

# REGIONAL TARGETS FOR TRANSIT ASSET MANAGEMENT - DRAFT

Performance Based Planning and Programming

2017 Report



# Regional Targets For Transit Asset Management - DRAFT

April 28, 2017

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The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 23 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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## Overview of Performance-Based Planning and Programming Requirements

Under the Moving Ahead for Progress in the 21st Century Act (MAP-21) and reinforced in the Fixing America's Surface Transportation (FAST) Act, federal surface transportation regulations require the implementation of performance management requirements through which States and metropolitan planning organizations (MPOs) will “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.”

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have been gradually issuing a set of rulemakings, initially proposed and subsequently final, for the implementation of this performance based planning and programming (PBPP) process. Each rulemaking lays out the goals of performance for a particular area of transportation, establishes the measures for evaluating performance, specifies the data to be used to calculate the measures, and then sets requirements for the setting of targets.

Under the PBPP process, States, MPOs, and providers of public transportation must link investment priorities to the achievement of performance targets in the following areas.

1. Highway Safety
2. Highway Assets: Pavement and Bridge Condition
3. System Performance (Interstate and National Highway System, Freight Movement on the Interstate System, and the Congestion Mitigation and Air Quality Improvement Program)
4. Transit Safety and Transit Asset Management

The final Statewide and Metropolitan Planning Rule, published May 27, 2016, provides direction and guidance on requirements for implementation of PBPP, including specified measures and data sources, forecasting performance, target-setting, documentation in the statewide and metropolitan long-range transportation plans and Transportation Improvement Programs (TIPs), and reporting requirements. The initial part of the PBPP process will require coordination and agreement on specific responsibilities for each agency in accordance with the planning rule.

Table 1 displays the PBPP goal areas and the corresponding prospective parties in the region which will need to agree on and formally document respective PBPP responsibilities for performance target selection and project programming.

**Table 1: PBPP Goal Areas and Prospective Responsible Parties**

	DDOT, MDOT, VDOT	NPS, MdTA, MWAA	Arlington, Alexandria, Charles, Fairfax, Frederick, Loudoun, Montgomery, Prince George's, Prince William	DRPT, MTA, NRTC, PRTC, VRE, WMATA	TPB
Highway Safety	√				√
Highway Pavement and Bridge Condition	√	√	√		√
System Performance (NHS Congestion, Freight, and CMAQ)	√				√
Transit Safety			√	√	√
Transit Asset Management			√	√	√

States will typically measure performance and set targets on a statewide basis, and providers of public transportation will measure performance and set targets for their transit system. Depending upon the area of performance, targets may be set annually, biennially, or every four years. States and providers of public transportation must also develop supporting strategic plans for monitoring and improving performance in order to achieve their selected targets. In addition to quantitative targets, periodic narrative reports on performance will also be required. Target-setting is intended to be based on an agency's strategic plan and science-based methodology for forecasting performance based on measured trends and the funding available and programmed for projects that will affect performance.

The MPO is responsible for agglomerating this information to calculate measures and set targets for the metropolitan planning area as appropriate. MPOs have up to 180 days to adopt targets following the targets being set by State DOTs or providers of public transportation. MPOs must coordinate with the State DOTs and providers of public transportation in setting the metropolitan area targets, which should be based on the strategic plans and funded projects of the cognizant agencies. Accordingly, through 2018 the TPB will be taking action on setting performance targets for a variety of prescribed performance measures for the metropolitan planning area.

## Introduction to the Transit Asset Management Performance and Target Reporting

This report presents the transit asset management (TAM) targets being adopted by the National Capital Region Transportation Planning Board (TPB) for 2017. The setting of TAM targets is one of the requirements of the PBPP rulemaking.

As part of the federal PBPP rulemaking, the final Transit Asset Management rule was published in the Federal Register on July 26, 2016, and became effective October 1, 2016.<sup>1</sup> Transit asset management (TAM) is “a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively through the life cycle of such assets.”

Under the final TAM rule, transit providers must collect and report data for four performance measures, covering rolling stock, equipment, infrastructure, and facility condition. For these measures, transit providers have to annually set targets for the fiscal year, develop a four-year TAM plan for managing capital assets, and use a decision support tool and analytical process to develop a prioritized list of investments.

Each provider of public transportation is required to adopt targets for the performance of their transit assets, initially by January 1, 2017. Subsequently, MPOs have 180 days to adopt transit asset targets for their metropolitan planning area. Accordingly, the TPB adopted transit asset targets for the region in May 2017.

## Scope

The final TAM rule applies to all recipients and subrecipients of Federal transit funds (e.g., Section 53XX funds) that own, operate, or manage capital assets used in the provision of public transportation and requires accounting for all assets used in the provision of public transportation service, regardless of funding source, and whether used by the recipient or subrecipient directly, or leased by a third party.

The following annual schedule for TAM requirements was published in the final rulemaking:

- Providers of public transportation must establish performance targets for the year by January 1.
- Providers of public transportation must report data and targets by January 30 in the National Transit Database.
  - Optional reporting for this year, e.g., FY 2018 targets by January 30, 2017.
  - Mandatory reporting for future years, e.g., FY 2019 targets by January 30, 2018.
- The TPB shall adopt transit asset targets for the metropolitan region within 180 days (i.e., by June 30, 2017).
- Providers of public transportation must develop four-year TAM Plans by October 2018. Subsequently, plans must be updated every four years.

The federal TAM rulemaking defines two tiers of providers of public transportation. Tier 1 providers are those that operate rail service or more than 100 vehicles in regular service. Tier 2 providers are those operating less than 100 vehicles in regular service. Tier 1 providers must set transit asset targets for their agency, as well as fulfilling other additional reporting and asset management requirements. Tier 2 providers can set their own targets, or participate in a group plan with other Tier 2 providers whereby targets are set for the group as a whole. Note that a parent organization can operate several services, such as bus service and paratransit service, that combined exceed one hundred vehicles.

The region has seven Tier 1 providers of public transportation that fall under the federal rulemaking:

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<sup>1</sup> <https://www.gpo.gov/fdsys/pkg/FR-2016-07-26/pdf/2016-16883.pdf>

1. WMATA: Metrorail, Metrobus, MetroAccess
2. District of Columbia: Streetcar, Circulator
3. Fairfax County: Connector, Community and Neighborhood Services
4. Montgomery County: Ride On
5. Prince George's County: TheBus, Call-A-Bus
6. Potomac and Rappahannock Transportation Commission (PRTC): OmniRide, OmniLink
7. Virginia Railway Express (VRE)

The region has twelve Tier 2 providers that fall under the federal rulemaking, including several small paratransit providers and non-profit providers:

#### **Northern Virginia**

1. Alexandria: DASH, DOT
2. Arlington: ART
3. Fairfax City: CUE
4. Loudoun County Transit
5. Virginia Regional Transit (VRT)
6. The Arc of Greater Prince William
7. Every Citizen Has Opportunities, Inc. (ECHO)
8. Endependence Center of Northern VA
9. Weinstein Jewish Community Center
10. Prince William Area Agency on Aging

#### **Suburban Maryland**

11. Charles County: VanGo
12. Frederick County: TransIT

All of the Tier 2 providers in the region have chosen to participate in a group plan with their respective state agency: the Maryland Transit Administration (MTA) or the Virginia Department of Rail and Public Transportation (DRPT). Accordingly, there are nine reporting entities in the TPB's metropolitan planning area.

Providers of public transportation operating within the region but based outside of the TPB's metropolitan planning area, such as MTA Commuter Bus and MARC commuter rail, do not need to be included.

## **Performance Measures**

There are four transit asset performance measures, two of which are age-based and two of which are condition-based:

1. Rolling stock (Age)
2. Equipment: (non-revenue) service vehicles (Age)
3. Infrastructure: rail fixed-guideway track, signals, and systems (Condition)
4. Stations/Facilities (Condition)

Within each of the performance measures, assets are further divided into asset classes. For example, distinct asset classes for buses can be 30-foot, 35-foot, 40-foot, articulated, etc. Each asset class is measured separately for performance and for target-setting. In addition, for the age-based performance measures providers may set their own standard – the useful life benchmark (ULB) – for each asset class. So, two agencies may have different standards for their 40-foot buses

as well as different targets for the anticipated percentage of buses that will exceed those standards, to reflect different degrees of usage and operating conditions, variations in maintenance efforts, etc. This limits the feasibility of comparison among agencies and of the integration of data to measure regional performance or set regional targets.

**Figure 1 - TAM Performance Measures**

	Performance Measure	Asset Classes
<b>Rolling stock (Age)</b>	Percentage of revenue vehicles within a particular asset class that have met or exceeded useful life benchmark (ULB).	40 foot bus, 60 foot bus, vans, automobiles, locomotives, rail vehicles
<b>Equipment - (non-revenue) service vehicles (Age)</b>	Percentage of vehicles that have met or exceeded their ULB.	Cranes, prime movers, vehicle lifts, tow trucks
<b>Infrastructure-rail fixed-guideway track, signals, and systems (Condition)</b>	The percentage of track segments, signal, and systems with performance restrictions.	Signal or relay house, interlockings, catenary, mechanical, electrical and IT systems
<b>Stations/ Facilities (Condition)</b>	The percentage of facilities, within an asset class, rated below 3 on the TERM scale.	Stations, depots, administration, parking garages, terminals

## Data Sources

Providers of public transportation measure their performance in accordance with the definitions and requirements of federal rulemaking, including the TAM final rule and the final rule on National Transit Database (NTD) Asset Inventory Reporting. The FTA has also published a Guideway Performance Assessment Guidebook and a Facility Performance Assessment Guidebook to provide guidance to providers of public transportation on how to collect data and measure performance for these assets.

## Regional Performance

In most cases for the 2017 target-setting process, providers set targets that are approximately equivalent to their current performance. In future years, TPB staff will work with the providers of public transportation to collate performance data across the region.

## Regional Targets

The nine reporting entities for provision of public transportation have provided their targets to the TPB. The draft targets for the metropolitan planning region are presented in tabular form to account for the differences in targets and standards among the providers of public transportation. Targets are the threshold for the maximum percentage of assets at or exceeding acceptable standards.

**Figure 2 - Regional TAM Targets**

Reporting Entity	Rolling Stock	Service Vehicles	Rail Infrastructure	Station/Facility Condition
WMATA	1% Rail, 3% Bus	15% <sup>c,d</sup>	5%	32%
DDOT	0% Rail, 40% Bus	20% <sup>c</sup>	5%	20%
Ffx. Co.	10%	14% <sup>e</sup>	n/a	0%
Mont. Co.	8% <sup>a</sup>	50% <sup>c,d</sup>	n/a	50% <sup>f</sup>
Pr. Geo. Co.	0%	18% <sup>d</sup>	n/a	0%
PRTC	46% <sup>b</sup>	50% <sup>c</sup>	n/a	0%
VRE	0% Rail	50% <sup>e</sup>	n/a	0%
MTA	24% <sup>a</sup>	31% <sup>d</sup>	n/a	25% <sup>f</sup>
DRPT	20%	Not reported	n/a	20%

a: heavy-duty buses; b: 45-foot buses; c: autos; d: trucks; e: service vehicles; f: maintenance/administrative facilities

# APPENDIX

## Providers of Public Transportation – Individual Targets

The following letters, presentation slides, and other data were provided by the individual reporting entities, and are posted on the MWCOG website at the following URL address.

<https://www.mwcog.org/transportation/planning-areas/performance-based-planning-and-programming/transit-asset-management/>

District Department of Transportation (DDOT)

- Table

Fairfax County

- Presentation

Maryland Transit Administration (MTA)

- Presentation to the TPB Technical Committee, January 6, 2017

Montgomery County

- Table

Prince George's County

- Table

Virginia Department of Rail and Public Transportation (DRPT)

- Presentation to the TPB Technical Committee, February 3, 2017

Virginia Railway Express (VRE)

- Letter from Deputy CEO and COO Rich Dalton, dated March 24, 2017

Potomac and Rappahannock Transportation Commission (PRTC)

- Letter from Interim Executive Director Eric Marx, dated March 9, 2017

Washington Metropolitan Area Transit Authority (WMATA)

- Letter from General Manager and CEO Paul Wiedefeld, dated February 3, 2017
- Presentation to the TPB Technical Committee, March 3, 2017