Transit Asset Management & Public Transportation Agency Safety Plans

CCRPC TAC Meeting, November 7, 2023

What is Transit Asset Management?

- Outlines the systematic practice of assessing, monitoring, and reporting the condition of assets utilized in the operation of public transportation service.

- Informs strategic planning for the procurement, operation, maintenance, and replacement of capital assets.

- Supports managing performance, risks, and costs over asset life cycles, to provide safe, cost-effective, and reliable public transportation.

What Can Transit Asset Management Do?

- **Reduce risk and improve safety**
  - Reducing potential injuries or fatalities due to poor conditions, maintenance issues, or unexpected breakdowns
- **Support more effective operations**
  - Decreasing risk through proactive rather than reactive spending
  - Optimizing maintenance planning and preventing backlogs
- **Improve reliability and customer service**
  - Reducing unexpected delays in service or lost trips by identifying and preventing systemic failures
  - Improving condition of stations and vehicles for cleanliness, customer experience
- **Save time, money, and resources**
  - Optimizing return on investment
  - Matching agency goals, priorities, and needs with actual spending/funding requests and project planning
  - Reducing costs of managing assets over the course of their lives

TAM Requirements

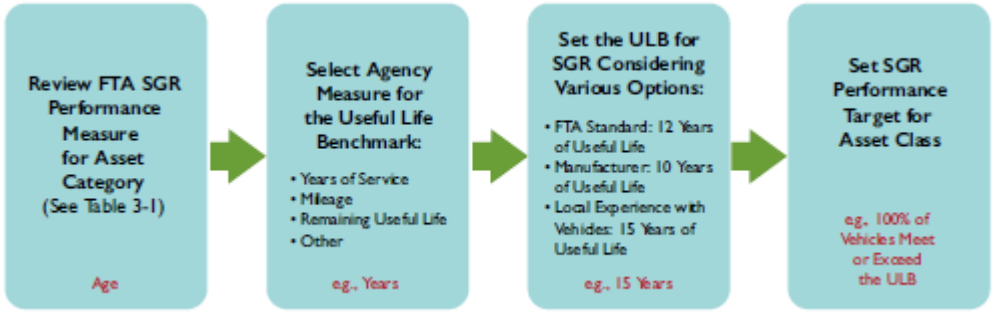
1. **Create/Maintain/Update** Compliant TAM Plan
2. **Coordinate** with State and Regional Planning Agencies
3. **Self-certify** Compliance in Certifications and Assurances during Grant Making
4. **Submit** Annual Data Report
    a) Performance Targets
    b) Performance Status
        i. Condition Assessments
        ii. Inventories
5. **Submit** Annual Narrative Report
6. **Participate** in Oversight during TR/SMR

Performance Targets

- Rolling Stock (Age)
  - Buses
- Equipment (Age)
  - Maintenance & Non-revenue vehicles
- Facilities (Condition)
  - Support
  - Passenger

Performance Targets & Measures

Agency Name	Asset Category	Asset Class	2023 Target	2024 Target	2025 Target	2026 Target
Green Mountain Transit Authority	Equipment	Non Revenue/Service Automobile	20%	20%	20%	10%
Green Mountain Transit Authority	Equipment	Other Rubber Tire Vehicles	22%	22%	11%	11%
Green Mountain Transit Authority	Facilities	Administrative / Maintenance Facilities	50%	0%	0%	0%
Green Mountain Transit Authority	Facilities	Passenger Facilities	0%	0%	0%	0%
Green Mountain Transit Authority	Revenue Vehicles	BR - Over-the-road Bus	0%	0%	100%	n/a
Green Mountain Transit Authority	Revenue Vehicles	BU - Bus	34%	35%	29%	21%
Green Mountain Transit Authority	Revenue Vehicles	CU - Cutaway	16%	8%	20%	30%
Green Mountain Transit Authority	Revenue Vehicles	VA – Vans	0%	0%	0%	50%
Green Mountain Transit Authority	Revenue Vehicles	MV - Minivan	0%	38%	31%	23%



Condition	Rating	Description
Excellent	5.0 to 4.8	New asset; no visible defects.
Good	4.7 to 4.0	Asset showing minimal signs of wear; some (slightly) defective or deteriorated component(s).
Adequate	3.9 to 3.0	Asset has reached its mid-life (condition 3.5); some moderately defective or deteriorated component(s).
Marginal	2.9 to 2.0	Asset reaching or just past the end of its use life; increasing number of defective or deteriorated component(s) and increasing maintenance needs.
Poor	1.9 to 1.0	Asset is past its useful life and is in need of immediate repair or replacement may have critically damaged component(s).

Facilities will be at least a 3.0 on TERM rating scale:

- Admin/Garage Building: 3.60
- Storage Building: 2.33
- DTC: 4.60

Public Transportation Agency Safety Plan(PTASP) Overview

- 49 C.F.R. Part 673 requires certain operators of public transportation systems to develop safety plans that include the processes and procedures necessary to implement safety management systems (SMS).

ROLE OF THE SAFETY PLAN

For a transit agency, the Safety Plan serves two goals:

- Help a transit agency manage safety risks
- Help a transit agency prioritize capital investments through performance-based planning

Safety Management System (SMS) Components

- Safety Management Policy
  - Safety objectives
  - Confidential employee reporting program
  - Organizational accountabilities and responsibilities
  - Designation of a CSO
- Safety Risk Management
  - Processes for hazard mitigation
  - Risk assessment
  - Mitigation development
- Safety Assurance
  - Safety performance measurement
- Safety Promotion
  - Comprehensive safety training program
  - Safety communication

Safety Performance Targets

FTA requires that transit agencies coordinate with States and Metropolitan Planning Organizations (MPOs) to the maximum extent practicable to assist those States and MPOs with the selection of Statewide and regional safety performance targets. At a minimum, FTA requires each transit agency to make its SPTs available to States and MPOs.

CCRPC, VTRANS AND GMT AGREEMENT ON PERFORMANCE BASED PLANNING, PROGRAMMING AND REPORTING

- GMT will present data collected for each transit performance measure and collaborate with the CCRPC in setting targets.
- GMT will provide the CCRPC a minimum of 30 days to give feedback on the data and assumptions provided. GMT will set transit targets taking into consideration feedback from the CCRPC.
- If the CCRPC chooses to adopt their own targets for any FHWA or FTA measure, they will develop performance targets for the metropolitan planning area in coordination with VTrans or GMT.

GMT's SPT's

Safety Performance Targets							
Mode of Transit Service	**Fatalities**	**Fatalities/ 100,000 VRM**	**Injuries**	**Injuries/ 100,000 VRM**	**Safety Events**	**Safety Events/ 100,000 VRM**	**System Reliability**
MB	0	0	0.67	0.04	0.33	0.02	17,766
CB	0	0	0	0.00	0	0.00	61,865
DR -DO	0	0	0	0.00	0	0.00	0
DR - PT	0	0	0	0.00	0	0.00	28,158

PTASP Relationship to TAM Plan

- GMT considers the results of its asset condition assessments while performing safety risk management.
- Results of condition assessments and SMS analysis inform GMT’s investment priorities.