



U.S. Department of Transportation
Federal Transit Administration



Transit Asset Management Guide

Focusing on the Management of Our Transit Investments

Background

The Federal Transit Administration (FTA) and the U.S. transit industry are working to improve the understanding and practice of transit asset management, which is now a national policy. In the most recent National State of Good Repair Assessment, FTA found an estimated backlog of \$86 billion in deferred maintenance and replacement needs, a backlog that continues to grow. The enactment of Moving Ahead for Progress in the 21st Century (MAP-21) and its successor, Fixing America's Surface Transportation (FAST), require transit agencies to prepare a Transit Asset Management (TAM) Plan. Helping transit agencies maintain bus and rail systems in a State of Good Repair (SGR) is one of FTA's highest priorities.

To advance transit asset management, this guide provides a transit-specific asset management framework for managing assets individually and as a portfolio of assets that comprise an integrated system. The guide provides flexible, yet targeted guidance to advance the practice and implementation of transit asset management.

Objectives

The objectives of this report are to explain what transit asset management is and the business benefits to an agency; provide an enterprise asset management framework and business model that agencies can refer to as “best practice”; describe the elements of a transit asset management plan; detail, for each major asset class, the major enabling components of asset management—inventory, condition assessment, performance analysis and modeling, risk management, and lifecycle cost management; and guide organizations through the migration from their current baseline to high-performance asset management.

This report was originally published in 2012 and re-released in 2016 with minor updates to reflect the 2016 TAM Final Rule, which requires public transit providers that received Federal transit assistance to undertake certain transit asset management activities. Although the regulations set out minimum standards to satisfy Federal transit asset management requirements, they do not represent the full suite of transit asset management best practices. This guide discusses many activities that are not required by the regulations, but if undertaken will promote fully meeting the FTA's regulatory requirements and effectively maintaining and managing transit assets. The report notes rule requirements throughout broader discussion of TAM best practices.

Findings and Conclusions

Asset management allows transit agencies to more effectively use available funds to improve their system's physical condition and performance, thus potentially increasing ridership.

Asset management processes are ongoing and involve evaluating and managing the relationships between costs, risks, and performance over the asset's lifecycle. The transit asset management framework has three categories of business processes:

1. Asset Management Vision and Direction – agency-wide processes that establish the organization-wide asset management policy and strategy and drive resource allocation
2. Lifecycle Management – the processes involved in the lifecycle management of individual asset classes; these include managing the data (inventory), monitoring the assets' condition and performance, and developing lifecycle management plans
3. Cross-Asset Planning and Management – agency-wide processes that consider information from all asset classes to support the capital programming and operations and maintenance budgeting process
4. The fundamental concepts of asset management are straightforward; however, implementing the changes required to become a mature asset management organization requires careful planning and execution. As a starting point, this guide identifies steps for planning, implementing, and institutionalizing an asset management improvement program.

Benefit

Through asset management, transit agencies can more effectively use available funds to improve the physical condition and performance of their system. This, in turn, has the potential to increase ridership. Some of the benefits associated with improved asset management activities are as follows:

- Improved customer service – improves on-time performance and service operations, vehicle and facility cleanliness; reduces missed trips, slow orders, and station shutdowns, and focuses investments around customer centered goals and metrics.
- Improved productivity and reduced costs – maintains assets more effectively, using condition-based approaches and using predictive and preventive maintenance strategies (where these can be employed) to reduce costs while improving service delivery.
- Optimized resource allocation – better aligns spending with an agency's goals and objectives to obtain the greatest return from limited funds and incorporates lifecycle cost, risk, and performance trade-offs into capital programming and operations & maintenance budgeting.
- Improved stakeholder communications – provides stakeholders with more accurate and timely customer-centered performance indicators and provides tools to communicate forecasted performance metrics (including level of service) based on different levels of funding.

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Project Information

FTA Report No. 0098

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