

Transit Asset Management Update

Kristin Thompson | Director, Asset Management August 28, 2023



What is Asset Management?

Transit asset management (TAM) is the:

- strategic and systematic practice of
- procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to
- manage their performance, risks, and costs over their life cycles,
- for the purpose of providing safe, cost-effective, and reliable public transportation.

(49 CFR Section 625.5)



What do we mean by an "asset?"

An item, thing, or entity that has potential or actual value to an organization



Revenue Vehicles	Buses Rail Vehicles	
Facilities	Maintenance Administrative Passenger & parking	
Equipment	Non-revenue vehicles Fare equipment Signage	
Infrastructure	Track, guideway Bridges & tunnels Traction power Signaling systems	

Outcomes of Asset Management

- Improved customer service
 - Reliable service delivery
 - Well-maintained vehicles, facilities, infrastructure
- Improved productivity and reduced costs
 - Condition-based maintenance
 - Preventive & predictive maintenance

- Optimized resource allocation
 - Align spending with goals and objectives
 - Incorporate lifecycle cost considerations
- Improved stakeholder communications



Transit Asset Management business processes

Policy & Strategy

- Commitment to AM & continual improvement
- Roles, responsibilities, & resources
- Goals, objectives, & performance expectations

Lifecycle Management

- Asset inventory
- Condition assessment and performance monitoring
- Lifecycle management planning

Cross-Asset Planning

- Capital planning & programming
- O & M budgeting
- Performance modeling

Information Technology Systems

Enablers (e.g. training, culture, leadership)



Asset Management timeline

1980s-90s

Asset management practice develops in Australia

2004

First international asset management standard published

2016

FTA Transit Asset
Management (TAM)
rule published

2018

First TAM Plans submitted

FTA Transit Asset Management requirements

- TAM Plan every 4 years
 - Inventory of Capital Assets
 - Condition Assessment
 - Decision Support Tools
 - Investment Prioritization
 - TAM and SGR Policy
 - Implementation Strategy
 - List of Key Annual Activities
 - Identification of Resources
 - Evaluation Plan

- Annual NTD reporting
 - Inventory of Assets
 - Condition Assessments and Performance Results
 - Projected Targets for the Next Fiscal
 Year
 - Narrative Report on System
 Conditions and Progress

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Why asset management?

O-Train will remain out of service through the

UK researchers conducting study in East Palestine, Ohio after train derailment

King County Metro to Cut Bus Service

With hundreds of buses out of service and a mechanic shortage delaying repairs and maintenance, Seattle area bus riders will see significantly reduced service this summer.

In case of O-Train service

disruption

ruption du

O-Train

Partial LIRR Far Rockaway Branch service suspended due to single-car derailment

METRO vision

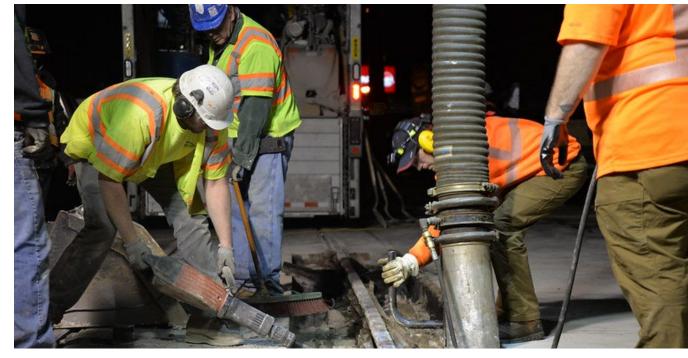
	Current	Future
BRT stations	157	~500
LRT stations	37	67
Miles of track & infrastructure	21	49
Light rail vehicles	91	146
BRT buses	76	~200





LRT State of Good Repair program

- Identify & replace key components becoming obsolete
- Proactive replacement mitigates future risk to operations
- Extensive coordination
 - Work to preserve operations
 - Coordinate maintenance work to make the most of shutdowns



METRO Blue Line

Long shutdown will help METRO Blue Line have a long life

Posted by Drew Kerr | Thursday, July 7, 2022 1:05:00 PM





Light Rail Vehicle (LRV) rust mitigation program

- LRVs in our climate experience rust and corrosion from interaction with salt and sand on roadways
- After 10 years in service, corrosion on older Type 1
 LRVs was severe and needed labor-intensive repair
- Lessons learned:
 - New inspection tasks to identify & document affected areas
 - Light mitigation applied earlier
 - LRVs continuously cycled through paint and body shop

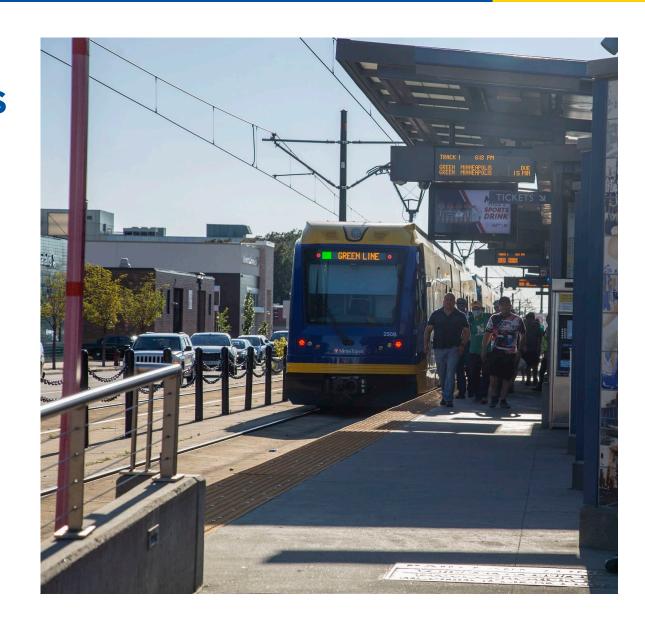
METRO BRT fleet management

- Dedicated BRT fleet accumulates high mileage
- 2015 A Line buses
 - All received standard midlife body update and interior assessment/repairs
 - Testing several approaches to mechanical components
 - Results will be evaluated and applied to future BRT midlife updates in 2026 and 2028



2023 Legislative outcomes

- New sales tax creates sustainable funding stream
- Expenditures include capital maintenance for METRO system
- Growing asset management capabilities will support longrange planning for capital needs





Opportunities for continued growth

- Asset management learning & collaboration
 - Internal steering team and cross-functional project teams
 - Engagement with peers and industry groups
- Support capital planning with long-term projections





Opportunities for continued growth

- Modernizing data and systems
 - Council-wide Enterprise Asset Management
 System (EAMS) project underway
 - Strengthening asset-related geospatial data
- Process improvements to leverage existing tools
 - Enhancing on-boarding practices for new assets





Thank You!

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