

POLICY AND ORGANIZATION GROUP

Committee Triennial Strategic Plan (TSP)

Committee Name and Number: ABC40 Transportation Asset Management

Committee Chairperson: Sue McNeil

TSP Three-Year Period: April 15, 2006 to April 15, 2009

Date Prepared: April 6, 2009

1. Committee Scope:

A. When did your committee last consider the scope?

The scope was revised during the committee's strategic planning process in Spring 2007.

B. Does the current scope statement accurately reflect your committee's activities?
Should the scope be modified?

Yes, the scope should be modified to reflect the changes made in the strategic plan.

B. What changes are proposed and why are these changes necessary?

The scope should be changed from:

The committee brings together practitioners and researchers to consider current asset management practice across all transportation modes, develops research needs, and encourages dialog and wide dissemination of information through meetings, workshops, conferences, and publications. Asset management is a systematic process for maintaining, upgrading and operating the physical assets of the transportation system by employing engineering principals, economic theory, sound business practice, and information systems to determine optimal short and long-term resource allocations. The committee recommends how the topic can best be addressed within TRB.

To the revised scope as presented in the strategic plan:

The Committee seeks to advance the state of art and state of the practice in asset management. Asset management is a process to strategically manage the transportation system in a cost-effective and efficient manner. Asset management by its nature is a collaborative process, and the Asset Management Committee works with other TRB Committees across all modes, with the AASHTO Asset Management Subcommittee, and with other partners.

The revised scope was developed by the strategic planning committee in Spring 2007. The group felt that the original scope was too wordy and not specific enough. The original emphasized activities that any committee can do rather than the focus of the Asset Management committee. The revised scope was also more in line with other committees in terms of reflecting the technical focus of the committee.

2. Committee Strategic Planning

- A. Has your committee conducted strategic planning sessions? If so, please attach results.

The committee developed a strategic plan during 2007. The committee agreed on the strategic plan at the January 2008 annual meeting. The plan is attached.

- B. If you have not done strategic planning, what are your committee's strategic directions for the future?

Not applicable

3. Critical and Cross-cutting Issues

Identify committee's activities that helped address any critical and cross-cutting issues identified by (a) the committee, (b) the TRB Executive Committee (<http://onlinepubs.trb.org/Onlinepubs/general/CriticalIssues06.pdf>), (c) the Technical Activities Council (<http://onlinepubs.trb.org/Onlinepubs/dva/DivAGuide.pdf>, p. 58), and (d) the Policy and Organization Group (<http://www.trb.org/Committees/AB000/IssueDesc2006.pdf>) that fall under the scope of the committee.

- A. What are the key long term and emerging issues that your committee is tracking?

Many of the activities of the committee address critical and cross-cutting issues because asset management is by definition a cross cutting issue. Table 1 summarizes the critical and cross-cutting issues addressed by the various activities of the committee. The issues are categorized as issues identified by the TRB Executive Committee, issues identified by the Technical Activities Council and issues identified by the Policy and Organization group. Table 2 lists issues not addressed by the Asset Management Committee activities. While all of these issues are relevant to asset management, they have not been explicitly addressed by a particular activity.

- B. What plans do you have to address cross-cutting issues with other committees?

Table 1 also shows the other committees involved in the various activities. In the case where another committee or organization has taken the lead, the collaborating committee is shown in bold.

The committee plans to continue collaborating with other committees. For example the planned 2009 Asset Management Conference includes tracks on Safety, Pavement Management and Data.

Table 1. Activities Related to Critical and Cross Cutting Issues

TRB Executive Committee	Technical Activities Council	Policy and Organization Group	Activity	Collaborating Committees
Energy and Environment	Transportation and energy; Balancing environmental and transportation goals	Transportation and Sustainability	Session 2009 – Greening Asset Management in Transportation Maintenance and Operations	Maintenance and Operations Management ; Ecology and Transportation; Roadside Maintenance Operations
			Session 2009 – Sustainability Issues in Pavement and Asset Management	Pavement Management Systems
Finance	Making transportation Investments; Show me the money	Finance	Session 2007- What Planners Need to Know about Transportation Finance	Statewide Multimodal Transportation Planning ; Metropolitan Policy, Planning, and Processes; Transportation Programming, Planning and Systems Evaluation; Taxation and Finance
			Session 2008 – Executive Issues in Transportation Public-Private Partnerships	Strategic Management; Taxation and Finance
			Session 2008 – Comparison of Public-Private Partnership Approaches to Traditional Methods: Valuation Techniques, Methods and Tools	Taxation and Finance
Human and Intellectual Capital	Shortage of Personnel	Human and Intellectual Capital	Session 2008 – Change Management in State Departments of Transportation	Management and Productivity
			Sessions 2006, 2007, 2008, and 2009 – Best presentations from the Annual Interuniversity Symposium on Infrastructure Management (AISIM) (These are presentations by graduate students)	Pavement Management (With assistance from the Infrastructure Management Research and Education – IMRE- group)

TRB Executive Committee	Technical Activities Council	Policy and Organization Group	Activity	Collaborating Committees
Infrastructure	Renewing infrastructure		December 2008 - Transportation Research Circular E-C131, Transportation Asset Management: Strategic Workshop for Department of Transportation Executives	Task Force on Accelerating Innovation in the Highway Industry
			Preservation Research Roadmap http://www.tsp2.org/roadmap/	National Center for Pavement Preservation; AASHTO
			2007 Conference – New Directions in Asset Management and Economic Analysis	Transportation Economics; Marine Group; Roadway Pavement Preservation Task Force; Pavement Maintenance; AASHTO; APWA; NACE, National LTPA Association
Institutions		Institutions	Session 2007 – Successful Asset Management and the Role of Organizational Culture	Strategic Management; Performance Measurement, Management and Productivity
			Session 2008 – Comparative Performance Measurement : Sharing Good Practices	Strategic Management; Management and Productivity; Performance Measurement; Pavement Management Systems; Surface Properties- Vehicle Interaction
			Session 2008 – Making Organizational Improvements: Recent Cases of Progress	Strategic Management
Safety	Safety		Session 2007 – Safety Management and Asset Management	Transportation Safety and Management; Performance Measurement; Geographic Information Science and Applications; Statewide Transportation Data and Information Systems
			2006 – Peer Exchange 2007 - Circular E-C111, Integrating Roadway, Traffic, and Crash Data	Statewide Transportation Data and Information Systems; Geographic Information Science

TRB Executive Committee	Technical Activities Council	Policy and Organization Group	Activity	Collaborating Committees
	Freight	Global Trade and Competition	Workshop 2007 – Asset Management for Ports	Marine Environmental; Ports and Channels; Inland Water Transportation
			Port Track at 2007 Asset Management Conference	Maritime Group
		Data and Information Assets	Workshop 2007 – Benchmarking for Data Stewardship in Asset Management	Statewide Transportation Data and Information Systems
			Workshop 2008 – Data Stewardship: Lessons Learned and Benefits	Statewide Transportation Data and Information Systems; Information Systems and Technology
			Peer Exchange 2008 – Aligning Data to Support Transportation Decisions Peer Exchange	Statewide Transportation Data and Information Systems
			Workshop 2009 – Developing Transportation Data Quality Standards	Transportation and Sustainability; Statement Transportation Data and Information Systems; Statewide Multimodal Transportation Planning, National Transportation Data Requirements and Programs
			Workshop 2009 – Aligning Data Programs to meet Transportation Agency Needs	Statewide Transportation Data and Information Systems

Table 2. Critical Issues Not Addressed by the Asset Management Committee

TRB Executive Committee	Technical Activities Council	Policy and Organization Group
Congestion	Capacity	
Emergencies	Security	Emergency Preparedness
Equity		
	Integrating Modes and Institutions	
	Matching systems to communities	Changing Demographics

4. Committee Activity Plans

A. What activities are planned next year to achieve your goals?

Planning for four major activities is already underway:

- Conference – November 2009 – Portland that will include a peer exchange, meetings of an NCHRP panel and PIARC, and workshops sponsored by FHWA.
- Sessions – Annual Meeting – 6 topics areas are under development
- Special issue of TR News focused on asset management. A proposal has been submitted and the special issue should appear in Oct/Nov of 2010.
- AISIM5 – 5th Annual Inter-University Symposium on Infrastructure Management will be held at University of Iowa in June 2009. The best presentations from this student run, student focused symposium are selected for presentation at a session at the Annual Meeting. The session is cosponsored with the Pavement Management Committee and is intended to showcase the work of the next generation of researchers. AISIM is organized by IMRE.

B. What activities are envisioned in future years?

The strategic plan proposed a new subcommittee structure. The committee must devote some effort to getting this new subcommittee structure off the ground. The committee will continue to work with the long list of other committees on ongoing activities including research needs statements, peer exchanges and conferences.

5. Committee Organization and Membership

A. Describe the membership gender and racial diversity.

18 Members, 5 International, 2 Younger Members
6 Women, 2 African Americans

B. How is membership distributed geographically?

Eastern _8_ Central _8_
Western _4_ International _5_

C. How is membership distributed across professional affiliation?

State Government _4_ Federal Government _4_

Education _10_
Local Government _2_

Private Sector _5_
Nonprofit/Other ___

D. How many “friends” are associated with the committee? 85

D. List subcommittees and their chairs.

Permanent subcommittees

- **Conference Planning** – Chairs: Francine Shaw-Whitson, Cathy Nelson.
- **Paper Review** – Chairs: Tim Lomax, Jason Bittner.
- **Research** – Chair: TBD

Subject Subcommittees

- **Asset Life Cycle – The Broad View** – Chairs: Will Puffer
- **Integration of Operations and Maintenance** – Chairs: Katie Zimmerman, Lacy Love
- **Performance Measurement** – Chairs: Roy Jurgens, Jeff Price

6. Interaction with Other TRB Committees, Organizations, and Customers

A. List other TRB committees which your committee maintains a formal liaison representation.

Listed in Table 3.

B. List outside organizations which your committee maintains ongoing liaison representation.

Listed in Table 3.

E. List shared activities during the past year (examples should include work on cross-cutting issues, information exchange, research, etc.)

Listed in Table 1.

Table 3. Liaisons with Other TRB Committees and Organizations

TRB Committees and Other Groups	Liaison	Topic Areas
AASHTO Asset Management Subcommittee http://assetmanagement.transportation.org	Lacy Love	Public Private Partnerships Life Cycle Risk and Asset Valuation
AASHTO Maintenance Committee http://maintenance.transportation.org/?siteid=76	Lacy Love	Integration of Maintenance and Operations
ADD40 Transportation and Sustainability	Adjo Amekudzi	Life cycle
AFB50T Task Force on Context Sensitive Design/Solutions (CSD/CSS)		Life cycle Green issues
ASCE Infrastructure Systems Committee http://www.asce.org/	Gerardo Flintsch	Performance Measurement

TRB Committees and Other Groups	Liaison	Topic Areas
Bridge Management http://webboard.trb.org/default.asp?boardid=13	Pannapa Herabat	Tradeoffs
Geographic Information Science and Applications http://www.ncgia.ucsb.edu/ABJ60/	Tom Maze	Data as an Asset
IMRE http://128.173.204.63/IMRE_Workshop/IMRE%20Final%20Report.pdf http://www.aisim.org/	Gerardo Flintsch	Education and Training
LTAP/T2 http://www.ltapt2.org/	Terry McNinch	Education and Training
Maintenance (includes Pavement Maintenance, Maintenance and Operations Management, etc.) http://webboard.trb.org/default.asp?boardid=13	Katie Zimmerman	Public Private Partnerships Life cycle Integration of Maintenance and Operations
National Center for Pavement Preservation http://www.pavementpreservation.org/	Katie Zimmerman	Integration of Maintenance and Operations
National Transportation Operations Coalition http://www.ntoctralks.com/		Performance Measurement
Pavement Management Systems	Stuart Hudson	Tradeoffs
Performance Measures http://www.trb-performancemeasurement.org/	Jeff Price	Risk and Asset Valuation Performance Measurement
Policy and Organization Group http://www.trb.org/Committees/AB000/	Sue McNeil	Organizational Culture/ Institutional change
Statewide Data and Information Systems http://webservices.camsys.com/trbcomm/home.htm	Jack Stickel	Data as an Asset
Strategic Management	Francine Shaw Whitson	Public Private Partnerships Life cycle
Taxation and Finance http://webboard.trb.org/default.asp?boardid=68	Will Puffer	Public Private Partnerships Life cycle Risk and Asset Valuation
Transportation Economics http://transportationeconomics.org/	Doug Lee	Life cycle

7. Business Meeting Attendance (information from the most recent meeting)

A. Annual business meeting: Members 13 Guests 54

B. Summer business meeting: Members 6 Guests 9 NA

8. Technology Transfer Activities for Colleagues and Customers

A. Is the committee planning to publish documents within the next two years?
(proceedings, circulars, etc.)

Please list and give anticipated dates.

- E-Circular from November 2009 Conference.

- Each subject subcommittee will be encouraged to develop an e-circular to serve as a resource for the particular subject area.

C. Workshops proposed (excluding the TRB Annual Meeting).

Several workshops will be held as part of the National Asset Management conference to be held in November 2009. The topics are:

- Economic Analysis of Highway Projects Using the Web-based Project-level Benefit-Cost Model & Analysis Tool, BCA.Net.
- Application of Life-Cycle Cost Analysis(LCCA) in the Selection of Preservation Strategies
- Principles and Practices of Data Integration for Transportation Asset Management,
- Highway Economic Requirements System – State Version (HERS-ST)

D. Conferences proposed.

Planning is currently underway for the 2009 Asset Management Conference. We anticipate holding another conference in 2011.

E. Other activities (web pages, newsletters, updating of millennium paper, etc.)

- The committee has submitted a request to serve as a co-sponsor of the FHWA webinars on asset management. Members of the TRB committee already collaborate with FHWA and the AASHTO subcommittee to select topics and speakers for the webinars. The proposed co-sponsorship would formalize this arrangement and permit us to promote the webinars using TRB channels such as the TRB E-News.
- A proposal has been submitted for a theme issue of TR News on asset management. This will involve

9. Research Needs and Problem Statements (Of particular interest are problem statements for TRB Cooperative Research Programs, but please list related activities your committee is involved with as well.)

A. How do you determine and select research needs and problem statements?
(workshops, call for ideas, etc.)

Research needs and problem statements are generally solicited in committee meetings and via email. Topics are selected based on discussion and consensus. Some consideration has been given to an email ballot but that has not been necessary.

B. Number of Research Problem Statements currently under development?

None directly.

C. List Research Problem Statements funded during last three years?

In cooperation with the AASHTO Subcommittee on Asset Management, the success rate of asset management related research proposals is quite high.

Attachment A. includes a list of NCHRP Research on Asset Management.

D. Are the statements available to the public (for example, in TRB Research Needs Database, <http://rns.trb.org/>)?

Yes

10. General Remarks and Comments Offered by the Committee

- A. Should your committee continue in its present form with its present title?
If no, please explain.

Yes

- B. Should it be merged with one or more other committees?
If yes, please explain.

No

- F. Any other comments considered appropriate by the committee.

The committee's location under the Management and Leadership section of the Policy and Organization Group mean that the activities of the committee are often dismissed or ignored by the engineering side of TRB. In addition to the current activities (co-sponsored sessions, working groups), some consideration should be given to holding some TRB Annual Meeting activities at the Marriott or Shoreham rather than solely at the Hilton.

The committee also needs to consider broadening its scope and activities to include fleet, equipment, facilities, communications, and personnel.

11. Annual Reports of Committee Activities (Please attach last three years of annual reports and supporting documents).

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