Measure M Independent Taxpayer Oversight Committee

Enterprise Transit Asset Management
State of Good Repair

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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.*
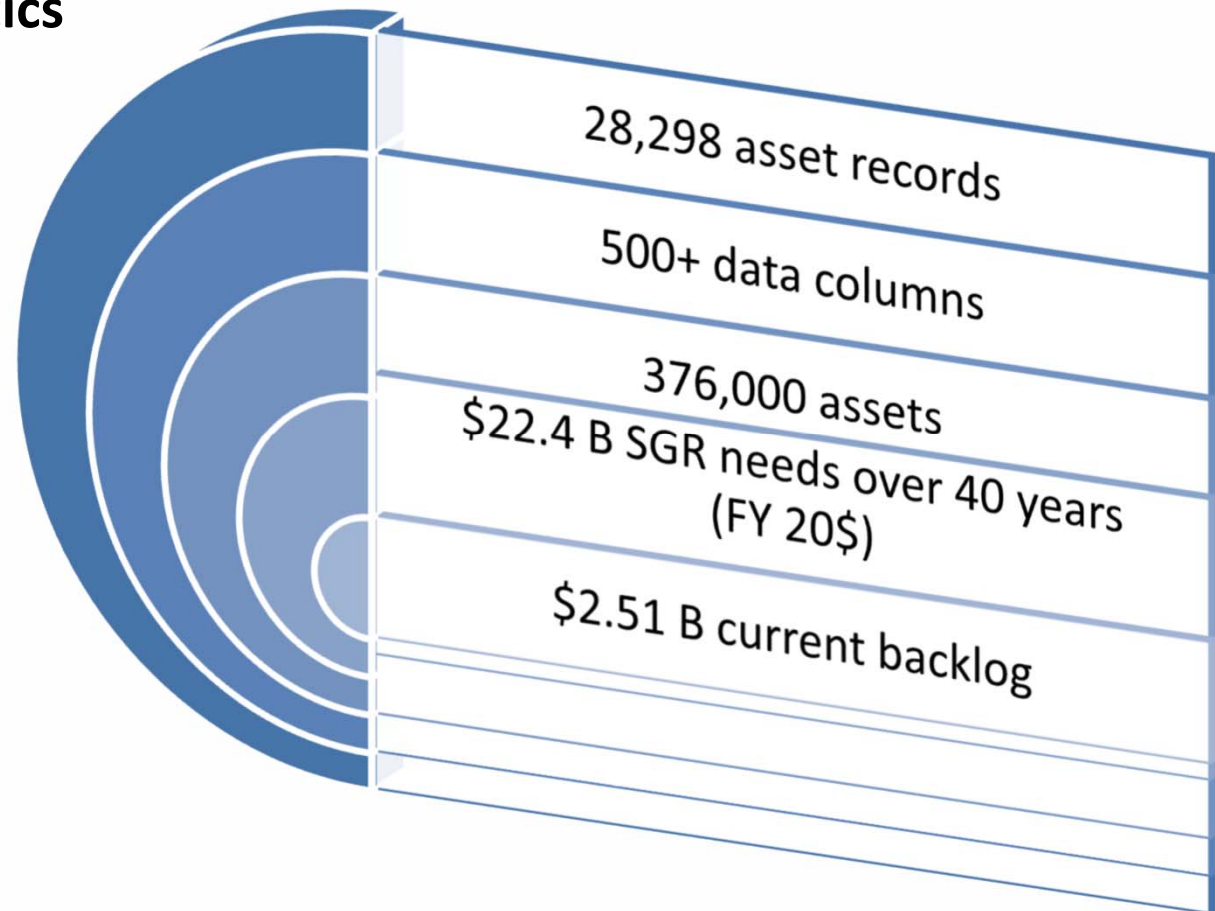
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Current Statistics

As of 6/30/20

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

Inventory $19.2 B - Continual gathering of information

Backlog: Assets overdue for replacement or rehabilitation

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28,298 asset records

500+ data columns

376,000 assets

$22.4 B SGR needs over 40 years (FY 20$)

$2.51 B current backlog

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

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**	
Facilities						
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	

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**	
Infrastructure						
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	

* Includes SUVs, heavy construction equipment and other street-legal vehicles, and excludes trailers.
** Self-powered vehicles only (excludes trailers).

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FTA TAM Requirements Accomplished

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

- Completed the first 3 year Facilities Condition assessment contract. Regular assessments mandated by the FTA for facilities.

- 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.

- FTA approved Metro's FY19 NTD reporting in Q4 of FY20.

	Current Estimated Replacement Cost	Current Backlog
Facilities	$ 7,029,577,634	$ 536,301,103
Equipment	$ 133,666,689	$ 45,404,749
Infrastructure	$ 8,040,365,128	$ 1,073,658,431
Rolling Stock	$ 4,012,327,376	$ 852,538,970
Metro Overall	$ 19,215,936,827	$ 2,507,903,253

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- New Blue (system wiring, tracks, crossovers, switches)
- 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

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Transit Asset Management - Next Steps

October 31, 2020 FTA compliance deadline:
- Update written narrative comparing actual performance against targets for Metro TAM and Group TAM Plans
- Upload data into National Transit Database (NTD) for multiple forms
- Provide clarification to FTA as needed on Performance measures and targets throughout FY21

Share FY21 TAM information with SCAG to meet MPO Rulemaking reporting dates
- Updated Group TAM Plan
- Updated FY20 TAM Performance, Condition and FY21 Targets

Support implementation of new Enterprise Asset Management System
- Work with Operations and ITS to procure and start implementation of software
- Coordinate onboarding process for new assets from new projects

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:
- Structures-Currently in year 2 of 5 year contract, ongoing
- Fire Life Safety Systems
- Facilities- prepare to re-start assessment cycle in 2021

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Thank you!

Denise Longley
Enterprise Transit Asset Management
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