



Measure M Independent Taxpayer Oversight Committee

Enterprise Transit Asset Management
State of Good Repair





Transit Asset Management (TAM)

“TAM is a business model that uses condition of assets to guide optimal prioritization of funding at transit properties in order to keep our transit networks in a State of Good Repair” --- FTA

Per FTA’s TAM Rulemaking – A Capital Asset is in a State Of Good Repair if it Meets The Following Objective Standards:

- The capital asset is able to perform its designed function;
- The use of the asset in its current condition does not pose an identified unacceptable safety risk; and
- The life-cycle investment needs of the asset have been met or recovered, including all scheduled maintenance, rehabilitation, and replacements.

Metro’s TAM Policy Defines

An SGR asset as one that is currently in use in operation and its rehabilitation or replacement needs shall be included in the asset inventory.

An SGR capital project involves rehabilitating or replacing an existing asset. *Excluded from this definition are capital projects for capacity enhancements or expansions to existing projects or new services.*



TAM Inventory Database Overview

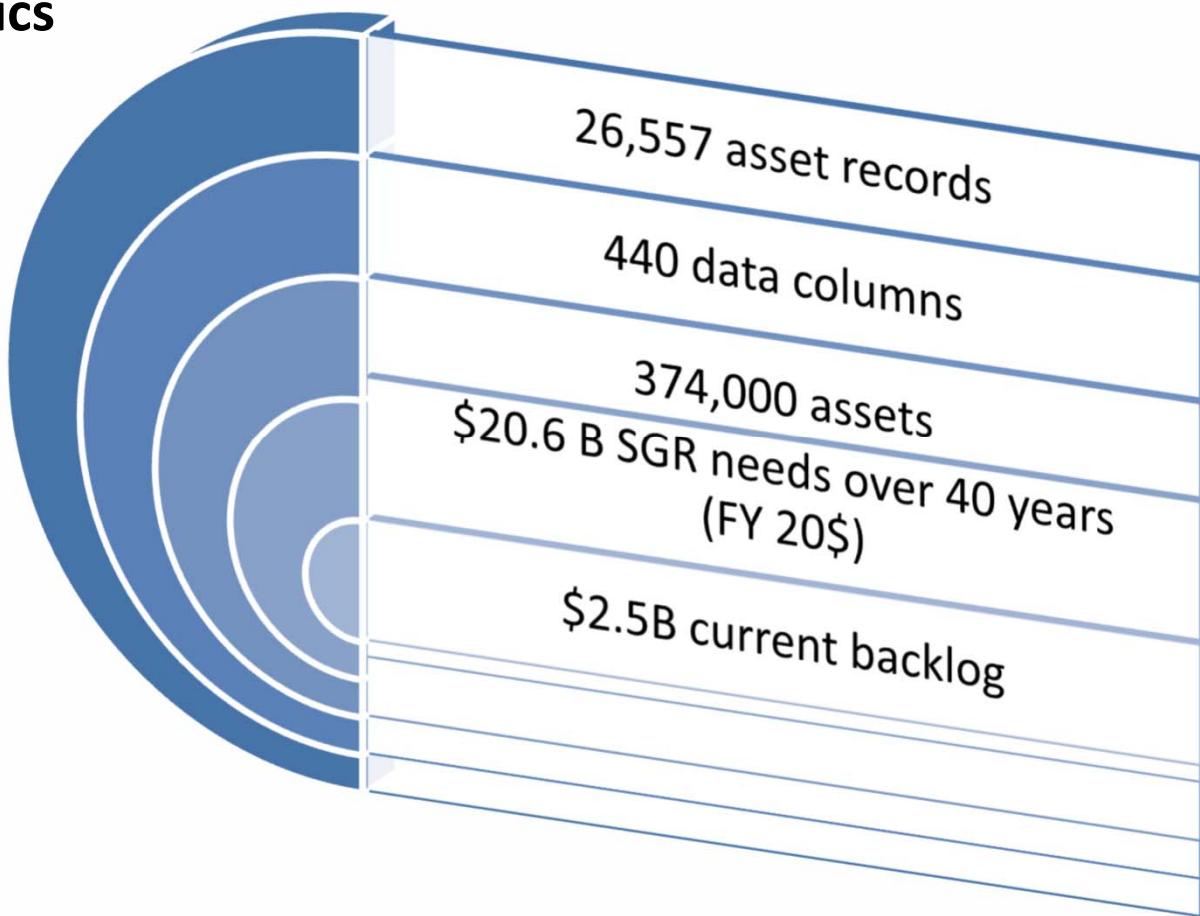
Current Statistics

As of 6/30/19

Data collection is an ongoing process with Asset Stakeholder Technical Working Groups

Inventory \$18.7B -
Continual gathering of information

Backlog: Assets overdue for replacement or rehabilitation



Federal Transit Administration (FTA) Reporting Requirements

	FTA TAM Performance Measures / Targets				Based on FY19 Census Date (6/30/2019)			
	Asset Class	On 6/30/2019	Performance Measure based on 49 CFR Part 625	FY20 Target (reported to FTA)	Total Asset Count	Exceeded ULB	Average Age	
Rolling Stock	Motorbus (BU)	22.72%	625.43(b): Rolling stock. The performance measure for rolling stock is the percentage of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark.	15.36%	2,152	489	9	
	Articulated Bus (AB)	74.81%		75.24%	389	291	14	
	Light Rail Vehicles (LR)	0.00%		0.00%	298	0	7	
	Heavy Rail Vehicles (HR)	0.00%		0.00%	104	0	23	
Equipment	Automobiles	26.00%	625.43(a): Equipment: (non-revenue) service vehicles. The performance measure for non-revenue, support-service and maintenance vehicles equipment is the percentage of those vehicles that have either met or exceeded their useful life benchmark.	26.43%	477	124	6	
	Trucks and Other Rubber Tire Vehicles*	28.48%		38.21%	934	266	9	
	Steel Wheel Vehicles**	44.44%		25.00%	9	4	12	
Facilities	Asset Class	On 6/30/2019	Performance Measure based on 49 CFR Part 625	FY20 Target (reported to FTA)	Total Asset Count	Locations Below TERM Condition 3		
	Passenger Facilities (Stations & Parking)	0.00%	625.43(d): Facilities. The performance measure for facilities is the percentage of facilities within an asset class, rated below condition 3 on the TERM scale.	0.00%	240	0		
	Administration & Maintenance Facilities	0.00%		0.00%	138	0		
Infrastructure	Asset Class	On 6/30/2019	Performance Measure based on 49 CFR Part 625	FY20 Target (reported to FTA)	Total Revenue Track	Average Performance Restriction		
	Heavy Rail (HR)	0.00%	625.43(c): Infrastructure: rail fixed-guideway, track, signals, and systems. The performance measure for rail fixed-guideway, track, signals, and systems is the percentage of track segments with performance restrictions.	0.00%	31.84 miles	0.00 miles		
	Light Rail (LR)	2.80%		2.24%	171.73 miles	4.81 miles		
<small>*Includes SUVs, heavy construction equipment and other street-legal vehicles, and excludes trailers.</small>								
<small>** Self-powered vehicles only (excludes trailers).</small>								



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FTA TAM Requirements Accomplished

The following has been accomplished by Metro's Enterprise Transit Asset Management (ETAM) staff:

- The 2018 TAM Plan was updated including adding four new FTA required elements and met the October 31, 2019 FTA compliance deadline.
- The Group Plan was completed and the uniform performance targets were reported to the FTA through the National Transit Database (NTD) by October 31, 2019.
- The TAM performance measures for the preceding fiscal year and new targets were reported to the FTA's NTD by October 31, 2019.
- Southern California Association of Governments (SCAG) has been provided Metro's updated TAM Plan and the NTD performance and target data for their regional TAM reporting.

	Current Estimated Replacement Cost	Current Backlog
Facilities	\$ 6,649,077,376	\$ 474,434,681
Equipment	\$ 131,313,648	\$ 49,581,923
Infrastructure	\$ 7,987,665,662	\$ 979,035,826
Rolling Stock	\$ 3,946,289,849	\$ 1,007,244,385
Metro Overall	\$ 18,714,346,536	\$ 2,510,296,815



State of Good Repair Rail Projects – examples

- A650 Heavy Rail Vehicle Modernization (HRV) and Critical Component Replacement Program (OCCRP) - Midlife Modernization of 74 newest HRVs
- P2000 Light Rail Vehicle Midlife Modernization/ Overhaul Project -P2000 light rail car fleet, 52 vehicles
- P2550 Light Rail Vehicle Mid-Life Modernization -P2550 fleet, consisting of 50 Light Rail Vehicles (LRVs)
- P865/P2020 Railcar Midlife Overhaul
- P2550 Light Rail Vehicle Component Overhaul
- MRL Access Control / Alarm Monitoring System Replacement
- MBL & MGL Emergency Trip System (ETS) Replacement
- MRL 7th/Metro Turnback Upgrade
- Metro Green Line Train Control Track Circuits and TWC
- Blue and Gold Line Train Control Battery Replacement
- Rail Facility Maintenance & Improvements
- Metro Green Line Switch Machine Overhaul
- MRL UPS/Battery Replacement FY17-FY22
- Metro Red Line Tunnel Lighting Rehabilitation
- Green and Gold Line TPSS Battery Replacement
- Elevator Modernization & Escalator Replacement Project
- Fire Alarm Control Panel Replacements/Upgrade
- Metro Green, Red and Blue Line ETEL/PTEL Replacement



Transit Asset Management - Next Steps

Continue sharing TAM information with SCAG to meet MPO Rulemaking reporting dates

- Metro and Group TAM Plans;
- TAM Performance and Targets; and
- Asset Inventory

Develop SGR Capital Projects with Operations and OMB

ETAM, Operations and OMB to integrate asset inventory into capital project prioritization process

- Include identification of asset replacements in capital project proposals to OMB
- Update backlog with funded FY21 data

Continue Condition Assessments:

- Facilities
- Structures
- Systems

October 31, 2019 FTA compliance deadline: MET!

- Written narrative for Metro TAM and Group TAM Plans provided
- Data uploaded into National Transit Database (NTD), continue to answer FTA's questions
- Provide clarification as needed by the FTA on Performance measures and targets



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Thank you!

Denise Longley
Enterprise Transit Asset Management
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