



Development of Local Safety Targets for the TPO Region under the FHWA Transportation Performance Management – 2026 Annual PM1 Safety Target Setting Process

February 2026

Background and Overview

Safety Performance Management (Safety PM) is part of the overall [Transportation Performance Management](#) (TPM) program, which FHWA defines as a strategic approach that uses system information to make investment and policy decision to achieve national performance goals. The Safety PM Final Rule supports the Highway Safety Improvement Program (HSIP), as it establishes safety performance measure requirements for the purpose of carrying out the HSIP and to assess fatalities and serious injuries on all public roads.

The Safety PM Final Rule establishes five performance measures (based on five-year rolling averages) to include:

- 1. Number of Fatalities**
- 2. Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)**
- 3. Number of Serious Injuries**
- 4. Rate of Serious Injuries per 100 million VMT**
- 5. Number of Non-motorized Fatalities and Non-motorized Serious Injuries**

The Safety PM Final Rule also establishes the process for State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to establish and report their safety targets, and the process that FHWA will use to assess whether State DOTs have met or made significant progress toward meeting their safety targets.

This year represents the 9th annual target-setting process and for each of the first seven years the TPO Executive Board adopted a resolution to “support” the State’s targets. However, the TPO adopted a [Regional Roadway Safety Action Plan](#) in June 2023 that established a formal goal to reduce fatalities and serious injuries by two-thirds by the year 2045, which translates to a 5% annual reduction from 2024 – 2045. The TPO staff therefore started developing our own TPO regional PM1 Safety Targets based on the new commitment as of the 2025 performance cycle. This will serve as a mechanism for tracking our progress towards meeting this important goal moving forward.





2026 PM1 Safety Target and Baseline Period Overview

The annual safety targets are based on a rolling 5-year average, as a way to smooth out variances that typically occur year over year in the data. This year's target period covers the years from **2022 – 2026**, which are compared against a 5-year baseline of actual data covering the years **2020 – 2024**.

Entities are determined to have met or made significant progress toward meeting their safety performance targets when at least four out of the five targets are either met based on actual outcomes, or are better than the baseline period performance. Note, the TPO's local targets will not be directly evaluated by FHWA with no consequences for missing targets.

Crash data back to the year 2020 was provided by the Tennessee Department of Safety & Homeland Security (TDOSHS) and specifically the Tennessee Highway Patrol's TITAN Business Unit which stores all statewide crash reports in an online database system for tracking. Crash statistics are normally reported at the full-county level, but since geographic coordinates were provided, the TPO staff was able to select only the ones inside the TPO Planning Area for the necessary target computations.

Measure 1 – Number of Fatalities

The chart and figure below show the actual number of fatalities each year within the TPO Planning Area for the baseline period from 2020 – 2024. The target values are set by applying a 5% reduction factor to the 2023 value to generate target numbers for 2024 through 2026 which comprise part of the target period 5-year rolling average between 2022 – 2026. The actual value for 2024 was modestly higher than the target value, but was at least a decrease from the 2023 value. The somewhat low values in the baseline, especially for year 2020, means that the target will likely be higher than the baseline for the next few annual target-setting reporting periods.

Year	Actual Fatalities	Target Fatalities
2020	81	
2021	113	
2022	93	93
2023	121	121
2024	120	115
2025		109
2026		104
5-Year Rolling Avg Baseline (2020-2024)	105.6	
5-Year Rolling Avg Target (2022-2026)		108.4





Measure 2 – Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)

In order to develop rate targets, the TPO staff first had to estimate the amount of Vehicle Miles of Travel that occurs only within the TPO Planning Area, which consists of partial counties except for Knox County. This can be challenging because TDOT only reports full county-level VMT in its annual Highway Performance Monitoring System (HPMS) submittal. A GIS process was used to select the roadways within the TPO Planning Area and estimate their contribution to the full county VMT through use of traffic count data. This method accounts for the roadways classified as Collector and above with a separate estimate for “Local” road VMT having to be computed. The Local road VMT was derived based on a roadway mileage percentage factor that was applied to that category for each county independently.

To develop target-year rates for the full 2020 – 2026 period the TPO staff also had to project the VMT for the unknown years of 2025 and 2026. The projections for those years were made using the TPO’s regional travel demand forecasting model which provided county-specific VMT growth rates which were applied to the 2024 VMT. See the chart below for the final results that were converted to an annualized total in terms of 100 million VMT needed for the rate calculations. The other chart shows the resulting baseline and target rate values for this performance measure area as calculated by dividing the fatality numbers from Measure 1 by the total VMT.

County	Full County Daily VMT					TPO Area Daily VMT					Projected TPO VMT	
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2025	2026
Anderson	2,580,705	2,558,989	2,614,333	2,773,999	2,412,601	2,332,424	2,291,994	2,345,033	2,496,232	2,196,133	2,202,909	2,209,685
Blount	3,194,163	3,380,241	3,567,522	3,614,476	3,065,448	2,901,379	3,056,600	3,240,154	3,316,958	2,775,473	2,799,490	2,823,507
Knox	15,889,294	16,883,974	17,636,854	17,243,528	15,297,476	15,889,294	16,883,974	17,636,854	17,243,528	15,297,476	15,419,327	15,517,436
Loudon	2,315,669	2,475,930	2,498,786	2,605,498	2,650,127	2,050,021	2,188,176	2,210,753	2,297,636	2,360,624	2,379,427	2,398,230
Roane	1,990,747	2,087,432	2,121,103	2,222,535	2,293,551	265,175	252,624	244,844	268,302	277,121	278,244	279,368
Sevier	4,128,988	4,601,354	4,608,283	4,598,751	3,852,750	502,327	553,021	562,882	559,487	391,497	396,027	400,557
TOTAL	30,099,566	31,987,920	33,046,881	33,058,787	29,571,953	23,940,619	25,226,389	26,240,520	26,182,142	23,298,323	23,475,424	23,628,783
	ANNUALIZED in 100M VMT					87.38	92.08	95.78	95.56	85.04	85.69	86.25

Year	# of Actual Fatalities	# of Target Fatalities	100 Million VMT	Actual Fatality Rate	Target Fatality Rate
2020	81		87.38	0.927	
2021	113		92.08	1.227	
2022	93	93	95.78	0.971	0.971
2023	121	121	95.56	1.266	1.266
2024	120	115	85.04	1.411	1.352
2025		109	85.69	0.000	1.272
2026		104	86.25		1.206
5-Year Rolling Avg Baseline (2020-2024)				1.160	
5-Year Rolling Avg Target (2022-2026)				1.213	



Measure 3 – Number of Serious Injuries

The chart and figure below show the actual number of Serious Injuries within the TPO Planning Area each year for the baseline period from 2020 – 2024. Unlike with the fatalities measure, the year 2024 saw an increase in the number of serious injuries meaning that the target value is being far exceeded for this performance measure area meaning that the 2022 – 2026 target value will be extremely difficult to achieve.

Year	Actual Serious Injuries	Target Serious Injuries
2020	542	
2021	497	
2022	449	449
2023	515	515
2024	546	489
2025		465
2026		442
5-Year Rolling Avg Baseline (2020-2024)	509.8	
5-Year Rolling Avg Target (2022-2026)		472.0



Measure 4 – Rate of Serious Injuries per 100 million VMT

This measure is very similar to Measure 2 except instead of fatalities it is the rate of Serious Injuries per 100 million VMT. The chart below shows the baseline and targets which illustrate the projected decline (improvement) in this measure.

Year	# of Actual Serious Injuries	# of Target Serious Injuries	100 Million VMT	Actual S.I. Rate	Target S.I. Rate
2020	542		87.38	6.203	
2021	497		92.08	5.397	
2022	449	449	95.78	4.688	4.688
2023	515	515	95.56	5.389	5.389
2024	546	489	85.04	6.421	5.750
2025		465	85.69		5.427
2026		442	86.25		5.125
5-Year Rolling Avg Baseline (2020-2024)				5.620	
5-Year Rolling Avg Target (2022-2026)				5.276	



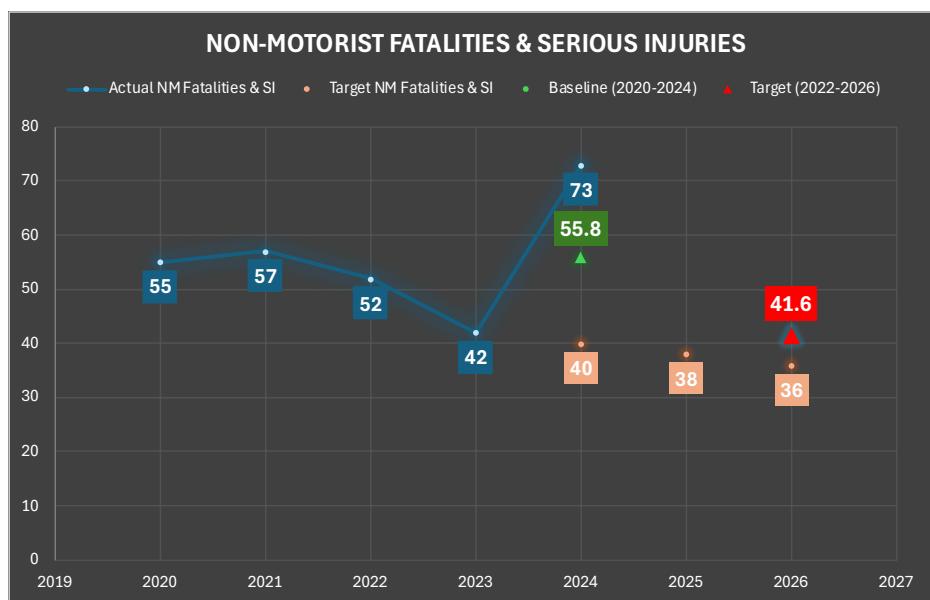
Measure 5 – Number of Non-motorized Fatalities and Non-motorized Serious Injuries

This measure is a subset of both Measure 1 and Measure 3 to focus in on the Non-Motorist involved crash victims, also known as “Vulnerable Road Users” and is comprised primarily of bicyclists and pedestrians. The measure is calculated as the sum of both Serious Injuries and Fatalities, so it is helpful to look at the breakdown of those separately as shown in the chart below.

Performance Measure	2020	2021	2022	2023	2024
Number of Non-motorist Fatalities	15	19	14	17	17
Number of Non-motorist Serious Injuries	40	38	38	25	56
Number of Non-motorist Fatal + SI	55	57	52	42	73

The chart and figure below show the actual number of Non-Motorist Fatality and Serious Injury victims within the TPO Planning Area each year for the baseline period from 2020 – 2024. The target values are based on a 5% reduction starting from year 2023, which had the lowest number of fatalities plus serious injuries in recent years. While this measure had been trending downward since 2021, the year 2024 saw a significant increase and almost a doubling of the year 2023 value. The chart above shows that while the fatality portion of this measure has stayed somewhat the same, the number of Serious Injuries increased dramatically in 2024 relative to prior years.

Year	Actual NM Fatalities & SI	Target NM Fatalities & SI
2020	55	
2021	57	
2022	52	52
2023	42	42
2024	73	40
2025		38
2026		36
5-Year Rolling Avg Baseline (2020-2024)	55.8	
5-Year Rolling Avg Target (2022-2026)		41.6





Summary and Conclusion

The chart below provides a summary of all measures with historical and projected numbers for the baseline and target 5-year periods:

Performance Measure	2020	2021	2022	2023	2024 (Actual)	2024 (Target)	2025 (Target)	2026 (Target)	BASELINE 2020-2024	TARGET 2022-2026
Fatalities	81	113	93	121	120	115	109	104	105.6	108.4
Serious Injuries	542	497	449	515	546	489	465	442	509.8	472.0
Number of Non-motorist fatalities	15	19	14	17	17					
Number of Non-motorist serious injuries	40	38	38	25	56					
Number of Non-motorist Fatal + SI	55	57	52	42	73	40	38	36	55.8	41.6
Vehicle Miles of Travel (100M VMT)	87.38	92.08	95.78	95.56	85.04	85.04	85.69	86.25		
Fatalities per 100M VMT	0.927	1.227	0.971	1.266	1.411	1.352	1.272	1.206	1.160	1.213
Serious Injuries per 100M VMT	6.203	5.397	4.688	5.389	6.421	5.750	5.427	5.125	5.620	5.276

Since this is only the second set of TPO-specific regional targets there is not enough data to include a formal target assessment at this point in time. The first set of regional targets covered the 5-year period between 2021-2025 so once the statistics for year 2025 are complete later in 2026 it will be possible to document the results for actual performance versus the targets for each measure. While some measures appear to be trending better such as overall fatalities, others are getting much worse such as the non-motorist category. The TPO will continue to work with its partner jurisdictions to identify crash factors and program projects to address major safety needs in the Region in the hopes of improving trends for all measures. The following chart depicts the annual progress needed to achieve the two-thirds reduction, from 121 in 2023 to 40 in 2045 for the Fatalities measure by 2045:



**A RESOLUTION BY THE EXECUTIVE BOARD
OF THE KNOXVILLE REGIONAL
TRANSPORTATION PLANNING ORGANIZATION
ADOPTING 2026 REGIONAL SAFETY PERFORMANCE MEASURE TARGETS
FOR THE TPO PLANNING AREA**

WHEREAS, the Knoxville Regional Transportation Planning Organization (TPO) is the designated Metropolitan Planning Organization (MPO) for the Knoxville urbanized area; and

WHEREAS, in 2012 Congress passed the Moving Ahead for Progress in the 21st Century (MAP-21) that mandated the establishment of a performance and outcome based program for transportation decisions which was carried forward in the Infrastructure Investment and Jobs Act (IIJA); and

WHEREAS, a national goal has been established to achieve a significant reduction in traffic fatalities and serious injuries on all public roads; and

WHEREAS, the Safety Performance Management Measures regulations support the Highway Safety Improvement Program (HSIP) and require State DOTs and MPOs to annually set Safety Performance Measure Targets, which apply to all public roads, for 5 factors; including number of fatalities, rate of fatalities per 100 Million Vehicle Miles Traveled (VMT), number of serious injuries, rate of serious injuries per 100 Million VMT, and number of non-motorized fatalities and serious injuries; and

WHEREAS, MPOs have 180 days following the establishment and reporting of the State targets in the HSIP Annual Report to make a decision regarding whether to support each state's targets or to establish their own; and

WHEREAS, the Knoxville Regional TPO adopted a Regional Roadway Safety Action Plan in July 2023, which made a stated commitment to reduce fatalities and serious injuries by two-thirds by 2045; and

WHEREAS, Knoxville TPO staff quantified the number of motorist and non-motorist fatalities and serious injuries using data provided by the Tennessee Department of Safety & Homeland Security in order to calculate all required safety targets including an estimate of vehicle miles traveled (VMT) for the rate-based ones; and

WHEREAS the Technical Committee has recommended that the Knoxville TPO Executive Board adopt regional targets for this 2022 - 2026 target period;

NOW, THEREFORE, BE IT RESOLVED BY THE KNOXVILLE REGIONAL TRANSPORTATION PLANNING ORGANIZATION EXECUTIVE BOARD:

That the Knoxville Regional TPO hereby adopts Regional 2022 – 2026 Targets as shown in Attachment A for all of the required Safety Performance Measures specified in the IIJA in order to support the goals of the TPO's Regional Roadway Safety Action Plan.

February 25, 2026

Date

Mayor Glenn Jacobs
Knox County
TPO Executive Board Chair

Doug Burton
Coordinator
Knoxville Regional TPO

ATTACHMENT A: Regional 2025 Safety Performance Measure Targets (2022-2026 5-Year Average)

Performance Measure	5-Year Rolling Averages	
	Baseline (2020 - 2024)	Target (2022 - 2026)
Number of Fatalities	105.6	108.4
Fatality Rate	1.160	1.213
Number of Serious Injuries	509.8	472.0
Serious Injury Rate	5.620	5.276
Number of Non-Motorized Fatalities and Serious Injuries	55.8	41.6