

# **FAST ACT Requirements: Integration of Performance Measures into the Alamo Area Metropolitan Planning Organization FY 2019 – FY 2022 Transportation Improvement Program**

## **Introduction**

The Moving Ahead for Progress (MAP-21) federal transportation bill instituted performance measurement to provide greater accountability and transparency to achieve the most efficient and effective investment of transportation resources. Performance measurement requirements were refined in the Fixing America's Surface Transportation (FAST) Act. State DOTs and Metropolitan Planning Organizations (MPOs) are required to move towards a performance-based planning process with an emphasis on project selection based on specific planning factors. Among its project scoring criteria, the Alamo Area Metropolitan Planning Organization (AAMPO) considers the following factors for selection of projects in its financially constrained project list:

- Highway Safety: Three year average of vehicle-related fatal and incapacitating crashes within the project limits
- Congestion: Volume/Capacity ratio in excess of 1.0
- Bicycle and Pedestrian Safety: Three year average of bicycle and pedestrian-related fatal and incapacitating crashes within the project limits, adjacent vehicle volumes and speeds and proximity to moving traffic

Under MAP-21, States were required to set annual safety performance targets. The annual measures States set targets for include:

- Number of fatalities (The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year).
- Rate of fatalities per 100 million vehicle miles traveled (VMT) (The ratio of total number of fatalities to the number of vehicle miles traveled (VMT expressed in 100 Million VMT) in a calendar year).
- Number of serious injuries (The total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year).
- Rate of serious injuries per 100 million VMT (The ratio of total number of serious injuries to the number of VMT (VMT expressed in 100 Million VMT) in a calendar year).
- Number of non-motorized fatalities and number of non-motorized serious injuries combined (The combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year).

The Texas Department of Transportation established the statewide targets to support the Strategic Highway Safety Plan (SHSP) and the Highway Safety Improvement Program (HSIP). Once the State of Texas set their safety targets, MPOs within Texas were required to either adopt the Texas targets or set their own that would help achieve the statewide target. In January 2018, the Alamo Area MPO adopted the state targets. These statewide targets (expressed as a five-year average) are:

- Total Traffic Fatalities Per Calendar Year: 3,703.8
- Rate of Traffic Fatalities Per 100M VMT: 1.432
- Number of Serious Injuries: 17,565.4
- Rate of Serious Injuries Per 100M VMT: 6.740
- Number of Non-Motorized Fatalities and Serious Injuries: 2,150.6

As part of the FAST act, performance measures were incorporated for transit agencies, primarily through the Transit Asset Management (TAM) assessment and planning requirements. A Tier II provider in the Alamo Area, Alamo Regional Transit opted to work toward achievement of the statewide TAM plan and targets. VIA Metropolitan Transit (VIA) is the only Tier 1 transit provider serving the Alamo Area and developed its own TAM plan to meet that requirement. All assets owned by VIA were examined using the Federal Transit Administration (FTA) Transit Economic Requirements Model (TERM) which uses a scale of one to five to determine the quality of the asset. The scale is as follows:

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|---------------|--|
| 1 = Poor      | The asset is critically damaged or in need of immediate repair; well past useful life.   |
| 2 = Marginal  | Defective or deteriorated in need of replacement; exceeded useful life.                  |
| 3 = Adequate  | Moderately deteriorated or defective; has not exceeded useful life.                      |
| 4 = Good      | Good condition, no longer new, may be slightly defective/deteriorated but is functional. |
| 5 = Excellent | No visible defects, new or near new, may still be under warranty if applicable.          |

An asset is deemed to be in good repair if it has a rating of 3, 4, or 5 on this scale. Likewise, an asset is deemed to not be in good repair if it has a rating of 1 or 2. Using this scale, VIA examined revenue vehicles, non-revenue vehicles and facilities.

In January 2018, the Alamo Area MPO approved the TAM targets below.

- 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: n/a
- 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

**FY 2019 – FY 2022 Transportation Improvement Program**

Upon adoption of the FAST Act, a direct correlation between safety targets and TAM plans needed to be established through project selection as reflected in the Transportation Improvement Programs (TIPs). By rule, TIPs amended or updated on or after May 27, 2018 must meet the Performance-Based Planning and Programming (PBPP) planning requirements [81 FR 34050] for the safety performance measures. The TIP was reviewed and this analysis developed showing how projects included in the AAMPO’s TIP help achieve safety and TAM plan requirements.

## Transit Section

Based on ratings, VIA developed investment priorities for vehicles and facilities. Transit projects listed in the FY 2019-2022 Transportation Improvement Program include:

### *Revenue Vehicles*

1. VIA is funding replacement components for revenue vehicles (\$4,563,177)
2. VIA is funding the purchase of 112 paratransit vehicles (\$16,081,121)

Note: In late 2017, VIA replaced half of its fixed route buses with CNG buses, which will also significantly reduce vehicle emissions. VIA's full fleet conversion will be complete in 2025.

### *Non-Revenue Vehicles*

1. From 2019 through 2021 VIA plans to undertake a systematic replacement program of non-revenue cars and trucks (\$917,000)

### *Facilities*

1. VIA has planned for improvements to many of its passenger facilities including: IH 10 West Park & Ride (P&R), SH 151 P&R, Northeast P&R, Randolph P&R, Robert Thompson Transit Center and Brooks Transit Center. Total investment for the four year time period in passenger facilities is \$35,432,279.
2. VIA has also planned for improvements to its Maintenance Facility, Bus Yard and Administration Building for a total investment of \$10,505,000.

## Roadway Section

Because the AAMPO's project selection process considers safety, most of the roadway projects included in the TIP have significant impact on improving safety and thus work towards achieving the adopted safety targets. Generally, these projects 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; implementation of wrong way driver technologies and improved traffic signals; grade separated overpasses; improved low water crossings; installation of flashing beacons; and Intelligent Transportation Systems projects. While it would be redundant to relist all of the projects in the TIP in this document, some of the major efforts include:

- Implementing the Safety Service Patrol on controlled access highways in Bexar, Comal and Kendall Counties to quickly clear disabled vehicle and primary crashes and prevent secondary crashes
- Converting two way frontage roads to one way on IH 35 North between FM 306 and Hays/Comal County Line as this segment changes from a rural to a more urbanized area
- Expanding SH 46 from Farhills to US 281 (a high traffic volume area) from two to six lanes
- Constructing direct connectors at the following interchange locations: IH 410 at SH 151, at IH 410 at IH 10 East; and at Loop 1604 at IH 10 West to reduce conflict points and crashes
- Constructing a grade separation on Loop 337 at River Road thus reducing conflict points

- Using Surface Transportation Block Grant and Transportation Alternatives funding to implement safe bicycle and pedestrian facilities at high activity locations (MyLink program)
- Constructing a bicycle and pedestrian bridge on SS 536 at the San Antonio River
- Constructing interchange improvements at IH 410/US 281/San Pedro to reduce weaving which will prevent crashes

Additional safety improvements from the Grouped CSJ project list include:

- Improving traffic signals at 29 locations
- Improving safety lighting at 26 locations
- Improving pavement markings on 45 roadway segments
- Replacing or rehabilitating a bridge at 11 locations
- Implementing wrong way driver technologies on two segments of IH 35 South

### **November 2018 TIP Amendments**

TIPs amended or updated on or after October 1, 2018 must meet the PBPP planning requirements for FTA's Transit Asset Management Final Rule. Since the AAMPO is making amendments to the FY 2019 - FY 2022 TIP, the TIP was reviewed and this analysis developed showing how projects being amended in the AAMPO's TIP help achieve safety and TAM plan requirements.

#### Transit Amendments

The transit amendments this quarter will have no significant impact on VIA's Transit Asset Management Plan. Primarily, the amendments are to consolidate five individual projects related to VIA's Rapid Transit Corridor Study in FYs 2020-2024 into one project and move it to FY 2019. Other amendments include adjusting funding amounts.

#### Roadway Amendments

Many of the roadway amendments this quarter include individually listing the Engineering and Right of Way components of added capacity projects as individual projects now that Bexar County has been designated nonattainment for ozone. Amendments that specifically impact travel safety include:

- Adding six new travel lanes (express and HOV) on IH 35 between IH 410 North and FM 3009
- Adding six new travel lanes (including HOV) on Loop 1604 from SH 16 to Redland Road and improving the intersections along this corridor
- Converting two way frontage roads to one way frontage roads on IH 10 West from Scenic Loop to the Kendall/Bexar County Line as this area changes from a rural to a more urban area
- FM 1516 project from FM 78 to IH 10 will expand the roadway from 2 to 4 lanes divided and include bike lanes and sidewalks

## **Other Activities**

For many years the AAMPO has been proactively working to improve safety in the region. AAMPO staff have been long time users of TxDOT's Crash Records Information System (CRIS dataset) and have reported, through project scoring processes, online dashboards, and presentations, the crash data trend for the region. Since 1997, AAMPO staff have also worked with partner agency staff on our Active Transportation Program to host Walkable Community Workshops with schools and neighborhood groups to identify bicycle and pedestrian needs in their communities. AAMPO staff also presented "Share the Road" concepts at the City of San Antonio's defensive driving classes for employees, and conducts "Street Skills" bicycle and pedestrian safety classes for teens and adults, reaching over 1,000 people. Bicycle helmets and bike light sets are provided as an incentive for participation. AAMPO staff also assists with school bike rodeos to be sure safe cycling starts early. The City of San Antonio was an early adopter of the Vision Zero initiative and the AAMPO continues to partner with San Antonio and other local governments on safety outreach efforts.

## **Conclusion**

The AAMPO has proactively responded to the requirements of performance planning and target setting. The AAMPO Transportation Policy Board commits to supporting, planning and programming funding for projects and programs that contribute to the accomplishments of safety targets and transit asset management goals. The MPO, along with its partners will continue to monitor the established targets for all performance measures and report achievements.