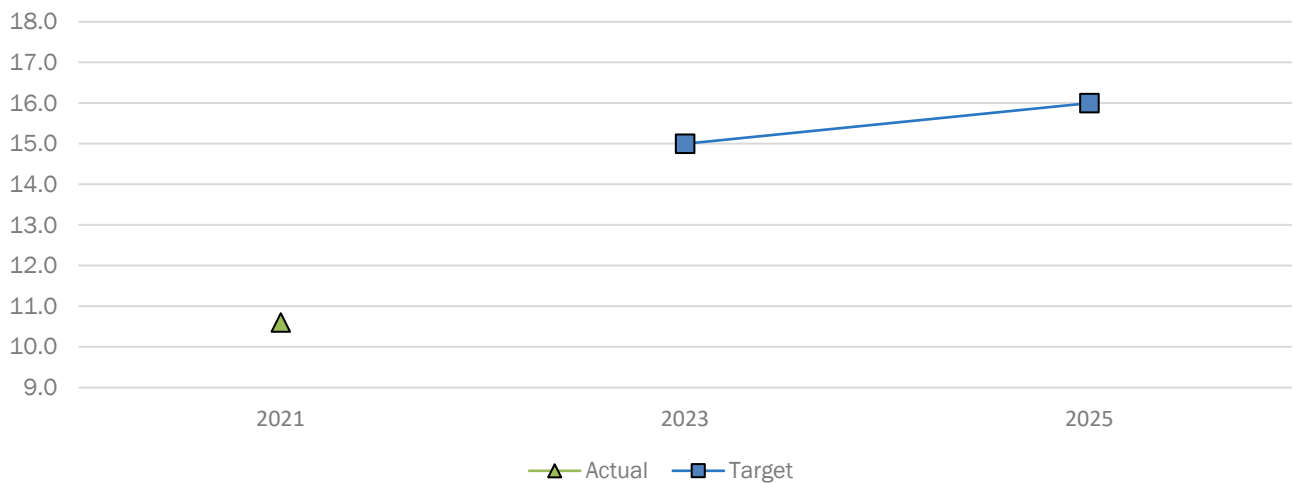
Annual Hours of PHED Per Capita: McKinney	2021	2022	2023	2024	2025
Annual (Actual)	1.9	--	--	--	--
Target	--	--	1.3	--	0.9

Performance Measure: Annual Hours of Peak Hour Excessive Delay Per Capita: San Antonio

In accordance with 23 CFR 490.703, TxDOT did not collect PHED data for the San Antonio UZA for the 2017-2021 performance period.

For the 2021-2025 performance period, Alamo Area Metropolitan Planning Organization (AAMPO) used the National Performance Management Research Data Set (NPMRDS) data from past years and assumed a 2% annual growth in both excessive delay and in person-miles traveled. AAMPO believes this is a conservative target that reflects pre-COVID-19 trends.

Figure 21
Annual Hours of PHED Per Capita: San Antonio



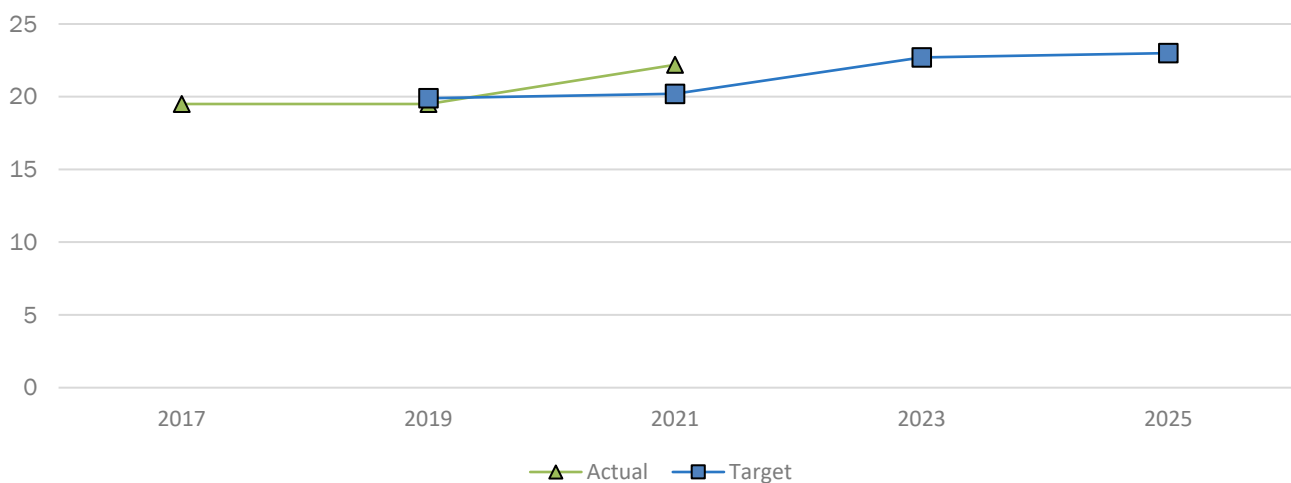
Annual Hours of PHED Per Capita: San Antonio	2021	2022	2023	2024	2025
Annual (Actual)	10.6	--	--	--	--
Target	--	--	15.0	--	16.0

Performance Measure: Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: Dallas – Fort Worth – Arlington

For the 2017-2021 performance period, the actual four-year performance for the percent of non-SOV travel in the Dallas – Fort Worth – Arlington region (21.4%) exceeded the four-year target of 20.0% and similarly represents progress over the 2017 baseline figure of 19.5%. To support progress on this measure, the North Central Texas Council of Governments (NCTCOG) continues to recommend, program, and implement multi-modal transportation projects that incentivize non-SOV travel in the Dallas – Fort Worth – Arlington Urbanized Area, including ongoing efforts to significantly expand the region's transit system and off-street bikeway network. These efforts have led to steady improvements in this measure in recent years; however, these improvements were dwarfed by the massive increase in telecommuting seen during the COVID-19 pandemic. The combination of these two factors resulted in the observed progress on this measure for the four-year performance period.

For the 2021-2025 performance period, NCTCOG used Method A (American Community Survey 5-Year Estimates) as detailed in 23 CFR 490.709(f)(1) to obtain data for the Non-SOV Travel measure for the Dallas-Fort Worth-Arlington Urbanized Area. The trend/slope used to establish the targets is an average of two trends 1) holding the latest observed value steady to simulate a retention of pandemic improvements, and 2) a pure best-fit least-squares trend that considers observed data available. The average trend is then adjusted upward to intercept the latest observed value. This method acknowledges that some changes to travel patterns seen during the pandemic are likely to be permanent, that the four-year estimates that NCTCOG is using will continue to be influenced by the pandemic for the next several years. As a result, this measure will continue to slowly increase due to NCTCOG's continued work to incentivize non-SOV Travel.

Figure 22
Percent of Non-SOV Travel: Dallas – Fort Worth – Arlington



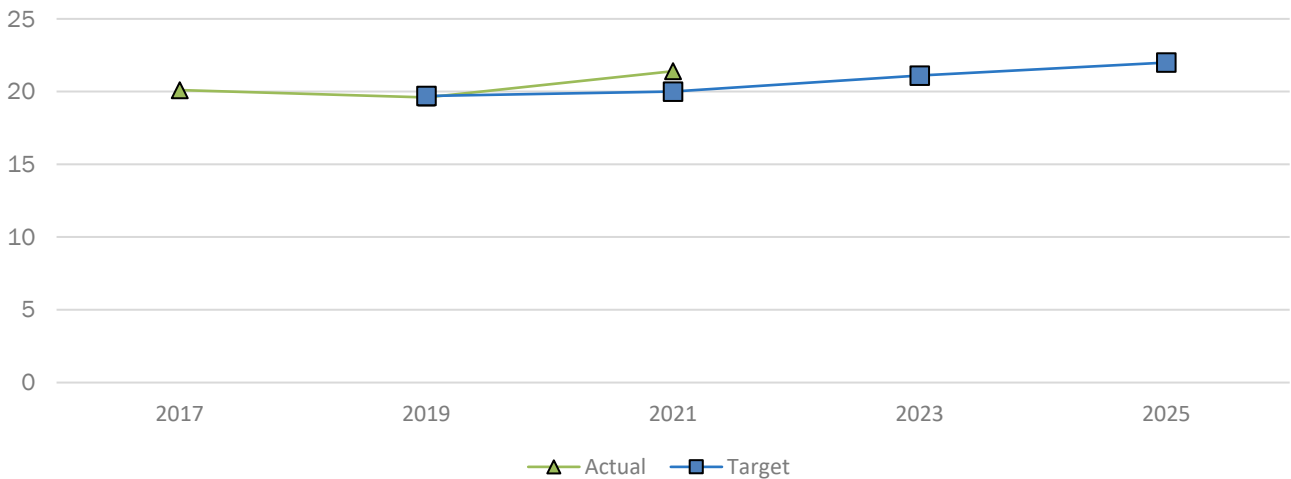
Percent of Non SOV Travel: Dallas – Fort Worth – Arlington	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	19.5	--	19.5	--	22.2	--	--	--	--
Target	--	--	19.9	--	20.2	--	22.7	--	23.0

Performance Measure: Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: Houston

For the 2017-2021 performance period, the actual four-year performance for the percent of non-SOV travel in the Houston region (22.2%) exceeds the four-year target of 20.2% and similarly represents progress over the 2017 baseline figure of 20.1%. Progress towards this target is supported by the strategies and performance measures established in H-GAC’s 2045 RTP, including increasing multi-occupant vehicle use, expanding multimodal transportation capacity, and investing in an interconnected network of walkways and bikeways throughout the region. As noted above, the increase in telecommuting during the COVID-19 pandemic also advanced progress towards this measure.

The American Community Survey (ACS) five-year estimates were used as the data source for the 2021-2025 performance period. The performance period baseline was developed from the American Community Survey 5-year average of non-SOV travel for the years 2016 through 2020. The rapid shift of more employees working from home due to the pandemic was acknowledged and factored into target setting. Future METRO bus rapid transit projects, transit improvements, and other regional programs that increase non-SOV travel were reviewed during target setting. Targets were set using this knowledge and a historical trend analysis that reflects an increase in non-SOV travel over time while the urbanized area has significant population growth.

Figure 23
Percent of Non-SOV Travel: Houston



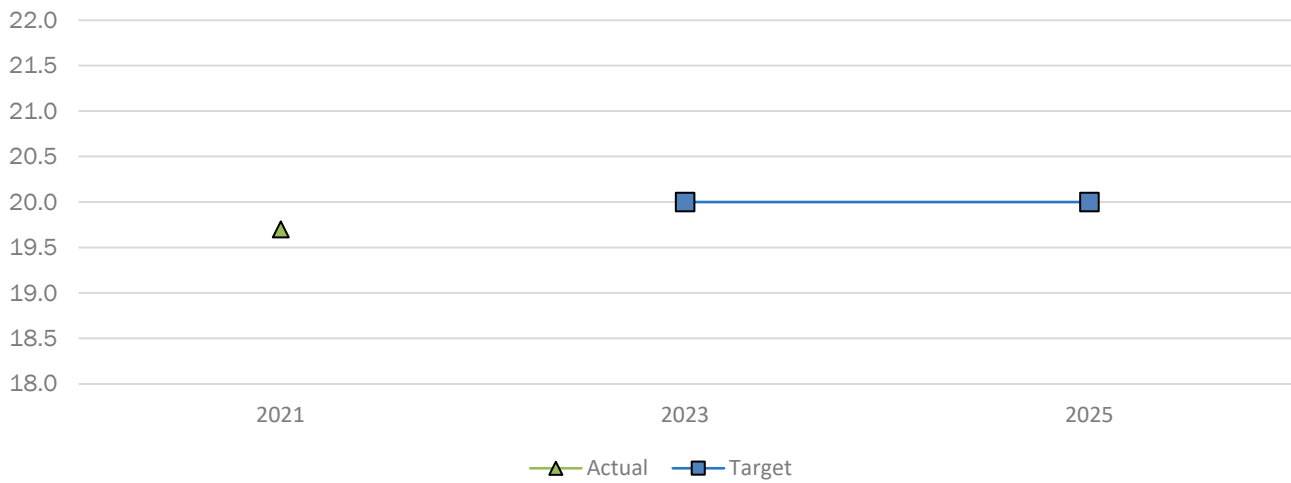
Percent of Non SOV Travel: Houston	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	20.1	--	19.6	--	21.4	--	--	--	--
Target	--	--	19.7	--	20.0	--	21.1	--	22.0

Performance Measure: Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: Conroe – The Woodlands

In accordance with 23 CFR 490.703, TxDOT did not collect non-SOV travel data for the Conroe – The Woodlands UZA for the 2017-2021 performance period.

The American Community Survey (ACS) five-year estimates were used as the data source for the 2021-2025 performance period. The performance period baseline was developed from the American Community Survey 5-year average of non-SOV travel for the years 2016 through 2020. The rapid shift of more employees working from home due to the pandemic was acknowledged and factored into target setting. Future bus rapid transit projects, transit improvements, and other regional programs that increase non-SOV were reviewed during target setting. Targets were set using this knowledge and a historical trend analysis that reflects an increase in non-SOV travel over time while the urbanized area has significant population growth.

Figure 24
Percent of Non-SOV Travel: Conroe – The Woodlands



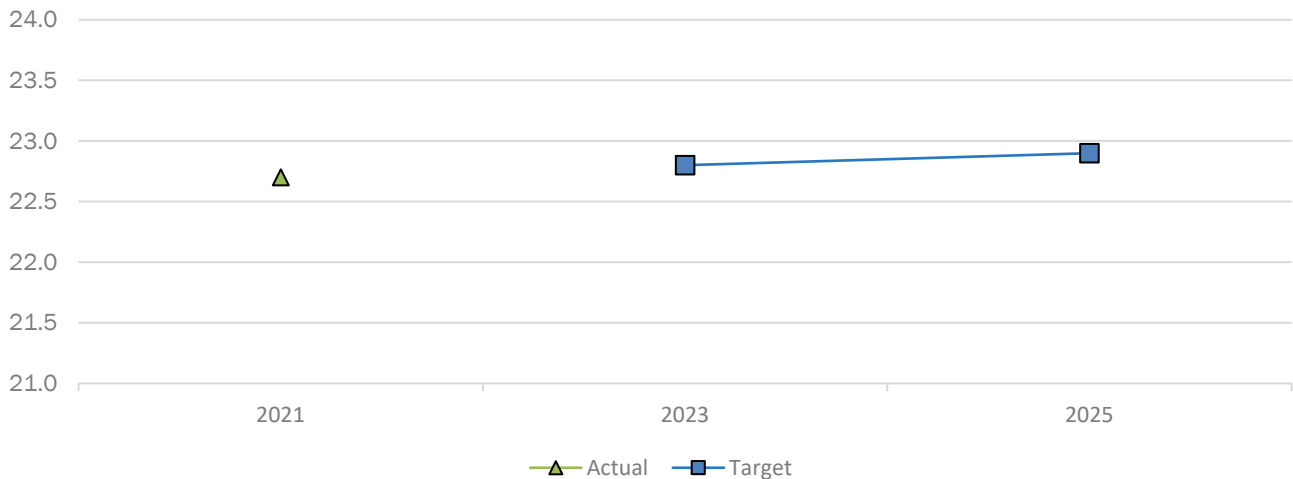
Percent of Non-SOV Travel: Conroe – The Woodlands					
	2021	2022	2023	2024	2025
Annual (Actual)	19.7	--	--	--	--
Target	--	--	20.0	--	20.0

Performance Measure: Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: Denton - Lewisville

In accordance with 23 CFR 490.703, TxDOT did not collect non-SOV travel data for the Denton - Lewisville UZA for the 2017-2021 performance period.

For the 2021-2025 performance period, NCTCOG used Method A (American Community Survey 5-Year Estimates) as detailed in 23 CFR 490.709(f)(1) to obtain data for the non-SOV Travel measure for the Denton-Lewisville Urbanized Area. The trend/slope used to establish targets is an average of two trends 1) holding the latest observed value steady to simulate a retention of pandemic improvements, and 2) a pure best-fit least-squares trend that considers observed data available. This average trend was then adjusted upward to intercept the latest observed value. This method acknowledges that some changes to travel patterns seen during the pandemic are likely to be permanent, that the four-year estimates NCTCOG is using will continue to be influenced by the pandemic for the next several years, and that this measure will continue to slowly increase due to NCTCOG's continued work to incentivize non-SOV Travel.

Figure 25
Percent of Non-SOV Travel: Denton - Lewisville



Percent of Non-SOV Travel: Denton - Lewisville	2021	2022	2023	2024	2025
Annual (Actual)	22.7	--	--	--	--
Target	--	--	22.8	--	22.9

Performance Measure: Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: El Paso

In accordance with 23 CFR 490.703, TxDOT did not collect non-SOV travel data for the El Paso UZA for the 2017-2021 performance period.

Due to a lack of previous non-SOV travel data, the two-year and four-year targets were both set to 20%. Using these targets, the goal for this performance period is to maintain current mode shares. These targets can be adjusted when additional data is available at the mid-performance period report in two years. These targets are optimistic based on the limited observed data, but lower than what the trend suggests, mainly because very few observations are available.

Targets were established first by looking at non-SOV trends for years 2018 through 2019, gathered from the American Community Survey (ACS). Once the trends were established and a probable value projected for future years, the EPMPO in consultation with local partners and TTI, agreed on a value that, through particular projects and/or policies, could be reached locally and contribute nationally to improve non-SOV goals. Such projects and policies should become a main element of the long range plan for the region. The EPMPO is looking into adding data from additional years to develop a more consistent trend (isolate pandemic effects); once this is achieved, the EPMPO might be able to revise the targets.

Figure 26
Percent of Non-SOV Travel: El Paso



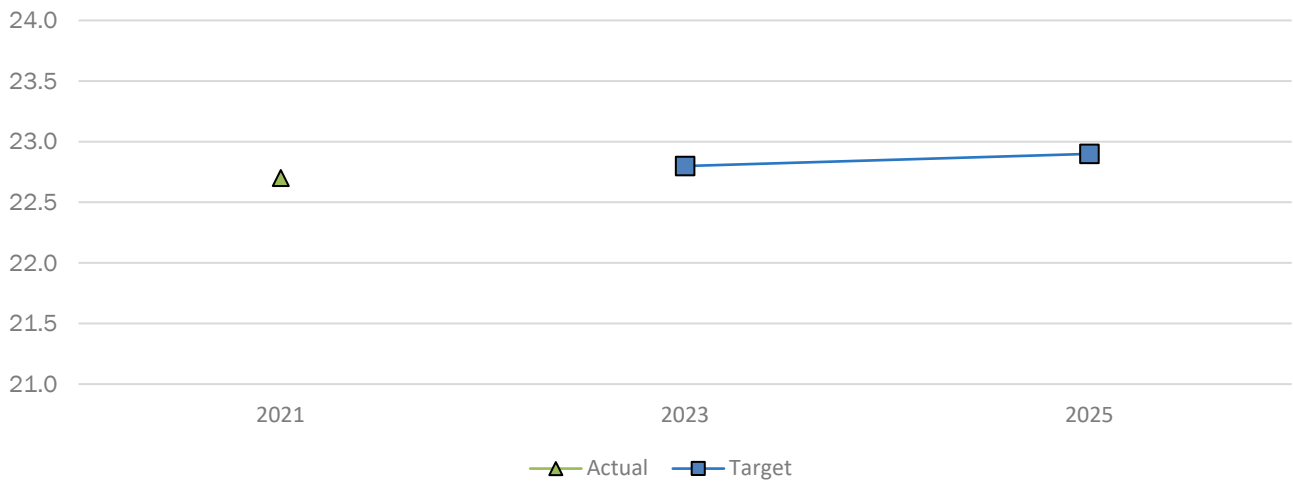
Percent of Non SOV Travel: El Paso	2021	2022	2023	2024	2025
Annual (Actual)	20.2	--	--	--	--
Target	--	--	20.0	--	20.0

Performance Measure: Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: McKinney

In accordance with 23 CFR 490.703, TxDOT did not collect non-SOV travel data for the McKinney UZA for the 2017-2021 performance period.

For the 2021-2025 performance period, NCTCOG used Method A (American Community Survey 5-Year Estimates) as detailed in 23 CFR 490.709(f)(1) to obtain data for the non-SOV Travel measure for the McKinney Urbanized Area. The trend/slope used to establish targets is an average of two trends: 1) holding the latest observed value steady to simulate a retention of pandemic improvements, and 2) a pure best-fit least-squares trend that considers observed data available. This average trend was then adjusted upward to intercept the latest observed value. This method acknowledges that some changes to travel patterns seen during the pandemic are likely to be permanent, that the four-year estimates NCTCOG is using will continue to be influenced by the pandemic for the next several years, and that this measure will continue to slowly increase due to NCTCOG's continued work to incentivize non-SOV Travel.

Figure 27
Percent of Non-SOV Travel: McKinney



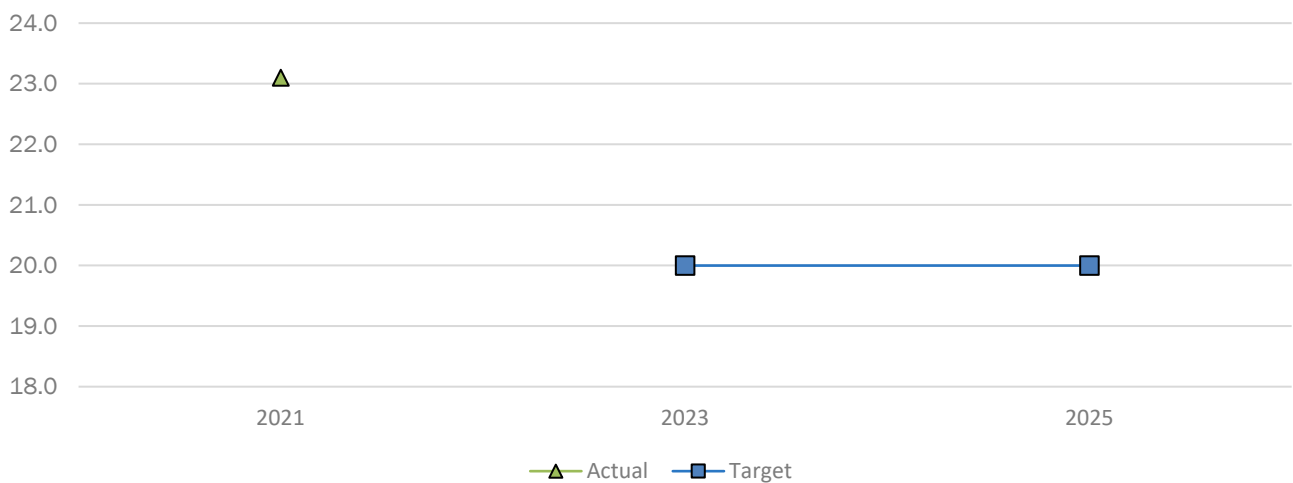
Percent of Non-SOV Travel: McKinney	2021	2022	2023	2024	2025
Annual (Actual)	22.7	--	--	--	--
Target	--	--	22.8	--	22.9

Performance Measure: Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: San Antonio

In accordance with 23 CFR 490.703, TxDOT did not collect non-SOV travel data for the San Antonio UZA for the 2017-2021 performance period.

For the 2021-2025 performance period, AAMPO utilized Method A, using American Community Survey (ACS) data to quantify non-SOV travel. This is derived from the ACS 5-year estimate of workers over 16 years old who drove alone to work in a car, truck, or van. Based on pre-COVID-19 trends, the level of non-SOV travel remained steady across years 2018-2020 and targets were made to align with this trend.

Figure 28
Percent of Non-SOV Travel: San Antonio



Percent of Non SOV Travel: San Antonio	2021	2022	2023	2024	2025
Annual (Actual)	23.1	--	--	--	--
Target	--	--	20.0	--	20.0

System Reliability, Freight, and Congestion Performance Measures: Conclusion

Over the four-year performance period for system reliability, freight, and congestion, TxDOT has performed well relative to both its baseline values and its four-year targets. TxDOT has seen increasing reliability on both Interstate and non-Interstate NHS roadways over this period. Additionally, peak hours of excessive delay have fallen in some regions of the state (Dallas – Fort Worth – Arlington) while experiencing a plateau in others (Houston), trending ahead of four-year performance targets in both cases. Both regions have also experienced modest increases in the percent of non-SOV travel, again outperforming four-year targets in both cases. TxDOT will continue to prioritize investments in system reliability and congestion reduction, increasing the ability of people and goods to efficiently move throughout the state.

PM 4 – Total Emissions Reduction and Air Quality

The Total Emissions Reduction Performance Measures are established in 23 CFR 490.807 and measure cumulative reported emission reductions for all projects funded by Congestion Mitigation and Air Quality (CMAQ) funds. These measures affect the US Environmental Protection Agency-designated air quality nonattainment and maintenance areas for the state. Texas sets statewide emissions reduction targets for its nonattainment and maintenance areas for the following pollutants: nitrogen oxides (NOx), volatile organic compounds (VOCs), particulate matter at 10 micrometers in diameter (PM10), and carbon monoxide (CO). This performance measure is presented in two sections based on geography: statewide and Metropolitan Planning Organization (MPO) level.

Statewide Performance Measures

The statewide baseline measures, along with two-year and four-year actual measures and targets for both the 2017-2021 and 2021-2025 performance periods are provided in the table below. All measurements are provided in total kilograms per day (kg/day). Data in this section reflect values from TxDOT’s 2022 Full Performance Period Progress Report, 2022 Baseline Performance Period Report, and values from previous TxDOT submissions to FHWA’s CMAQ Public Access System.

For the 2017-2021 performance period, the 2017 baseline presents the cumulative four-year emissions reductions from 2014 through 2017. Similarly, 2019 actual values represent the cumulative two-year emissions reductions from 2018 through 2019, and 2021 actual values represent the cumulative four-year emissions reductions from the full performance period of 2018 through 2021. The same methodology applies for the 2021-2025 performance period – the 2-year target (2023) and 4-year target (2025) values represent a cumulative emissions reduction from the 2021 baseline, which was the actual value from the end of the previous performance period.

For the PM10 and CO data provided in this section, statewide values are identical to those of the El Paso Metropolitan Planning Organization (EPMPO). This is because EPMPO is the only MPO in Texas in nonattainment for PM10 and CO.

Table 4
Summary of Statewide Performance Measures for Emissions Reduction and Air Quality

Performance Measures	2017 Actual	2019 Actual	2021 Actual (New Baseline)	2-Year Target (2023)	4-Year Target (2025)
STATEWIDE EMISSIONS REDUCTION					
Total Emissions Reduction Statewide: NOx	2,864.540	6,882.338	12,472.915	2,679.641	5,015.745
Total Emissions Reduction Statewide: VOC	566.574	1,514.190	2,536.829	723.809	1,301.270
Total Emissions Reduction Statewide: PM10	0.979	11.369	20.652	4.540	8.900
Total Emissions Reduction Statewide: CO	580.239	490.753	824.635	175.750	367.100

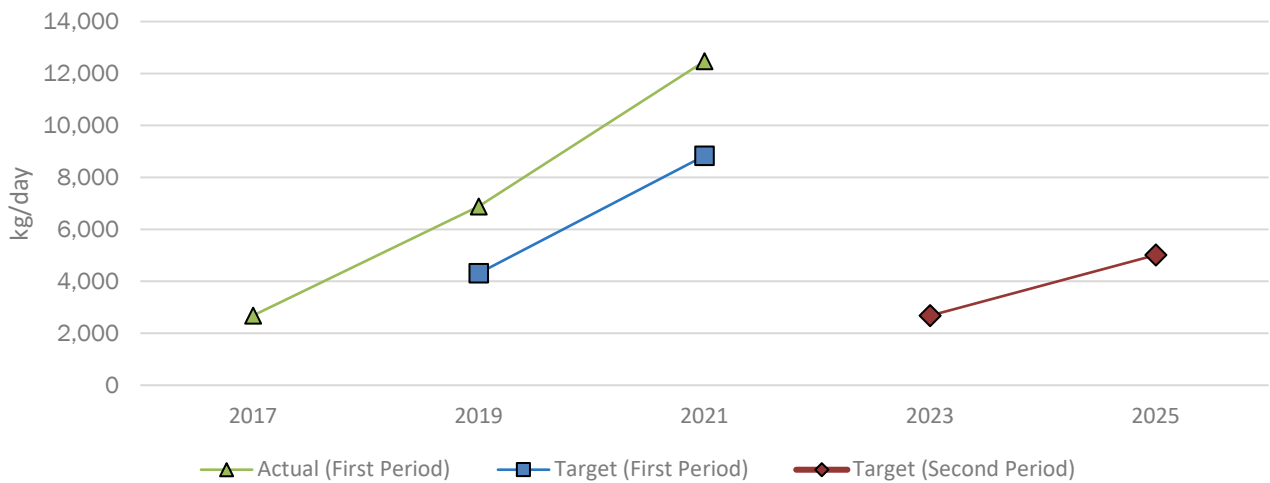
The following sections describe actual results as compared to the performance period targets for each performance measure.

Performance Measure: Total Emissions Reduction Statewide: NOx

For the 2017-2021 performance period, the statewide four-year NOx emissions reduction exceeded the four-year target by 3,639.9 total daily kilograms, thus the target for this performance measure was met in 2021. Because the major metropolitan areas in Texas have many congestion hotspots, TxDOT and various MPOs encourage flexible working hours and telecommuting, as well as alternative modes of transportation such as walking and biking, to help reduce the demand on the roadway system. Additionally, some cities, counties, and municipalities offer tax breaks and incentives, such as transit passes or carpools, to businesses to help reduce single-occupancy vehicle traffic. Several TxDOT programs directly or indirectly support investments that reduce congestion and improve emissions. TxDOT and its partners look at ways to reduce emissions when assessing the anticipated outcome of a project and making investment decisions.

For the 2021-2025 performance period, TxDOT coordinated with several MPOs to develop two-year and four-year targets. Targets are based on a variety of methodologies and data, including methodologies published in the Texas Guide to Accepted Mobile Source Emission Reduction Strategies (MOSERS), analysis of past emissions reductions, traffic demand modeling, and analyzing the emissions reductions realized on past projects compared to anticipated reductions from planned projects.

Figure 29
Total Emissions Reduction Statewide: NOx



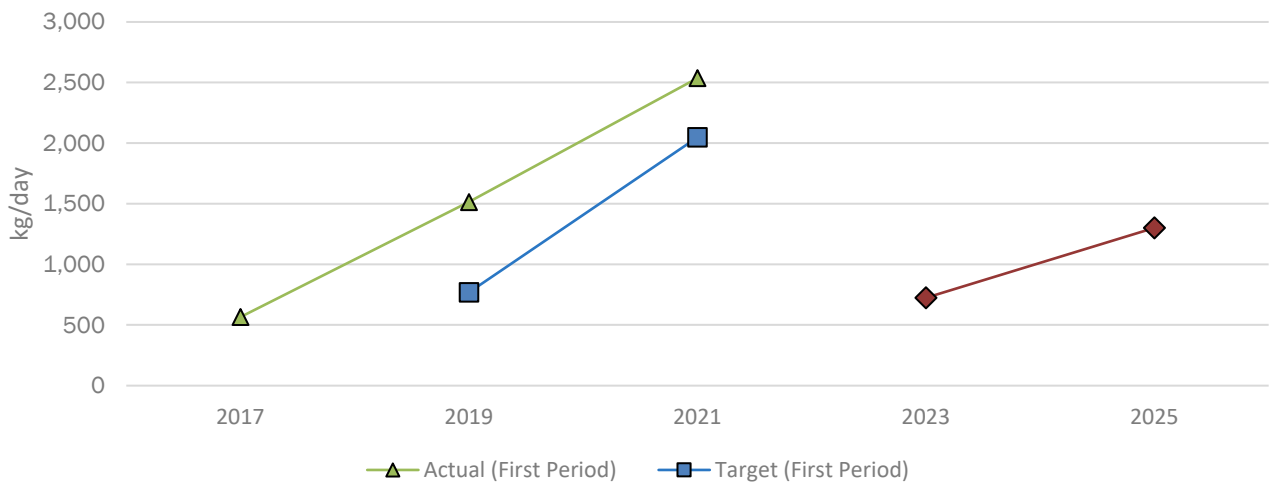
Total Emissions Reductions Statewide: NOx	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	2,684.540	--	6,882.338	--	12,472.915	--	--	--	--
Target	--	--	4,312.390	--	8,833.027	--	2,679.641	--	5,015.745

Performance Measure: Total Emissions Reduction Statewide: VOC

For the 2017-2021 performance period, the statewide four-year performance for VOC emissions reduction exceeded the four-year target by 488.2 kg/day in 2021. Like the previous performance measure, statewide transportation demand management (TDM) efforts, TxDOT programs, and non-SOV transportation modes can be attributed to this result.

For the 2021-2025 performance period, TxDOT coordinated with several MPOs to develop two-year and four-year targets. Targets are based on a variety of methodologies and data, including methodologies published in MOSERS, analysis of past emissions reductions, traffic demand modeling, and analyzing the emissions reductions realized on past projects compared to anticipated reductions from planned projects.

Figure 30
Total Emissions Reduction Statewide: VOC



Total Emissions Reductions Statewide: VOC	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	566.574	--	1,514.190	--	2,536.829	--	--	--	--
Target	--	--	768.970	--	2,048.624	--	723.809	--	1,301.270

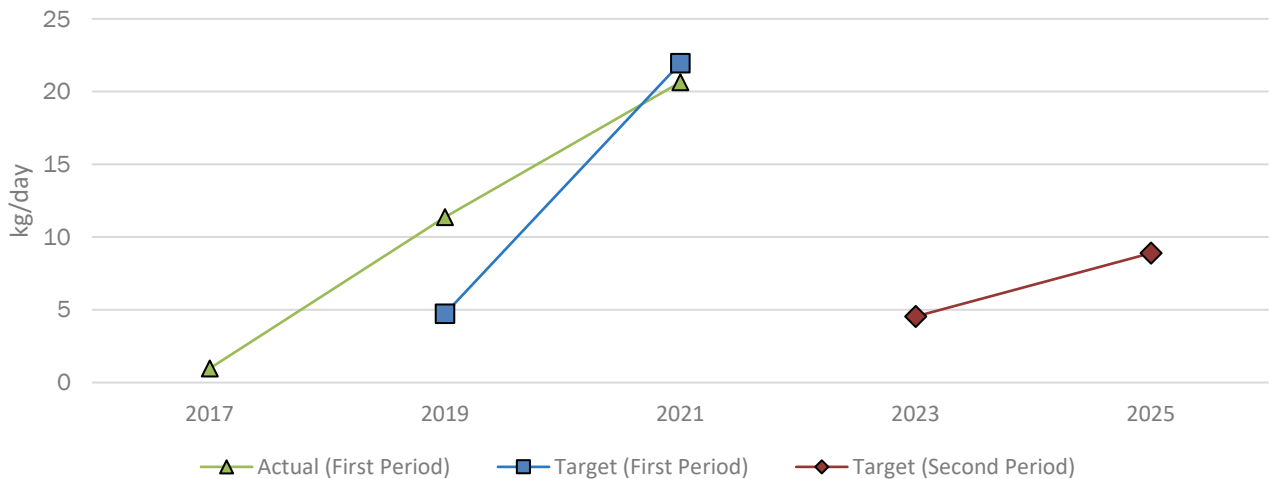
Performance Measure: Total Emissions Reduction Statewide: PM10

As mentioned in the Emissions Reduction introduction, statewide values for PM10 are identical to those of the El Paso Metropolitan Planning Organization (EPMPO). This is because EPMPO is the only MPO in Texas in nonattainment for PM10.

For the 2017-2021 performance period, the statewide four-year performance for PM10 emissions reduction did not meet the target for this performance measure in 2021, as emissions reductions were short of the target by 1.32 kg/day. Still, progress towards this target was achieved via the implementation of rehabilitation and operational improvements on roadways, ramps, bicycle and sidewalks, transit operating assistance, transit circulator, roundabouts, and purchases of buses.

The methodology for the 2022-2025 performance period compares CMAQ project emissions from the FHWA User Profile and Access Control System (UPACS) and the EPMPO Transportation Improvement Program (TIP) over the past four-years to develop targets for the future four-year CMAQ program. The emission benefits for the projects in current MPO TIPs are lower than those from the last performance reporting period. Also, several past projects were duplicates in the UPACS system at the time, which contributed to a greater anticipated emissions reduction. As such, the targets for the second performance period are lower than the targets for the first performance period. New targets will be re-evaluated at the mid-performance period report.

Figure 31
Total Emissions Reduction Statewide: PM10



Total Emissions Reductions Statewide: PM10	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	0.969	--	11.369	--	20.652	--	--	--	--
Target	--	--	4.733	--	21.963	--	4.540	--	8.900

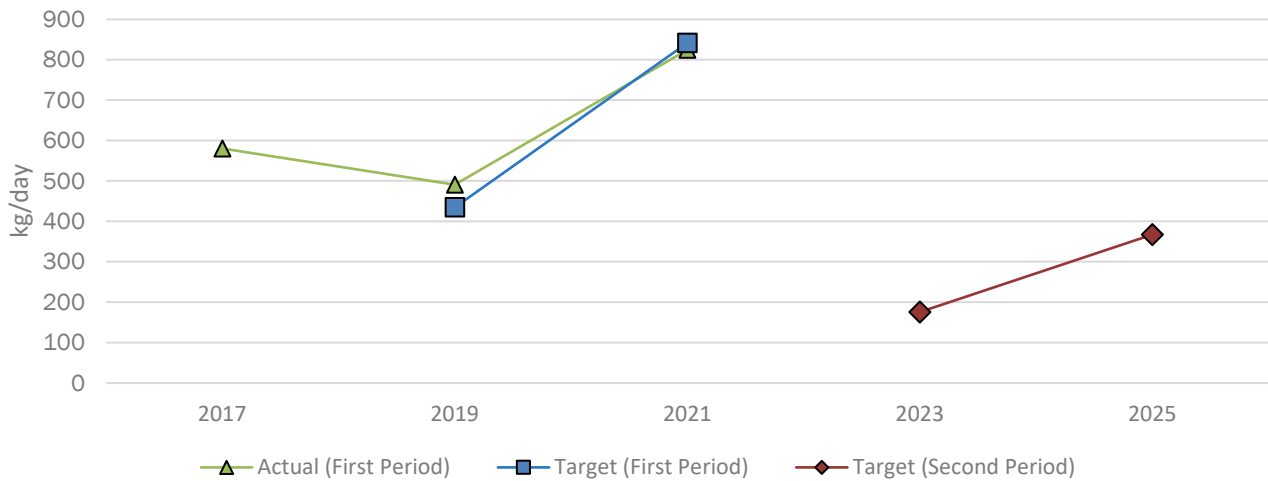
Performance Measure: Total Emissions Reduction Statewide: CO

As mentioned in the Emissions Reduction introduction, statewide values for CO are identical to those of the El Paso Metropolitan Planning Organization (EPMPO). This is because EPMPO is the only MPO in Texas in nonattainment for CO.

For the 2017-2021 performance period, the statewide four-year performance for CO emissions reduction was short of the target by 17.0 kg/day, meaning the 2021 target for this performance measure was not met. Like the PM10 performance measure, emissions reductions were achieved via roadway improvements and investments in non-motorized infrastructure and public transit.

The methodology for the 2021-2025 performance period compares CMAQ project emissions from UPACS and the EPMPO TIP over the past four-years to develop targets for the future four-year CMAQ program. The emission benefits for the projects in current MPO TIPs are lower than those from the last performance reporting period. Also, several past projects were duplicates in the UPACS system at the time, which contributed to a greater anticipated emissions reduction. As such, the targets for the second performance period are lower than the targets for the first performance period. New targets will be re-evaluated at the mid-performance period report.

Figure 32
Total Emissions Reduction Statewide: CO



Total Emissions Reductions Statewide: CO	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	580.239	--	490.753	--	824.635	--	--	--	--
Target	--	--	434.931	--	841.615	--	175.750	--	367.100

MPO Performance Measures

The MPO-level baseline measures, along with two-year and four-year actual measures and targets for these performance measures, are provided in the table below. All measurements are provided in total kilograms per day (kg/day). Data in this section reflect targets set in each MPO’s TIP and actual two-year and four-year performance values from FHWA’s CMAQ Public Access System. In the case of the El Paso Metropolitan Planning Organization (EPMPO), actual and target values are identical to statewide values because EPMPO is the only MPO in Texas in nonattainment for PM10 and CO.

Alamo Area MPO (AAMPO) developed Air Quality Performance Measures for the performance period beginning October 1, 2022, but this region was not required to do so under previous applicability determinations.

Table 5
Summary of MPO Performance Measures for Emissions Reduction and Air Quality

Performance Measures	2017 Actual	2019 Actual	2021 Actual (New Baseline)	2-Year Target (2023)	4-Year Target (2025)
METROPOLITAN PLANNING ORGANIZATION EMISSIONS REDUCTION					
Total Emissions Reduction: NCTCOG ²					
NOx	2,410.80	5,884.42	10,923.87*	2,330.64	4,195.15
VOC	499.72	1,418.56	2,385.55*	599.90	1,035.83
Total Emissions Reduction: H-GAC ³					
NOx	453.74	953.36	1,382.91	221.25	601.47
VOC	66.85	68.66	98.87	69.94	172.86
Total Emissions Reduction: EPMPO ⁴					
PM10	0.97	11.37	5.42 ⁵	4.54	8.9
CO	580.24	490.75	219.51	175.75	367.1
Total Emissions Reduction: AAMPO ⁶					
NOx	-	-	121.583	127.750	219.130
VOC	-	-	25.435	53.970	92.576

* NCTCOG did not use 2021 actual values as the baseline for the 2021-2025 performance period. The new baseline values for NOx and VOCs are 1,942.20 and 466.90 kg per day, respectively.

² [Microsoft Word - Chapter 9 Performance Measurement May 2022 updates 5.5.2022 \(nctcog.org\)](#)

³ [2023-2026-Transportation-Improvement-Program-Appendix-B-November-2022 \(h-gac.com\)](#)

⁴ [RMS2023-2026TIP.pdf \(elpasompo.org\)](#)

⁵ [EL PASO METROPOLITAN PLANNING ORGANIZATION \(elpasompo.org\)](#)

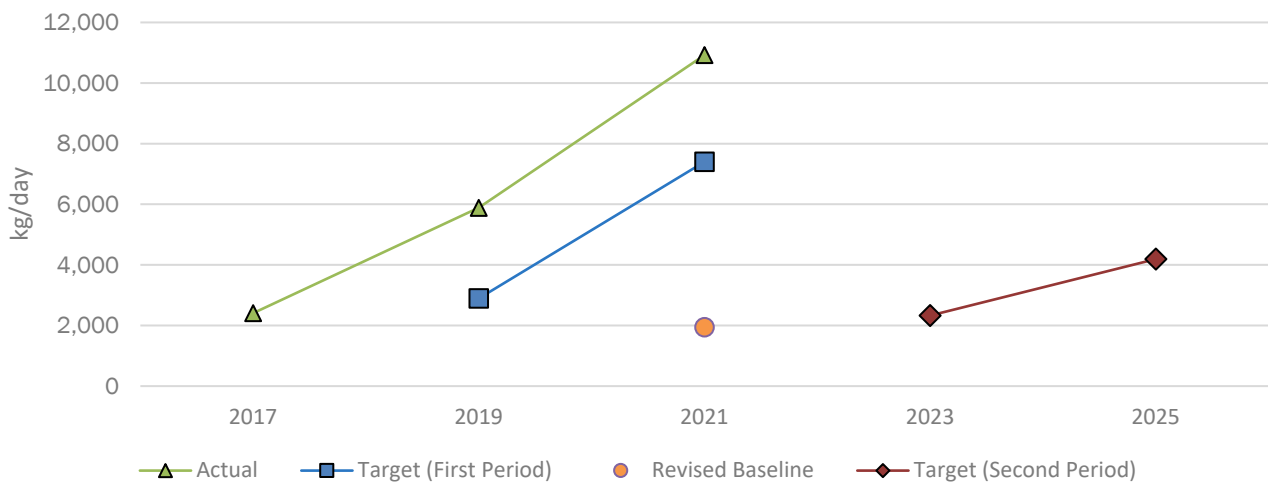
⁶ [Alamo Area Metropolitan Planning Organization \(alamoareampo.org\)](#)

Performance Measure: North Central Texas Council of Governments (NCTCOG) Emissions Reduction

NCTCOG reports emissions reductions for NOx and VOC. Given better-than-expected performance in achieving its two-year targets, NCTCOG exercised its option in 2020 to revise its 2021 four-year targets higher for these measures. The adjusted targets are provided in the table below, along with actual two-year and four-year performance. Despite the higher target set, NCTCOG still exceeded its four-year targets for both pollutants by comfortable margins.

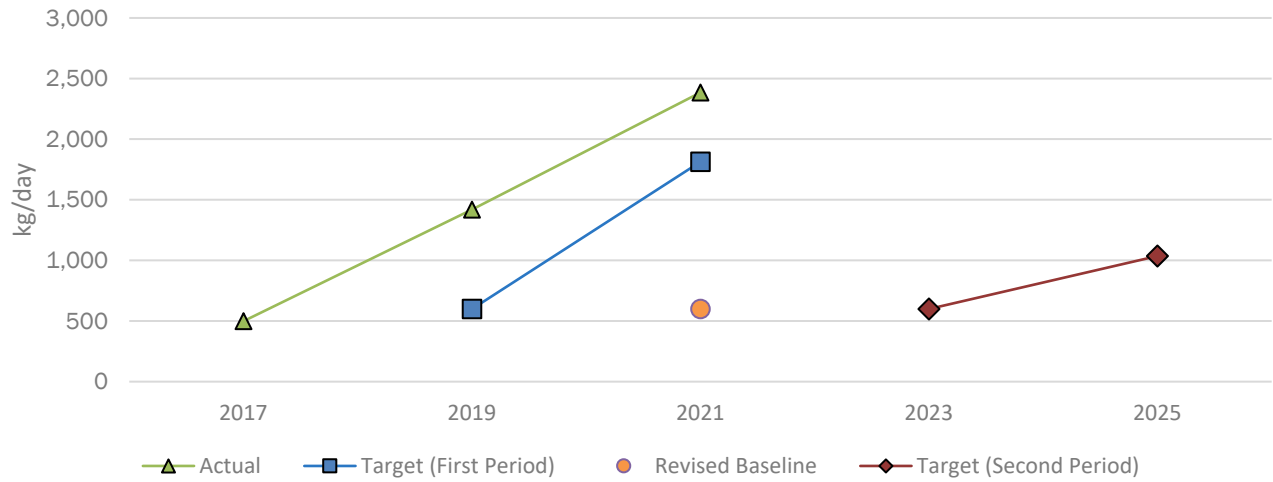
For the 2021-2025 performance period, NCTCOG and TxDOT developed a new baseline, as well as two-year and four-year targets from planned TIP projects from 2022 through 2025. This methodology compares existing local TIP projects from 2021 to 2024 with projects included in the Federal Highway Administration’s Public Access System for that same period. Based on the results, staff applied the percentage of the emissions benefits reported in the TIP for NOx and VOC to determine the new baseline and future targets.

Figure 33
NCTCOG Emissions Reduction: NOx



NCTCOG Emissions Reduction: NOx	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	2,410.80	--	5,884.42	--	10,923.87	--	--	--	--
Revised Baseline	--	--	--	--	1,942.20	--	--	--	--
Target	--	--	2,892.96	--	7,403.95	--	2,330.64	--	4,195.15

Figure 34
NCTCOG Emissions Reduction: VOC



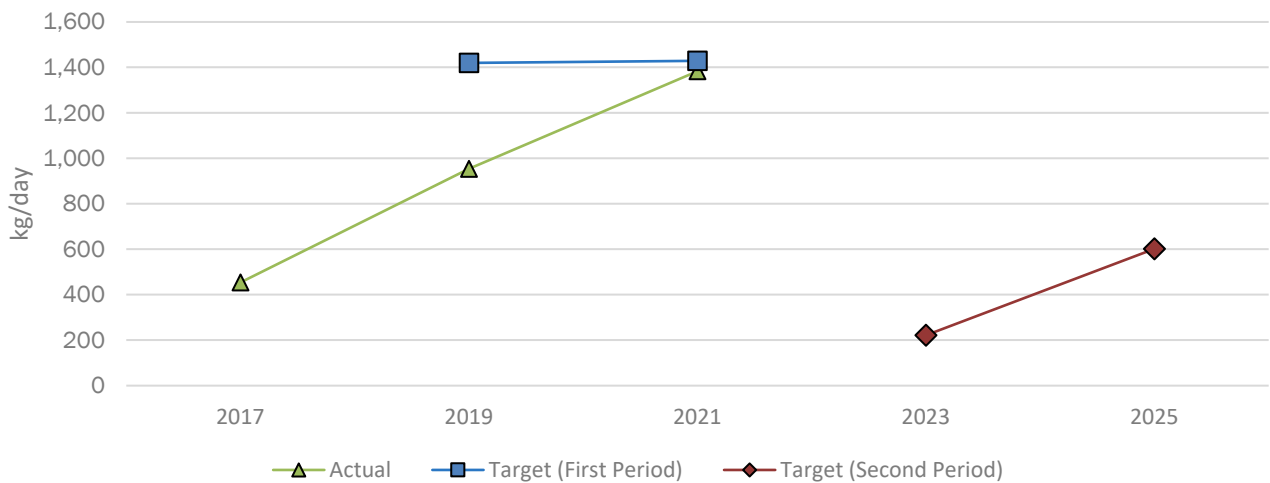
NCTCOG Emissions Reduction: VOC	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	499.72	--	1,418.56	--	2,385.55	--	--	--	--
Revised Baseline	--	--	--	--	599.90	--	--	--	--
Target	--	--	599.67	--	1,814.02	--	599.90	--	1,035.83

Performance Measure: Houston-Galveston Area Council (H-GAC) Emissions Reduction

H-GAC monitors performance in the Houston region for both NOx and VOC. H-GAC’s four-year performance for NOx emissions reduction was short of the target by 46.17 kg/day, and VOC was short of the four-year target by 135.73 kg/day. Despite these shortfalls, H-GAC made significant progress over the four-year performance period, nearly tripling emissions reductions for NOx and increasing emissions reductions for VOC by nearly 50%.

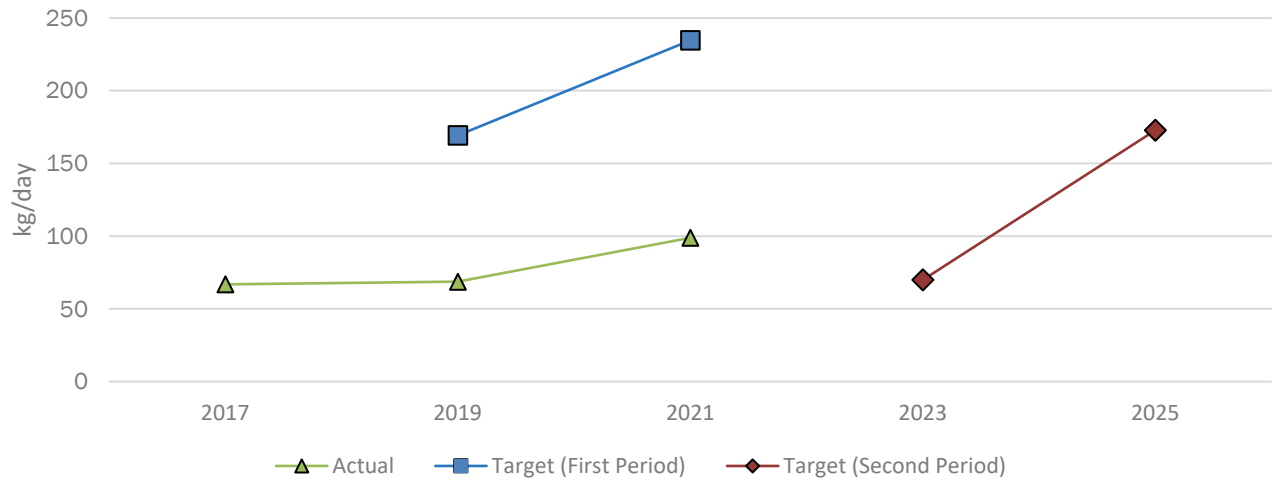
For the 2021-2025 performance period, H-GAC and TxDOT developed two-year and four-year targets from planned TIP projects. This methodology applies a “project delivery success rate” developed by comparing the planned emission reductions from the beginning of the previous 2017-2021 performance period cycle with the actual emission reductions recorded for funded projects over the same period.

Figure 35
H-GAC Emissions Reduction: NOx



H GAC Emissions Reduction: NOx	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	453.74	--	953.36	--	1,382.91	--	--	--	--
Target	--	--	1,419.43	--	1,429.08	--	221.25	--	601.47

Figure 36
H-GAC Emissions Reduction: VOC



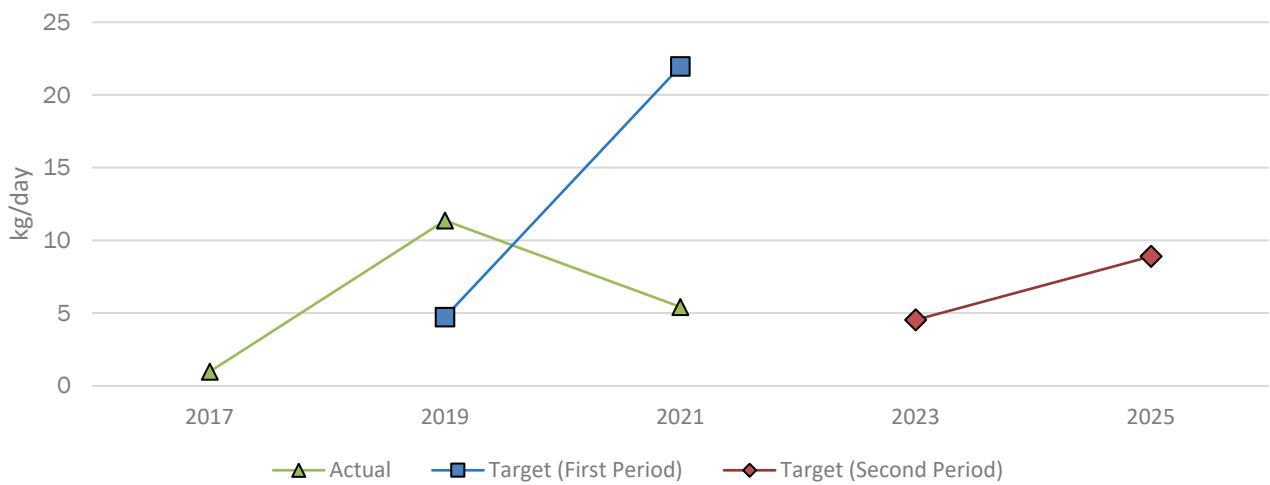
H GAC Emissions Reduction: VOC	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	66.85	--	68.66	--	98.87	--	--	--	--
Target	--	--	169.30	--	234.60	--	69.94	--	172.86

Performance Measure: El Paso MPO (EPMPO) Emissions Reduction

EPMPO measures emissions reductions for PM10 and CO and is the only region in Texas in nonattainment for these pollutants, meaning regional and statewide performance targets for these measures are identical. At the midpoint of the first performance period, EPMPO updated the four-year targets due to more reliable data available in 2018 and 2019 for both CO and PM10 emissions. During this performance period, EPMPO made significant progress reducing both PM10 and CO emissions, coming in just 6% and 2% below the four-year targets, respectively.

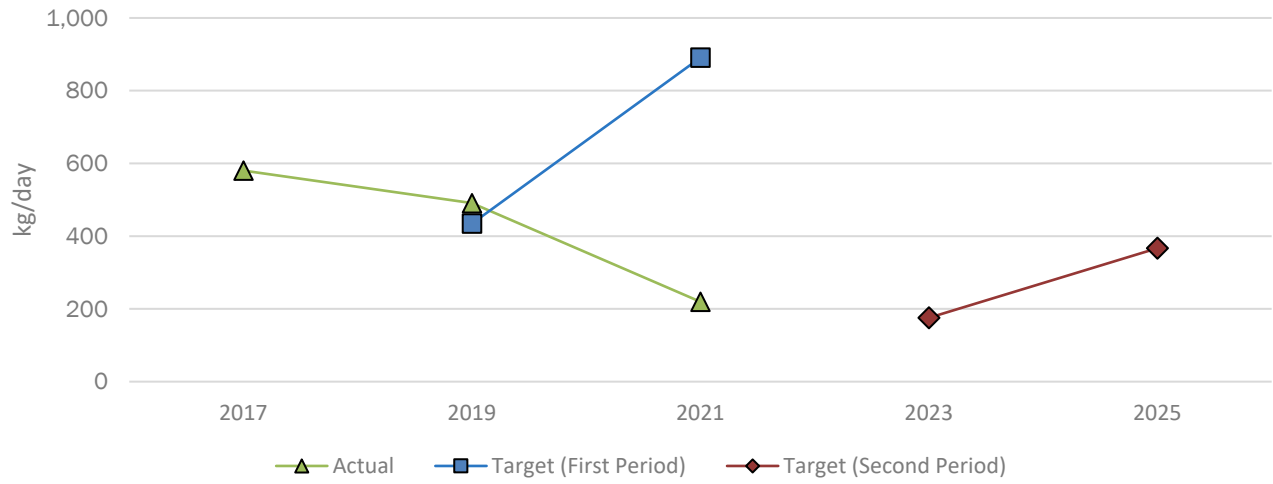
For the 2021-2025 performance period, EPMPO and TxDOT developed two-year and four-year targets for applicable criteria pollutants PM10 and CO to support the state of Texas targets. This methodology compares CMAQ project emissions from the FHWA User Profile and Access Control System (UPACS) and the EPMPO Transportation Improvement Program over the past four years to develop targets for the future four-year CMAQ program.

Figure 37
EPMPO Emissions Reduction: PM10



EPMPPO Emissions Reduction: PM10	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	0.97	--	11.37	--	5.42	--	--	--	--
Target	--	--	4.73	--	21.96	--	4.54	--	8.9

Figure 38
EPMPO Emissions Reduction: CO



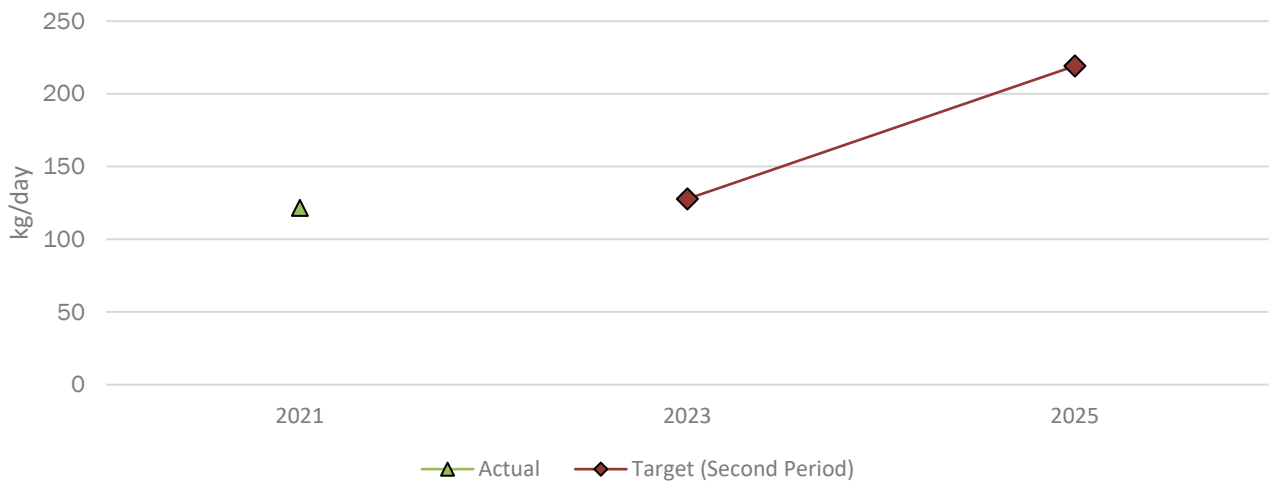
EPMPO Emissions Reduction: CO	2017	2018	2019	2020	2021	2022	2023	2024	2025
Annual (Actual)	580.24	--	490.75	--	219.51	--	--	--	--
Target	--	--	434.93	--	891.11	--	175.75	--	367.1

Performance Measure: Alamo Area MPO (AAMPO) Emissions Reduction

In accordance with 23 CFR 490.803, AAMPO was not required to provide emissions reduction data for the 2017-2021 performance period.

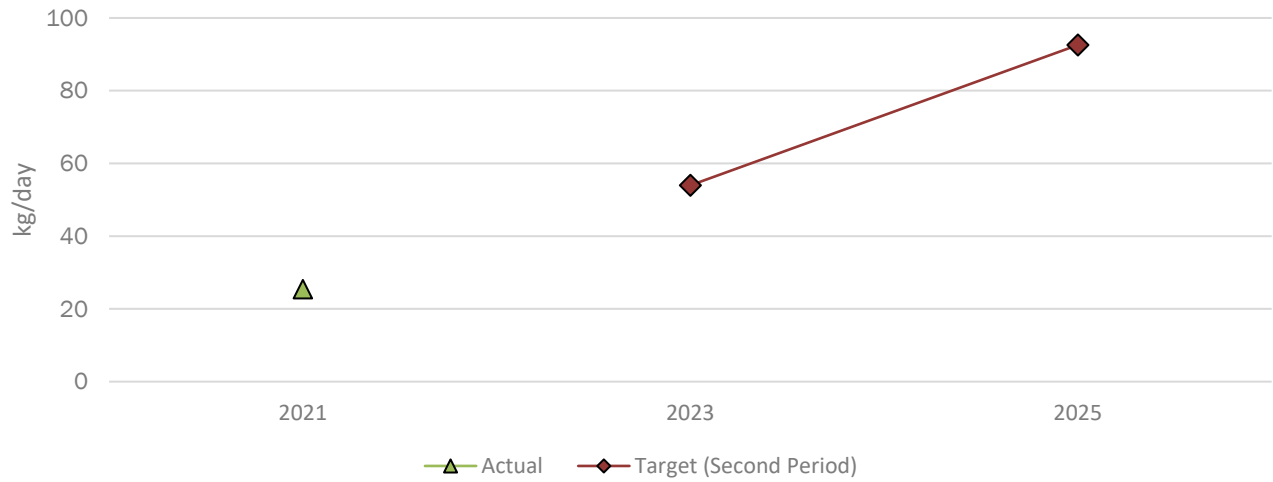
For the 2021-2025 performance period, AAMPO and TxDOT developed two-year and four-year targets for applicable criteria pollutants NOx and VOC to support the state’s targets. This methodology compares CMAQ project emissions from the FHWA User Profile and Access Control System (UPACS) and the AAMPO Transportation Improvement Program over the past four years to develop targets for the future four-year CMAQ program.

Figure 39
AAMPO Emissions Reduction: NOx



AAMPO Emissions Reduction: NOx	2021	2022	2023	2024	2025
Annual (Actual)	121.583	--	--	--	--
Target	--	--	127.750	--	219.130

Figure 40
AAMPO Emissions Reduction: VOC



AAMPO Emissions Reduction: VOC	2021	2022	2023	2024	2025
Annual (Actual)	25.435	--	--	--	--
Target	--	--	53.970	--	92.576

Total Emissions Reduction and Air Quality Performance Measures: Conclusion

In general, significant progress was made to reduce emissions and improve air quality through CMAQ-funded projects during the first performance period, both at the statewide level and in the regions of Texas currently in nonattainment for certain pollutants. Statewide, TxDOT far exceeded four-year targets for NO_x and VOC emissions reductions. Substantial reductions were made for PM₁₀ and CO, though these four-year actual values were marginally below the targets set for these pollutants. For the second performance period, the state continues to set aggressive emissions reduction targets, and TxDOT is optimistic that the targets will be met and exceeded.

At the regional level during the first performance period, NCTMPO met its four-year targets for emissions reductions by comfortable margins for both VOC and NO_x. H-GAC and EPMPPO did not achieve their four-year targets for their criteria pollutants, though both regions made notable strides in working towards these goals relative to their baseline figures.

Going forward, TxDOT will continue to work alongside its MPO partners to advance regional and statewide projects that reduce emissions and promote additional progress on these performance measures.

Transit Performance Measures

Transit Asset Management

TxDOT’s 2023-2026 Group Sponsored Transit Asset Management (TAM) Plan catalogs and assesses the condition of transportation assets for 39 public transit providers across Texas. By tracking the condition of these important assets, the TAM plan allows agencies to schedule vehicle and equipment replacements to ensure systems maintain a State of Good Repair (SGR). The plan assesses the condition of revenue vehicles, service vehicles, and equipment using a useful life benchmark (ULB). Each type of vehicle has a ULB expressed in years; vehicles exceeding their ULB are considered in need of replacement.

Transit facilities are assessed using the Federal Transit Administration’s Transit Economic Requirements Model (TERM) scale, which assesses facility elements on a five-point scale. Items rating below three points are considered in need of replacement or refurbishment.

TxDOT updates the group TAM plan every four years and has established targets of 15% for all performance measures. The 2019 baseline and recorded performance from the 2023 plan are shown below.

Table 6
Group TAM Plan Performance Measures and Targets

Performance Measures	Target*	2019 Baseline	2023 Actual
Percent of Revenue Vehicles at or Exceeding Useful Life Benchmark	15%	12.3%	14.1%
Percent of Service Vehicles at or Exceeding Useful Life Benchmark	15%	18.5%	36.5%
Percent of Facilities Rated Below 3 on Condition Scale (TERM)	15%	3.8%	7.2%
<i>*This is a rolling target that applies in an ongoing way to all three performance measures.</i>			

Transit Safety Management

Moving Ahead for Progress in the 21st Century (MAP-21) granted the Federal Transit Administration (FTA) the authority to establish and enforce a comprehensive framework to oversee the safety of public transportation throughout the United States. MAP-21 expanded the regulatory authority of FTA to oversee safety, providing an opportunity to assist transit agencies in moving towards a more holistic, performance-based approach to Safety Management Systems (SMS). This authority was continued through the Fixing America’s Surface Transportation Act (FAST Act). In accordance with the Public Transportation Agency Safety Plan (PTASP) final rule, TxDOT assisted with the preparation and certification of all PTASPs for small urban transit providers in the state.

The PTASP Final Rule stipulates that all urban transit providers must develop safety performance targets for seven safety-related performance measures. These seven targets are shown in Table 7 below.

Table 7
PTASP Performance Measures

Performance Measures	Safety Performance Target	Safety Performance Target
Fatalities	Total Number Reported	Rate Per Total Vehicle Revenue Miles
Injuries	Total Number Reported	Rate Per Total Vehicle Revenue Miles
Safety Events	Total Number Reported	Rate Per Total Vehicle Revenue Miles
System Reliability	Median Distance Between Major Mechanical Failure (Miles)	

Urban transit agencies track these safety measures and report incidents to the National Transit Database. Performance targets should be shared with an agency’s MPO and TxDOT to assist in the TIP and STIP preparation processes. Safety performance measure baselines and annual targets for the 39 PTASPs prepared and certified by TxDOT are provided in the table below.

Table 8
PTASP Performance Targets and Actual Annual Results

Agency	Mode^	Fatalities		Fatality Rate*		Injuries		Injury Rate*		Safety Events		Safety Event Rate*		System Reliability	
		2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target
Arlington Handitransit	DR	0	0	0.00	0.00	0.2	0.2	0.02	0.02	0.8	0.8	0.07	0.07	127,355	127,355
Alamo Regional Transit	MB	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	26,982	26,982
	DR	0	0	0.00	0.00	3	3	0.25	0.25	0	0	0.00	0.00	16309	16309
Beaumont Municipal Transit	MB	0	0	0.00	0.00	4	4	0.11	0.11	3	3	0.28	0.28	100,815	100,815
	DR	0	0	0.00	0.00	0	0	0.00	0.00	2	2	0.80	0.80	39,501	39,501
Brownsville Metro	MB	0	0	0.00	0.00	5.8	5.8	0.78	0.78	0	0	0.00	0.00	4,175	4,175
	DR	0	0	0.00	0.00	2	2	1.26	1.26	0	0	0.00	0.00	18,468	18,468
Brazos Transit District	MB	0	0	0.00	0.00	4	2	0.39	0.19	7	4	0.69	0.36	20,000	40,000
	DR	0	0	0.00	0.00	4	2	0.38	0.19	10	5	0.95	0.47	60,000	75,000
Corpus Christi RTA	MB	0	0	0.00	0.00	14.5	14.5	39.00	39.00	7.5	7.5	20.00	20.00	28,320	28,320
	DR	0	0	0.00	0.00	2	2	15.00	15.00	2	2	15.00	15.00	14,932	14,932
	VP	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	96,963	96,963
Cleburne Transportation	MB	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	53,886	53,886
	DR	0	0	0.00	0.00	0.2	0.2	0.07	0.07	0.6	0.6	0.20	0.20	185,445	185,445
CityLink Transit	MB	0	0	0.00	0.00	0.8	0.8	0.22	0.22	2.4	2.4	0.58	0.58	17,303	17,303
	DR	0	0	0.00	0.00	0.6	0.6	0.12	0.12	1.2	1.2	0.22	0.22	32,563	32,563
Conroe County Transit	MB	0	0	0.00	0.00	3	0.8	283.00	111.00	5	1.6	471.00	222.00	4,420	4,420
	DR	0	0	0.00	0.00	0	0	0.00	0.00	1	0.4	395.00	87.00	12,644	12,644
Community Transit Service (Ellis/Navarro)	DR	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	33,740	33,740
Denton County Transportation Authority	MB	0	0	0.00	0.00	0	0	0.00	0.00	152.25	152.25	9.90	9.90	6,593	6,593
	DR	0	0	0.00	0.00	0.25	0.25	0.10	0.10	152.25	152.25	59.40	59.40	23,899	23,899
Span, Inc. (Denton County)	DR	0	0	0.00	0.00	1	1	0.20	0.00	5	4	0.80	0.70	39,244	40,000
Fort Bend Transit	MB	0	0	0.00	0.00	0.4	0.4	0.06	0.06	1.8	1.8	0.27	0.27	8,637	8,637
	DR	0	0	0.00	0.00	3	3	0.28	0.28	3.4	3.4	0.32	0.32	12,065	12,065
The Grand Connection	DR	0	0	0.00	0.00	5	5	0.63	0.63	0	0	0.00	0.00	23,325	23,325

Table 8
PTASP Performance Targets and Actual Annual Results

Agency	Mode^	Fatalities		Fatality Rate*		Injuries		Injury Rate*		Safety Events		Safety Event Rate*		System Reliability	
		2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target
Connect Transit (Gulf Coast Center)	MB	0	0	0.00	0.00	0.2	0.02	3.00	3.00	0.2	0.2	3.00	3.00	33,424	33,424
	DR	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	62,743	62,743
Gulf Coast Transit District	MB	0	0	0.00	0.00	0.2	0.2	3.00	3.00	0.2	0.2	3.00	3.00	33,424	33,424
	DR	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	62,743	62,743
Harris County Transit	MB	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	351,994	351,994
	DR	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	777,648	777,648
Hill County Transit District	MB	0	0	0.00	0.00	1	0	16.00	0.00	2	1	38.00	17.00	9,383	10,321
	DR	0	0	0.00	0.00	3	2	18.00	12.00	5	3	29.00	18.00	17,584	19,342
Laredo Transit Management, Inc.	MB	0	0	0.00	0.00	3.8	3.8	0.22	0.22	2	2	0.12	0.12	39,590	40,163
	DR	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	28,208	28,152
Longview Transit	MB	0	0	0.00	0.00	1.2	1.2	20.00	20.00	0	0	0.00	0.00	6,456	6,456
	DR	0	0	0.00	0.00	0.4	0.4	4.00	4.00	0	0	0.00	0.00	10,838	10,838
Lubbock Citibus	MB	0	0	0.00	0.00	6.2	6	0.33	0.32	6.2	6	0.33	0.32	10,889	11,000
	DR	0	0	0.00	0.00	3.4	3	0.56	0.50	2.8	2.5	0.46	0.41	13,455	13,500
McKinney Urban Transit District	DR	0	0	0.00	0.00	0.25	0.25	0.10	0.10	152.5	152.5	59.40	59.40	23,899	23,899
Metro McAllen	MB	0	0	0.00	0.00	35	35	1.50	1.50	36	36	1.50	1.50	4,144	4,144
	DR	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	82,479	82,479
Midland-Odessa Urban Transit District	MB	0	0	0.00	0.00	0	0	0.00	0.00	0	0	2.88	2.88	2,543	2,543
	DR	0	0	0.00	0.00	0	0	0.00	0.00	10	10	5.29	5.29	6,338	6,338
Northeast Transportation Service	DR	0	0	0.00	0.00	4.7	4.7	0.74	0.74	8.7	8.7	1.36	1.36	42,580	42,580
Port Arthur Transit	MB	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	14,076	14,076
	DR	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	17,164	17,164
Public Transit Services - Mineral Wells	MB	0	0	0.00	0.00	1	1	0.60	0.60	5	5	2.90	2.90	8,295	8,295
	DR	0	0	0.00	0.00	11	11	0.40	0.40	63	63	2.10	2.10	12,399	12,399
Round Rock Transit	MB	0	0	0.00	0.00	-	-	0.35	0.35	-	-	0.20	0.20	5,000	5,500
	DR	0	0	0.00	0.00	0	0	0.00	0.00	0.2	0.2	0.19	0.19	68,000	68,000

Table 8
PTASP Performance Targets and Actual Annual Results

Agency	Mode [^]	Fatalities		Fatality Rate*		Injuries		Injury Rate*		Safety Events		Safety Event Rate*		System Reliability	
		2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target	2019 Actual	Annual Target
Concho Valley Transit District	MB	0	0	0.00	0.00	0	0	0.00	0.00	1.5	1.5	0.48	0.48	27,446	27,446
	DR	0	0	0.00	0.00	0	0	0.00	0.00	3	3	0.75	0.75	36,377	36,377
City of San Marcos	MB	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	21,991	21,992
	DR	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	8,929	8,929
STAR Transit	MB	0	0	0.00	0.00	0.5	0.5	20.00	20.00	1.5	1.5	50.00	50.00	10,248	10,248
	DR	0	0	0.00	0.00	2.75	2.75	20.00	20.00	3.5	3.5	30.00	30.00	6,443	6,443
Texoma Area Paratransit System, Inc.	DR	0	0	0.00	0.00	3	3	0.06	0.06	0	0	0.00	0.00	83,880	83,880
Texarkana Urban Transit District	MB	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	350,000	350,000
	DR	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	21,000	21,000
The Woodlands Township	MB	0	0	0.00	0.00	0	0	0.00	0.00	0	0	0.00	0.00	5,182	5,182
	CB	0	0	0.00	0.00	1	1	0.11	0.11	0.5	0.5	0.06	0.06	83,398	83,398
Tyler Transit	MB	0	0	0.00	0.00	0.6	0.6	0.19	0.19	0.6	0.6	0.19	0.19	9,930	9,930
	DR	0	0	0.00	0.00	0.4	0.4	0.19	0.19	0.2	0.2	0.10	0.10	10,023	11,024
Valley Metro	MB	0	0	0.00	0.00	5.6	5.6	0.28	0.28	6.2	6.2	0.31	0.31	82,200	82,200
	DR	0	0	0.00	0.00	1	1	0.72	0.72	1.2	1.2	0.87	0.87	57,738	57,738
Victoria Transit	MB	0	0	0.00	0.00	3.2	3.2	0.77	0.77	1.6	1.6	0.39	0.39	51,800	51,800
	DR	0.2	0.2	0.00	0.00	2.2	2.2	0.53	0.53	1.4	1.4	0.34	0.34	203,280	203,280
	CB	0	0	0.00	0.00	0.7	0.7	0.23	0.23	2	2	0.68	0.68	209,447	209,447
Waco Transit System	MB	0	0	0.00	0.00	2.6	2.6	0.32	0.32	2.2	2.2	0.27	0.27	14,123	14,123
	CB	0	0	0.00	0.00	1	1	0.22	0.22	2.8	2.8	0.62	0.62	12,409	12,409
City of Wichita Falls	MB	0	0	0.00	0.00	0.6	0.6	0.10	0.10	0.8	0.8	0.14	0.14	148,571	148,571

[^] CB = Commuter bus, DR = demand response, MB = fixed-route bus, VP = van pool
* Rates are provided as per 100,000 Vehicle Revenue Miles

Summary of Performance Measures and Targets

In recent years, TxDOT has made considerable progress in both setting and achieving performance targets for roadway and transit systems that are in line with federal performance management guidelines. While Texas has mirrored national trends related to increasing numbers of safety incidents on the state's highway network, TxDOT has promoted considerable progress in other key performance measures, including those addressing system reliability, congestion, asset condition, and air quality. TxDOT will continue to work with MPOs and transit agencies throughout the state to set performance targets and achieve progress towards these targets with strategic statewide investments through future STIPs.