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Los Angeles County  
Metropolitan Transportation  
Authority  
One Gateway Plaza  
3rd Floor Board Room  
Los Angeles, CA

## Board Report

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**File #:** 2020-0401, **File Type:** Oral Report / Presentation

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**MEASURE M INDEPENDENT TAXPAYERS OVERSIGHT COMMITTEE  
JULY 7, 2020**

**SUBJECT: RECEIVE Oral Report on State of Good Repair**

**ACTION: ORAL REPORT**

**RECOMMENDATION**

Oral Report on State of Good Repair

# 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.*



# TAM Inventory Database Overview

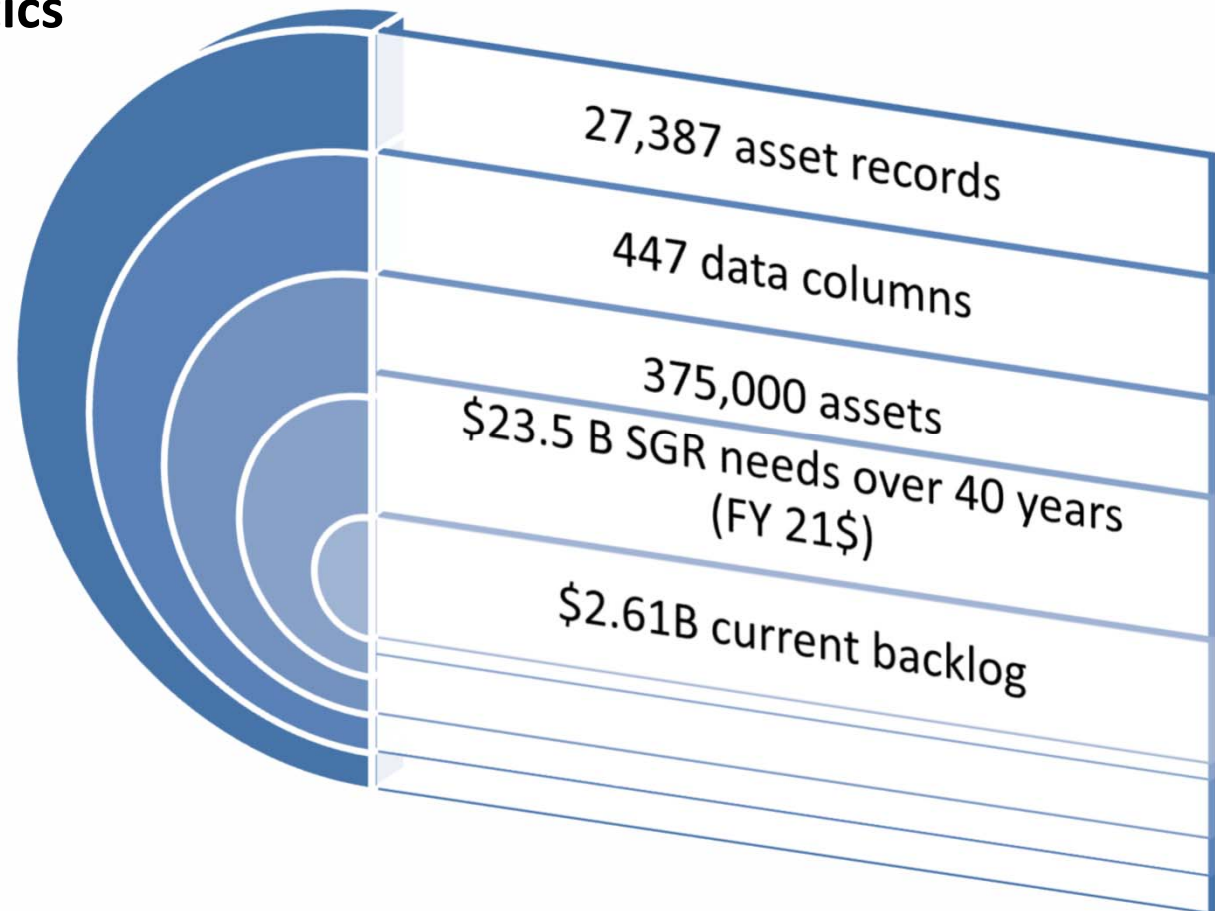
## Current Statistics

As of 6/30/20

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

Inventory: \$19.5B - 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                      |    |
| <b>Rolling Stock</b>                   | Bus (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 |
| <b>Equipment</b>                       | 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*    | 28.16%                                       |   | 38.21%                                | 934                 | 263                              | 9  |
|  | Steel Wheel Vehicles**                    | 44.44%                                       |   | 25.00%                                | 9                   | 4                                | 12 |
| <b>Facilities</b>                      | 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%                                 | 238                 | 0                                |    |
|  | Administration & Maintenance Facilities   | 0.00%  |   | 0.00%                                 | 137                 | 0                                |    |
| <b>Infrastructure</b>                  | Asset Class                               | On 6/30/2020                                 | Performance Measure based on 49 CFR Part 625  | FY20 Target (reported to FTA)         | Total Revenue Track | Average Performance Restriction  |    |
|  | Heavy Rail (HR)                           | 0.36%  | 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         | 0.11 miles                       |    |
|  | Light Rail (LR)                           | 2.96%  |   | 2.24%                                 | 171.73 miles        | 5.08 miles                       |    |

\* Includes SUVs, heavy construction equipment and other street-legal vehicles, and excludes trailers.

\*\* Self-powered vehicles only (excludes trailers).



# 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     | \$6,753,698,569                    | \$537,127,703   |
| Equipment      | \$134,104,416                      | \$45,816,327    |
| Infrastructure | \$8,118,860,052                    | \$1,084,140,137 |
| Rolling Stock  | \$4,455,689,920                    | \$947,389,155   |
| Metro Overall  | \$19,462,352,957.26                | \$2,614,473,322 |



## 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



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# Transit Asset Management - Next Steps

## **Share FY21 TAM information with SCAG to meet MPO Rulemaking reporting dates**

- Updated Group TAM Plan;
- Updated FY20 TAM Performance , Condition and FY21 Targets; and
- Updated Inventory, Performance, Condition and Targets to FTA

## **Support implementation of new Enterprise Asset Management System**

- Work with Operations and ITS to procure and implement 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:**

- Facilities
- Structures
- Fire Life Safety Systems

## **October 31, 2020 FTA compliance deadline:**

- Update written narrative for Metro TAM and Group TAM Plans
- Upload data into National Transit Database (NTD)
- Provide clarification as needed by the FTA on Performance measures and targets



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Thank you!

Denise Longley  
Enterprise Transit Asset Management  
*State of Good Repair*



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