

AGENDA ITEM #6: MAP-21/FAST ACT REGIONAL PERFORMANCE MEASURES AND TARGETS
Keith Nichols, HRTPO

The MAP-21 and FAST Act federal surface transportation legislation packages require that MPOs prepare and use a set of federally-established performance measures and set targets. Targets are required in the areas of roadway safety, transit asset management, transit safety, pavement condition, bridge condition, roadway performance, and freight. MPOs must approve Calendar Year 2021 regional performance targets in three of these areas – roadway safety, transit asset management, and transit safety.

Roadway Safety

There are five safety measures that MPOs are required to establish targets and monitor progress for:

- Fatalities
- Fatality Rate
- Serious Injuries
- Serious Injury Rate
- Bike/Pedestrian Fatalities & Serious Injuries (combined)

A task force was formed from TTAC members to assist with the development of regional targets. The Regional Performance Measures Task Force convened on December 17, 2020, to discuss the 2021 safety performance measures and targets. The working group came to a consensus that HRTPO should continue to adopt Vision Zero targets for each of these measures, where the number of fatalities, serious injuries, and bike/pedestrian fatalities & serious injuries are reduced by a set amount each year to reach a goal of zero by 2045, the horizon of the upcoming regional Long-Range Transportation Plan.

Using the Vision Zero concept, the draft 2021 regional safety performance targets recommended by the Regional Performance Measures Task Force are as follows:

2021 DRAFT HRTPO Safety Performance Targets	
Fatalities	123
Fatality Rate (per 100 Million VMT)	0.82
Serious Injuries	1,433
Serious Injury Rate (per 100 Million VMT)	9.61
Number of Bike/Pedestrian Fatalities and Serious Injuries Combined	175

Transit Asset Management

Federal legislation requires transit performance measures in the area of state of good repair, also referred to as transit asset management (TAM). There are four TAM asset categories that MPOs are required to establish targets and monitor progress for:

- Rolling Stock - Buses, ferry boats, light rail vehicles, and trolley buses
- Equipment/Service Vehicles - Non-revenue automobiles, trucks, and other vehicles
- Infrastructure – Light rail
- Facilities – Passenger, parking, maintenance, and administrative facilities

Hampton Roads Transit (HRT), as a Tier I transit agency, must develop and carry out their own TAM plans. As Tier II transit agencies, the Williamsburg Area Transit Authority (WATA) and Suffolk Transit are eligible to participate in group TAM plans, and they use statewide targets established by the Virginia Department of Rail and Public Transportation.

HRTPO staff prepared a recommended list of regional transit asset management targets, based on a weighted average of HRT, WATA, and Suffolk Transit targets. These draft targets are:

Asset Type	Performance Measure	Asset Classes	DRAFT 2021 HRTPO Target
Rolling Stock	% of revenue vehicles within each asset class that have met or exceeded their useful life benchmark	Bus	< 10%
		Cutaway Buses	< 1%
		Ferry Boat	< 33%
		Light Rail Vehicles	0%
		Minibus	< 20%
		Trolley Buses	< 10%
		Van	< 25%
Equipment/Service Vehicles	% of vehicles that have met or exceeded their useful life benchmark	Non-Revenue/Service Vehicles	< 62%
		Trucks & Other Rubber Tire Vehicles	< 17%
Infrastructure	% of track segments, signals, and systems with performance restrictions	Light Rail Infrastructure	< 4%
Facilities	% of facilities in each asset class rated under 3.0 on FTA's TERM scale	Passenger/Parking	< 1%
		Maintenance	< 10%
		Administrative	< 10%

Transit Safety

Starting in 2021, MPOs must establish regional transit safety targets and incorporate them into TIPs and LRTPs. There are four transit safety categories that MPOs are required to establish targets and monitor progress for:

- Fatalities
- Injuries
- Safety Events
- System Reliability

Similar to transit asset management, Tier I transit agencies such as HRT must develop and carry out their own Public Transportation Agency Safety Plans (PTASPs), and Tier II transit agencies such as WATA and Suffolk Transit are eligible to participate in the statewide PTASP.

HRTPO staff prepared a recommended list of regional transit safety targets, based on a weighted average of HRT, WATA, and Suffolk Transit targets. These draft targets are:

Category	Measure	Bus	Demand Response	Light Rail	Vanpool
Fatalities	Total number of reportable fatalities per year	0	0	0	0
	Rate per total vehicle revenue miles	0 per 100,000 revenue miles	0 per 100,000 revenue miles	0 per 100,000 revenue miles	0 per 100,000 revenue miles
Injuries	Total number of reportable injuries per year	< 83	0	0	0
	Rate per total vehicle revenue miles	< 7.62 per 100,000 revenue miles	0 per 100,000 revenue miles	0 per 100,000 revenue miles	0 per 100,000 revenue miles
Safety Events	Total number of safety events per year	< 71	< 1	< 5	0
	Rate per total vehicle revenue miles	< 5.70 per 100,000 revenue miles	< 0.04 per 100,000 revenue miles	< 15.40 per 100,000 revenue miles	0 per 100,000 revenue miles
System Reliability	Distance between major failures	> 10,000 miles	> 29,249 miles	> 9,470 miles	> 498,800 miles

Mid-Period Performance Target Adjustments

States have the opportunity to adjust four-year asset condition and system performance targets at the mid-term of the performance period, as do MPOs that established their own four-year targets. For any mid-period adjustments made by the state, MPOs may choose whether to continue supporting the state target or adopt a new, MPO-specific target.

The CTB approved adjusting one of the statewide four-year targets – NHS bridge deck area in good condition – from 33% down to 30.5%. The target adjustment was recommended to align with the current best estimate of statewide performance.

The Regional Performance Measures Task Force discussed this topic at their December 17, 2020, meeting and reached consensus on using a target for NHS bridge deck area in good condition of 27%. This would match the baseline based on the percentage that was in good condition in Hampton Roads in 2017.

The draft regional safety, transit asset management, transit safety, and NHS bridge deck area in good condition performance targets have been made available for public review and comment from December 17, 2020, through January 4, 2021.

Mr. Keith Nichols, HRTPO Principal Transportation Engineer, will brief the TTAC on this item.

RECOMMENDED ACTION:

Recommend HRTPO Board approval of the updated regional performance targets.