

1255 Imperial Avenue, Suite 1000 San Diego, CA 92101-7490 (619) 231-1466 • FAX (619) 234-3407

# **Policies and Procedures**

No. 65

Board Approval: 9/20/2018

SUBJECT:

Transit Asset Management Policy

**PURPOSE** 

The purpose of this policy (the Policy) is to establish guidelines for the management of the San Diego Metropolitan Transit System's (MTS) organizational assets.

### BACKGROUND:

Transit asset management (TAM) is a strategic and systematic process through which an organization procures, operates, maintains, rehabilitates, and replaces transit assets to manage their performance, risks, and costs over their lifecycle to provide costeffective, reliable, and safe service to current and future customers.

The goal of TAM is to keep all organizational assets in a state of good repair (SGR), which is defined by the Federal Transit Administration (FTA) as the condition in which a transit or capital asset is able to safely operate at a full level of performance.

MTS is committed to effectively manage its transit assets and maintain its system in a SGR to support safe, efficient, and reliable transit services across the organization. MTS must also comply with applicable maintenance regulations of the FTA, Federal Railroad Administration (FRA) and the California Public Utilities Commission (CPUC).

With this policy, MTS commits to:

- Maintain an asset inventory that includes vehicles, facilities, and facility equipment used in the delivery of transit service;
- Identify safety-critical assets within the asset inventory and prioritize efforts to maintain those safety-critical assets in a SGR;
- Clearly define ownership, control, accountability, and reporting requirements for assets, including leased and third-party assets;
- Set asset performance targets and measure, monitor, and report on progress towards meeting those targets;







- Base capital project prioritization and other asset management decisions on asset criticality, condition, performance, available funding, safety considerations, and on the evaluation of alternatives that consider full lifecycle benefits, costs, and risks;
- Maintain an agency-wide TAM Plan that complies with current Federal Transit
  Administration requirements, Board Policies, Fleet and Facilities Maintenance Plans,
  Standard Operating Procedures and Transit Asset Management best practices; and
- Provide tools to communicate forecasted performance metrics outlined in MTS Board Policy 42.

This TAM Policy complies with the Federal Requirements of the Moving Ahead for Progress in the 21st Century Act (MAP-21), which mandated new NTD reporting requirements for asset management. These regulations were finalized in July 2016 with the revisions through the Federal Registry (The Final Rule) detailing the expected responsibilities for transit agencies.

## PROCEDURE:

### 65.1 MAINTENANCE PLANS

Maintenance is managed with a multi-year time horizon to improve the reliability of all of its assets. The maintenance procedures will be documented in the Fleet and Facilities Maintenance Plans (FMP) of the MTS Operators, which will provide an overview of each department's resources, structure, asset management, and maintenance programs. The purpose of these FMPs is to not only ensure that the assets are maintained in a state of good repair based on original equipment manufacturer (OEM) standards, but also help to enhance operations by providing safe, frequent and reliable service. These FMPs are used to monitor and manage assets to achieve these standards, improve safety and increase reliability and performance.

These FMPs are also supported by the Standard Operating Procedures (SOPs) used to guide day to day activities. Together, they will define the preventive maintenance (PM) requirements for all MTS assets and the procedures will ensure all PM activities are performed in a timely manner.

Annual reviews of the FMPs and SOPs will take place to ensure updates to the OEM standards are captured and reflected accordingly in these plans. On-going performance measures will also be used to evaluate the effectiveness of these maintenance plans and the overall maintenance program as a whole. The primary sections of the FMPs will be as follows:

# 65.1.1 VEHICLE MAINTENANCE

Vehicle maintenance practices should be consistent with the standardized industry practices and should incorporate the vehicle manufacturer guidelines for preventive maintenance and replacement. For all operating revenue and non-revenue fleet assets, the FMP will address:

- Organization Structure
- Maintenance Program Schedules
- Quality Control
- Training
- Preventive Maintenance
- Inspections

- Records
- Service and Cleaning Activities
- Warranty Program
- Goals and statistics

PM inspections are to be completed on time and no required PM will be deferred.

### 65.1.2 FACILITY MAINTENANCE

The FMPs for MTS facilities shall be prepared for each facility or inventoried asset that the MTS Operator has direct capital responsibility. A facility could be a bus maintenance facility, trolley maintenance facility, transit station, fixed guideway system, or other discreet asset. Each individual facility FMP shall include assessment of all major systems and equipment (i.e., inventoried assets) that included that facility, including inspection and preventative maintenance activities consistent with the manufacturer's minimum requirements for equipment under warranty. Each MTS Operator shall keep a record of the maintenance history of facilities and equipment. Each FMP will have precise procedures for both higher-frequency routine inspections and more-detailed structural inspections. For all operations and support facilities, the FMP shall address:

- Organization Structure
- Maintenance Program Schedules
- Quality Control
- Preventive Maintenance
- Inspections
- Service and Cleaning Activities
- Warranty Program
- Condition Assessment including a prediction of the asset's performance and a prioritization of any necessary investments

PM inspections are to be completed on time and no required PM will be deferred.

In order to determine an asset's condition, the FTA's Transit Economic Requirements Model (TERM) scale is to be used, listed in the table below, with condition rating ranges from (5) Excellent to (1) Poor.

Rating	Condition	Description
5	Excellent	No visible defects, new or near new condition, may still be under warranty if applicable
4	Good	Good condition, but no longer new, may be slightly defective or deteriorated, but is overall functional
3	Adequate	Moderately deteriorated or defective; but has not exceeded useful life
2	Marginal	Defective or deteriorated in need of replacement; exceeded useful life
1	Poor	Critically damaged or in need of immediate repair; well past useful life

Facility assets with a condition rating score of 3.0 and above are in a state of good repair. Assets with a condition score lower than 2.9 are not in a state of

good repair, and may require prioritization during capital programing to ensure safe, efficient, and reliable transit service.

### 65.2 ASSET MANAGEMENT SYSTEM

MTS staff shall maintain an asset management system that collects and aggregates data necessary to oversee and implement the FMPs. The asset management system shall, at a minimum:

- a) manage each individual FMP through the entire lifecycle for each inventoried asset;
- b) track all inspections, PM, and unscheduled repairs for each inventoried asset; and
- c) track completion timelines and overall PM compliance.

#### 65.3 CAPITAL AND OPERATING BUDGETS

Data collected by the FMP and asset management system will be used to plan for operating and capital budgets and foster a fact-based decision making process. The asset inventory and condition assessment data will be reviewed to validate project requests based on the asset age or condition for rehabilitation or replacement of the assets that are indicated within the designated period. Asset management reports showing the scheduled and unscheduled maintenance costs by assets will also be used to validate project and funding requests for both the Capital Improvement Plan (CIP) and annual operating budgets.

## 65.4 MONITORING, REPORTING, AND DISCLOSURE

The Chief Executive Officer, or their designee, will be the Accountable Executive and have the overall responsibility for overseeing the development of the agency's TAM Plan to ensure that the necessary resources are available to carry out the plan. Per FTA's TAM Final Rule, this plan will include the following elements:

- Inventory of assets A register of capital assets and information about those assets. The FTA defines these assets as all capital assets a provider owns, except equipment with an acquisition value under \$50,000 that is not a service vehicle.
- Condition assessment A rating of the assets' physical state.
- <u>Decision support tool</u> Analytic process/ tool to assist in capital asset investment prioritization needs.
- <u>Prioritized list of investments</u> A prioritized list of projects or programs to manage or improve the SGR of capital assets.
- TAM and SGR policy Executive-level direction regarding expectations for TAM.
- <u>Implementation strategy</u> Operational actions to achieve agency TAM goals and policies.
- Key annual activities Describe the key TAM annual activities.
- <u>Identification of resources</u> List resources needed to carry out the TAM Plan.
- Evaluation plan Monitor and update to support continuous TAM improvement.

It is anticipated that the TAM Plan strategy will evolve in response to internal and external changes or challenges faced by MTS. Therefore, the TAM Plan will be considered a "living document" that will be reviewed, and revised as necessary, on an annual basis. Any and all process changes within SOPs or FMPs will be reviewed and impacts to the overall TAM plan will be revised accordingly. The figures included in the

five-year plan will also be updated each year at the completion of the CIP process. The updated TAM plan will be published to the MTS Board of Directors each year.

In contrast, this TAM Policy will remain relatively constant over time. However, if major changes that would significantly affect the policy and the business operations of TAM do occur, such as regulatory changes at the FTA level, these changes to the policy would need to be approved by the MTS Board of Directors.

POLICY.65.TRANSIT ASSET MANAGEMENT POLICY

Original Policy Adopted on 9/20/2018.