

TRB/NCHRP Research on Asset Management

Research Underway

Research Topic	Status
Transportation System Performance Management Programs – Insight from Practitioners	NCHRP Project 8-62. Development a guidebook that reflects current practice in designing, implementing, and sustaining transportation performance management programs in state DOT's. Final report anticipated Winter 2009.
Supplement to the AASHTO Transportation Asset Management Guide: Volume 2 – A Focus on Implementation	NCHRP Project 8-69. Development of an implementation guide for asset management including processes and tools that can be used to implement TAM, strategies for enhancing communication about TAM and ways ERP systems can effectively support TAM. Final report anticipated in Spring 2010.
Target Setting Methods and Data Management to Support Performance-Based Resource Allocation by Transportation Agencies	NCHRP Project 8-70. Development of a comprehensive set of methods for establishing performance targets for all aspects of transportation. Final report anticipated Winter 2009.
Methodology for Estimating Life Expectancies for Highway Assets	NCHRP Project 8-71. Expand methodology of determining life expectancy for major assets to other asset types; investigate the benefits of maintenance actions and their impact on life expectancy. Contract pending.
Decision Making for Outsourcing and Privatization of Vehicle and Equipment Fleet Maintenance	NCHRP Project 13-03. Development of a recommended process for making decisions on outsourcing and privatization of vehicle and equipment fleet maintenance. Final report anticipated Spring 2009.
Determining Highway Maintenance Costs	NCHRP Project 14-18. Determination of agency costs for routine and preventive maintenance operations. Contract underway. Anticipated completion summer 2010.
Culvert Rehabilitation to Maximize Service Life While Minimizing Direct Costs and Traffic Disruption	NCHRP Project 14-19. Develop a handbook that provides up-to-date guidance to assess the existing condition of culverts; provides assistance in the selection and design of suitable rehabilitation options. Project underway.

Developing an Asset Management Plan for the Interstate Highway System	NCHRP Project 20-74. Identification of appropriate asset indicators for the interstate highway system and development of an implantable asset management framework for interstate highway system investments. Draft final report completed Fall 2008.
Development of National Level of Service Criteria for the Interstate Highway System	NCHRP Project 20-74A. Development of a standard way to describe the service level of Interstate Highway System assets that could be used to benchmark performance. Final report anticipated Spring 2010.
Asset Management of Environmental Mitigation Features	Jointly funded under NCHRP Project 8-36 (Task 84) and NCHRP Project 25-25 (Task 51). Gather information on best practices on asset management approaches to environmental mitigation features. Project underway.
A Model Guide for the Development and Use Condition Assessment Systems for Transportation Assets	NCHRP Project 20-7(Task 206). Final report delivered to panel. Publication decision pending by AASHTO.
Assessment of State-of-the-Practice for Identifying Earth Retaining Structures	NCHRP Project 20-7(Task 259). This task will develop recommendations for conducting an inventory and condition assessment of earth retaining structures. Project underway. Anticipated completion in winter 2009.
Use of Bridge Management for Transportation Agency Decision-Making	NCHRP Synthesis Topic 37-07. Gather information on current practices that agency CEO's and senior decision-makers use to make network level funding decisions for their bridges. Publication anticipated spring 2009.
Performance Based Contracting for Maintenance	NCHRP Synthesis Topic 37-09. Gather information on implementation of performance-based maintenance contracting. Publication anticipated late January 2009.
Pavement Marking Warranty Specifications	NCHRP Synthesis Topic 39-13. Gather information on the benefits of using warranty specifications, specification guidelines, items to include in bid package, and cost associated with different specifications. Project underway. Publication anticipated summer 2009.

Completed Research

Research Topic	Status
Transportation Asset Management Guide	First generation asset management guide adopted and published by AASHTO. Research conducted under NCHRP 20-24(11).
Transportation Asset Management in Australia, Canada, England and New Zealand	Published as FHWA-PL-05-019. Conducted as an international scan under NCHRP 20-36.
U.S. Domestic Scan Pilot: Asset Management	FHWA has published the scan report. Conducted as a domestic scan under NCHRP 20-68(01).
A Review of DOT Compliance with GASB 34 Requirements	Published as NCHRP Report 522
Analytical Tools for Asset Management	Published as NCHRP Report 545; contains two software components: Asset Manager NT and Asset Manager PT
Performance Measures and Targets for Transportation Asset Management	Published as NCHRP Report 551
Multiple Objective Optimization for Bridge Management Systems	Published as NCHRP Report 590.
GASB 34 - Methods for Condition Assessment and Preservation	Published as NCHRP Report 608.
Collecting, Processing and Integrating GPS Data Into GIS	Published as NCHRP Synthesis 301.
Performance Measures of Operational Effectiveness for Highway Segments and Systems	Published as NCHRP Synthesis 311.
Strategic Planning and Decision Making in State DOT's	Published as NCHRP Synthesis 326.
Automated Pavement Distress Collection Techniques	Published as NCHRP Synthesis 334.
Pavement Management Applications Using GIS	Published as NCHRP Synthesis 335.
Managing Selected Transportation Assets: Signals, Lighting, Signs, Pavement Markings, Culverts, and Sidewalk	Published as NCHRP Synthesis 371.
Asset Management Approaches to ADA Compliance	The report entitled "ADA Compliance at Transportation Agencies: A Review of Practices" was completed under NCHRP 20-07, Task 249 and is available online.
Strategic Performance Measures for State DOT's	NCHRP Project 20-24(Task 37B) looked at pavement smoothness (IRI) as a comparative measure. The results have been published by AASHTO in the report "Comparative Performance Measurement: Pavement Smoothness"
Asset Management in Planning and Operations: A Peer Exchange	Published a Transportation Research E-Circular E-C076

Updated: 1/8/09