

2010/Strategic Plan/2014



American Association of State Highway and Transportation Officials
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STANDING
COMMITTEE
ON HIGHWAYS



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Executive Summary

This is the proposed Strategic Plan for the AASHTO Standing Committee on Highways (SCOH). It will guide SCOH for the next four years as the committee seeks to serve its member states and to support the AASHTO Strategic Plan.

This plan represents the first new SCOH Strategic Plan since 1998. To capture the many important issues which have arisen since then, the plan's development relied upon extensive collaboration which included:

- Reviewing survey responses from more than 360 AASHTO committee members;
- Interviews with 20 key stakeholders including other AASHTO committee chairs;
- A review of the survey responses, briefing papers and workshop proceedings which fed the AASHTO Strategic Plan update;
- Two-and-a-half days of workshops by SCOH members;
- The formation of 10 SCOH Work Groups who drafted objectives and action items;
- Ten briefing papers and over 40 conference calls with the 10 Work Groups;
- Sixteen versions and three rounds of circulating the draft plan for comment, both within and outside of SCOH;
- Presentations and discussions by outside AASHTO committee members and stakeholders on the draft objectives and action items.

Particular emphasis was given during the drafting of this plan to complementing the AASHTO Strategic Plan. While recognizing the extraordinary value of their committee's technical products, SCOH members also recognized that they had much to offer in the support of AASHTO's policy initiatives. The SCOH members crafted this plan to retain SCOH's long-standing technical focus while adding significant new emphasis upon policy engagement. This additional policy focus is the direct result of the survey responses and stakeholder interviews. They indicated that SCOH should direct its considerable resources and expertise to the support of critical AASHTO policy issues, such as increasing investment, communicating the value of transportation, and documenting transportation agencies' performance.

As a result of the aforementioned activities, SCOH members have identified ten specific and two overarching Objectives and 40 related Action Items that are enumerated in this plan. The two overarching Objectives relate to Technical and Governance Issues. The ten specific Objectives are:

- Cut Fatalities in Half by 2030
- Congestion-Free America
- System Preservation
- Project Delivery
- Freight
- Performance Management
- Workforce Planning and Development
- Research and Emerging Technology
- Climate Change and
- Communicating the Value of Transportation

The success of the Strategic Plan depends upon its execution. After adoption, an Implementation Plan will be developed to track its progress. The intent of this Strategic Plan is to capitalize on the unparalleled technical skills, policy experience, and management expertise of SCOH and its many subcommittees and task forces. Implementation of the Strategic Plan will direct their efforts toward meeting the considerable challenges facing SCOH members, their states, AASHTO, and the nation's transportation system.

VISION

To be the leader of technical innovations and policy development for the highway transportation system.

MISSION

In support of the AASHTO Strategic Plan, develop and advocate policies, technical standards, services, and innovations to enable the nation and member states to have a world-class highway network as part of a safe, efficient, and sustainable multi-modal transportation system supporting the nation's economy and quality of life.

1. Overarching Objectives and Action Items

1.1 Technical Services

SCOH Strategic Objective on Technical Services

Develop and effectively disseminate standards, specifications, technical policies, technological advancements, and best practices that improve the quality and safety of the nation's highway system while integrating it into a modern, multi-modal transportation network.

■ *ACTION ITEM*

ACTION 1

SCOH will provide the strategic direction on priorities to its subcommittees and technical committees for their development of policies, procedures, and technical standards.

■ *RELATED AASHTO GOAL AND OBJECTIVES*

AASHTO GOAL 3

Provide world class technical services.

AASHTO STRATEGIC OBJECTIVE 3A

Identify, communicate, and facilitate use of emerging research, technologies, materials, processes, and programs.

AASHTO STRATEGIC OBJECTIVE 3B

Increase use of AASHTO technical services and products.

AASHTO STRATEGIC OBJECTIVE 3C

Maximize participation in technical activities.

AASHTO STRATEGIC OBJECTIVE 3D

Expand training opportunities and the array of offerings by using “webinars,” video conferencing, and other technologies.

1.2 Governance Issues

SCOH Governance Goal

Ensure ongoing coordination and collaboration between SCOH and its Subcommittees, the Board of Directors, and other AASHTO standing committees.

SCOH Strategic Objective on Governance

Develop an organizational structure and communication and coordination system to ensure cross-jurisdictional issues between SCOH and other AASHTO groups, as well as with its subcommittees and task forces, are addressed effectively.

■ *ACTION ITEM*

ACTION 1

SCOH will charge a Governance Task Force consisting of Subcommittee Chairs and SCOH members to

- Recommend an organizational structure and communication and coordination mechanisms to improve coordination and communication vertically and horizontally across the Standing Committee on Highways,
- Develop and deliver a reporting and monitoring system which keeps SCOH leadership focused upon execution of the Strategic Plan,
- Recommend a new SCOH meeting format to:
 - Allow for greater peer exchange and discussion on critical issues, and
 - Provide time on the SCOH meeting agenda at both spring and annual meetings to discuss the top issues from the Chief Engineers' perspective and recommendations on approaches, strategies, solutions, and/or actions to address them. These top issues and recommended actions to address them will then be presented to the Board of Directors.

2. Freight

SCOH Strategic Objective on Freight

Support the improvement of the national freight network to keep America competitive in the global economy.

■ ACTION ITEMS

ACTION 1

SCOH will support and collaborate with the AASHTO Freight Committees (Special Committee on Intermodal Transportation and Economic Expansion, Standing Committee on Rail Transportation (SCORT), Standing Committee on Water Transportation (SCOWT), and the Subcommittee on Highway Transport (SCOHT)), FHWA, and industry associations and representatives to identify and define the national freight system and related intermodal connectors.

ACTION 2

SCOH will support and participate with the AASHTO Freight Committees, FHWA, and industry associations and representatives to review and assess bottlenecks and operational problems with freight, movement on the transportation system. This activity will also result in identification of engineering, freight and logistics best practices to minimize impacts and maximize system efficiencies related to operational deficiencies.

ACTION 3

SCOH will review and revise the charge and charter of SCOHT to ensure that the subcommittee takes a more expansive role in the development of freight policy and practice. Specifically, the charge of the subcommittee, as a representative of the SCOH, will be revised to work with other freight and intermodal committees to address freight advocacy in transportation policy development, efficient freight movement, intermodal connectivity, and economic development related to freight.

■ **RELATED AASHTO GOAL AND OBJECTIVE**

AASHTO GOAL 1

Re-establish transportation as a national priority.

AASHTO STRATEGIC OBJECTIVE 1B

Improve the national freight network to keep America competitive in the global economy.

3. Cut Fatalities in Half by 2030

SCOH Strategic Objective on Cutting Fatalities by Half by 2030

Promote highway-related strategies to assist in cutting fatalities by half by 2030 with a vision towards zero fatalities.

■ **ACTION ITEMS**

ACTION 1

SCOH will set aside time at SCOH meetings for members to discuss best practices and lessons learned based on strategies they used to address safety in their home states. SCOH will also ask its subcommittees to present a summary of strategies developed to help reduce fatalities. SCOH will also request Standing Committee on Highway Traffic Safety (SCOHTS) Chair/Vice Chair to provide updates on strategies developed and implemented through SCOHTS to address the reduction of fatalities and the results of these activities. Results of these implementations will be considered for inclusion in the Chief Engineers report.

ACTION 2

SCOH will collaborate with SCOHTS and support strategies identified by SCOHTS and SCOHTS Subcommittee on Safety Management to help states work with their local partners to reduce fatalities on local roads.

ACTION 3

SCOH will provide input to Standing Committee on Research (SCOR) and Technology Implementation Group (TIG) in prioritizing research and use of technologies including ITS and IntelliDrive in addressing collision and fatality reduction.

ACTION 4

SCOH members will be actively involved in communicating national safety messages packaged to be communicated at the state and at the local level. SCOH will accomplish this by coordinating the effort with SCOHTS-SM and will work with AASHTO Headquarters and the Subcommittee on Public Affairs to package the material.

ACTION 5

SCOH and SCOHTS will jointly sponsor webinars and conduct joint meetings to discuss and sponsor research proposals and other joint activities to increase collaborative efforts to reduce fatalities.

■ **RELATED AASHTO GOAL AND OBJECTIVE**

AASHTO GOAL 1

Re-establish transportation as a national priority.

AASHTO STRATEGIC OBJECTIVE 1D

Cut fatalities in half by 2030.

4. Congestion-Free America

SCOH Strategic Objective on Congestion

Strive to create a congestion-free America by integrating advanced technologies and enhanced operations to efficiently manage the multimodal transportation system, while strategically adding capacity with a focus on improving the performance of the overall system.

■ **ACTION ITEMS**

ACTION 1

SCOH will provide guidance on innovative ways to strategically increase physical and operational capacity to maximize efficient operations and performance of the national transportation network. SCOH will accomplish this by funding a synthesis study to create a compendium of national and international best practices, procedures, and processes that have been successful in maximizing the operational efficiency of the national transportation network.

ACTION 2

SCOH will advance innovative operations to improve system performance by identifying best practices on emerging initiatives and organizational structures appropriate to facilitate broad implementation. SCOH will also explore the creation of a Resource Center to facilitate broad implementation of best practices.

ACTION 3

SCOH will provide support, promote the SHRP 2 program, and be actively involved in the implementation of SHRP2 projects that address congestion, reliability, and mobility issues by having SCOH members involved with the four SHRP2 implementation task teams that have been created. These SCOH members will communicate SCOH's perspective to the implementation task teams and report back to SCOH members on progress of SHRP2 projects being implemented.

■ **RELATED AASHTO GOAL AND OBJECTIVE**

AASHTO GOAL 1

Re-establish transportation as a national priority.

AASHTO STRATEGIC OBJECTIVE 1F

Create a congestion-free America through improvements to the multimodal transportation system and improve system performance through advanced technology and operations.

5. Climate Change

SCOH Strategic Objective on Climate Change

Identify and disseminate information on new and emerging practices, materials, and technologies related to climate change mitigation and adaptation. Evaluate policy development and technical standards for highway infrastructure planning, design, and development in light of climate change issues. Provide communication and educational resources that support state implementation of these approaches.

■ ACTION ITEMS

ACTION 1

In coordination with AASHTO's Climate Change Steering Committee, support the development and dissemination of new tools and practices for climate change mitigation and adaptation.

ACTION 2

In coordination with AASHTO's Climate Change Steering Committee, evaluate the need for short-term infrastructure rehabilitation projects in response to climate changes in highly vulnerable locations.

ACTION 3

Support AASHTO's Climate Change Steering Committee in reducing Greenhouse gases by exploring, researching, and developing operations strategies that lower energy consumption, reduce congestion, and reduce costs.

ACTION 4

Promote climate change in SCOH's research proposals.

ACTION 5

SCOH will task all its subcommittees to evaluate policy development and technical standards for highway infrastructure planning, design, and development in light of climate change issues. After completing the evaluation, the subcommittees will give a short report to SCOH on changes that need to be made to address climate change.

■ RELATED AASHTO GOAL AND OBJECTIVE

AASHTO GOAL 1

Re-establish transportation as a national priority.

AASHTO STRATEGIC OBJECTIVE 1G

Advocate energy and climate change policies that are in agreement with AASHTO's policies on transportation and enhance the national and state economies, improve national security, and reduce greenhouse gases.

6. Performance Management

SCOH Strategic Objective on Performance and Accountability

Assist the Board of Directors, the Standing Committee on Performance Management (SCOPM), and member states in the development of AASHTO's position on Performance Management, in the dissemination

of state best practices, and in the implementation of any national performance management framework, particularly as it pertains to highway system condition, performance, and operation.

■ *ACTION ITEMS*

ACTION 1

SCOH will form a Performance Management Task Group which will be structured to act quickly in providing technical guidance to AASHTO as it negotiates a set of performance metrics and a performance management process with Congress and the Administration for the re-authorization legislation. SCOH will identify volunteers willing to serve on this task group to represent SCOH in supporting AASHTO staff and other committees as they respond to evolving requests for information related to developing a national transportation performance management process.

ACTION 2

With leadership from SCOPM, SCOH will provide input in developing common definitions and data-collection processes in order to “operationalize” uniform, accurate, timely, and cost-effective highway performance measures.

ACTION 3

SCOH will work with the Standing Committee on Performance Management and the Standing Committee on Planning to facilitate a shift from a process-oriented program and project delivery system to an outcome-based project and program delivery process.

■ *RELATED AASHTO GOAL AND OBJECTIVE*

AASHTO GOAL 1

Re-establish transportation as a national priority.

AASHTO STRATEGIC OBJECTIVE 1H

Promote accountability through performance-based management to enhance the national transportation system, and work with strategic partners to develop a framework of goals, standards and metrics tailored to meet individual state needs.

7. Communicate the Value of Transportation

SCOH Strategic Objective on Communicating the Value of Transportation

Contribute to the efforts of the AASHTO Board of Directors to secure national support for sufficient, sustainable “net new revenue” through a diversified portfolio of funding sources, by communicating the value of transportation to quality of life, to citizens, to communities, and to the economy.

■ *ACTION ITEMS*

ACTION 1

SCOH will support the Board of Directors in communicating the value of transportation. SCOH will:

- Propose a resolution to inform the Board of Directors formally that the Standing Committee on Highways is available and willing to serve as direct communicators or as technical advisors to their efforts of communicating the value of transportation to the citizens, the media, and to legislators,

- Assign three SCOH members to work with the AASHTO Board of Directors and the Subcommittee on Public Affairs to brand and translate AASHTO messages for communication at the SCOH, state, and local level,
- Collaborate with AASHTO and the Board of Directors to develop appropriate policy, programmatic, and technical messages that are aligned with the AASHTO messages. SCOH will look to NCHRP funds to support research efforts involved in developing these messages.
- Work with the Subcommittee on Public Affairs, National Transportation Public Affairs Workshop, and the AASHTO Headquarters Office to ensure that they know that SCOH is available to provide technical expertise to its advocacy efforts. SCOH will work with these groups to identify, document, and share state successes in delivering transportation projects that illustrate and communicate the value of transportation. Examples will include projects delivered using stimulus funds.

ACTION 2

SCOH will issue a periodic Chief Engineers Report that will present information about present and future transportation trends and needs and the ability of our nation's transportation infrastructure to meet those demands. The Chief Engineers Report will include Board of Director strategies for meeting the current and future transportation needs. SCOH will use the Chief Engineers Report and the AASHTO Campaign Toolkit as sources to support the Board of Director's Strategic Plan and to communicate messages at the state and local agencies level.

ACTION 3

SCOH will coordinate with AASHTO in sharing messages about the value of transportation in collaboration with the Associated General Contractors (AGC), the American Road & Transportation Builders Association (ARTBA), and the American Council of Engineering Companies (ACEC).

■ *RELATED AASHTO GOAL AND OBJECTIVE*

AASHTO GOAL 2

Advocate and communicate to achieve AASHTO's goals.

AASHTO STRATEGIC OBJECTIVE 2D

Communicate the value of transportation to citizens, community, quality of life, and the economy.

8. Research and Emerging Technology

SCOH Strategic Objective on Research and Emerging Technology

Identify, develop, and communicate standards, specifications, technical policies, and other guidelines and facilitate the use of emerging research, technologies, materials, processes, and programs in order to have a world-class transportation system that can meet the challenges of tomorrow.

■ *ACTION ITEMS*

ACTION 1

SCOH will prioritize and recommend three to five projects that emphasize high payoff, cross-cutting research areas of critical interest to the chief engineers. SCOH also will be more involved in prioritizing projects submitted to SCOR by its Subcommittees.

ACTION 2

SCOH will ensure that the projects that are implementable within its charge, including those by the subcommittees, are piloted and the outcomes and results will be packaged for appropriate marketing that can be easily reviewed, understood, and adopted by the states, such as short videos, technical briefs, and other materials. SCOH will also ensure that training is developed and deployed to implement these innovative projects and solutions to foster integration into the normal operations of the state DOTs.

ACTION 3

SCOH will expedite adoption of promising innovations that have been pilot tested and appropriately documented so that states can adopt them as standard operating processes/procedures. SCOH will act to focus TIG in certain areas of emphasis that they deem important. SCOH will also evaluate the mechanisms that are available to get projects that have been pilot tested to become part of standard practice, including the role of TIG, as one such mechanism.

ACTION 4

SCOH will appoint a task force or use NCHRP funds to hire a consultant to document the current process of implementing improvements to AASHTO technical standards and have recommendations on options to accelerate updating of manuals and broaden publication development and delivery formats. For significant changes that SCOH desires to fast-track into practice through its guidance and policy manuals SCOH will use electronic ballots to approve technical memoranda instead of waiting for the update and acceptance of complete new manuals and standards.

■ **RELATED AASHTO GOAL AND OBJECTIVE**

AASHTO GOAL 3

Provide world-class technical services.

AASHTO STRATEGIC OBJECTIVE 3A

Identify, communicate, and facilitate use of emerging research, technologies, materials, processes, and programs.

9. Workforce Planning and Development

SCOH Strategic Objective on Workforce Planning and Development

SCOH will support the states by advancing the knowledge and implementation of tools to address workforce planning and development (recruitment, retention, succession planning, core competencies, and professional development) in highway-related disciplines (e.g., highway design, bridge engineering, construction, maintenance, traffic engineering, systems operations, right-of-way, utilities, etc.).

■ **ACTION ITEMS**

ACTION 1

SCOH will appoint representatives to work closely with the Subcommittee on Human Resources to facilitate progress on current and future core highway workforce challenges. SCOH representatives will update SCOH members on progress of these workforce planning and development efforts.

ACTION 2

SCOH will propose to establish a comprehensive workforce assessment tool and training clearinghouse in collaboration with the SCOFA Subcommittee on Human Resources.

ACTION 3

SCOH will propose an NCHRP study to survey, research, and gather information on successful implementation of a corporate university concept for state DOTs.

ACTION 4

SCOH, through its subcommittee structure, will identify priorities for current training needs, including the conversion or development of technical or professional development courses to web-based training or self-study programs. Training that is identified will be developed in collaboration with the AASHTO Subcommittees on Human Resources, FWHA and the National Highway Institute (NHI) and/or other training organizations.

■ **RELATED AASHTO GOAL AND OBJECTIVE**

AASHTO GOAL 4

Assist state DOTs with leadership and performance.

AASHTO STRATEGIC OBJECTIVE 4C

Assist states in addressing issues of workforce recruitment, retention, succession planning, core competencies, and professional development in emerging areas.

10. Project Delivery

SCOH Strategic Objective on Project Delivery

Support accelerated project delivery by contributing to environmental streamlining efforts and promoting agency best practices for expediting the design, review, construction, and inspection of high-quality transportation projects.

■ **ACTION ITEMS**

ACTION 1

SCOH will continue efforts to promote environmental streamlining. SCOH will accomplish this through involvement with the Center for Environment Excellence and by continuing to collaborate with the Standing Committee on the Environment (SCOE), Federal Highway Administration, federal resource agencies, and national advocacy groups.

ACTION 2

SCOH will create a forum to review and discuss the findings of the Domestic Scan Program (NCHRP 20-68A), NCHRP Project 20-73 titled, "Accelerating Transportation Program and Project Delivery: Conception to Completion" and the findings of the SHRP2 capacity research project on collaborative decision making framework. SCOH will create a working group that will provide input and communicate with FHWA and other groups working on expediting project delivery. The SCOH group will brainstorm and study the details of the research findings as it pertains to:

1. Integrating project initiation and programming to accelerate project delivery,
2. Innovative practices in right-of-way and utility clearance,
3. Innovative means to reduce construction duration times, particularly through innovative construction practices and innovative construction procurement methods, and
4. The findings of the SHRP 2 project of ensuring that the right people are involved at key decision points and right processes, information and strategies are used at the right time to ensure timely, if not accelerated project delivery.

The SCOH team will also focus on project delivery during the implementation phase of the Strategic Plan.

ACTION 3

SCOH will task all appropriate SCOH Subcommittees to examine their standards, policies, manuals, and recommended procedures to ensure they promote collaborative best practices identified for accelerating the design, construction, and inspection of high-quality transportation projects and promote collaborative project delivery.

ACTION 4

SCOH will work with the Standing Committee on Performance Management to setup a high level meeting to address the role and relationship between the two Standing Committees and the Task Force on Project Delivery to address cross-cutting issues such as those listed below that are not covered by other subcommittees:

1. Innovative procurement methods such as design-build, best-value, public-private partnerships, etc. (some of these may warrant their own action items),
2. Working with AASHTO/FHWA on context sensitive solutions,
3. State of the practice project management approaches and a project management guide for delivery of highway projects, and
4. Consultant management issues, such as how to most effectively manage consultant contracts.

SCOH needs to play a leadership role in areas pertaining to Project Delivery. Since the Subcommittee on Project Delivery is under the Standing Committee on Performance Management it is important for the leadership of both Standing Committees to meet and discuss the relationship and roles of the Subcommittee with respect to the role and goals of the two Standing Committees.

■ *RELATED AASHTO GOALS AND OBJECTIVES*

AASHTO GOAL 1

Re-establish transportation as a national priority.

AASHTO GOAL 4

Assist State DOTs with leadership and performance.

AASHTO STRATEGIC OBJECTIVE 1C

Accelerate project delivery.

AASHTO STRATEGIC OBJECTIVE 4B

Provide a comprehensive framework for accelerated project delivery of all transportation projects.

11. System Preservation

SCOH Strategic Objective on System Preservation

Advance innovative technologies and state-of-the art techniques, and adopt measurements providing intelligence to improve the condition of the entire highway system.

■ ACTION ITEMS

ACTION 1

SCOH will identify and promote primary technologies, strategies, materials, and processes that support rapid construction, rehabilitation, preservation, and maintenance of the highway system and improve the conditions of the existing highway system with minimum impact to traffic.

ACTION 2

SCOH will assist the AASHTO Board of Directors in advocating to Congress and the public for adequate funding for system preservation. This will include analysis to support funding needs and involvement in the development of reports like the Bottom Line Report and other publications that make the case for adequate funding for system preservation.

ACTION 3

SCOH will actively support implementation of research being conducted in the SHRP2 Renewal track.

ACTION 4

SCOH will actively advance the practice of asset management. SCOH will have the Subcommittee on Asset Management participate in discussions, provide briefings, and participate in Peer Exchanges with SCOH on asset management practices to advance system preservation.

■ RELATED 1998 SCOH GOAL AND OBJECTIVE

1998 SCOH Strategic Plan Goal 3

Develop and advocate implementation of state-of-the-art methods and techniques for highway preservation.

1998 SCOH Objective

System preservation.

