ITEM 9 – Information September 16, 2020

Performance Based Planning and Programming – Transit Safety Draft Targets

Background:

The board will be briefed on the draft regional targets for transit safety performance measures, including fatalities, injuries, safety events, and system reliability, as required under the federal performance based planning and programming (PBPP) rulemaking for public transportation providers and MPOs. The board will be asked to approve the regional targets at its November meeting.



MEMORANDUM

TO: Transportation Planning Board

FROM: Eric Randall, TPB Transportation Engineer

SUBJECT: Performance-Based Planning and Programming (PBPP) Regional Transit Safety Targets -

DRAFT

DATE: September 10, 2020

This memorandum provides an update on implementation of the federal performance-based planning and programming (PBPP) target-setting requirements under the federal surface transportation act (Fixing America's Surface Transportation Act, or FAST Act) for the area of transit safety. Applicable providers of public transportation are required to adopt targets for four performance measures, following which metropolitan planning organizations (MPOs) are required to establish overall transit safety targets for their planning area.

TRANSIT SAFETY RULEMAKING

The Public Transportation Agency Safety Plan (PTASP) final rule was issued on July 19, 2018. The issuance of this final rule served as a capstone for a collection of rules making up the Public Transportation Safety Program, including the National Public Transportation Safety Plan Rule which defined the four transit safety performance measures for which providers of public transportation and MPOs have to set targets.

The PTASP final rule had an effective date of July 19, 2019, with another year for implementation. The rule applies to providers of public transportation that are recipients and sub-recipients of FTA Section 5307 funding and that fall under the safety jurisdiction of the Federal Transit Administration (FTA). Applicable providers of public transportation were required to develop Public Transportation Agency Safety Plans, which include the process and procedures for implementing Safety Management Systems (SMS), and certify their safety plan by July 20, 2020. In addition, they were required to set initial targets for the four transit safety measures by July 20, 2020 (thereafter annually), following which the MPO must set transits safety targets for the metropolitan planning area within 180 days.

Transit Safety Performance Measures					
Fatalities	Total number of reportable fatalities and the rate per total vehicle revenue miles by mode				
Injuries	Total number of reportable injuries and the rate per total vehicle revenue miles by mode				
Safety Events (Collisions, derailments, fires, or life safety evacuations)	Total number of reportable events and the rate per total vehicle revenue miles by mode				
System Reliability	Mean distance between major mechanical failures by mode				

In response to the COVID-19 pandemic, on April 23, 2020 the FTA announced that it would give providers of public transportation more time to meet the requirements of the PTASP regulation. The regulation set July 20, 2020 as the deadline for providers of public transportation to certify that they have established a compliant agency safety plan. FTA announced it would provide relief by refraining from taking any enforcement action until December 31, 2020 against providers that are unable to meet the July 20, 2020 deadline.

TRANSIT SAFETY FOR THE NATIONAL CAPITAL REGION

The following providers of public transportation in the region are required to set transit safety targets in accordance with the PBPP requirements. These targets are required for each mode operated by the provider, including heavy rail, streetcar, commuter bus, bus, and paratransit (demand response).

Regional recipients of FTA Section 5307 funding and the modes the operate

- WMATA: Metrorail, Metrobus, MetroAccess
- DDOT: DC Circulator, DC Streetcar
- MDOT-MTA: MTA Commuter Bus
- PRTC OmniRide: commuter bus, local bus, and paratransit

Regional sub-recipients of FTA Section 5307 funding

- VanGo (Charles Co.)
- TransIT (Frederick Co.)
- Ride On (Montgomery Co.)
- The Bus (Prince George's Co.)

Note that while local bus systems in Suburban Maryland are sub-recipients of FTA funds through the State of Maryland's Locally Operated Transit systems (LOTS) funding programs, the local bus systems operated by jurisdictions in Northern Virginia do not receive federal funds and the PTASP rule is not applicable to them. In addition, commuter rail systems including MARC and VRE have their safety regulated by the Federal Railroad Administration (FRA) and the PTASP rule does not apply to them.

CALCULATION OF REGIONAL SAFETY TARGETS

Targets for the region are based on those adopted – or still preliminary – by each provider of public transportation. Measures are calculated for each mode:

- Number of Fatalities/Serious Injuries/Incidents total number for all providers of that mode.
- Rate of Fatalities/Serious Injuries/Incidents total number for all providers of the mode divided by the total number of Vehicle Revenue Miles (VRM) for that mode (reported in rate per 100,000 VRM). VRM are the miles that vehicles are scheduled to or actually travel while in revenue service.
- Mean Distance Between Failure (MDBF) the total number of VRM for that mode divided by the total number of failures for all providers of the mode.

REGIONAL TRANSIT SAFETY TARGETS - DRAFT

Based on the targets adopted or in the process of being adopted by each provider of public transportation, the following set of transit safety targets is proposed as draft targets for the region.

2020 Regional Transit Safety Targets - DRAFT - as of September 10,2020

	Fatalities		Serious Injuries		Safety Events		Reliability
	Number	Rate	Number	Rate	Number	Rate	MDBF
Heavy Rail (HR)*	0	0	324	0.38	95	0.11	7,000
Streetcar Rail (SR) **	0	0	3	2.28	2	3.80	10,000
Urban Bus (MB)*	0	0	452	0.74	602	0.98	21,645
Commuter Bus (CB)	0	0	12	0.19	185	3.00	11,593
Demand Response (DR)	0	0	69	0.00	207	0.97	48,422

Rate - Per 100,000 Vehicle Revenue Miles

^{*} Includes preliminary measures not yet finalized by a provider

^{**} Placeholder for Streetcar Rail based on data from previous years



Public Transportation Agency Safety Plan Informational Guidance | Roles & Responsibilities 5/30/19

Background

FTA and FHWA published the final rule on Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning on May 27, 2016. On July 19, 2018, FTA published the Public Transportation Agency Safety Plan (PTASP) Final Rule, which requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS). The rule applies to all operators of public transportation systems that are recipients and sub-recipients of federal financial assistance under the Urbanized Area Formula Program (49 U.S.C. § 5307) and all rail transit operator recipients. FTA is deferring applicability of this requirement for operators that only receive funds through FTA's Enhanced Mobility of Seniors and Individuals with Disabilities Formula Program (Section 5310) and/or Rural Area Formula Program (Section 5311).

Metropolitan Planning Agreements

MPOs should initiate discussions with transit agencies, state DOTs and planning partners to update their Metropolitan Planning Agreements, per 23 C.F.R. § 450.314. This presents an opportunity for the MPO and its planning partners to clarify roles and responsibilities for developing and sharing performance data, setting performance targets, reporting of targets, and tracking progress towards meeting targets, through a formal agreement.

Establish Transit Safety Targets for Metropolitan Planning Areas

The MPO is required to set performance targets for each performance measure, per 23 C.F.R. § 450.306. Those performance targets must be established 180 days after the transit agency established their performance targets. Transit agencies are required to set their safety performance targets by July 20, 2020. In accordance with 49 U.S.C. 5303(h)(2)(B) and 5304(d)(2)(B), each State and transit agency must make its safety performance targets available to States and Metropolitan Planning Organizations to aid in the planning process. 49 C.F.R. § 673.15(b) requires, to the maximum extent practicable, a State or transit agency to coordinate with States and Metropolitan Planning Organizations in the selection of State and MPO safety performance targets.

Performance Measures in Transportation Improvement Programs (TIP) and Metropolitan Transportation Plans

MPOs are required to reference the safety performance targets and agency safety plans in their TIPs and Metropolitan Transportation Plans updated or amended after July 20, 2021. The planning products must include a description of the performance measures and performance targets used in assessing the performance of the transportation system, for transit asset management, safety, and the FHWA performance measures. This should also include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the performance targets identified in the metropolitan transportation plan, linking investment priorities to those performance targets.

Federal Transit Administration





Timeline for Public Transportation Agency Safety Plan

July 19, 2018:

Public Transportation Agency Safety Plan (PTASP) Final Rule is published

July 20, 2019:

• PTASP Final Rule becomes effective

July 20, 2020:

- Transit providers subject to the PTASP final rule are required to have their certified agency safety plans in place, which includes safety performance targets, and share the targets with their MPO and State
- For small public transportation providers, a State must certify compliance unless the provider opts to draft and certify its own agency safety plan.

January 20, 2021 (or no more than 180 days after receipt of the agency safety plan from public transportation providers):

• MPOs are required to set their initial transit safety targets

July 20, 2021:

- Specific written provisions for the transit safety measure are jointly agreed upon and adopted by the MPO(s), State(s), and providers of public transportation
- The MPO reflects the transit safety measures and targets in all MTPs and TIPs updated or amended after this date













2020 TRANSIT AGENCY SAFETY TARGETS – DRAFT

Performance-Based Planning and Programming

Eric Randall
TPB Transportation Engineer

Transportation Planning Board September 16, 2020



Presentation Items

- Performance Based Planning Programming
- Transit Agency Safety Plans Rule
- Transit Safety Performance Measures
- Applicability
- 2020 Regional Transit Safety Targets DRAFT
- Next Steps



Performance Based Planning and Programming

- Under MAP-21 and reinforced in the FAST Act, federal surface transportation regulations require the implementation of performance based planning and programming (PBPP) by State DOTs, MPOs, and providers of public transportation "transition to a performance-driven, outcome-based program that provides for a greater level of transparency and accountability, improved project decision-making, and more efficient investment of federal transportation funds."
- State DOTs, MPOs, and providers of public transportation must link investment priorities to the achievement of performance targets (and included in the TIP and long-range plan)



Federal PBPP Performance Areas

- Federal PBPP process requires State DOTs, MPOs and providers of public transportation to set targets (annually or every two/four years) for 26 performance measures
 - Highway Safety
 - Highway Assets (Pavement and Bridge Condition)
 - Highway System Performance (Reliability, Freight, CMAQ Program)
 - Transit Assets
 - Transit Safety



Final Rule - Transit Agency Safety Plans

- Federal PBPP rulemaking (July 2018) requires applicable providers of public transportation to develop and certify an agency safety plan
- Applicable transit operators are required to annually set targets for four (4) Transit Safety performance measures, initially in July 2020
 - Due to the pandemic, the Federal Transit
 Administration (FTA) has "suspended enforcement" of the rule through December 31, 2020
- MPOs have 180 days following to adopt Transit Safety targets for their metropolitan planning area (i.e., regional targets)



Transit Safety Performance Measures

	Performance Measures
Fatalities	Total number of reportable fatalities and the rate per total vehicle revenue miles by mode
Injuries	Total number of reportable injuries and the rate per total vehicle revenue miles by mode
Safety Events*	Total number of reportable events and the rate per total vehicle revenue miles by mode
System Reliability	Mean distance between major mechanical failures by mode

^{*} Collisions, derailments, fires, or life safety evacuations



Applicable Transit Agencies

- Requirement applies to providers of public transportation that are recipients and sub-recipients of federal Section 5307 funding that are under FTA safety regulation
 - WMATA: Metrorail, Metrobus, MetroAccess
 - DDOT: DC Circulator, DC Streetcar
 - MDOT-MTA: MTA Commuter Bus
 - PRTC: OmniRide bus and paratransit
 - and local bus systems in Suburban Maryland:
 - VanGo (Charles Co.)
 - TransIT (Frederick Co.)
 - Ride On (Montgomery Co.)
 - The Bus (Prince George's Co.)

Does not apply to Northern Virginia agencies



2020 Regional Transit Safety Targets - DRAFT

Draft targets for the region are based on each agency's adopted or preliminary measures for each mode

Mode	Fatalities		Serious Injuries		Safety Events		Reliability
	Number	Rate	Number	Rate	Number	Rate	MDBF
Heavy Rail (HR)*	0	0	324	0.38	95	0.11	7,000
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Demand Response (DR)	0	0	69	0.00	207	0.97	48,422

Rate - Per 100,000 Vehicle Revenue Miles MDBF = Mean Distance Between Failures

^{**} Placeholder for Streetcar Rail based on data from previous years



^{*} Includes preliminary measures not yet finalized by a transit agency

Next Steps

- Take any comments on draft regional transit safety targets
- October Anticipate the completion of formal adoption of agency targets by all transit agencies in the region
- November 18 TPB adopt final regional transit safety targets



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