

PERFORMANCE BASED PLANNING MEASURES

A key feature of MAP-21 was the establishment of performance targets and measures at the national, state, and local level. The FAST Act made no changes to those performance measures. Therefore, all established performance targets and measures should align with the national goals which were outlined in MAP-21 and carried forward in the FAST Act. Those measures are as follows:

- 1) Safety - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- 2) Infrastructure condition - To maintain the highway infrastructure asset system in a state of good repair.
- 3) Congestion reduction - To achieve a significant reduction in congestion on the National Highway System.
- 4) System reliability - To improve the efficiency of the surface transportation system.
- 5) Freight movement and economic vitality - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- 6) Environmental sustainability - To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- 7) Reduced project delivery delays - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

Specific quantitative criteria have been published by the Secretary of Transportation to measure whether these goals are being achieved. State guidelines have also been provided and KTMPO regularly reviews these metrics to evaluate KTMPO's goals, objectives, and performance measures in their ability to support the state performance targets. The KTMPO public engagement process provides citizens, public agencies, transportation agencies, private transportation providers, and other interested parties with a reasonable opportunity to comment in the transportation planning process as required by FAST Act.

Regional Performance Targets

The Fixing America's Surface Transportation (FAST) Act requires KTMPO to adopt regional performance targets to better utilize transportation investments in the KTMPO region. In this approach, goals, measures, and data are used to inform policy makers about how to invest in a better performing regional transportation system. Transportation funds are intended to target projects aimed at achieving set performance targets for, safety, pavement/bridge condition, system performance, State of Good Repair (transit), and transit safety. To comply with federal requirements, KTMPO initiated the process for selecting performance measure targets in 2016 and has continued refining and adopting new targets on an annual or biannual basis as necessary.

Safety Performance Measures

The Safety Performance Rule (PM1), found in 23 CFR 490.207(a1-5), establishes safety performance measures to address fatalities and serious injuries on roadways and is evaluated using Fatality Analysis Reporting System (FARS) and Vehicular Miles Traveled (VMT) estimates. This Rule is to better invest transportation funding for safety improvement projects to support safe roadway networks.

TxDOT sets safety performance targets for five federally required safety performance measures. These targets include:

- Number of fatalities;
- Fatalities per million miles traveled;
- Number of serious injuries;
- Serious injuries per million vehicle miles traveled; and
- Number of non-motorized fatalities and non-motorized serious injuries.

From January 2018 to January 2023 the KTMPO Policy Board approved the support of the State's safety performance targets. However, when setting the FY24 safety targets, discussions began about the adoption of KTMPO region-specific safety targets, marking the inaugural year KTMPO's safety targets vary from TxDOT. In January 2024, the Policy Board adopted a goal of zero motor vehicle fatalities and a 25% decrease in serious injuries by the year 2050. The following are KTMPO's regional safety targets for FY24:

KTMPO Regional Safety Targets	
Mode	Target
Traffic Fatalities	57
Serious Injuries	286
Fatalities per 100 million VMT	1.45
Serious Injuries per 100 million VMT	7.32
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	33

KTMPO Policy Board will continue the adoption of safety targets on an annual basis as required by the federal planning Rule.

By setting region specific safety targets, KTMPO plans on doing the following:

- Work with the state and safety stakeholders to address areas of concern for fatalities or serious injuries within the MPO planning area; Coordinate with the state and include in the Metropolitan Transportation Plan (MTP) the safety performance

measures and targets for all public roads in the metropolitan area;

- Integrate into the 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 Highway Safety Implementation Plan (HSIP);
- Use data to identify areas that have shown a concentration of accidents and continue to use crash rates as one of our scoring criteria to select projects that support the regional goals;
- Use this information as part of our public outreach efforts to educate drivers about ways they can drive more safely and reduce accidents.

Some recommendations may be made to reduce the recurrence of crashes at particular locations, such as:

- Upgrades to existing transportation infrastructure;
- Modification or implementation of safety infrastructure;
- Creation of alternative routes to alleviate congestion;
- Public campaigns promoting a particular safety issue;
- Requirement of the use of motorcycle and bicycle safety gear;
- An assessment of the transportation network to determine driver decisions

Projects located in both the TIP and the MTP were evaluated for both fatality and serious injury rate. Projects were measured using the project location's number of fatalities and serious injury rate per 100 million vehicle miles traveled against the statewide 5-year rolling average. A higher difference indicated that a location has more safety issues than the statewide average. A higher difference receives a higher score for a safety project, therefore, a project that addresses hazardous roadways may receive a higher ranking. For future projects, KTMPO plans to continue to review and possibly reweight project scoring criteria and use crash rates to evaluate transportation projects to further support the regions targets for a safe transportation system. In time, as projects are completed and reliable performance measure related data becomes available, we will be able to determine the attainment of these performance measures and if adjustments are needed.

Infrastructure or Pavement / Bridge Condition Measures

The Infrastructure or Pavement/Bridge Condition Rule (PM2), found in 23 CFR 490.307(a1-4)(c1-2), establishes performance measures to assess the condition of Interstate pavement, Non-Interstate NHS pavement, and NHS bridges. These facilities are evaluated using the State DOT Highway Performance Monitoring System (HPMS) and rated as either good or poor based on the data.

On June 21, 2023, the TPPB approved the adoption of the States’s performance measure targets set for 2026 regarding Infrastructure and Pavement/Bridge Condition. Additional information regarding these targets and other federally required performance measures can be found at [this website](#). TxDOT’s 2022 Transportation Asset Management Plan can be read [here](#).

KTMPO adopted the following 2026 4-year targets for the state:

Infrastructure or Pavement/Bridge Condition Measures	
Mode	Target
Percent of NHS Bridge Deck Area in Good Condition	47.6% or more
Percent of NHS Bridge Deck Area in Poor Condition	1.50% or less
Percent of Interstate Highway Pavement in Good Condition	63.6% or more
Percent of Interstate Highway Pavement in Poor Condition	0.2% or less
Percent of Non-Interstate Highway Pavement in Good Condition	46.0% or more
Percent of Non-Interstate Highway Pavement in Poor Condition	1.5% or less

These performance measures are being addressed through the review and possible reweighting of project scoring criteria in preparation for the next MTP reprioritization to further support the State’s targets. In time, as projects are completed and reliable performance measure related data becomes available, we will be able to determine the attainment of these performance measures and if adjustments are needed.

System Performance / Freight / CMAQ Measures

The System Performance/Freight/CMAQ Rule (PM3), found in 23 CFR 490.507(a1-2)(b), 23 CFR 490.607, 23 CFR 490.707(a,b), and 23 CFR 490.807, establishes measures based on Level of Travel Time Reliability (LOTTR), Total Peak Hour Excessive Delay person-hours, Truck Travel Time Reliability Index , percent of trips that are Non-SOV, Total Emission Reductions and Annual Total Tailpipe CO₂ Emissions on NHS and is evaluated using NPMRDS, speed limits, auto occupancy, HPMS, and fuel sales statistics, the American Community Survey and CMAQ Public Access System for air quality measures.

The State’s goal is to “work with MPO’s to keep system delay and reliability within the target set as proportion to population growth.” Additional information regarding these targets and

other federally required performance measures can be found at [this website](#). TxDOT's October 2020 progress report can be read [here](#).

In April 2022, the Texas A&M Transportation Institute (TTI) provided KTMPO with local numbers and updated estimates for regional system performance metrics. On August 17, 2022 the TPPB adopted the following local targets for System Performance Measures in 2022:

2022 System Performance/Freight/CMAQ Measures	
Mode	Target
Percent of "reliable" person miles traveled on the Interstate System	97%
Percent of "reliable" person miles traveled on the Non-Interstate NHS	75%
Ratio of unreliable truck travel to average truck travel on the Interstate System	1.70

These performance measures are being addressed through the review and possible reweighting of project scoring criteria in preparation for the next MTP reprioritization to further support the State's targets. In time, as projects are completed and reliable performance measure related data becomes available, we will be able to determine the attainment of these performance measures and if adjustments are needed.

KTMPO's TIP and MTP will be continuously updated to reflect demonstrated performance-based decisions that relate to the support and attainment of performance measure targets for the region.

Transit Asset Management / State of Good Repair Performance Measures

The Transit Asset Condition Performance Rule, found in 49 CFR 625.43(a,b,c,d), establishes performance measures to assess the condition of regional transit networks as defined as State of Good Repair (SGR) and documented in a transit agency's Transit Asset Management Plan (TAMP). SGR targets measure system performance and evaluate how well a transit system is performing.

Hill Country Transit District (HCTD) serves as the transit operator and designated recipient for federal transit funding within the urban service area. In the 2024 Annual Report, HCTD established State of Good Repair (SOGR) performance targets and objectives for both their urban and rural systems in their TAMP. The TAMP covers all fleet vehicles, as well as other capital assets to include equipment, rolling stock, infrastructure, and facilities. KTMPO Policy Board determined that future revisions may be necessary to ensure consistency with the performance targets that HCTD establishes and, therefore, any future revisions to the

TAMP be administratively approved by KTMPO staff and brought to the attention of both TAC and TPPB. KTMPO Policy Board will continue the adoption of urban and rural performance targets on an annual basis as required by the federal planning Rule.

In February 2024, KTMPO agreed to support and adopt HCTD's Transit Asset Management/State of Good Repair target for 2024 which is to have less than 30% of assets within each group (fleet vehicles, maintenance equipment, and facilities) exceed their useful life benchmark.

The inclusion of transit projects located in both the TIP and MTP are intended to support HCTD in achieving the SGR performance measures for the regional transportation system.

Public Transportation Agency Safety Plan (PTASP) Performance Measures

The Public Transportation Agency Safety Plan (PTASP) Rule, found in 49 CFR 673, requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS).

Hill Country Transit District (HCTD) serves as the transit operator and designated recipient for federal transit funding within the urban service area. As required by the December 30, 2020 statutory deadline, HCTD adopted their Public Transportation Agency Safety Plan including regional safety performance targets. On February 21, 2024 TPPB approved a resolution supporting and adopting the safety performance targets in HCTD's PTASP as the performance targets for the MPO region. KTMPO's Policy Board will continue the adoption of Hill Country's PTASP safety performance targets on an annual basis as required by the federal planning Rule.

KTMPO agreed to support and adopt HCTD's PTASP Performance Measures for 2024 which are shown below:

Fixed Route (Bus) Safety Performance Targets	
Mode	Target
Fatalities	0
Rate of Fatalities	0
Injuries	0
Rate of Injuries	0%
Safety Events	1
Rate of Safety Events	0.00017%

Mean Distance Between Major Mechanical Failure	10,321 VRM
--	------------

Demand Response Safety Performance Targets	
Mode	Target
Fatalities	0
Rate of Fatalities	0
Injuries	2
Rate of Injuries	0.00012%
Safety Events	3
Rate of Safety Events	0.00018%
Mean Distance Between Major Mechanical Failure	19,342 VRM
Other	0

The inclusion of transit projects located in both the TIP and MTP are intended to support HCTD in achieving the SMS performance measures for the regional transportation system.