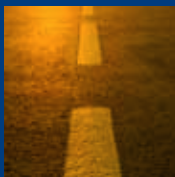


AASHTO Transportation Asset Management Guide

A Focus on Implementation



U.S. Department
of Transportation

**Federal Highway
Administration**

What

Is the Transportation Asset Management Guide?

AASHTO Transportation Asset Management Guide—A Focus on Implementation is a new publication from the Transportation Research Board's (TRB's) National Cooperative Highway Research Program (NCHRP). It aims to help transportation agencies address strategic questions they confront in managing the surface transportation system.

Drawn from both national and international knowledge and experience, it provides guidance to State Department of Transportation (DOT) executives, as well as county and municipal transportation agencies, to assist them in realizing the most from financial resources now and in the future, preserving highway assets, and providing the service expected by customers. Divided into two key parts, Part One of the guide focuses on leadership and goal and objective setting, whereas Part Two is more technical guidance.



Implementing Asset Management

This latest volume of the *AASHTO Transportation Asset Management Guide* provides guidance for implementing asset management concepts, principles, performance targets, strategies, tools, analysis methods, data collection, and application of management system information. To assist in the implementation of Transportation Asset Management (TAM), the new guide includes examples of tools for evaluating return on investment and improving economic efficiency, resource allocation, and budgeting decisions. It also includes examples of strategies for enhancing communication and information-sharing among decisionmakers and elected officials. Finally, it provides examples of ways that Enterprise Resource Planning systems can effectively support TAM.

What Is Transportation Asset Management?

The definition according to the American Association of State Highway and Transportation Officials' (AASHTO's) Subcommittee on Asset Management is:

"Transportation Asset Management is a strategic and systematic process of operating, maintaining, upgrading and expanding physical assets effectively throughout their lifecycle. It focuses on business and engineering practices for resource allocation and utilization, with the objective of better decisionmaking based upon quality information and well-defined objectives."

"This guide provides practitioners and decisionmakers with the information and tools needed to implement a transportation asset management system that will support a larger performance management program."

TAM is a business model, a decision support system, and a management approach that can be used across an agency to address five core questions:

- » What is the current state of physical assets?
- » What are the required levels of service and performance delivery?
- » Which assets are critical to sustained performance?
- » What are the best investment strategies for operations, maintenance, replacements, and improvement?
- » What is the best long-term funding strategy?

The goal of a TAM program is to minimize the life-cycle costs for managing and maintaining transportation assets, including roads, bridges, tunnels, rails, and roadside features. It is important for a TAM program to support a strategic resource allocation process that uses a performance-based approach to maintain and preserve physical assets.

Through the use of management systems, engineering and economic analysis, and other tools, transportation agencies can evaluate collected data before making decisions on how specific resources should be deployed. This assists in the many accountability, resources, and preservation challenges and expectations faced on a daily basis.

An asset management approach can lessen long-term costs and improve credibility of the decisionmaking process by being objective and technically based.

Decisionmakers with a hands-on document
t approach for their organization that will
am.” —**Kirk Steudle**, Director, Michigan DOT



What Are the Steps to TAM Implementation?

Successful TAM implementation requires good management, effective leadership, and the right organizational culture. The key to TAM implementation is to meet a required level of service, in the most cost-effective manner, through the management of assets for present and future customers. This is done in a sequence of management steps—from setting direction, creating alignment, and developing the plan, to strengthening processes, systems, and data.

The guide explores 14 steps to TAM implementation:

1. Set agency goals and objectives.
2. Conduct self-assessment and TAM gap analysis.
3. Define the scope of TAM.
4. Develop the change strategy.
5. Integrate TAM into the organizational culture.
6. Integrate TAM into business processes.
7. Establish asset management roles.
8. Establish performance management standards.
9. Develop a TAM plan.
10. Strengthen enabling processes—service planning.
11. Strengthen enabling processes—life-cycle management.
12. Strengthen enabling processes—TAM integration.
13. Strengthen information systems.
14. Strengthen data.

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The Path Toward TAM

The path toward best practice TAM will always look different in each agency on the basis of its history, political and physical environment, responsibilities, culture, and organizational constraints.

The new guide puts all TAM components in one place, from tools, plans, and techniques, to examples and ideas for enhancing TAM. Implementing TAM is incremental and continuous, but with this guide, transportation executives can focus on specific tasks and plot a course to obtaining a level of TAM practice that is just right for their agency.

Contacts

For more information and to view the *AASHTO Transportation Asset Management Guide*, visit www.assetmanagement.transportation.org, or contact Steve Gaj in FHWA's Office of Asset Management, 202-366-1336 (email: stephen.gaj@dot.gov).



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