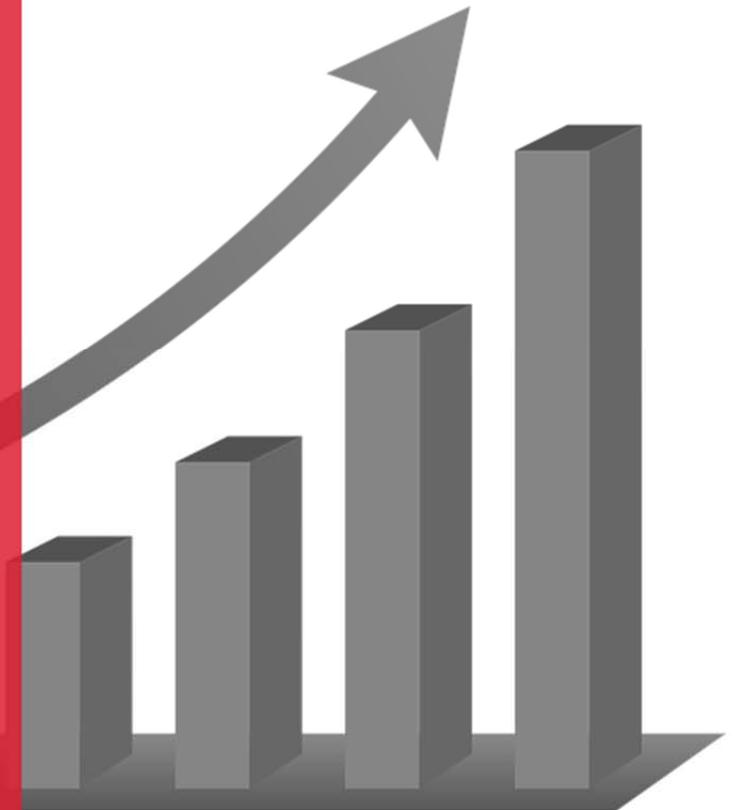


PERFORMANCE MEASUREMENT

MOVING PEOPLE
CONNECTING PLACES



The Alamo Area recognizes the importance of transportation performance tracking, goal setting and measurement to provide greater accountability and transparency and to achieve a more efficient and effective investment of transportation resources. To date, the MPO has met all of the deadlines as set forth of the adoption of performance measures and has developed innovative ways of communicating the performance measurement tracking to partner agencies and the public.

Accomplishments Over the Past Five Years

With the adoption of Mobility 2040 in December 2014, the MPO recognized the importance of performance measurement and tracking and responded by adopting initial performance measures to measure progress over time. Performance measures adopted in Mobility 2040 included:

- minimize system degradation
- increase transit modal share
- decrease overall travel delay
- decrease truck/freight delay
- increase transit ridership per revenue hour

- reduce the frequency and severity of crashes
- increase stakeholder involvement and
- improve access to jobs.

These performance measures supported the MPOs overall goals related to:

- System preservation
- Congestion/travel demand reduction
- Invest in transit quality and effectiveness
- Safety
- Collaboration
- Social/environmental stewardship
- Economic development
- Support mixed use development

While many of the performance measure adopted in Mobility 2040 were no the final measures adopted at the federal level, the MPO, nevertheless, did participate in planning activities, programs, and project selection processes that supported the MPO's overall goals with the intent of improving the adopted performance measures outlined in the Plan.

To date, the MPO has adopted performance measures associated with Safety (PM1), Bridge/Pavement Condition (PM2) and Roadway System Performance (PM3), and Transit Asset Management. MPO staff has mastered the use of TxDOT's Crash Record Information System (CRIS database) and the National Performance Management Research Data Set (NPMRDS) as these performance targets are set.

As shown in Figure 10-1 and Figure 10-2, MPO staff has also established online cash statistics dashboards to share data with the public and transportation stakeholders.

Figure 10-1. MPO Safety Performance Measure Dashboard Overview

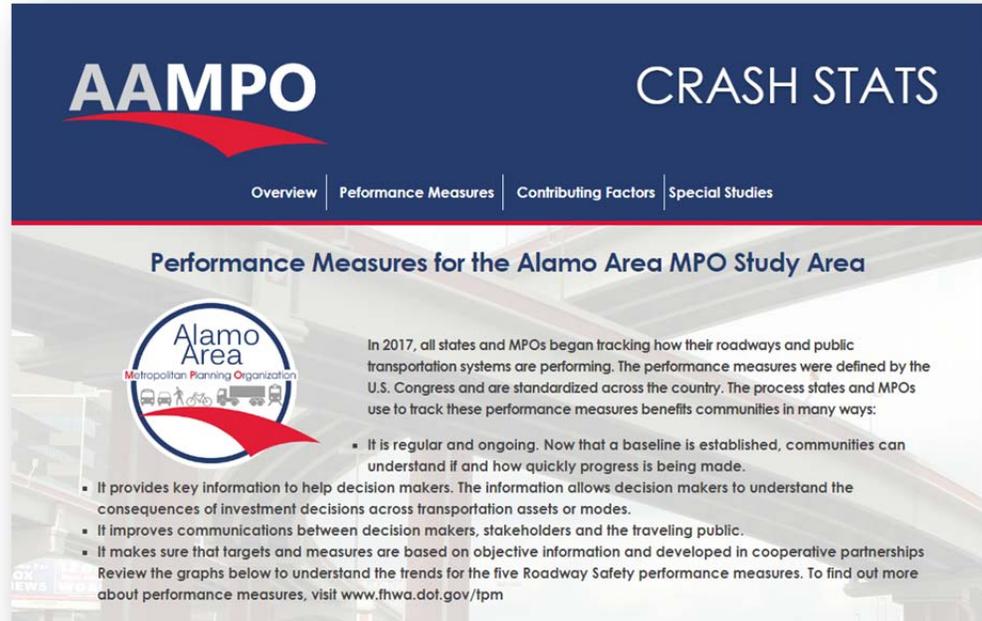
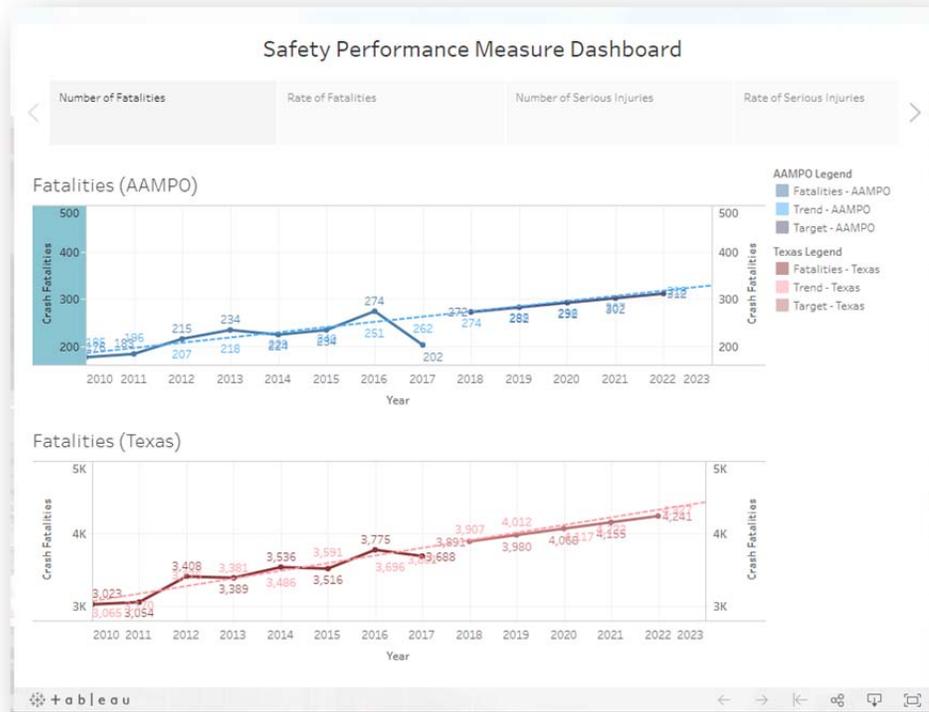


Figure 10-2. MPO Safety Performance Measure Dashboard



Background

The federal transportation bill, Moving Ahead for Progress in the 21st Century (MAP-21) instituted Performance Management to provide greater accountability and transparency and help achieve the most efficient and effective investment of transportation resources. The MPO has closely watched performance measures at the state and federal level.

Performance Measurement

The United States Department of Transportation recognizes that it is important to continuously monitor the performance of the nation's transportation improvements and programs to determine if the nation is achieving its national goals and objectives related to transportation. Monitoring progress towards achieving these goals and objectives is accomplished through the use of performance measures. Performance measurement provides various transportation agencies with a better ability to identify and mitigate issues with their respective transportation networks.

Moving Ahead for Progress in the 21st Century Act (MAP-21)

On July 6, 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) transportation bill was signed into law, creating a streamlined, performance-based, multimodal program in an effort to address challenges facing the U.S. transportation system. In relation to performance management, MAP-21 aimed to increase the accountability and transparency of Federal highway programs by improving transportation investment decision-making through performance-based planning and programming. Furthermore, the Act states: "...Performance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision-making through performance-based planning and programming..."

As a result of MAP-21, performance measures to chart progress toward accomplishment of national goals established in MAP-21 include safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays as outlined below:

- Safety - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- Infrastructure Condition - To maintain the highway infrastructure asset system in a state of good repair.

- Congestion Reduction - To achieve a significant reduction in congestion on the National Highway System (NHS).
- System Reliability - To improve the efficiency of the surface transportation system.
- 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.
- Environmental Sustainability - To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- 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.

Fixing America's Surface Transportation (FAST) Act

The Fixing America's Surface Transportation Act of 2015, or FAST Act, was signed into law on December 4, 2015. The FAST Act provides for new planning requirements such as providing for the development and integrated management of intermodal facilities that support intercity transportation; encouraging consultation with State agencies that plan for tourism and natural disaster risk reduction; planning for system resiliency and reliability and reducing storm-water impacts of surface transportation; and improving freight mobility.

The FAST Act continues MAP-21's overall performance approach, and ensures that State DOTs and MPOs invest in projects that collectively make progress toward the National Goals that were established by Congress.

The FAST Act also allows MPOs serving a transportation management area to voluntarily develop a Congestion Management Plan that shall include regional goals to reduce vehicle miles traveled during peak commuting hours and improve transportation connections between areas with high job concentration and areas with high concentrations of low-income households.

Performance Measures and Targets

Currently, under the FAST Act, State DOTs and MPOs are required to establish performance targets and report on the progress made toward achieving each of these performance targets for the following performance measures:

Safety (PM1)

In 2017, the Texas Department of Transportation (TxDOT) began establishing targets based on five-year rolling averages for five federally-required Safety performance measures. TxDOT most recently set targets for 2019 as shown in Table 10-1.

Table 10-1 Safety Performance Measures and Targets

Performance Measure	2019 Statewide Target (Expressed as Five-Year 2015-2019 Average)
Total number of traffic related fatalities on all public roads	3,791
Rate of traffic related fatalities on all public roads per 100 million VMT	1.414
Total number of traffic related serious injuries on all public roads	17,751
Rate of traffic related serious injuries on all public roads per 100 million VMT	6.550
Total number of non-motorized fatalities and serious injuries on all public roads	2,237.6

These targets were developed using a data-driven, collaborative process during the update of Texas' 2017-2022 Strategic Highway Safety Plan. The targets are aligned with the state's Highway Safety Improvement Program and Highway Safety Plan and reflect a 2% reduction from the original trendline projection for 2022. When a trendline is decreasing, the target mirrors that projection.

On January 28, 2019, the Alamo Area Metropolitan Planning Organization Transportation Policy Board adopted TxDOT's Safety targets, committing to plan and program projects that contribute to the accomplishments of those targets.

For STP-MM project selection, safety is one of the criteria where technical points are awarded based on the crash rate. Numerous projects adopted in the FY 2019-2022 Transportation Improvement Program support achieving the targets established for safety. These include: stand-alone safe bicycle and pedestrian projects and Complete Streets projects; added capacity and operational projects that also include safe bicycle and pedestrian facilities; conversion of frontage roads from two-way to one-way; intersection improvements; safety lighting; pavement markings; wrong way driver technologies; improved traffic signals; grade separated overpasses; improved low water crossings; flashing beacons; and Intelligent Transportation Systems projects.

The MPO began monitoring data for these five Safety performance measures in 2017 and will continue to report achievements to the Transportation Policy Board annually in the fall.

Transit State of Good Repair

VIA Metropolitan Transit has adopted targets for four Transit Asset Management Performance measures for:

- Equipment State of Good Repair: rehab or replace equipment based on the VIA Metropolitan Transit Board of Trustees approved capital plan to maintain an overall state of good repair rating of 3 or better
- Rolling Stock State of Good Repair: by June 2018, replace 270 fixed route buses with an age of 14 years or greater
- Infrastructure State of Good Repair: zero, no passenger rail infrastructure; and
- Facilities State of Good Repair: rehab facilities based on the VIA Metropolitan Transit Board of Trustees approved capital plan to maintain an overall state of good repair rating of 3 or better

On January 22, 2018, the Alamo Area Metropolitan Planning Organization Transportation Policy Board adopted VIA Metropolitan Transit's performance measurement targets. The Transportation Policy Board commits to supporting, planning and programming projects that contribute to the accomplishments of said targets.

Numerous transit projects adopted in Mobility 2045 support achieving the targets established for transit state of good repair, including: the purchase of maintenance tools and equipment; the purchase of revenue vehicles; the purchase of replacement components for revenue vehicles; new and upgrades to existing passenger facilities; and upgrades to the operational facilities.

Pavement and Bridge Condition (PM2)

TxDOT has adopted targets for six performance measures related to pavement and bridge condition as shown in Table 10-2.

Table 10-2 Pavement Performance Measures and Targets

Performance Measure	2022 Statewide Target
Percentage of Interstate pavements in Good condition	66.4%
Percentage of Interstate pavements in Poor condition	0.3%
Percentage of non-Interstate NHS pavements in Good condition	52.3%
Percentage of non-Interstate NHS pavements in Poor condition	14.3%
Percentage of NHS bridges in Good condition	50.42%
Percentage of NHS bridges in Poor condition	0.80%

On December 10, 2018, the Alamo Area Metropolitan Planning Organization Transportation Policy Board took action to support TxDOT’s 2022 statewide targets, committing to plan and program projects locally that contribute to the accomplishment of these targets statewide.

Numerous roadway projects adopted in Mobility 2045 do support achieving the targets established for pavement and bridge condition through the preservation and upgrade of existing roadways and bridges. Additionally, pavement and bridge condition data made available by TxDOT will allow the MPO to begin examining pavement and bridge condition with future project calls. Where pavements and bridges in Poor condition are located on off-system roadways, the MPO will coordinate with local governments to identify potential improvements.

Roadway System Performance (PM3)

When developing statewide targets for three roadway system performance measures, TxDOT teamed up with the Texas A&M Transportation Institute (TTI). After a data-driven, collaborative process, TTI identified estimated future trend lines and achievable targets for each MPO in Texas. MPO staff and Technical Advisory Committee members reviewed and concurred with the methodology used to develop targets for the Alamo Area. Statewide targets took into account each of the MPOs’ region-specific targets. Statewide and MPO-region targets are outlined in Table 10-3.

Table 10-3 Roadway System Performance Measures and Targets

Performance Measure	2022 Statewide Target	2022 MPO Region Target
Interstate Reliability	56.6%	65.0%
Non-Interstate NHS Reliability	55.4%	45.0%
Truck Travel Time Reliability Index	1.79	2.20

Three additional System Performance measures include Annual Hours of Peak Hour Excess Delay per Capita; Percent Non-SOV Travel; and Total Emissions Reduction, are not yet applicable to the MPO. At the time of applicability determination on October 1, 2017, the MPO was not identified as one of the MPOs required to set targets for these measures.

On December 10, 2018, the Alamo Area Metropolitan Planning Organization Transportation Policy Board took action supporting the three regional 2022 targets developed by TTI for the study area that contribute to the State meeting its adopted targets.

Numerous projects adopted in Mobility 2045 support achieving the targets established for system performance including added capacity projects on NHS-designated routes; the implementation of a Safety Service Patrol; Intelligent Transportation Systems projects; corridor studies; and new and enhanced transit service and facilities.