

TRANSIT ASSET MANAGEMENT

FEDERAL RULEMAKING FOR PERFORMANCE BASED PLANNING AND PROGRAMMING

An Overview

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TPB Regional Public Transportation Subcommittee
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National Capital Region
Transportation Planning Board

Transit Asset Management (TAM)– Today's Discussion

- Federal Performance Based Planning and Programming (PBPP) Rulemaking
- Transit Providers and Metropolitan Planning
- Transit Asset Management – What is it?
- Applicability to Regional Providers
- TAM Definitions, Performance Measures, and Agency Tiers
- TAM Plan Elements and Prioritizations
- FTA Links
- Next Steps

Federal PBPP Rulemaking Schedule

	Planning Rules <i>USDOT Significant Rulemaking Report, as of August 2016</i>	Proposed Rulemaking	Final Rulemaking
Planning	<ul style="list-style-type: none"> Statewide and Metropolitan and Non-metropolitan Planning 	June 2014	May 27, 2016
Highway Safety	<ul style="list-style-type: none"> Safety Performance Measure Rule Highway Safety Improvement Program (HSIP) 	March 2014	March 2016
Highway Conditions	<ul style="list-style-type: none"> Pavement and Bridges Performance Measurement Asset Management Plan 	January/ February 2015	<i>December 2016</i>
Congestion / System performance	<ul style="list-style-type: none"> System Performance Measures Rule (NHS, Freight and CMAQ) 	April 2016	<i>January 2017</i>
Transit	<ul style="list-style-type: none"> Transit Asset Management National Public Transportation Safety Plan Public Transportation Agency Safety Plan 	September 2015 (Transit Asset) February 2016 (Transit Safety)	July 26, 2016 (Transit Asset) <i>October 2016</i> (Agency Transit Safety)



Metropolitan and Statewide Planning Rule

On May 27, 2016, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) jointly published a final rule on **Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning**.

- Updates federal surface transportation regulations with changes adopted in the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act.
- Incorporates Performance Based Planning and Programming (PBPP) requirements first set forth in MAP-21.
 - *“Introduces critical changes to the planning process by requiring States, MPOs, and operators of public transportation to link investment priorities to the achievement of performance targets in key areas such as safety, infrastructure condition, congestion, system reliability, emissions, and freight movement.”*



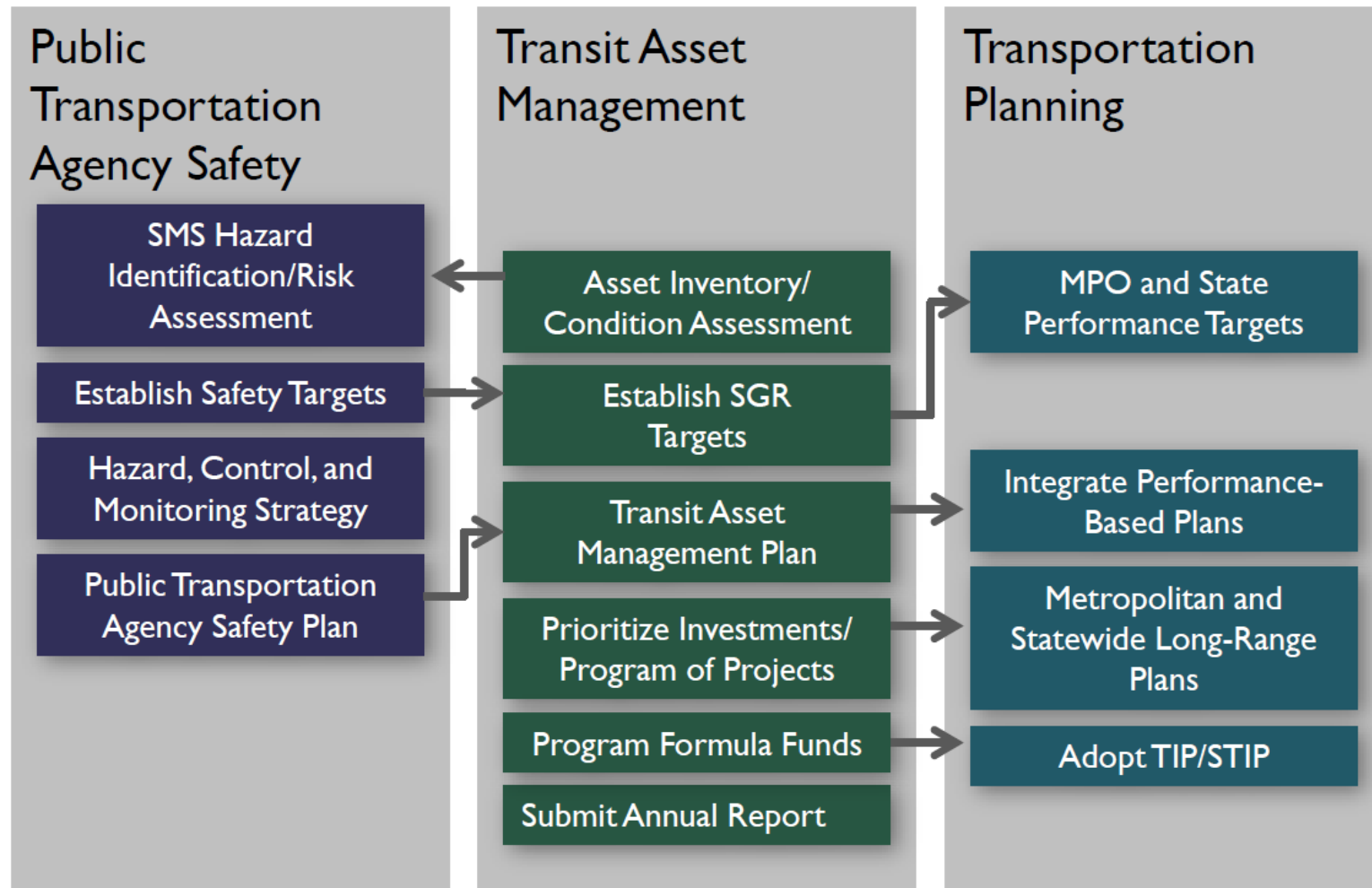
Performance Based Planning and Programming

“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.”

- States, MPOs, and providers of public transportation must link investment priorities to the achievement of performance targets in:
 - Highway Safety
 - Highway Asset: Pavement and Bridge Condition
 - System Performance (National Highway System, Freight, CMAQ)
 - Transit Safety
 - **Transit Asset**



Linking Regulations



Coordination of Transit Providers with Metropolitan Planning

- MPOs shall establish performance targets for transit for state of good repair and safety in coordination with targets of transit providers, within 180 days of the transit agency targets.
 - Transit Assets – Transit provider by Jan 1, 2017; MPO by Jun 30
 - Transit Safety – Provider by 1 year after final rule; MPO within 180 days.
- The Transportation Improvement Program (TIP) and the metropolitan transportation plan (i.e., TPB's CLRP) must consider programming of projects in each area and how they affect performance.
 - Describe progress toward achieving targets in each update
- MPO and the providers of public transportation must **jointly agree upon and document in writing** the coordinated processes for:
 - Collection of performance data
 - Selection of performance targets for the metropolitan area
 - Reporting of metropolitan area targets
 - Reporting of actual system performance (related to those targets)



TAM Implementation – Timeline

- Statewide and Metropolitan and Non-metropolitan Planning final rule published May 27, 2016
 - Framework for PBPP process and state and MPO planning.
- The Transit Asset Management final rule published in the Federal Register on July 26, 2016.
- TAM rule effective October 1, 2016.
- Transit Providers establish performance targets for FY 2018 by January 1, 2017.
- Transit Providers report data and targets by January 30, 2017 in NTD.
- MPO (i.e., TPB) adopts transit asset targets for the metropolitan region within 190 days (i.e., by June 30, 2017).
- Transit Providers establish four-year TAM Plans by October 2018.

Transit Asset Management – What is it?

What is TAM?

- A transit asset management (TAM) system is “a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively through the life cycle of such assets.”

Performance – Transit providers to collect and report data on four performance measures: equipment, rolling stock, infrastructure, and facilities

Targets – Transit providers to set targets for the four performance measures for the upcoming fiscal year

TAM Plan – Four-year plan for managing capital assets, updated every four years.

Decision support tools – Use of analytical process and tool to develop investment prioritization

Applicability to Regional Providers

Applicability (§625.3)

- Applies to all recipients of 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.
 - “TAM plans would be required to account for all assets used in the provision of public transportation service for the recipient or subrecipient, regardless of funding source, and whether used by the recipient or subrecipient directly, or leased by a third party.”
- Public transportation service is defined as regular, continuing shared-ride surface transportation services that are open to the general public or open to a segment of the general public defined by age, disability, or low-income.
- Not applicable to closed-door operations, transportation services that are specific to the clientele of a particular organization.



Providers in the National Capital Region

Direct Recipients:

- DDOT
- WMATA
- PRTC
- Fairfax County
- Arlington County
- MWAA
- MWCOG
 - Subrecipients: Diamond Transportation Services, Yellow Transportation, Liberty Transportation, Regency Taxi, Fairfax County Neighb. & Comm. Svcs.
- NVTC
 - Subrecipients: City of Alexandria, City of Falls Church
- MTA (direct services outside the region)
 - Subrecipients: Montgomery, Prince George's, Charles, Frederick Co's.
- Virginia DRPT
 - Subrecipients: Virginia Regional Transit



Transit Asset Performance Measures

	Performance Measure	Assets
Equipment - (non-revenue) service vehicles (Age)	Percentage of vehicles that have met or exceeded their useful life benchmark (ULB).	Cranes, prime movers, vehicle lifts, tow trucks
Rolling stock (Age)	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, cutaways, locomotives, rail vehicles
Infrastructure-rail fixed-guideway track, signals, and systems (Performance)	The percentage of track segments, signal, and systems with performance restrictions.	Signal or relay house, interlockings, catenary, mechanical, electrical and IT systems
Stations/ Facilities (Condition)	The percentage of facilities, within an asset class, rated below 3 on the TERM scale.	Maintenance, Administration, Depots, Terminals, Parking Garages



TAM Plan – Provider Tiers

Agency Size

- Tier I provider - Recipient with more than 100 vehicles in revenue service during peak regular operations, across all fixed route modes of service or in any one non-fixed route mode, or that operates a rail system.
 - Each Tier 1 provider has to prepare and submit a Transit Asset Management Plan with nine elements
- Tier II provider - Recipient with 100 or fewer vehicles in revenue service during peak regular operations, across all non-rail fixed route modes of service or in any one non-fixed route mode
 - TAM Plan with four elements required.
 - Tier II providers are grouped and reported collectively by State or other recipient.
 - Option to report individually.

Providers by Tier for the National Capital Region

Tier I

Operates rail

OR

> 100 vehicles across all fixed-route modes

OR

> 100 vehicles in one non-fixed route mode

Tier II

< 101 vehicles across all fixed route modes

OR

< 101 vehicles in one non-fixed route mode

1. WMATA: Metrorail, Metrobus, MetroAccess
2. DDOT: Streetcar, Circulator
3. Fairfax Connector
4. Montgomery County Ride On
5. PRTC OmniRide, OmniLink
6. Virginia Railway Express

1. Arlington ART
2. MWCOG (Diamond Transportation Services, Yellow Transportation, Liberty Transportation, Regency Taxi, Fairfax County Neighb. & Comm. Svcs.)
3. NVTC (Alexandria DASH)
4. Prince George's TheBus
5. MTA (Charles VanGo, Frederick TransIT)
6. Virginia DRPT (Virginia Regional Transit)

To be confirmed...



Elements of Transit Asset Management Plan

TAM Plan has nine elements (only 1-4 are required of Tier II recipients)

1. Inventory of capital assets
 2. Condition assessment
 3. Decision-support tools
 4. Investment prioritization
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5. TAM and SGR policy
 6. Implementation strategy
 7. List of key annual activities
 8. Identification of resources
 9. Evaluation plan

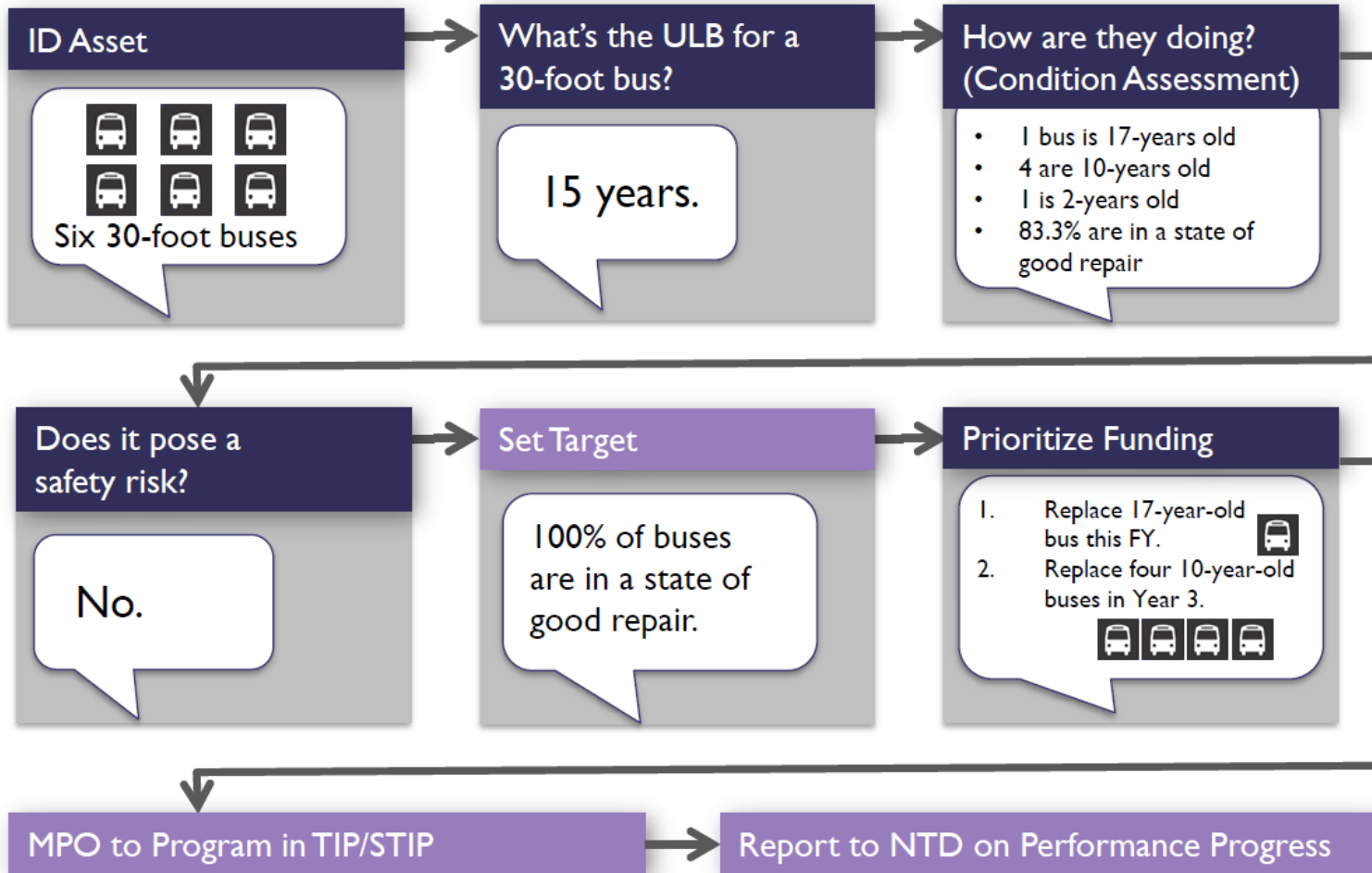
TAM Plan Investment Prioritization

Investment prioritization (§625.33)

- a) Plan identifies projects for state of good repair of capital assets
- b) Projects ranked in order of priority and year
- c) Ranking of projects consistent with plan's policy and strategies
- d) Consideration for safety projects
- e) Financially constrained
- f) Consider accessibility requirements



TAM Workflow (Example – 30-ft bus)



Reporting - National Transit Database (NTD) and Asset Inventory Module

- Data and targets submitted through NTD and Asset Inventory Module (Form A-90).
 - Data and targets based on asset class. For instance, rolling stock can include asset class for each type of bus: 30 ft, 40 ft, 60 ft.

Annual Reporting Requirements (§625.55)

Each provider must submit two annual reports:

- Annual data report to NTD with targets for the following year and the condition of their public transportation systems,
- Narrative report with a description of any change in condition since the last report and a description of progress towards meeting performance targets established in the previous year.



NTD Asset Inventory Module

Form A-90

Line No.	Performance Measure	Annual Target	Annual Performance	Difference	Row Complete Yes / No
1	Percentage of revenue vehicles that have met or exceeded their useful life benchmark				
	AB - Articulated bus				
	AG - Automated guideway vehicle				
	AO - Automobile				
	BR - Over-the-road bus				
	BU - Bus				
	CC - Cable car				
	CU - Cutaway Bus				
	DB - Double decked bus				
	FB - Ferryboat				
	HR - Heavy rail passenger car				
	IP - Inclined plane vehicle				
	LR - Light rail vehicle				
	MO - Monorail vehicle				
	RL - Commuter rail locomotive				
	RP - Commuter rail passenger coach				
	RS - Commuter rail, self-propelled passenger car				
	SB - School bus				
	SV - Sport Utility Vehicle				
	TB - Trolleybus				
	TR - Aerial tramway				
	VN - Van				
	VT - Vintage trolley / streetcar				
2	Percentage of service vehicles that have either met or exceeded their useful life benchmark				
	Automobiles				
	Trucks and other Rubber Tire Vehicles				
	Steel Wheel Vehicles				
3	Percentage of track segments, signals, and systems with performance restrictions (by mode)				
	AG - Automated Guideway				
	AR - Alaska Railroad				
	CC - Cable Car				
	CR - Commuter Rail				
	HR - Heavy Rail				
	LR - Light Rail				
	MG - Monorail/Automated Guidewa				
	SR - Streetcar Rail				
	TR - Aerial Tramway				
	YR - Hybrid Rail				
4	Percentage of Passenger and Maint. facilities rated below condition 3 on the condition scale				
	Passenger Facilities				
	Passenger Parking Facilities				
	Maintenance Facilities				
	Administrative Facilities				
5	Upload TAM Narrative Report: Your narrative report should include, at a minimum, a discussion of your system including the 1-Changes in your system's conditions since last year 2- Progress toward your current fiscal year's targets, and 3 – Targets for the next fiscal year.				

Attachment
The maximum file upload size is 10.00 MB.



FTA Links

FTA TAM page

- <https://www.transit.dot.gov/TAM>
- link to final rule documents
- link to recorded webinars

NTD Asset Inventory Modules and Information

<https://www.transit.dot.gov/ntd/ntd-asset-inventory-modules-and-information>

Final Transit Asset Management Rule

- National Transit Asset Management Final Rule
- TAM Final Rule Press Release
- TAM Final Rule Fact Sheet
- TAM Final Rule FAQ
- Performance Measure Guidebooks Federal Register Notices
 - Draft Facility Condition Assessment Guidebook
 - Draft Guideway Performance Assessment Guidebook

The proposed guidebooks describe methods to calculate state of good repair performance measures for transit infrastructure and facilities, including standard terminology, calculation options, and how to measure and report to the National Transit Database. The notice of public comment was issued on July 26. [Submit your comments](#) by September 24. See the [Transit Asset Management: Proposed guidebooks Federal Register Notice](#).

TAM Final Rule Webinars

- TAM Final Rule *Presentation*
- TAM Final Rule *Recording* ^{PDF}
- TAM Final Rule Small Systems Focus *Presentation*
- TAM Final Rule Small Systems Focus *Recording* ^{PDF}
- NTD Asset Inventory *Presentation*
- TAM Condition Assessment and Guideway Performance Restriction Guidebooks *Presentation*
- TAM Condition Assessment and Guideway Performance Restriction Guidebooks *Recording* ^{PDF}



Next Steps

- Letters from TPB to transit providers asking for formal Point Of Contact (POC) for coordination on TAM targets, submission of information to TPB, and TPB establishment of TAM targets.
 - Section 625.45(e) *Coordination with metropolitan, statewide and non-metropolitan planning processes*. To the maximum extent practicable, a provider and Sponsor must coordinate with States and Metropolitan Planning Organizations in the selection of State and Metropolitan Planning Organization performance targets.
- Continued coordination on TAM planning by TPB and the region's transit providers.
 - Will MTA/DRPT/NVTC be developing any group plans for subrecipients in this region?
 - Development of formal documentation on agreed transit asset metrics and target-setting process.



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Elements of Transit Asset Management Plan

TAM Plan has nine elements (only 1-4 are required of Tier II recipients)

1. An inventory of capital assets
 2. A condition assessment of the capital assets (with level of detail sufficient to monitor and predict the performance of each capital asset)
 3. A list of the transit provider's analytical processes or decision-support tools that:
 - (i) Estimate capital investment needs over time;
 - (ii) Assist capital asset investment prioritization;
 4. A project-based prioritization of investments.
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5. A transit asset management and State of Good Repair (SGR) policy;
 6. A strategy for the implementation of the TAM plan;
 7. A description of annual key transit asset management activities spanning the time horizon of the TAM plan;
 8. A specification of the resources, including personnel, needed to develop and implement the TAM Plan; and
 9. An outline of how the TAM plan and related business practices will be monitored, evaluated and updated, as needed, to ensure the continuous improvement of transit.



TAM Plan Investment Prioritization

Investment prioritization (§625.33)

- a) A TAM plan must include an investment prioritization that identifies projects to improve or manage over the TAM plan horizon period the state of good repair of capital assets for which a provider has direct capital responsibility.
- b) Provider must rank projects to improve or manage the state of good repair of capital assets in order of priority and anticipated project year.
- c) Ranking of projects in the investment prioritization must be consistent with the TAM plan policy and strategies
- d) The investment prioritization must give due consideration to those projects for state of good repair that pose an identified unacceptable safety risk.
- e) The investment prioritization must take into consideration an estimate of funding levels and funding sources that are reasonably expected to be available in each fiscal year during the TAM plan horizon period.
- f) The investment prioritization must take into consideration maintenance of accessible features and requirements for alteration of facilities.



TAM Definitions

- Performance measures cover all equipment, rolling stock, facilities, and infrastructure that agency owns, as well as third-party owned (i.e., contracted) rolling stock, passenger stations, administrative and exclusive-use maintenance facilities, and guideway infrastructure assets for which it has direct capital responsibility.
 - A capital asset is in a state of good repair if it is in a condition sufficient to enable the asset to operate at a full level of performance. Must consider the life cycle of that asset, and whether scheduled maintenance, repair, and rehabilitation have been completed.
 - Useful life benchmark (ULB) means the expected life cycle of a capital asset for a particular transit provider's operating environment, or the acceptable period of use in service for a particular transit provider's operating environment.
- Performance targets for the upcoming Fiscal Year set by Accountable Executive.
 - Targets based on recent condition data and reasonable financial projections.

