Making every asset count

From stop signs to suspension bridges to assets of every size in between, transportation agencies have zeroed in on asset management in recent years as an important strategy to help direct spending decisions. AASHTO’s Transportation Asset Management Guide, published in 2002 based on NCHRP research, is the key resource they turn to.

Beyond pavements and bridges
Asset management used to only be about pavements and bridges. Transportation agencies are responsible for many other assets, though. Neil Pedersen, Maryland’s state highway administrator, says, “The Transportation Asset Management Guide helps agencies expand beyond pavements and bridges in their asset management decisions. The guide takes a very pragmatic approach, with methodologies that can be applied equally well to drainage facilities, overhead lighting, sign structures, retaining walls, intelligent transportation systems, and traffic control systems.

“We are enthusiastically using the guide to expand our asset management framework.”

“In the early 2000s, Maryland DOT staff responsible for these other areas didn’t have a lot of experience with asset management, so this guide helped them understand the principles of asset management and how to apply them,” he adds. “Across our agency, we are enthusiastically using the guide to expand our asset management framework. It helps us make decisions on when and how to extend the life of existing assets or put new ones in place.”

North Carolina DOT is another agency making use of the guide. Lacy Love, director of asset management, says asset management concepts have become pervasive in NCDOT’s culture. “NCDOT’s commitment to data-driven decisions is rooted in principles described in the Transportation Asset Management Guide,” he says. “We have depended on the principles identified in the guide to help communicate the big picture of our agencywide goals in this area.”

Pavements, luminaires, transit facilities—all transportation assets can benefit from the guide’s management methods.

The guide outlines the flow of all the key activities for asset management.

The guide also helped NCDOT formalize its management approach. “The strategies presented in the guide helped us put together the many different pieces of the puzzle—asset inventory; assessment, monitoring; planning, and budgeting—and develop a rational, data-based approach to asset management,” says Love.

Satisfying a sophisticated audience
The value of the guide extends beyond internal decision making. Carlos Braceras, deputy director of Utah DOT, says, “With every passing year, members of the public and elected officials have become a more sophisticated audience. They increasingly look for us to provide a rationale for asset-related decisions using analytical methods. We heavily leveraged the Transportation Asset Management Guide for this purpose. Drawing from the guide, we can base our decisions in Utah on the conditions of the entire transportation system and on our asset needs of today as well as tomorrow.”

Braceras continues, “We definitely didn’t have the time or capital to reinvent the wheel, so we relied heavily on the Transportation Asset Management Guide. This is a prime example of why NCHRP is so important to us.”

From theory to implementation
NCHRP is actively involved in further developing tools to assist transportation agencies with asset management. Michael Bridges, Louisiana Department of Transportation and Development’s undersecretary of the Office of Management and Finance, says, “The original guide—Volume 1—helped us answer the questions ‘What is asset management? How can an agency assess itself on a maturity level? What represents good practice?’ Volume 2, which will be subtitled A Focus on Implementation, will expand on specific implementation strategies. The two parts will work together, and we expect to continue to draw from the guide in Louisiana as we refine and improve our practices.”

The Transportation Asset Management Guide is available online at downloads.transportation.org/AMGuide.pdf. The draft of Volume 2 can be found at onlinepubs.trb.org/onlinepubs/nchrp/docs/NCHRP08-69_TAMGUIDE_VOLUMElII.pdf.

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