



MAP-21 PERFORMANCE MANAGEMENT REQUIREMENTS

BACKGROUND

Performance Management is a strategic approach to connect investment and policy decisions to help achieve performance goals. Performance measures are quantitative criteria used to evaluate progress. Performance measure targets are the benchmarks against which collected data is gauged. The Moving Ahead for Progress in the 21st Century Act (MAP-21) requires State DOTs and MPOs to conduct performance-based planning by tracking performance measures and setting data-driven targets to improve those measures. Performance-based planning ensures the most efficient investment of federal transportation funds by increasing accountability, transparency, and providing for better investment decisions that focus on key outcomes related to seven national goals:

- Improving Safety;
- Maintaining Infrastructure Condition;
- Reducing Traffic Congestion;
- Improving the Efficiency of the System and Freight Movement;
- Protecting the Environment; and,
- Reducing Delays in Project Delivery.

The Fixing America's Surface Transportation (FAST) Act supplements the MAP-21 legislation by establishing timelines for State DOTs and MPOs to comply with the requirements of MAP-21. State DOTs are required to establish statewide targets and MPOs have the option to support the statewide targets or adopt their own quantifiable targets for the MPO's planning area.

TRANSIT ASSET MANAGEMENT (TAM) MEASURES

Transit Asset Performance

On July 26, 2016, FTA published the final Transit Asset Management rule. This rule applies to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The rule defines the term “state of good repair,” requires that public transportation providers develop and implement transit asset management (TAM) plans, and establishes state of good repair standards and performance measures for four asset categories: rolling stock, equipment, transit infrastructure, and facilities. The rule became effective on October 1, 2018.

The table below identifies performance measures outlined in the final rule for transit asset management.

Asset Category	Performance Measure
Equipment	Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their useful life benchmark
Rolling Stock	Percentage of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark
Infrastructure	Percentage of track segments with performance restrictions
Facilities	Percentage of facilities within an asset class rated below condition 3 on the TERM scale

Transit Asset Management Performance Targets

Public transportation agencies are required to set and report transit targets annually. Public transit providers or their sponsors must share their targets with each MPO in which the transit provider’s projects and services are programmed in the MPO’s TIP. Subsequent MPO TAM targets must be set when updating the LRTP. MPOs can either agree to program projects that will support the TAM targets, or set their own separate regional TAM targets for the MPO’s planning area. Regional TAM targets may differ from agency TAM targets, especially if there are multiple transit agencies in the MPO’s

planning area, or in the event that one or more transit agencies have not provided TAM targets to the MPO.

The Hillsborough Area Regional Transit Authority set the following transit asset targets on August 23, 2018:

Asset Category - Performance Measure	Asset Class	2018 Target
Rolling Stock		
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Bus	13%
	Cutaway Bus	80%
	Automobiles	39%
	Streetcar	0%
	Total	≤22%
Equipment		
Age - % of non-revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Non-Revenue/Service Automobile	77%
	Vans	100%
	SUVs	82%
	Total	≤81%
Infrastructure		

Asset Category - Performance Measure	Asset Class	2018 Target
% of track segments with performance restrictions ¹	Rail fixed guideway track	0%
Facilities		
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administration	22%
	Maintenance	18%
	Parking Structures	6%
	Passenger Facilities	20%
	Shelter	32%
	Total Passenger/Parking	≤10%
	Total Administrative/Maintenance	0%

On October 30, 2018, the Hillsborough MPO agreed to support the Hillsborough Area Regional Transit Authority's transit asset targets, thus agreeing to plan and program projects in the TIP that will, once implemented, make progress toward achieving the transit provider targets.

The Tampa Bay Area Regional Transit Authority (TBARTA) is categorized as a Tier II transit provider under the TAM rule and is thus qualified to participate in a group TAM Plan, which will be compiled by a group TAM Plan sponsor.² For TBARTA, upon

¹ Track segments are owned by the City of Tampa, which reported on August 22, 2018 that 0% of track segments have performance restrictions.

² Under the TAM rule, Tier II transit providers are those which either: own ≤100 vehicles across all fixed route modes; or, ≤100 vehicles in one non-fixed route mode; or, are a subrecipient of 5311 funds; or, are a Native American tribe.

completion of the group TAM Plan, the targets and narrative report of the TAM Plan will be submitted to the National Transit Database by a sponsoring agency on its behalf.

The Hillsborough MPO TIP was developed and is managed in cooperation with the Hillsborough Area Regional Transit Authority. It reflects the investment priorities established in the Hillsborough MPO's 2040 LRTP and documents local and FTA funds to be used for TAM, along with Surface Transportation Program funds – based on MPO priorities in previous years. Hillsborough MPO's investments that address transit state of good repair include:

- Streetcar capital maintenance
- Bus replacements with compressed natural gas conversion
- The Hillsborough MPO TIP also recommends an additional \$4 million for bus replacement; and
- Identifies \$10 million to invest in upgrading computer aided dispatch automated vehicle location (CAD/AVL) technology.

The Hillsborough MPO TIP has been evaluated and the anticipated effect of the overall program is that, once implemented, progress will be made towards achieving the Hillsborough Area Regional Transit Authority's transit asset performance targets.

SAFETY MEASURES (PM1)

Safety is the first national goal identified in the FAST Act. In March of 2016, the Highway Safety Improvement Program (HSIP) and Safety Performance Management Measures Rule (Safety PM Rule) was finalized and published in the *Federal Register*. The rule requires MPOs to set targets for the following safety-related performance measures and report progress to the State DOT:

- Fatalities;
- Serious Injuries;
- Nonmotorized Fatalities and Serious Injuries;
- Rate of Fatalities per 100M Vehicle Miles Traveled (VMT); and
- Rate of Serious Injuries per 100M VMT.

The 2016 Florida Strategic Highway Safety Plan (SHSP) is the statewide plan focusing on how to accomplish the vision of eliminating fatalities and reducing serious injuries on all public roads. The SHSP was developed in coordination with Florida's 27 MPOs through Florida's Metropolitan Planning Organization Advisory Council (MPOAC). The SHSP development process included review of safety-related goals, objectives, and strategies in MPO plans. The SHSP guides FDOT, MPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out throughout the State.

The Florida SHSP and the Florida Transportation Plan (FTP) both highlight the commitment to a vision of zero deaths. The FDOT Florida Highway Safety Improvement Program (HSIP) annual report documents the statewide interim performance measures toward that zero deaths vision. As such, the MPO acknowledges FDOT statewide HSIP interim safety performance measures and FDOT's 2018 safety targets, which set the target at "0" for each performance measure to reflect the Department's goal of zero deaths. However, the MPO is setting its safety performance targets based upon data collected within the MPO planning area for previous years related to safety performance measures. The 2018 targets are stated here as: Fatalities – 184; Serious Injuries – 1,618; Nonmotorized Fatalities and Serious Injuries - 243; Rate of Fatalities per 100M Vehicle Miles Traveled (VMT) – 1.40; and Rate of Serious Injuries per 100M VMT – 12.35

The TIP considers potential projects that fall into specific investment programs established by the MPO. For the Hillsborough MPO safety projects may be programmed with funds from the HSIP and/or the Safe Routes to Schools (SRTS) and address either

infrastructure or behavior safety. The Hillsborough MPO FY2018-2019 TIP has numerous funded projects that enhance the safety of facilities including:

- SR60 / BRANDON BLVD FROM OF BRANDON TOWN CTR TO GORNTO LAKE RD, add turn lanes and improve signal, CST FY21
- US41/SR685/N FLORIDA AVE FR S OF E BIRD ST TO N OF W WATERS AVE, traffic signal update, CST FY18
- US301/SR43 FROM FALKENBURG RD TO SLIGH AVENUE, median modification, CST FY20
- MORRIS BRIDGE ROAD FROM DAVIS ROAD TO FOWLER AVENUE, add paved shoulders, sidewalk/sidepath, CST FY21
- GIBSONTON ELEMENTARY ALAFIA ST & VERN STREET FR GIBSONTON DR TO NUNDY, add sidewalk, CST FY20
- KENLY ELEMENTARY 21ST AVE FROM 66TH ST TO 62ND ST, add sidewalk, CST FY 20
- MORT ELEMENTARY SCHOOL VARIOUS LOCATIONS AROUND SCHOOL, add sidewalk, CST FY20
- SUMMERFIELD ELEMENTARY, add sidewalk, CST FY 18
- GREEN SPINE CYCLE TRACK FROM WILLOW AVE TO DOYLE CARLTON DR, bike path, CST FY20
- THE HEIGHTS MOBILITY PLAN, urban corridor improvements, PE FY19
- GEORGE RD FROM DANA SHORES DR TO TOWN N COUNRTY GREENWAY, urban corridor improvements, PE FY23

In addition to funded projects listed above, the MPO continues to prioritize safety projects, including intersection and corridor enhancements based on the recommendations from the Vision Zero effort (Table 2).

The TIP includes specific investment projects that support all of the MPOs goals including safety, using a prioritization and project selection process. The TIP prioritization process evaluates projects that have an anticipated effect of reducing both fatal and injury crashes. The MPO's goal of reducing fatal and serious injury crashes is linked to this investment plan and the process used in prioritizing the projects is consistent with federal requirements.

The MPO will continue to coordinate with FDOT and transit providers to take action on the additional targets and other requirements of the federal performance management process.

PAVEMENT AND BRIDGE CONDITION MEASURES (PM2)

In January 2017, USDOT published the Pavement and Bridge Condition Performance Measures Final Rule, which is also referred to as the PM2 rule. This rule establishes the following six performance measures:

- Percent of Interstate pavements in good condition;
- Percent of Interstate pavements in poor condition;
- Percent of non-Interstate National Highway System (NHS) pavements in good condition;
- Percent of non-Interstate NHS pavements in poor condition;
- Percent of NHS bridges by deck area classified as in good condition; and
- Percent of NHS bridges by deck area classified as in poor condition.

For the pavement measures, five pavement metrics are used to assess condition: International Roughness Index (IRI); Cracking Percent; Rutting; Faulting; and a Present Serviceability Rating (PSR) for lower speed roads. The bridge measure assesses the condition of a bridge's deck, superstructure, substructure, and culverts. Good condition suggests that no major investment is needed, and poor condition suggests major reconstruction investment is needed.

Pavement and Bridge Performance Targets

Federal rules require State DOTs and MPOs to set bridge and pavement performance targets and monitor progress towards achieving the targets. States must set four-year statewide targets for the percent of interstate pavements in good and poor condition; two-year and four-year targets for the percent of non-Interstate NHS pavements in good and poor condition; and two-year and four-year targets for the percent of NHS bridges by deck area in good and poor condition.

MPOs must set four-year targets for all six measures. MPOs can either agree to program projects that will support the statewide targets, or set their own quantifiable targets for the MPO's planning area.

FDOT set the following statewide targets on May 18, 2018:

Performance Measure	2-year Statewide Target (Jan. 1, 2018 to Dec. 31, 2019)	4-year Statewide Target (Jan. 1, 2018 to Dec. 31, 2021)
Percent of Interstate pavements in good condition	Not required	60%
Percent of Interstate pavements in poor condition	Not required	5%
Percent of non-Interstate NHS pavements in good condition	40%	40%
Percent of non-Interstate NHS pavements in poor condition	5%	5%
Percent of NHS bridges by deck area in good condition	50%	50%
Percent of NHS bridges by deck area in poor condition	10%	10%

In setting the statewide targets, FDOT considered several factors. The key considerations included:

- FDOT currently has the following conditions:
 - 66% of the Interstate pavements in good condition and 0.1% in poor condition;
 - 45% of the non-Interstate NHS pavements in good condition and 0.4% in poor condition;
 - 72% of NHS bridges by deck area in good condition and 1% in poor condition
- FDOT seeks to be conservative in its targets, while at the same time meeting the minimum condition requirements (no more than 5% of the Interstate System in poor condition and no more than 10% of NHS bridges by deck area in poor condition).

On October 30, 2018, the Hillsborough MPO agreed to support FDOT’s statewide pavement and bridge performance targets, thus agreeing to plan and program projects in the TIP that will, once implemented, make progress toward achieving the statewide targets.

The Hillsborough MPO TIP was developed and is managed in cooperation with FDOT and the Hillsborough Area Regional Transit Authority. It reflects the investment priorities established in the 2040 LRTP. The focus of Hillsborough MPO’s investments is that bridge and pavement condition include:

- I-75 from CR 672 to Progress Blvd, resurfacing, added CST FY21
- US 301 from Breckenridge Pkwy/Sligh Ave to I-75, resurfacing, added PE FY19, CST FY21
- US 301 from Lake St Charles Blvd to Progress Blvd, resurfacing, added CST FY21
- US 41 from 15th Ave to Bullfrog Creek, resurfacing, added PE FY19, CST FY21
- I-75 over Riverview Dr, bridge repair, added PE and CST FY22-23
- US 41 over Alafia River, long bridge repair, added PE and CST FY20-21
- US 41 SB over McKay Bay, bridge repair, added PE and CST FY20-21
- Gandy Bridge from Old Tampa Bay to Bridge #100300, added PE FY21, CST FY22

The Hillsborough MPO TIP has been evaluated and the anticipated effect of the overall program is that, once implemented, progress will be made towards achieving the statewide pavement and bridge performance targets.

SYSTEM PERFORMANCE, FREIGHT, AND CONGESTION MITIGATION & AIR QUALITY IMPROVEMENT PROGRAM MEASURES (PM3)

In January 2017, USDOT published the System Performance/Freight/CMAQ Performance Measures Final Rule to establish measures to assess passenger and freight performance on the Interstate and non-Interstate National Highway System (NHS), and traffic congestion and on-road mobile source emissions in areas that do not meet federal National Ambient Air Quality Standards (NAAQS). The rule, which is referred to as the PM3 rule, requires MPOs to set targets for the following six performance measures:

- Percent of person-miles on the Interstate system that are reliable, also referred to as Level of Travel Time Reliability (LOTTR);
- Percent of person-miles on the non-Interstate NHS that are reliable (LOTTR);
- Truck Travel Time Reliability index (TTTR);
- Annual hours of peak hour excessive delay per capita;
- Percent of non-single occupant vehicle travel (Non-SOV); and
- Total emissions reduction of on-road mobile source emissions.

In Florida, only the two LOTTR performance measures and the TTTR performance measure apply. Because all areas in Florida meet current NAAQS, the remaining three measures do not currently apply in Florida. A description of the applicable measures follows.

LOTTR Measures

The LOTTR performance measures assesses the percent of person-miles traveled on the Interstate or the non-Interstate NHS that are reliable. LOTTR is defined as the ratio of longer travel times (80th percentile) to a normal travel time (50th percentile) over of all applicable roads, between the hours of 6 a.m. and 8 p.m. each day. The measures are expressed as the percent of person-miles traveled on the Interstate or Non-Interstate NHS system that are reliable. Person-miles take into account the number of people traveling in buses, cars, and trucks over these roadway segments.

TTTR Measure

The TTTR performance measure assesses the reliability index for trucks traveling on the interstate. A TTTR ratio is generated by dividing the 95th percentile truck travel time by a normal travel time (50th percentile) for each segment of the Interstate system over specific time periods throughout weekdays and weekends. This is averaged across the length of all Interstate segments in the state or MPO planning area to determine the TTTR index.

System Performance and Freight Targets

Federal rules require MPOs to establish four-year performance targets for the LOTTR and TTTR performance measures, within 180 days of FDOT setting statewide targets. MPOs can either agree to program projects that will support the statewide targets, or set their own quantifiable targets for the MPO's planning area.

FDOT set the following statewide targets on May 18, 2018:

Performance Measure	2-year Statewide Target (Jan. 1, 2018 to Dec. 31, 2019)	4-year Statewide Target (Jan. 1, 2018 to Dec. 31, 2021)
Percent of person-miles on the Interstate system that are reliable (Interstate LOTTR)	75%	70%
Percent of person-miles on the non-Interstate NHS that are reliable (Non-Interstate NHS LOTTR)	Not Required	50%
Truck travel time reliability (TTTR)	1.75	2.00

In setting the statewide targets, FDOT considered several factors. The key considerations included:

- FDOT currently has the following conditions:
 - 82% of person-miles traveled on the Interstate that are reliable;
 - 84% of person-miles traveled on the non-Interstate that are reliable;
 - 1.43 truck travel time reliability index
- FDOT reviewed external and internal factors that may affect reliability, conducted a trend analysis for the performance measures, and developed a sensitivity analysis indicating the level of risk for road segments to become unreliable. One

key conclusion from this effort is that there is a degree of uncertainty with the future performance of reliability.

- FDOT sought to be conservative in its targets and closely monitor its PM3 performance in the coming years.

On October 30, 2018, the Hillsborough MPO agreed to support FDOT's statewide system performance targets, thus agreeing to plan and program projects in the TIP that will, once implemented, make progress toward achieving the statewide targets.

The Hillsborough MPO TIP was developed and is managed in cooperation with FDOT and the Hillsborough Area Regional Transit Authority. It reflects the investment priorities established in the 2040 LRTP. The focus of Hillsborough MPO's investments that address system performance and reliability include:

- MLK Blvd at 50th St, intersection improvement, added CST FY23
- Hillsborough Ave at Nebraska Ave and 34th St, signal update, added CST FY19
- US 301 at Bloomingdale Ave, intersection improvement, added PE FY22-23
- South Coast Trail from Manatee Co Line to SR 60/Adamo Dr, County earmark, added PD&E FY19
- Green ARtery Segments D & E, Lowry Park to 22nd St Park added PE FY19
- Green Spine along Nuccio Pkwy from Nebraska Ave to 7th Ave, added CST FY20

The Hillsborough MPO considers system reliability in the TIP project selection process under the *Managing Traffic for Drivers and Shippers* and *Real Choices When Not Driving* project categories, which were established in the Hillsborough MPO's 2040 LRTP. Prioritization criteria for projects in these categories are data-driven and include performance metrics such as planning time index, travel time, and volume/capacity ratio.

Based on the information used to develop the TIP, the Hillsborough MPO anticipates that this TIP, once implemented, will contribute to progress toward achieving the statewide LOTTR and TTTR performance targets.