

## **B. FY 2021-2024 TIP Amendment: MAP-21/FAST Act Regional Performance Measures and Targets: Update**

Federal surface transportation legislation requires 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 2022 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 16, 2021, to discuss the 2022 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 2050, the horizon of the upcoming regional Long-Range Transportation Plan.

### **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 trolleybuses
- 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 its 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.

## Transit Safety

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 2022 targets.

The regional safety, transit asset management, and transit safety, performance targets were approved by the HRTPO Board at its January 2022 meeting.

HRTPO staff has prepared a website (<https://www.hrtpo.org/page/regional-performance-measures-and-targets/>) that describes these performance measures and targets.

Attached is the updated roadway safety, transit asset management/safety TIP Performance Measures sections to be added to the FY 2021-2024 TIP document.

**Mr. John Mihaly, HRTPO Principal Transportation Planner, will be available to answer questions on this item.**

Attachment 8B

### **RECOMMENDED ACTION:**

Recommend HRTPO Board approval of the TIP amendment.

## **TIP PERFORMANCE MEASURES**

A key feature of MAP-21 (and continued under the FAST Act) is the establishment of national performance goals in the areas of safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays. This legislation also requires Metropolitan Planning Organizations (MPOs) to prepare and set targets for the following federally-established performance measures:

- Roadway Safety
- Pavement Condition
- Bridge Condition
- Roadway Performance
- Freight Movement
- Transit Asset Management and Safety
- On-road mobile source emissions and traffic congestion for CMAQ Program

The FAST Act also requires Transportation Improvement Programs (TIPs) include a description of the anticipated effect of the TIP toward achieving the performance targets identified by the MPO. The TIP must also link investment priorities in the TIP to the achievement of performance targets in the plans.

HRTPO has prepared a website (<https://www.hrtpo.org/page/regional-performance-measures-and-targets/>) that describes these performance measures and targets, and HRTPO also prepares a System Performance Report on performance measures and targets on an annual basis. The first report was released in 2019.

### **Roadway Safety**

The first performance targets that had to be established by MPOs are in the area of 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)

The HRTPO has established one-year roadway safety targets each year since 2018. Based on the advice of the Performance Measures working group and the HRTPO Transportation Technical Advisory Committee (TTAC), the HRTPO Board established the most-recent annual (2022) roadway safety targets at its January 2022 meeting:

<b>2022 DRAFT HRTPO Safety Performance Targets</b>	
<b>Fatalities</b>	<b>125</b>
<b>Fatality Rate (per 100 Million VMT)</b>	<b>0.85</b>
<b>Serious Injuries</b>	<b>1,498</b>
<b>Serious Injury Rate (per 100 Million VMT)</b>	<b>10.19</b>
<b>Number of Bike/Pedestrian Fatalities and Serious Injuries Combined</b>	<b>179</b>

Each of these safety targets are based on the Vision Zero concept, where the number of fatalities, serious injuries, and non-motorized fatalities and serious injuries is reduced by a set amount each year to reach a goal of zero by 2050, the horizon of the upcoming regional Long-Range Transportation Plan.

## Transit Asset Management/Transit Safety

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 trolleybuses
- 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 its 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 2022 targets. These draft targets are:

Asset Type	Performance Measure	Asset Classes	DRAFT 2022 HRTPO Target
Rolling Stock	% of revenue vehicles within each asset class that have met or exceeded their useful life benchmark	Bus	< 10%
		Cutaway Buses	< 5%
		Ferry Boat	< 25%
		Light Rail Vehicles	0%
		Minibus	< 20%
		Trolley Buses	< 1%
		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	< 0.3%
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 were required to establish regional transit safety targets and incorporate them into the 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 its 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 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