

# Performance Measure Report

2023



## Background

To provide more transparency in the selection and prioritization of surface transportation projects, federal legislation requires a performance-based planning process framework in the development of the Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) including the adoption of performance measure targets.

The U.S. Department of Transportation (USDOT) developed performance measures in seven key goal areas identified in federal transportation legislation. State departments of transportation and metropolitan planning organizations must set performance measure targets in these key areas as part of a larger performance measure planning system that creates an outcome driven approach.

Transportation performance management is an iterative process that helps guide the planning process by providing directional goals for the plans and programs, but also provides a feed-back mechanism in which to measure success. To achieve the federal goals, states and MPOs jointly develop performance measures and targets with which to guide the transportation development process.

The Transportation Policy Board adopts the Performance Measure Report and updated performance measure targets on an annual basis. These targets are then incorporated into the programming and planning processes of the Transportation Improvement Program, Regional Transportation Plan, and other planning activities.

Safety

Infrastructure condition

Congestion reduction

System reliability

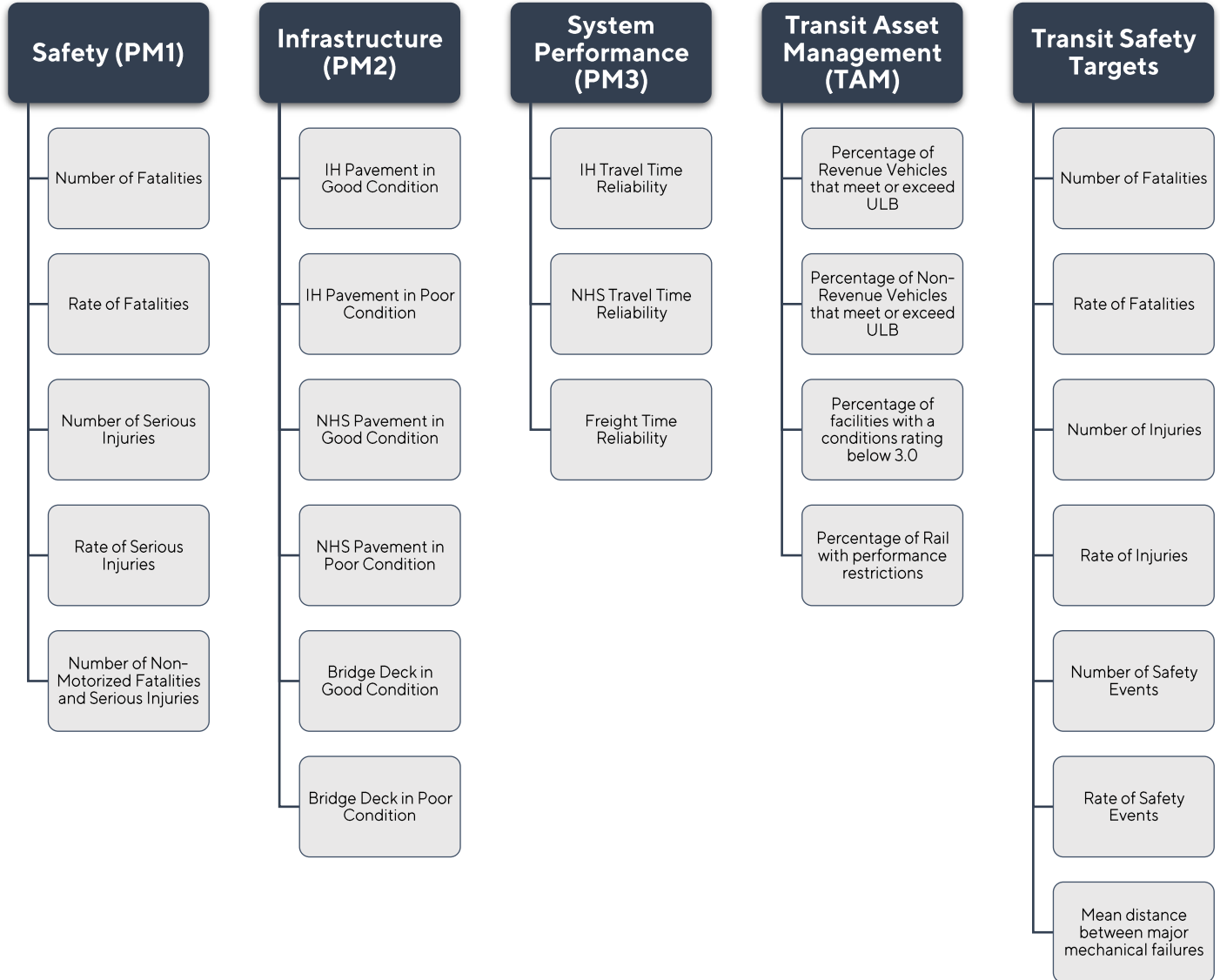
Freight movement and economic vitality

Environmental sustainability

Reduced project delivery delays

## Summary

The use of a performance-based transportation planning process is required in the development of the Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP). Part of the performance-based planning process requires the adoption of performance targets in key areas including Safety (PM1), Pavement and Bridge Conditions (PM2), System Performance and Freight Performance Measures (PM3) for on-system facilities as well as Transit Asset Management (TAM) and Transit Safety.



## Safety Performance Measures (PM1)

The Transportation Policy Board currently supports the state’s efforts and has adopted the Safety targets set by the Texas Department of Transportation (TxDOT). The table below details the statewide safety numbers which are supported by the priorities of the Transportation Policy Board and project investment. Targets are set annually, both at the state and local level, and are adjusted based on the previous year’s safety information and policy changes. Please refer to CAMPO’s [performance measure dashboards](#) for more information on regional performance.

Safety (PM1)	Current Target	2023 Target	5-Year Rolling Average Target
Number of Fatalities	3,272	3,159	3,682
Rate of Fatalities	1.23	1.2	1.38
Number of Serious Injuries	19,065	17,819	17,062
Rate of Serious Injuries	6.47	6.77	6.39
Number of Non-Motorized Fatalities and Serious Injuries	2,642	2,340	2,357

Please note, in addition to the calendar year targets, TxDOT sets a rolling 5-year target for each of the performance measures that is adjusted every year based on the actual safety data available from the previous year. These 5-year average targets represent the overarching safety goals set forth by the Texas Transportation Commission, namely a specific percentage reduction over the 5-year period. The new calendar year targets are calculated each year to support the rolling 5-year average targets. Because the calendar year targets are the actual targets needed for the current year to achieve the rolling 5-year average, the Transportation Policy Board adopts the calendar year targets.

## Pavement and Bridge Conditions (PM2)

The Transportation Policy Board evaluates the general condition of the regional transportation system by establishing minimum condition standards and setting targets conditions for pavement and bridges. The Transportation Policy Board currently supports the state’s efforts and has adopted the Pavement and Bridge Performance Measures (PM2) targets set by the Texas Department of Transportation. Please refer to CAMPO’s [performance measure dashboards](#) for more information on regional performance.

Infrastructure (PM2)	Current Target	Baseline	2-Year Target	4-Year Target
IH Pavement in Good Condition	66.5%	64.5%	63.9%	63.6%
IH Pavement in Poor Condition	.2%	.1%	.2%	.2%
NHS Pavement in Good Condition	54.1%	51.7%	45.5%	46%
NHS Pavement in Poor Condition	14.2%	1.3%	1.5%	1.5%
Bridge Deck in Good Condition	50.4%	49.2%	48.5%	47.6%
Bridge Deck in Poor Condition	1.5%	1.1%	1.5%	1.5%

Please note, in updating this year’s performance measure targets for PM2, the Texas Department of Transportation (TxDOT) has set 2 and 4-year targets for 2022 through 2025. These targets were set utilizing the most recent data available (baseline) regarding performance metrics.

## System and Freight Performance (PM3)

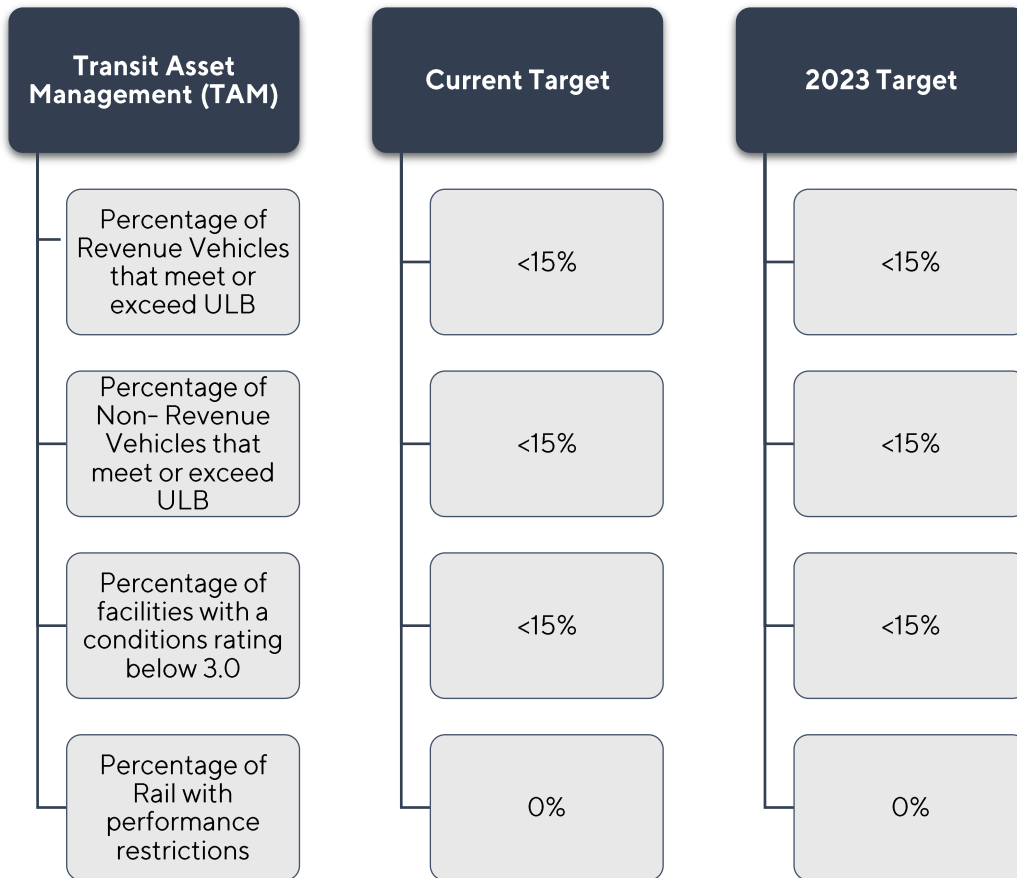
The Transportation Policy Board has prioritized addressing congestion in the region by establishing system performance measures and setting targets for travel time reliability. The Transportation Policy Board currently supports the state's efforts and adopted the System and Freight Performance targets set by the Texas Department of Transportation. Please refer to CAMPO's [performance measure dashboards](#) for more information on regional performance.

System Performance (PM3)	Current Target	Baseline	2-Year Target	4-Year Target
IH Travel Time Reliability	70.0%	84.6%	70%	70%
NHS Travel Time Reliability	70.0%	90.3%	70%	70%
Freight Time Reliability	1.76%	1.39	1.55	1.55

Please note, in updating this year's performance measure targets for PM3, the Texas Department of Transportation (TxDOT) has set 2 and 4-year targets for 2022 through 2025. These targets were set utilizing the most recent data available (baseline) regarding performance metrics.

## Transit Asset Management (TAM)

Direct recipients of federal funds from the Federal Transit Agency (FTA), must comply with the FAST Act by adopting Transit Asset Management (TAM) performance measures and targets. These direct recipients, including Capital Metro and the City of Round Rock, must develop a Transit Asset Management (TAM) Plan with performance measure goals related to capital assets. In addition to the plan, the transit agencies must set annual performance measure targets for asset classes that they manage.



Note that regional transit providers approach Transit Asset Management target setting differently; whereas some providers set specific targets for their asset classes, others set a more generalized range in their Transit Asset Management Plans. Because of this, CAMPO adopts an overall range that is inclusive of both the agency specific targets and set ranges across providers.

## Transit Safety Targets

Direct recipients of 5307 federal funding from the Federal Transit Agency (FTA), must comply with the federal regulations by adopting a Public Transportation Agency Safety Plan (PTASP) which includes transit safety targets that are adopted annually by the agency and the Transportation Policy Board. These direct recipients, including Capital Metro, the City of Round Rock and the City of San Marcos. Please note that rate targets are weighted averages between the providers, whereas specific number targets are the combined targets of the recipients.

Transit Safety Targets	Current Targets	2023 Targets
Number of Fatalities	-	1
Rate of Fatalities	0	.004
Number of Injuries	-	65
Rate of Injuries	0.35	.54
Number of Safety Events	-	85
Rate of Safety Events	0.195	0.65
Mean distance between major mechanical failures	17,200	12,500



## Performance Measure Resources

Transportation Performance Management (TPM) is a federally mandated strategic approach that uses system information to inform investment and policy decisions to achieve national performance goals. While target setting provides those critical benchmarks to measure success, it is the actionable investment decisions that directly impact the region. With that in mind, CAMPO has prioritized performance management in its investment strategies, planning activities, and has also developed digital tools to help provide real-time information and in-depth analysis regarding performance.

Transportation Performance Management Resources	
<a href="#"><u>Project Selection Criteria</u></a>	Project selection process that included a significant focus on the prioritization of projects that provide significant safety benefits, specifically in a project's ability to directly reduce fatalities and serious injuries.
<a href="#"><u>Performance Measure Dashboards</u></a>	Comprehensive digital dashboards that provide the most up-to-date regional performance information. The dashboard provides users with the ability to do in-depth analyses on safety, performance, and pavement/bridge conditions
<a href="#"><u>Planning Activities</u></a>	<p>CAMPO's planning activities from the Regional Transportation Plan and Transportation Improvement Program to the numerous regional and local studies include transportation performance management as an integral part of the planning process. Examples include:</p> <ul style="list-style-type: none"> <li>• Regional Transportation Plan</li> <li>• Transportation Improvement Program</li> <li>• Regional Safety Plan</li> <li>• Regional Freight Study</li> <li>• Regional Bottlenecks/Interchange Study</li> <li>• Mobile Emission Reduction Plan</li> <li>• Local Studies</li> </ul>



## **Resolution 2023-4-7**

### **Adoption of Performance Measure Targets and 2023 Performance Measure Report**

**WHEREAS**, pursuant to federal law, the Governor of the State of Texas designated the Capital Area Metropolitan Planning Organization (CAMPO) as the Metropolitan Planning Organization for the Austin region in 1973; and

**WHEREAS**, CAMPO's Transportation Policy Board is the regional forum for cooperative decision-making regarding transportation issues in Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson Counties in Central Texas; and

**WHEREAS**, use of a performance-based transportation planning process is required by the federal government in the development of the Transportation Improvement Program (TIP) and long-range Metropolitan Transportation Plan (MTP); and

**WHEREAS**, part of the performance-based planning process requires the adoption of performance targets in key areas by the effective date set by the FHWA's Final Rulemaking; and

**WHEREAS**, by these rulemakings, CAMPO must adopt performance measure targets for Safety (PM1), Pavement and Bridge Conditions (PM2), System Performance and Freight Performance Measures (PM3), Transit Asset Management (TAM) and Transit Safety Targets; and

**WHEREAS**, CAMPO has updated its performance measure targets in the required areas as part of the 2023 Performance Measure Report; and

**NOW, THEREFORE BE IT RESOLVED** that the CAMPO Transportation Policy Board hereby votes to adopt the updated performance measures targets as reflected in the 2023 Performance Measure Report; and

Hereby orders the recording of this resolution in the minutes of the Transportation Policy Board; and

**BE IT FURTHER RESOLVED** that the Board delegates the signing of necessary documents to the Board Chair.

The above resolution being read, a motion to adopt the updated performance measures targets as reflected in the 2023 Performance Measure Report as reflected was made on April 10<sup>th</sup>, 2023 by Council Member Rudy Metayer duly seconded by Council Member Natasha Harper-Madison.

Ayes: Commissioner Cynthia Long (Proxy for Mayor Craig Morgan), Council Member Rudy Metayer, Commissioner Clara Beckett, Council Member Alison Alter, Mayor Christine DeLisle, Commissioner Joe Don Dockery, Mayor Pro Tem Paige Ellis, Mr. Tucker Ferguson, P.E., Council Member Vanessa Fuentes, Council Member Natasha Harper-Madison, Mr. Matt Harriss, Commissioner Ann Howard, Mayor Jane Hughson, Commissioner Debbie Ingalsbe, Mayor Travis Mitchell, Ms. Amy Pattillo (Proxy for Judge Andy Brown), Mayor Jim Penniman-Morin, Commissioner Edward Theriot, and Commissioner Jeffrey Travillion

Nays: None

Abstain: None

Absent and Not Voting: Mayor Josh Schroeder

SIGNED this 10<sup>th</sup> day of April 2023

A handwritten signature in blue ink, appearing to read "Cynthia Long", written over a horizontal line.

Chair, CAMPO Board

Attest:

A handwritten signature in blue ink, appearing to read "Ashley Johnson", written over a horizontal line.

Executive Director, CAMPO

## **Appendix A – Federal Performance Measure Fact Sheets**

# Metropolitan Planning Organization Safety Performance Measures Fact Sheet

## Safety Performance Measures

The Safety Performance Management Measures regulation supports the Highway Safety Improvement Program (HSIP) and requires State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to set HSIP targets for 5 safety performance measures. This document highlights the requirements specific to MPOs and provides a comparison of MPO and State DOT responsibilities.

## How do MPOs establish HSIP targets?

Coordination is the key for all stakeholders in setting HSIP targets. Stakeholders should work together to share data, review strategies and understand outcomes. MPOs must work with the State DOT. MPOs should also coordinate with the State Highway Safety Office, transit operators, local governments, the FHWA Division Office, National Highway Transportation Safety Administration (NHTSA) Regional Office, law enforcement and emergency medical services agencies, and others. By working together, considering and integrating the plans and programs of various safety stakeholders, MPOs will be better able to understand impacts to safety performance to establish appropriate HSIP targets. Coordination should start with the Strategic Highway Safety Plan (SHSP). More information on the SHSP is available at <http://safety.fhwa.dot.gov/hsip/shsp/>.

HSIP Safety Targets Established by MPOs	
1	Number of fatalities
2	Rate of fatalities
3	Number of serious injuries
4	Rate of serious injuries
5	Number of non-motorized fatalities and non-motorized serious injuries

### MPOs establish HSIP targets by either:

1. agreeing to plan and program projects so that they contribute toward the accomplishment of the State DOT HSIP target or
2. committing to a quantifiable HSIP target for the metropolitan planning area.

To provide MPOs with flexibility, MPOs may support all the State HSIP targets, establish their own specific numeric HSIP targets for all of the performance measures, or any combination. MPOs may support the State HSIP target for one or more individual performance measures and establish specific numeric targets for the other performance measures.

If an MPO agrees to support a State HSIP target, the MPO would ...	If an MPO establishes its own HSIP target, the MPO would...
<ul style="list-style-type: none"> <li>■ Work with the State and safety stakeholders to address areas of concern for fatalities or serious injuries within the metropolitan planning area</li> <li>■ Coordinate with the State and include the safety performance measures and HSIP targets for all public roads in the metropolitan area in the MTP (Metropolitan Transportation Plan)</li> <li>■ Integrate into the metropolitan transportation planning process, the safety goals, objectives, performance measures and targets described in other State safety transportation plans and processes such as applicable portions of the HSIP, including the SHSP</li> <li>■ Include a description in the TIP (Transportation Improvement Program) of the anticipated effect of the TIP toward achieving HSIP targets in the MTP, linking investment priorities in the TIP to those safety targets</li> </ul>	<ul style="list-style-type: none"> <li>■ Establish HSIP targets for all public roads in the metropolitan planning area in coordination with the State</li> <li>■ Estimate vehicles miles traveled (VMT) for all public roads within the metropolitan planning area for rate targets</li> <li>■ Include safety (HSIP) performance measures and HSIP targets in the MTP</li> <li>■ Integrate into the metropolitan transportation planning process, the safety goals, objectives, performance measures and targets described in other State safety transportation plans and processes such as applicable portions of the HSIP, including the SHSP</li> <li>■ Include a description in the TIP of the anticipated effect of the TIP toward achieving HSIP targets in the MTP, linking investment priorities in the TIP to those safety targets</li> </ul>



**Volumes for HSIP Rate Targets:** MPOs that establish fatality rate or serious injury rate HSIP targets must report the VMT estimate used for such targets, and the methodology used to develop the estimate, to the State DOT. For more information on volumes for HSIP rate targets, see [http://www.fhwa.dot.gov/planning/processes/tools/technical\\_guidance/index.cfm](http://www.fhwa.dot.gov/planning/processes/tools/technical_guidance/index.cfm).

**Roads addressed by MPO HSIP Targets:** HSIP targets cover all public roadways within the metropolitan planning area boundary regardless of ownership or functional classification, just as State HSIP targets cover all public roads in the State.

## How do MPOs with multi-State boundaries establish HSIP targets?

MPOs with multi-State boundaries must coordinate with all States involved. If an MPO with multi-State boundaries chooses to support a State HSIP target, it must do so for each State. For example, an MPO that extends into two States would agree to plan and program projects to contribute to two separate sets of HSIP targets (one for each State). If a multi-State MPO decides to establish its own HSIP target, the MPO would establish the target for the entire metropolitan planning area.

## When do MPOs need to establish these targets?

States establish HSIP targets and report them for the upcoming calendar year in their HSIP annual report that is due August 31 each year. MPOs must establish HSIP targets within 180 days of the State establishing and reporting its HSIP targets. Since FHWA deems the HSIP reports submitted on August 31, MPOs must establish HSIP targets no later than February 27 of each year.

## Where do MPOs report targets?

While States report their HSIP targets to FHWA in their annual HSIP report, MPOs do not report their HSIP targets directly to FHWA. Rather, the State(s) and MPO mutually agree on the manner in which the MPO reports the targets to its respective DOT(s). MPOs must include baseline safety performance, HSIP targets and progress toward achieving HSIP targets in the system performance report in the MTP.

Whether an MPO agrees to support a State HSIP target or establishes its own HSIP target the MPO would include in the MTP a systems performance report evaluating the condition and performance of the transportation system with respect to the safety performance targets described in the MTP including progress achieved by the MPO in achieving safety performance targets

## Assessment of Significant Progress

While FHWA will determine whether a State DOT has met or made significant progress toward meeting HSIP targets, it will not directly assess MPO progress toward meeting HSIP targets. However, FHWA will review MPO performance as part of ongoing transportation planning process reviews including the Transportation Management Area certification review and the Federal Planning Finding associated with the approval of the Statewide Transportation Improvement Program.

Top 5 Things to Know about MPO HSIP Safety Performance Targets	
✓	All MPOs must set a target for each of the 5 HSIP Safety Performance Measures
✓	MPOs may adopt and support the State's HSIP targets, develop their own HSIP targets, or use a combination of both
✓	MPOs must establish their HSIP targets by February 27 of the calendar year for which they apply
✓	MPO HSIP targets are reported to the State DOT
✓	MPO HSIP targets are not annually assessed for significant progress toward meeting targets; State HSIP targets are assessed annually



# PAVEMENT PERFORMANCE MEASURES



## Final Rulemaking

The Federal Highway Administration (FHWA) published in the *Federal Register* (82 FR 5886) a [final rule](#) establishing performance measures for State Departments of Transportation (DOTs) to use in managing pavement and bridge performance on the National Highway System (NHS). The National Performance Management Measures; Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program Final Rule addresses requirements established by the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) and reflects passage of the Fixing America's Surface Transportation (FAST) Act. The rule is effective **May 20, 2017**.

### Performance Measures

- |   |   |
|---|---|
| ✓ | % of Interstate pavements in Good condition         |
| ✓ | % of Interstate pavements in Poor condition         |
| ✓ | % of non-Interstate NHS pavements in Good condition |
| ✓ | % of non-Interstate NHS pavements in Poor condition |

### About Condition

- **Good condition:** Suggests no major investment is needed.
- **Poor condition:** Suggests major reconstruction investment is needed.

### Penalty Provisions

If FHWA determines the State DOT's Interstate pavement condition falls below the minimum level for the most recent year, the State DOT must obligate a portion of National Highway Performance Program (NHPP) and transfer a portion of Surface Transportation Program (STP) funds to address Interstate pavement condition.

### Target Setting

#### State DOTs:

- Must establish targets, regardless of ownership, for the full extent of the Interstate and non-Interstate NHS.
- Must establish statewide 2- and 4-year targets for the non-Interstate NHS and 4-year targets for the Interstate by May 20, 2018, and report by October 1, 2018.
- May adjust targets at the Mid Performance Period Progress Report (October 1, 2020).

#### Metropolitan Planning Organizations (MPOs):

- Support the relevant State DOT(s) 4-year target or establish their own by 180 days after the State DOT(s) target is established.





# PAVEMENT PERFORMANCE MEASURES



## Key Dates

<b>May 20, 2017</b>	Final rule effective date.
<b>January 1, 2018</b>	1st 4-year performance period begins.
<b>May 20, 2018</b>	State DOT targets must be established.
<b>January 1, 2018</b>	State DOTs collect data for Interstate pavements that conform to the final rule (IRI, Rutting, Cracking %, Faulting, and Inventory).
<b>Within 180 days of relevant State DOT(s) target establishment</b>	MPOs must commit to support state target or establish separate quantifiable target.
<b>October 1, 2018</b>	Baseline Performance Period Report for 1 <sup>st</sup> Performance Period due. State DOTs report 4-year targets for Interstate and 2-year and 4-year targets for non-Interstate NHS; etc.
<b>April 15, 2019, and each April 15 thereafter</b>	State DOTs submit first Interstate data that conform to the final rule.
<b>January 1, 2020</b>	State DOTs collect data for non-Interstate NHS pavements that conform to the final rules.
<b>October 1, 2020</b>	Mid Performance Period Progress Report for the 1st Performance Period due. State DOTs report 2-year condition/performance; progress toward achieving 2-year targets; etc.
<b>June 15, 2021, and each June 15 thereafter</b>	State DOTs submit non-Interstate NHS data that conform to the final rule.
<b>December 31, 2021</b>	1st 4-year performance period ends.
<b>October 1, 2022</b>	Full Performance Period Progress Report for 1 <sup>st</sup> Performance Period due. State DOTs reports 4-year condition/performance; progress toward achieving 4-year targets, etc. Baseline Performance Period Report for 2 <sup>nd</sup> Performance Period due. State DOTs report 2-year and 4-year targets for Interstate and non-Interstate NHS; baseline condition; etc.



### Final Rulemaking

The Federal Highway Administration (FHWA) published in the *Federal Register* (82 FR5886) a [final rule](#) establishing performance measures for State Departments of Transportation (DOTs) to use in managing pavement and bridge performance on the National Highway System (NHS). The National Performance Management Measures; Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program Final Rule addresses requirements established by the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) and reflects passage of the Fixing America's Surface Transportation (FAST) Act. The rule is effective **May 20, 2017**.

#### Performance Measures

✓ % of NHS bridges by deck area classified as in Good condition

✓ % of NHS bridges by deck area classified as in Poor condition

#### Condition-Based Performance Measures

- Measures are based on deck area.
- The classification is based on National Bridge Inventory (NBI) condition ratings for item 58 - Deck, 59 - Superstructure, 60 - Substructure, and 62 - Culvert.
- Condition is determined by the lowest rating of deck, superstructure, substructure, or culvert. If the lowest rating is greater than or equal to 7, the bridge is classified as good; if is less than or equal to 4, the classification is poor. (Bridges rated below 7 but above 4 will be classified as fair; there is no related performance measure.)
- Deck area is computed using NBI item 49 - Structure Length, and 52 - Deck Width or 32 - Approach Roadway Width (for some culverts).

#### Target Setting

##### State DOTs:

- Must establish targets for all bridges carrying the NHS, which includes on- and off-ramps connected to the NHS within a State, and bridges carrying the NHS that cross a State border, regardless of ownership.
- Must establish statewide 2- and 4-year targets by May 20, 2018, and report targets by October 1, 2018, in the Baseline Performance Period Report.
- May adjust 4-year targets at the Mid Performance Period Progress Report (October 1, 2020).

##### Metropolitan Planning Organizations (MPOs):

- Support the relevant State DOT(s) 4-year target or establish their own by 180 days after the State DOT(s) target is established.



# BRIDGE

## PERFORMANCE MEASURES



### Key Dates

<b>May 20, 2017</b>	Final rule effective date.
<b>January 1, 2018</b>	1st 4- year performance period begins.
<b>May 20, 2018</b>	Initial 2- and 4-year targets established.
<b>October 1, 2018</b>	Baseline Performance Period Report for the 1 <sup>st</sup> Performance Period due. State DOTs report 2-year and 4-year targets; etc.
<b>Within 180 days of relevant State DOT(s) target establishment</b>	MPOs must commit to support State target or establish separate quantifiable target.
<b>October 1, 2020</b>	Mid Performance Period Progress Report for the 1 <sup>st</sup> Performance Period due. State DOTs report 2-year condition/performance; progress toward achieving 2-year targets; etc.
<b>December 31, 2021</b>	1st 4-year performance period ends.
<b>October 1, 2022</b>	Full Performance Period Progress Report for 1 <sup>st</sup> performance period due. State DOTs report 4-year condition/performance; progress toward achieving 4-year targets; etc. Baseline report due for 2 <sup>nd</sup> performance period due. State DOTs report 2- and 4-year targets; baseline condition, etc.

### Other Specifics

- State DOT targets should be determined from asset management analyses and procedures and reflect investment strategies that work toward achieving a state of good repair over the life cycle of assets at minimum practicable cost. State DOTs may establish additional measures and targets that reflect asset management objectives.
- The rule applies to bridges carrying the NHS, including bridges on on- and off-ramps connected to the NHS.
- If for 3 consecutive years more than 10.0% of a State DOT's NHS bridges' total deck area is classified as Structurally Deficient, the State DOT must obligate and set aside National Highway Performance Program (NHPP) funds for eligible projects on bridges on the NHS.
- Deck area of all border bridges counts toward both States DOTs' totals.

Visit [www.fhwa.dot.gov/tpm/](http://www.fhwa.dot.gov/tpm/) to learn about training, guidance, and other implementation-related information.



# NHS Travel Time Reliability Measures



**WHAT:** Measurement of travel time reliability on the Interstate and non-Interstate National Highway System (NHS). Read the final rule in the [Federal Register](#) [82 FR 5970 (January 18, 2017)].

**WHO:** State DOTs, as well as MPOs with Interstate and/or non-Interstate NHS within their metropolitan planning area.

**WHY:** Through MAP-21, Congress required FHWA to establish measures to assess performance in 12 areas, including performance on the Interstate and non-Interstate NHS. [See 23 CFR 490.507(a)]

**WHEN:** Implementation differs for the Interstate and non-Interstate NHS measures for the first performance period. State DOTs must establish 2- and 4-year targets for the Interstate, but only a 4-year target for the non-Interstate NHS, by **May 20, 2018**. Those targets will be reported in the State's baseline performance period report due by **October 1, 2018**. The State DOTs have the option to adjust 4-year targets in their mid performance period progress report, due **October 1, 2020**. For the first performance period only, there is no requirement for States to report baseline condition/performance or 2-year targets for the non-Interstate NHS before the mid performance period progress report. This will allow State DOTs to consider more complete data. The process will align for both Interstate and non-Interstate measures with the beginning of the second performance period on **January 1, 2022**.

MPOs must either support the State target or establish their own quantifiable 4-year targets within 180 days of the State target establishment.

**HOW:** Level of Travel Time Reliability (LOTTR) is defined as the ratio of the longer travel times (80<sup>th</sup> percentile) to a "normal" travel time (50<sup>th</sup> percentile), using data from FHWA's National Performance Management Research Data Set (NPMRDS) or equivalent. Data are collected in 15-minute segments during all time periods between 6 a.m. and 8 p.m. local time. The measures are the percent of person-miles traveled on the relevant portion of the NHS that are reliable. Person-miles take into account the users of the NHS. Data to reflect the users can include bus, auto, and truck occupancy levels.

**Note: The FHWA is preparing guidance on how all rules should be implemented.**



# Freight Reliability Measure



**WHAT:** Measurement of travel time reliability on the Interstate System (Truck Travel Time Reliability (TTTR) Index). Read the final rule in the [Federal Register](#) [82 FR 5970 (January 18, 2017)].

**WHO:** State DOTs and MPOs.

**WHY:** Through MAP-21, Congress required FHWA to establish measures to assess performance in 12 areas, including freight movement on the Interstate. The measure considers factors that are unique to this industry, such as the use of the system during all hours of the day and the need to consider more extreme impacts to the system in planning for on-time arrivals. [23 CFR 490.607]

**WHEN:** State DOTs must establish 2- and 4-year targets by **May 20, 2018**. Those targets will be reported in the State's baseline performance period report due by **October 1, 2018**. The State DOTs have the option to adjust 4-year targets in their mid performance period progress report, due **October 1, 2020**.

MPOs must either support the State target or establish their own quantifiable 4-year targets within 180 days of the State target establishment.

**HOW:** Freight movement will be assessed by the TTTR Index. Reporting is divided into five periods: morning peak (6-10 a.m.), midday (10 a.m.-4 p.m.) and afternoon peak (4-8 p.m.) Mondays through Fridays; weekends (6 a.m.-8 p.m.); and overnights for all days (8 p.m.-6 a.m.). The TTTR ratio will be generated by dividing the 95<sup>th</sup> percentile time by the normal time (50<sup>th</sup> percentile) for each segment. The TTTR Index will be generated by multiplying each segment's largest ratio of the five periods by its length, then dividing the sum of all length-weighted segments by the total length of Interstate.

State DOTs and MPOs will have the data they need in FHWA's National Performance Management Research Data Set (NPMRDS) as data set includes truck travel times for the full Interstate System. State DOTs and MPOs may use an equivalent data set if they prefer.

**Note: The FHWA is preparing guidance on how all rules should be implemented.**





## TAM Performance Measures

### Background

In 2012, MAP-21 mandated FTA to develop a rule establishing a strategic and systematic process of operating, maintaining, and improving public capital assets effectively through their entire life cycle. The TAM Final Rule 49 USC 625 became effective Oct. 1, 2016 and established four performance measures. The performance management requirements outlined in 49 USC 625 Subpart D are a minimum standard for transit operators. Providers with more data and sophisticated analysis expertise are allowed to add performance measures and utilize those advanced techniques in addition to the required national performance measures.

### Performance Measures

**Rolling Stock:** The percentage of revenue vehicles (by asset class) that have met or exceeded the useful life benchmark (ULB).

**Equipment:** The percentage of non-revenue service vehicles (by asset class) that have met or exceeded the ULB.

**Facilities:** The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale. Condition assessments must be no more than four years old.

**Infrastructure:** The percentage of track segments (by mode) that have performance restrictions. Track segments are measured to the nearest 0.01 of a mile.

#### Resources:

- [ULB Cheat Sheet](#)
- [Facility Performance Measure Guidebook](#)
- [Infrastructure Performance Measure Guidebook](#)
- [Narrative report template](#)

### Data To Be Reported to the National Transit Database (NTD)

**Rolling Stock:** The NTD lists 26 types of rolling stock, including bus and rail modes. Targets are set for each mode an agency, or Group Plan Sponsor, has in its inventory.

**Equipment:** Only 3 classes of non-revenue service vehicles are collected and used for target setting: 1) automobiles, 2) trucks and other rubber tire vehicles, and 3) other steel wheel vehicles.

**Useful Life Benchmark (ULB):** Default ULBs represent maximum useful life for rolling stock and equipment based on the TERM model. Agencies can choose to use the FTA provided default ULB OR

to customize based on analysis of their data.

**Facilities:** Four types of facilities are reported to NTD; they are combined to two categories for target setting: 1) Administrative and Maintenance and 2) Passenger and Parking.

**Infrastructure:** The NTD lists 9 types of rail modes; the NTD collects data by mode for track and other infrastructure assets.

BRT and Ferry are NTD fixed guideway modes but are not included in TAM performance measures and targets.

#### TAM Performance Metrics:

Agencies report data on current year performance and targets for the next fiscal year through the NTD Asset Inventory Module (AIM).

**TAM Narrative Report:** Agencies submit this report to the NTD annually. The report describes conditions in the prior year that impacted target attainment.

For more details visit  
[www.transit.dot.gov/TAM](http://www.transit.dot.gov/TAM)  
or email [TAM@dot.gov](mailto:TAM@dot.gov)

**TERM Scale:** Facility condition assessments reported to the NTD have one overall TERM rating per facility. Agencies are not required to use TERM model for conducting condition assessment but must report the facility condition assessment as a TERM rating score.

TERM Rating	Condition	Description
Excellent	4.8–5.0	No visible defects, near-new condition.
Good	4.0–4.7	Some slightly defective or deteriorated components.
Adequate	3.0–3.9	Moderately defective or deteriorated components.
Marginal	2.0–2.9	Defective or deteriorated components in need of replacement.
Poor	1.0–1.9	Seriously damaged components in need of immediate repair.

## What You Need to Know About Establishing Targets

### Include:

- Only those assets for which you have direct capital responsibility.
- Only asset types specifically referenced in performance measures.
- Only vehicles that are part of the active fleet.

### Group Plans:

- Only one unified target per asset class.
- Sponsors may choose to develop more than one Group Plan.

### MPOs:

- MPOs must establish targets specific to the MPO planning area for the same performance measures for all public transit providers in the MPO planning area within 180 days of when the transit provider(s) establish their targets.
- Coordinate with transit providers.

## Example Target Calculations

**Rolling Stock and Equipment:** Each target is based on the agency’s fleet and age. Agencies set only one target per mode/class/asset type. If an agency has multiple fleets in one asset type (see example BU and CU) of different service age, it must combine those fleets to calculate the performance metric percentage of asset type that exceeds ULB and to set the following fiscal year’s target. The performance metric calculation does not include emergency contingency vehicles.

Rolling Stock	Over the road bus (BU)	10	5	14 years	0%	60%
		15	13	14 years		
	Cutaway bus (CU)	19	8	10 years	21%	21%
		5	12	10 years		
	Mini Van (MV)	5	5	8 years	0%	0%
	Van (VN)	1	10	8 years	67%	67%
2		5	8 years			
Equipment	Auto (AO)	5	4	8 years	0%	0%

This example assumes no new vehicle purchases in the calculation of targets for FY22, therefore the FY22 target for over the road bus (BU) increases due to the second fleet vehicles aging another year and exceeding the default ULB. If an agency is more conservative, then it might set higher value targets. If an agency is more ambitious or expects funding to purchase new vehicles, then it might set lower value targets.

There is no penalty for missing a target and there is no reward for attaining a target. Targets are reported to the NTD annually on the A-90 form. The fleet information entered in the inventory forms will automatically populate the A-90 form with the appropriate classes and asset types associated with the modes reported.



# Safety Performance Targets Fact Sheet

## Overview

The Public Transportation Agency Safety Plan (PTASP) regulation at [49 CFR § 673.11\(a\)\(3\)](#) states that an Agency Safety Plan must include performance targets based on the safety performance measures established in the [National Public Transportation Safety Plan](#). This fact sheet contains guidance on how to determine safety performance targets (SPTs) to meet that requirement. <sup>1</sup>

## Setting Targets

Generally, an agency sets SPTs for each mode that represent its goals for the upcoming year (calendar, fiscal, or National Transit Database [NTD] reporting year). These goals could maintain current safety performance levels or aim to improve upon current safety performance. The Federal Transit Administration (FTA) has not specified how transit providers must set their targets nor established a required methodology.

You may choose to set your targets based on the safety data reported for each mode to the NTD in the past year or an average of the data (per mode) you reported over a certain number of years. You may consider benchmarking peer agencies or transit industry averages based on data reported to the NTD (see resources section for a link to the NTD time-series data).

## Fatality Target

For the fatality safety performance measure, FTA uses the NTD definition of fatality (death confirmed within 30 days) and excludes trespassing and suicide-related fatalities. This means that although you may have to report a trespassing fatality to the NTD, you would exclude that trespassing fatality from your fatality performance target.

## Injury Target

For the injury safety performance measure, FTA uses the NTD definition of injury (harm to a person requiring immediate medical attention away from the scene). FTA uses injuries reported on both the NTD S&S-40 (major) and S&S-50 (non-major) forms and excludes injuries resulting from assaults and other crimes (security events). This means you may have to report a crime-

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<sup>1</sup> The contents of this document do not have the force and effect of law and are not meant to bind the public in any way. This document is intended only to provide clarity to the public regarding existing requirements under the law or agency policies. Grantees and subgrantees should refer to FTA's statutes and regulations for applicable requirements.





related injury to the NTD, but you would exclude that injury from your injury performance target.

### Safety Event Target

For the safety event performance measure, FTA uses all *safety* events meeting an NTD major event threshold (events reported on the S&S-40 form). For this measure, FTA includes only major *safety* events and excludes major *security* events (both of which are reported to the NTD). This means you may have to report a major security event to the NTD, but you would exclude that security event from your safety events performance target.

### System Reliability Target

The system reliability target is expressed in miles and is the mean (average) distance between major mechanical failures. The NTD defines a major mechanical system failure as “a failure of some mechanical element of the revenue vehicle that prevents the vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip because actual movement is limited or because of safety concerns.” NTD Full Reporters report major mechanical failures to the NTD on the Maintenance Performance form (R-20). To calculate the mean distance between failures for a transit mode, you divide total vehicle revenue miles (VRM) by the total number of failures.

Agency B, which operates 45 fixed-route Vehicles Operated in Annual Maximum Service (VOMs), reported 2,560,000 total VRM and 250 major mechanical failures in the past year.

$$\text{VRM} / \text{failures} = \text{SPT}$$

$$2,560,000 / 250 = 10,240 \text{ miles}$$

### Data for NTD Reduced Reporters

Reduced Reporters report the total annual number of fatalities and injuries that occur in their systems, the total number of reportable events, and their annual VRM.<sup>2</sup> You can use this information to support the development of SPTs for fatalities, injuries, and safety events. As noted above, when you develop SPTs for fatalities, you will exclude trespassing and suicide-related fatalities; for injuries, you will exclude injuries resulting from assaults and other crimes (security events).

Reduced Reporters are not required to report major mechanical failures to the NTD. To set the system reliability performance target, you may, for example, review vehicle maintenance records to determine the number of major mechanical failures experienced in the prior year or the average of major mechanical failures over a certain number of years.

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<sup>2</sup> Reduced reporters receive or benefit from Section 5307 funding, operate 30 vehicles or less across all modes and types of service, and do not operate fixed guideway and/or high intensity busway.



## Resources

- [Safety Performance Targets Guide](#) provides information to help transit agencies develop SPTs based on the safety performance measures in FTA's [National Public Transportation Safety Plan](#). See, for example, the section "Strategies for Establishing SPTs."
- [PTASP Safety Performance Targets Webinar Presentation](#) (February 4, 2020) reviews the requirements for SPTs in the PTASP regulation.
- The most recent *NTD Safety and Security Policy Manual* lists the major reporting thresholds for rail and non-rail modes. For more information on NTD reporting, see the most recent *NTD Reporting Policy Manual* or *NTD Reduced Reporting Manual*. See the full list of [NTD manuals here](#).
- [NTD Glossary](#) includes definitions for reporting fatalities, injuries, safety events, and major mechanical system failures to the NTD and lists the NTD forms on which they are reported.
- [NTD Safety & Security Major-Only Time Series Data](#) includes data on events, injuries, and fatalities reported in previous years to the NTD by Full Reporters.
- [NTD Safety & Security Quick Reference Guides](#) define reportable Safety & Security events and identify reporting thresholds for rail and non-rail modes reporting to the NTD.



### PTASP Technical Assistance Available Now

- Access one-on-one Agency Safety Plan support
- Learn and share through the PTASP Community of Practice
- Explore the PTASP Resource Library

<https://www.transit.dot.gov/PTASP-TAC>