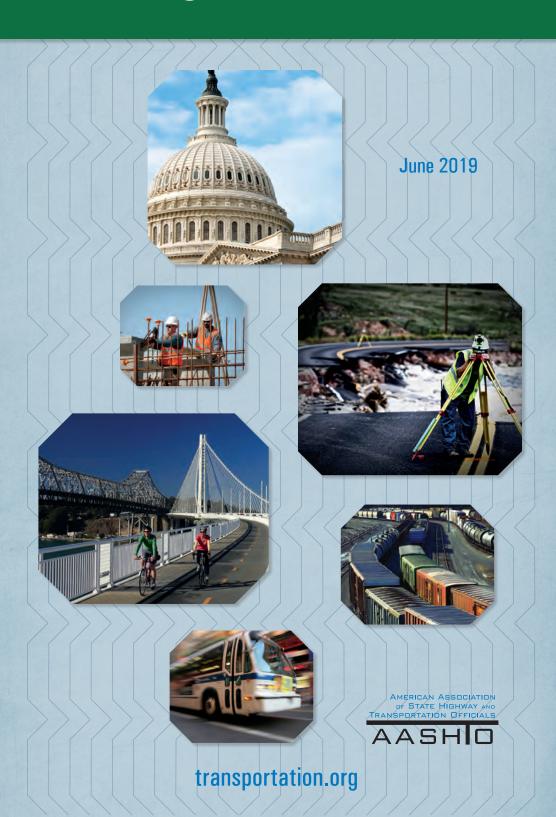
Innovation • Performance • Leadership Communication • Service • Quality

Guide to AASHTO's Technical Service Programs and Products



Message from the Executive Director



The American Association of State Highway and Transportation Officials is proud to offer you and your staff a wide-variety of world-class technical services and products. AASHTO's technical service programs play a critical role in ensuring that participating state departments of transportation have access to the latest technologies and techniques to plan, design, build, operate and maintain our nation's multi-modal transportation system.

With expertise in areas ranging from safety to freight, materials, training, education, new technologies, environmental policy, and project finance, AASHTO's technical service programs promote innovation in the delivery of

the services and products that are important to state DOTs and the customers you serve.

This Guide to AASHTO's Technical Service Programs and Products is intended to keep you apprised of the various services and programs currently offered, as well as their intended benefits for participating transportation departments.

We are honored to work with you through these technical service programs to continue the state DOTs' legacy of innovation and ingenuity that has defined AASHTO's work in the past and will continue to guide it in the future.

If you have questions regarding AASHTO membership or technical services, please do not hesitate to contact me.

Sincerely,

Jim Tymon

Jim Tymon

AASHTO Executive Director

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Overview of AASHTO and Its Member Benefits

Our Vision

The American Association of State Highway and Transportation Officials supports members in the development of transportation solutions that create economic prosperity, enhance quality of life, and improve transportation safety in our communities, states, and the nation as a whole.

Our Mission

The American Association of State Highway and Transportation Officials supports its members through policy development, advocacy, technical services, and leadership development and through advancing partnerships and promoting innovation.

AASHTO's Values

AASHTO has several core values that govern its day-to-day decision making. AASHTO is:

- Safety-Focused (in operations and through relentless pursuit of safer transportation);
- Innovative and Adaptable (forward-looking and willing to explore new solutions and adapt to evolving member needs);
- Collaborative (active in partnership and inclusive to those with shared vision and values);
- Accountable (open and transparent, responsive to stakeholder needs, operating with integrity);
- Service-Oriented (activities and initiatives are aimed at supporting member departments and their interests).

AASHTO's Goals and Strategies

AASHTO's goals and strategies are identified in the AASHTO Strategic Plan. They are based on input from surveys and discussions with AASHTO leaders, staff, and membership, and an assessment of the strengths, weaknesses, opportunities, and threats of AASHTO. The Plan focuses on four key goals:

- 1. Provide Value to Members
- 2. Provide Innovative Technical and Professional Services and Products
- 3. Be a Leader in National Transportation Policy Development
- 4. Communicate the Value of Transportation

Technical and Policy Leadership and Assistance to States

AASHTO is guided by a Board of Directors made up of the chief transportation officials from the 50 states, the District of Columbia, and Puerto Rico. The 12-member Executive Committee is led by AASHTO's officers and is assisted by its executive director.

AASHTO's policy development, standards setting, and technical activities are the product of volunteer state department of transportation personnel who work through the AASHTO committee structure. The committees collaborate throughout the year and typically meet annually. These committees, which represent the highest standard of transportation expertise in the country, address virtually every element of planning, designing, constructing, operating, and maintaining transportation services.

Centers of Excellence

AASHTO offers its members capacity building and training, technical services, and tools focused on transportation finance and procurement, environmental stewardship and project delivery, and Census-based trans-

portation planning data, among others. Built on a robust partnership with the U.S. Department of Transportation, trade associations, and private sector experts, these services and opportunities are provided through the Center for Environmental Excellence, Build America Transportation Investment Center (BATIC) Institute: An AASHTO Center for Excellence, Census Transportation Planning Products (CTPP) Program, and National Operations Center of Excellence (NOCoE).

AASHTOWare

AASHTO is the premier developer of transportation-related software products based on many of its standards, specifications, and guide documents, which are designed specifically to meet the needs of today's transportation agencies. The AASHTOWare technical service program is based on a "best practices" approach. It allows member agencies to pool their resources to produce software at a significant cost savings. www.aashtoware.org.

National Transportation Leadership and Management Conferences

AASHTO's National Transportation Management Conferences, a series of one- and two-week courses, provide new transportation managers with an introduction to fundamental management concepts and help more experienced middle-managers to grow leadership skills. The National Transportation Advance Leadership Institute will offer a unique senior executive management experience centering around emerging national policy insights and enhanced organizational and executive leadership skills.

Engaging the Public in Support of Transportation

AASHTO works to build public support and recognition for a solid transportation system, which is the foundation for the nation's future success. Through its outreach campaign, AASHTO works to generate media attention, sponsor events, and create communications tools to get this message out to the public.

Through reports highlighting the fiscal and physical conditions of the nation's highways, bridges, and transit, and by using events and other opportunities to engage the public in a national dialogue on the web, in print, and through face-to-face meetings, AASHTO will continue to showcase the smart solutions being offered by states to the many transportation challenges ahead.

News and Communications

AAASHTO publishes daily and weekly news products and maintains an extensive website as part of its efforts to communicate the latest information on the association and the transportation industry to our members and other interested parties. Electronic subscriptions are available free of charge at news.transportation.org.

The Daily Transportation Update is published every business day. It contains links to transportation stories published across the country and Federal Register notices pertaining to the transportation sector.

The weekly AASHTO Journal reports on transportation news at the Federal and state levels.

Transportation TV is AASHTO's comprehensive web channel, presenting thought-provoking, industry-related videos, at TransportationTV.org. You can also follow AASHTO on Facebook (www.facebook.com/AASHTOspeaks) and Twitter (www.twitter.com/AASHTOspeaks).

Transportation.org

AASHTO's website, <u>transportation.org</u>, contains more than 100,000 pages of information about every facet of the association including hot topics, news, press releases, the AASHTO bookstore for publications sales, awards, membership, committees, programs, meetings, presentations, software, and other resources.

AASHTO Mobile

AASHTO Mobile app offers transportation news on the go and real-time traffic anywhere in the United States. Download either AASHTO's iPhone or Android versions of the app from: aash.to/aashtomobile.

Showcasing Smart Solutions and Promising Practices

Standards and Technical Publications



Through AASHTO, the nation's preeminent transportation experts come together to advance the state of the art in transportation from design standards to environmental practices. Through their work, AASHTO develops and publishes more than 125 volumes of standards and guidelines that are used worldwide in the design, construction, maintenance, operation, and administration of highways, bridges, and other transportation facilities. They are available at

bookstore.transportation.org. Members receive 10 free hard copies,

five single-user licenses for digital titles, or a combination of five hard copies and five licenses based on the formats distributed by AASHTO.

Center for Environmental Excellence

The Center provides technical assistance, training, information exchange, partnership-building opportunities, and quick-and-easy access to environmental tools for our member departments. It promotes environmental stewardship in the delivery of transportation services by encouraging innovative ways to streamline the transportation delivery process. The Center's website, environment.transportation.org, provides a clearinghouse of environmental information for transportation professionals, including federal activity, research, best practices, and environmental tools.



National Operations Center of Excellence

The National Operations Center of Excellence (NOCoE) provides a centralized and comprehensive set of resources to serve the Transportation Systems Management and Operations (TSM&O) community. The NOCoE is a collaborative effort of AASHTO, the Institute of Transportation Engineers (ITE), and the Intelligent Transportation Society of America (ITS America), with support from the Federal Highway

Administration (FHWA). The NOCoE consists of two primary services: a web portal and a program of technical services.

BATIC Institute: An AASHTO Center for Excellence

The BATIC Institute: An AASHTO Center for Excellence (BATIC) enhances taxpayer value from transportation investment by promoting public sector capacity building in the analysis, understanding, and use of project finance techniques through a program of training, sharing of best practices, and technical assistance to all State Departments of Transportation and their local partner agencies. The goals of the BATIC Institute are to increase the capacity of policymakers and project sponsors including state DOTs and local partner agencies to understand project finance tools available to all types of projects, create a sound environment for partnership among project delivery stakeholders, and assess projects for potential delivery via public-private partnership (P3), and if suitable, empower their delivery of projects under

this approach.

Additional Technical Service Programs

All of AASHTO's Technical Service Programs (TSPs) have the accountability and obligation to serve AASHTO members. As an AASHTO member department, you have a say in setting the direction for these AASHTO programs. These programs were created by vote of the AASHTO Board of Directors to fulfill specific needs and to pool resources to build a much stronger national program than any one DOT could create on its own. State DOTs can use these programs instead of spending the money, time, and resources to create their own programs, or as a complement to their existing programs and processes. Funding for these programs is provided largely through voluntary contributions from participating state DOTs. Additional funding for various programs comes from fees for service, sponsorships, and federal, state, and local sources. Below please find the Technical Service Program listings and descriptive summaries of the benefits that each of AASHTO's technical programs can provide.

AASHTO Technical Service Programs

Program Name	Annual Contribution*
AASHTO Innovation Initiative (A.I.I.)	\$6,000
AASHTO Rail Resource Center (ARRC)	\$5,000
AASHTO re:source (formerly AMRL)	\$20,000
AASHTOWare®	Varies
Census Transportation Planning Products Program (CTPP)	Varies
Design Publications Maintenance (DPM)	\$15,000
Development of AASHTO Materials Standards (DAMS)	\$10,000
Environmental Technical Assistance Program (ETAP)	\$10,000
Equipment Management Technical Service Program (EMTSP)	\$5,000
Highway Safety Policy and Management Technical Service Program	\$10,000
Load and Resistance Factor Design (LRFD) Bridges and Structures Specifications Maintenance	\$15,000
Multi-State Transit Technical Assistance Program (MTAP)	\$5,000
National Transportation Product Evaluation Program (NTPEP)	\$20,000
Operations Technical Service Program/National Operations Center of Excellence	\$15,000
Resilient and Sustainable Transportation Systems Technical Assistance Program (RSTS)	\$10,000
Snow and Ice Cooperative Program (SICOP)	\$4,000
Transportation Curriculum Coordination Council (TC3)	\$ 20,000
Transportation System Preservation Technical Service Program (TSP2)	\$20,000
Transportation and Civil Engineering (TRAC) and RIDES	\$14,000

AASHTO Innovation Initiative (A.I.I.)

• Website: http://aii.transportation.org

Related AASHTO Committees: Special Committee on Research and Innovation

Program Overview



A.I.I. was established to identify and champion the implementation of a select few "ready to use" innovations, products, or processes that are likely to yield benefits to the users. AII scans the horizon for outstanding advancements in transportation technology and invests time and money to accelerate their adoption by agencies nationwide.

Each year, A.I.I. selects several highly valuable, but largely unrecognized procedures, processes, software, devices, or other innovations that have been adopted by at least one agency, are market ready, and are available for use by other interested agencies.

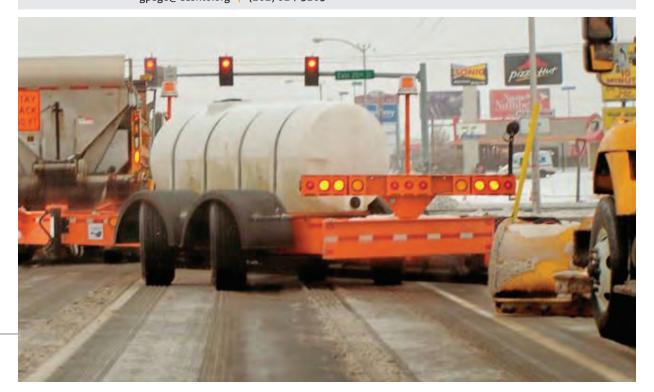
To date, more than 40 transportation agency innovations have been adopted by members through the program. These include now-common advances, such as e-Construction, the TowPlow, Plans on Demand, and the ARC-GIS Online-based geospatial transportation mapping platform known as UPLAN.

■ State DOT Benefits

A.I.I.'s objective is to assist in the implementation of new innovations. This objective is accomplished through two processes: Focus Innovations and Additional Selected Innovations (ASI). The Focus Innovation process entails the formation of a Lead State Team, which is charged with sharing information with AASHTO member agencies, local agencies, and their industry partners to improve the Nation's transportation system. The ASI process includes the development of a white paper touting the benefits of the technology. These processes benefit states by assisting DOTs with the implementation of new technologies.

Annual Contribution: \$6,000

AASHTO Staff Contacts: Glenn Page, Associate Program Director, Project Delivery gpage@aashto.org | (202) 624-5265



AASHTO Rail Resource Center (ARRC)

• Website: https://rail.transportation.org/aashto-rail-resource-center/

Related AASHTO Committees: Council on Rail Transportation; Special Committee on Freight

Program Overview

The AASHTO Rail Resource Center (ARRC) supplies AASHTO members with timely information, tools, and



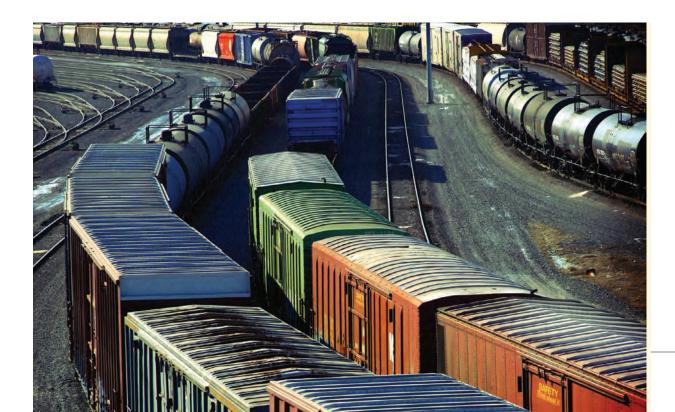
technical assistance to assist them in meeting the growing demand of freight movement and passenger mobility challenges that face our state departments of transportation. The AASHTO Rail Resource Center (ARRC) supports states in providing technical expertise through webinars, peer exchanges, and publications. Another technical training and peer exchange benefit is the use of these funds to be able to reimburse a portion of travel expenses for member states.

■ State DOT Benefits

The ARRC supports states in providing technical expertise through webinars, peer-to-peer exchanges, meetings, internet exchanges, research and publications to assist States in technical training related to safety, rail planning, grants management, environmental compliance, economic development, financing, and benefits/cost analysis. The ARRC is a unique opportunity, not available elsewhere, for states to share information and is a resource to develop best practices that can be used by states across the United States.

Annual Contribution: \$5,000

AASHTO Staff Contacts: Shayne Gill, Program Director for Multimodal Transportation sgill@aashto.org | (202) 624-3630



AASHTO re:source (formerly AMRL)

• Website: www.aashtoresource.org

Related AASHTO Committee: Committee on Materials and Pavements

Program Overview

The programs of the AASHTO re:source, along with the AASHTO Accreditation Program (AAP), and the Cement and Concrete Reference Laboratory (CCRL) program provide technical services that demonstrate the quality of your agency's



construction materials quality assurance and testing program, and protect the department from those who might question your test results and overall program. These programs provide objective evidence demonstrating the continued quality and accuracy of tests performed by your agency and others that perform construction materials testing for the department.

FHWA requires laboratory accreditation for state DOT central laboratories, as well as for any laboratories performing IA sampling and testing for the state, to ensure the quality of materials and workmanship incorporated into each Federal-aid highway construction project. AAP is respected by many federal agencies—FHWA, FAA, and the U.S. Army Corps of Engineers, to name a few—as being unbiased and above reproach.

■ State DOT Benefits

AASHTO provides the states with assessment and proficiency sample programs that are stronger than those that any individual state could provide using state funds to accomplish similar purposes. These programs are recognized as the most thorough and detailed assessments, and the largest proficiency sample programs available for evaluating the performance of construction materials testing laboratories. States can confidently rely on these programs as a part of a sound and thorough quality strategy.

States can use the AAP specifier functionality and alerts to easily monitor the accreditation status and performance of all laboratories that provide testing on state and federal projects.

AASHTO re:source also has serves as a training center. The organization has hosted the FHWA Highway Materials Engineering Course for the past three years and recently developed the AASHTO re:source Technical Exchange and Expo as a forum for the states and industry to share information and best practices related to construction materials testing.

The AASHTO re:source and CCRL assessment and proficiency sample programs are the largest programs of their kind, which demonstrates the confidence that specifying agencies have in them. These are established programs (CCRL was founded in 1929; AMRL was founded in 1965) that have honed and refined themselves over the years to better serve the customer. As an AASHTO re:source sponsor, each department pays \$20,000 per year to receive all AASHTO re:source and CCRL primary services, which is less expensive than the cost that the state would need to pay to internally duplicate or externally provide all of these services apart from AASHTO.

Annual Contribution: \$20,000

AASHTO Staff Contact: Steven E. Lenker, P.E., Director, Construction Materials Reference Laboratories slenker@aasthoresource.org | (240) 436-4770

AASHTOWare®

• Website: https://www.aashtoware.org

Related AASHTO Committee: Special Committee on AASHTOWare®

Program Overview



The AASHTOWare program allows member agencies to employ a cooperative approach to software development that incorporates best practices and enables DOTs to pool resources to address the common problems and challenges that each DOT faces in performing their mission. Software under the AASHTOWare program is designed by DOT experts for DOTs and delivered by private sector contractors. AASHTO owns the resulting products on behalf of all its members and licenses

them on an annual basis. The program is fully self-supported and runs on a non-profit basis. License revenue covers all program expenses, including software support, maintenance, and enhancements services provided by contractors, administrative expenses such as travel expense reimbursement to volunteers that serve on product oversight task forces, and related staff costs.

■ State DOT Benefits

For many years, the member departments of AASHTO have recognized the benefits of joining together in cooperative efforts to develop, maintain, and enhance computer software products jointly. The AASHTOWare Program develops specialized software products in such areas as bridge design and rating, pavement design, construction, contract administration, and safety. By joining together to address commonly perceived needs and problems, groups of AASHTO member agencies can realize significant economies of scale, reduce the costs of such activity to each member department, produce more robust and better maintained products, and foster product user groups to exchange information and to suggest useful enhancements and improvements. Moreover, the member agencies are in effect the "owners" of the software products that AASHTO licenses on their behalf, ensuring that they are properly maintained and enhanced at their direction.

Annual Contribution: Varies depending on licensing options selected by agency.

AASHTO Contact: Jan M. Edwards, Project Director

jedwards@aashto.org | (202) 624-8599



Census Transportation Planning Products Program (CTPP)

• Website: https://ctpp.transportation.org

Related AASHTO Committee: Committee on Planning; Committee on Data Management and Analytics

Program Mission

The CTPP is a State DOT funded, cooperative program that produces special tabulations of American Community Survey (ACS) data that have enhanced value for transportation planning, analysis and strategic direction. Additionally, the program provides universal access to that data, funds and conducts research, and provides training and technical assistance to the transportation planning community, all to increase understanding of the needs of the traveling public in support of policy and programming decision making.



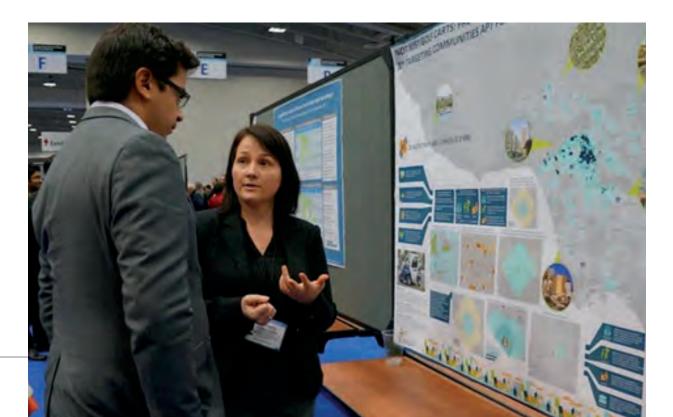
■ State DOT Benefits

The special tabulations of ACS data on journey to work statistics created through the CTPP Program are often the only transportation data that many communities have to describe their commuting and travel characteristics. The CTPP tabulations are critical to enabling fact-based transportation investment and management decisions, and there is no other cost-effective and readily available source of such information.

The CTPP realizes significant cost savings to the states in terms of consolidation and economies of scale. The cost to each state of producing one national, custom tabulation at the geography necessary for planning is considerably less than contracting individually with the census bureau for the required data. Additionally, the program champions research to improve transportation planning data. The CTPP also provides training and on-call technical assistance to State and regional planners.

Annual Contribution: States contribute once every five years. Contribution amount varies based on the population of each state (current contribution is equal to ~ 1.45 cents per person)

AASHTO Staff Contact: Penelope Z. Weinberger, Program Manager for Transportation Data pweinberger@aashto.org | (202) 624-3556



Design Publications Maintenance (DPM)

Related AASHTO Committee: Committee on Design

Program Overview

This technical service program was established to provide support for the activities of the Subcommittee on Design and its technical committees in the development and maintenance of the AASHTO publications under their purview. This TSP addresses the concerns in the resolution passed by the Board of Directors regarding the need for more frequently updated design standards.

State DOT Benefits

Funding provides assistance to technical committees during the review and balloting of publications prior to publication, travel assistance to technical committee meetings during the development of those publications, and travel assistance to Committee on Design members to attend their Annual Meeting.

Annual Contribution: \$15,000

AASHTO Staff Contact: Patricia Bush, P.E., Program Manager for Bridges and Design pbush@aashto.org | (202) 624-8181

A Policy on Geometric Design of Highways and Streets

2018
7th Edition

THE GREEN BOOK

Development of AASHTO Materials Standards (DAMS)

Related AASHTO Committee: Committee on Materials and Pavements

Program Overview

Established by the AASHTO Board of Directors in 2009, the primary function of the Development of AASHTO Materials Standards (DAMS) technical service program is to support the development of new standards, as well as revisions and updates to existing standards. These specifications are published in the AASHTO Standard Specifications for Transportation Materials web-based publication, a critical resource for maintaining the quality and health of our transportation infrastructure. Many of the materials used in transportation construction projects are tested for quality and acceptance according to AASHTO standards and specifications that are published in the Materials book. The value of this publication comes from the expertise and knowledge of the Committee of Materials and Pavements (COMP) members.

State DOT Benefits

Financial support provides a resource for the involvement of independent technical writers to assist in the production and development of new specifications, major revisions of current specifications, and support of the committee. In today's environment, DOT employees may not have the time to do the leg work required to flesh out these documents. DAMS allows COMP members to oversee and direct the work that is vital and key to new methods and specifications.

In addition, each state that contributes to DAMS receives the opportunity to be awarded scholarships for up to two individuals to attend the COMP annual meeting to ensure that each member department maintains their voice in the development of the Materials specifications. This scholarship includes reimbursement for travel and registration costs associated with attending the annual meeting.

Annual Contribution: \$10,000

AASHTO Staff Contact: Casey Soneira, Program Manager for Engineering csoneira@aashto.org | (202) 624-5824



Environmental Technical Assistance Program (ETAP)

· Website: https://scoe.transportation.org/home/environmental-technical-assistance-program/

Related AASHTO Committee: Committee on Environment and Sustainability

Program Overview

The Environmental Technical Assistance Program (ETAP) is a critical resource for state departments of transportation that provides cost-effective services and timely information to assist state DOTs in meeting the difficult challenge of delivering their transportation programs in an environmentally responsible manner.

State DOT Benefits

The goal of ETAP is to supply AASHTO members with the tools and resources necessary to enhance their department's program delivery, environmental streamlining and environmental stewardship. ETAP allows AASHTO staff to collaborate with the state DOTs and other experts to develop comments on relevant proposed Federal legislation, regulations, and guidance. ETAP also provides opportunities for partnership building and collaborative problem solving among state and Federal transportation and environmental organizations. ETAP has supported two Stormwater Practitioners' meetings as well as Committee on Environment and Sustainability (CES) participation in other environmental conferences of national importance.

Another resource available to all contributing members of ETAP is the Bureau of National Affairs' (BNA) Transportation/Environment Alert. This weekly newsletter highlights the latest developments in the field of transportation and environmental management, compliance, and stewardship. It provides information on Federal legislative and administrative actions, state DOT case studies, and AASHTO program updates.

Annual Contribution: \$10,000

AASHTO Contact: Oscar Bermudez, Program Specialist for Environment obermudez@aashto.org | (202) 624-7797



Equipment Management Technical Service Program (EMTSP)

• Website: https://www.emtsp.org

Related AASHTO Committees: Committee on Maintenance and its Equipment Technical Working Group

Program Overview

State highway agency equipment fleets represent a significant capital investment and also require recurring maintenance and operational expenditures. Fleet assets are vital to the delivery of agency programs, projects, and services. Efficient management of these assets can yield significant savings as well as improved performance and reliability. Integrating Asset Management strategies into the management of an equipment fleet can improve performance in all facets of fleet operations.

State DOT Benefits

The Equipment Management Technical Service Program (EMTSP) complements the on-going work and priorities of the AASHTO Committee on Maintenance's Equipment Technical Working Group (TWG) and is managed through the National Center for Pavement Preservation. Specific goals and accomplishments of the EMTSP include the following:

- · Advancing fleet best management practices;
- · Promoting the awareness of available equipment technologies;
- Monitoring and disseminating information regarding proposed regulatory changes and new research;
- Facilitating the development of AASHTO guides from appropriate research topics such as *Guidelines for Selection and Application of Warning Lights on Roadway-Operations Equipment* and the AASHTO Equipment Reference book;
- Formalized partnerships with regional networks of DOT equipment managers, industry partners, and academia, and collaboration with other national equipment and transportation maintenance committees, including TRB committee AHD60 Maintenance Equipment and the AASHTO Snow and Ice Cooperative Program (SICOP); and
- Technology transfer initiatives through an interactive website (http://www.emtsp.org) and listserv for fleet managers seeking technical information.

Annual Contribution: \$5,000

AASHTO Staff Contact: Jameelah Hayes P.E., Program Manager for Engineering jhayes@aashto.org | (202) 624-5266



Highway Safety Policy and Management Technical Service Program

Related AASHTO Committees: Committee on Safety

Program Overview

AASHTO member departments coordinate and cooperate with other public safety agencies and highway safety partners to develop and implement programs for improving safety on all public roads. The Highway Safety Policy and Management Technical Service Program supports member departments' and AASHTO's highway safety efforts.

To work toward the goal of reducing highway fatalities by half in two decades, and reflecting the partner-ships state DOTs have, AASHTO works with partner associations and agencies that also have a leadership role in safety. Through this work, AASHTO coordinates policy positions on transportation funding; institutionalization of the *Highway Safety Manual*; implementation of the Toward Zero Deaths national strategy on highway safety; and in efforts with individual safety partners representing the multidisciplinary approach to highway safety. This program supports the role of the AASHTO Program Manager for Safety in these activities and others staff. It also supports staff efforts to revise and implement safety-related publications and to coordinate AASHTO input into publications of other organizations. A minimal amount of funds are used to support travel of committee members to serve an active role in other associations' meetings, or to bring speakers to AASHTO Safety meetings.

■ State DOT Benefits

Under this program AASHTO staff and consultants support the *Highway Safety Manual*, including coordination of activities with partners such as TRB and FHWA, providing technical support and supporting state implementation efforts. Also, AASHTO staff consultants support the national strategy on highway safety (Toward Zero Deaths). Additional coordination takes place with other safety partners, such as participation in meetings and speaking at conferences to represent AASHTO and state interests and convey information on current activities, as well as gathering information to incorporate into AASHTO committee discussions and plans. AASHTO staff serves as a clearinghouse for information on safety programs for the member departments and provides input to performance management and legislative activities from the safety perspective.

Annual Contribution: \$10,000

AASHTO Staff Contact: Kelly Hardy, P.E., Senior Program Manager for Safety khardy@aashto.org | (202) 624-5868



Load and Resistance Factor Design (LRFD) Bridges and Structures Specifications Maintenance

• Website: https://bridges.transportation.org

Related AASHTO Committee: Committee on Bridges and Structures

Program Overview

This technical service program, established in 2006, provides LRFD and all bridge-related specifications funds for needed research and development to maintain quality documents.

State DOT Benefits

Funding over the past few years has paid for technical assistance and support contracts in the areas of movable bridges, service life design, tunnel design, element level bridge inspection issues, and load-rating issues for the Committee on Bridges and Structures members. The funding has also been used to provide state training on bridge security, finalize a new LRFD tunnel design publication, and to complete a complete review and reorganization of the concrete section of the LRFD Bridge Design Standards. Also, each year 6 to 8 technical committees are able to meet face-to-face for mid-year meetings where specifications are updated and research proposals are written.

Annual Contribution: \$15,000

AASHTO Staff Contact: Patricia Bush, P.E., Program Manager for Bridges and Design pbush@aashto.org | (202) 624-8181



Multi-State Transit Technical Assistance Program (MTAP)

• Website: https://mtap.transportation.org

Related AASHTO Committee: Council on Public Transportation

Program Overview



Established in 1987, the Multi-State Transit Technical Assistance Program (MTAP) enables state transit agencies to network and efficiently solve technical problems through a variety of peer exchange opportunities. MTAP helps state DOTs implement Federal Transit Administration (FTA) programs, provides feedback to FTA on implementation issues and best practices and creates a professional network to share best practices, receive technical assistance and obtain new ideas from other states. MTAP links state transit agencies through a host of services including information exchanges on Federal regulations, grant program reporting

requirements, public transportation funding, and state oversight of transit systems.

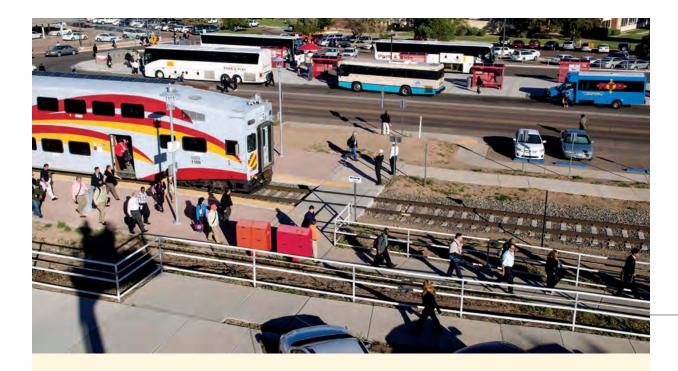
■ State DOT Benefits

For member states, MTAP annually hosts two meetings for members to network, discuss topics and issues of significance, share best practices and collaborate with FTA and other organizations. During the course of the year, MTAP provides technical information and assistance, a bi-annual newsletter and bi-weekly e-newsletter, best practices information, an integrated alert system, networking assistance, and monthly planning and peer exchange conference calls and webinars.

MTAP participates in the NCHRP research program, advancing the development of public transportation research on issues of importance to the Council on Public Transportation, AASHTO, and the state departments of transportation.

Annual Contribution: \$5,000

AASHTO Staff Contact: Richard Price, Program Specialist, Multi-State Transit Technical Assistance Program rprice@aashto.org | (202) 624-5813



National Transportation Product Evaluation Program (NTPEP)

which now incorporates the AASHTO Product Evaluation List (APEL)

• Website: http://www.ntpep.org; http://apel.transportation.org

Related AASHTO Committee: Committee on Materials and Pavements

Program Overview



The National Transportation Product Evaluation Program (NTPEP) was established by the AASHTO Board of Directors in 1994 to cooperatively test manufactured transportation products and conduct manufacturing audits that are of common interest to all member departments and share the results from these laboratory

and field evaluations/audits. NTPEP is run through a joint funding concept between participating Industry and AASHTO members, with revenue from industry being used primarily for the testing of and reporting on their products/audits, and with voluntary member dues used primarily for support services to administer the program and to assist with travel expenses to the annual NTPEP meeting.

In 2018, the AASHTO Product Evaluation List (APEL) became a subgroup of NTPEP and continues to serve as a central repository for product evaluations for new and/or proprietary engineered transportation products. Manufacturers are able to submit products online for accelerated laboratory testing through AASHTO, with the resulting data available to state agencies. The program also allows DOTs to upload state-level evaluations and/or certifications for new and/or proprietary engineered transportation products.

State DOT Benefits

By pooling the physical and professional resources of member departments, NTPEP is able to provide coordinated evaluations and audits on various products and materials in the areas of traffic safety, construction, and maintenance. APEL facilitates the exchange of state DOT evaluations and certifications and AASHTO coordinated evaluations for innovative and proprietary products. This program allows our member departments to save both money and personnel resources in qualifying products for use in construction and maintenance activities. The reports from the APEL site can be utilized to certify proprietary products for use on projects that will receive Federal funding and share evaluation results for reference by all state member departments.

Annual Contribution: \$20,000

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National Operations Center of Excellence (NOCoE)

Website: https://transportationops.org

Related AASHTO Committee: Committee on Transportation System Operations (CTSO)

Program Overview

The National Operations Center of Excellence (NOCoE) technical services include the following:

- On-call assistance to States to identify resources for technical and policy issues.
- Workforce development programs and resources with emerging skills guidance, including TSMO fellowships for State DOT employees.



- The TSMO Knowledge Center containing thousands of resources on TSMO strategies, practices, case studies and program development.
- Peer Exchanges to enable practitioners to have discussions and share knowledge of national TSMO practices
- Webinars to drive adoption of TSMO practices and strategies.
- · Ongoing assessment and synthesis of emerging best practices and TSMO program developments.

State DOT Benefits

State DOT contributions to the Operations Technical Service Program will go towards the following services:

- One National TSMO program area summit per year, that is focused on industry-wide and national-level
 topics to develop action plans and activities for all DOTs to benefit from the knowledge gained, resources
 developed (from partners and future action) and worthy of discussion needed. The previous summits have
 provided a platform for the TSMO community to engage in pertinent policy, knowledge sharing, technical research, and program development activities at the national level. Attendees for these summits will include
 TSMO stakeholders from public, private, academic, and industry sectors.
- Participation of young TSMO practitioners in a NOCoE fellowship that will help develop KSAs that include
 writing, presenting, networking and participation in peer exchanges. Participants will also be featured in the
 NOCoE newsletter. The fellowship is limited to contributing state DOTs.
- The National TSMO awards that award excellent TSMO implementation and impact along with the development of industry TSMO case studies for all submitted entries.
- Additional services to be developed based on the needs of the state DOT user community.

Annual Contribution: \$15,000

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Resilient and Sustainable Transportation Systems Technical Assistance Program (RSTS)

Website: https://rsts.transportation.org

Related AASHTO Committee: Committee on Transportation System Security and Resilience (CTSSR)

Program Overview

The Resilient and Sustainable Transportation Systems (RSTS) Technical Assistance Program is a voluntary pooled-fund program that provides timely information, tools, and technical assistance to assist AASHTO members in maintaining resilient transportation systems in the face of increasingly frequent extreme weather events, infrastructure vulnerabilities, energy demands, and diminishing resources.

State DOT Benefits

The RSTS program is a critical resource for State Departments of Transportation as they develop strategies to address transportation system resiliency concerns. RSTS assists AASHTO members in meeting the difficult challenges that arise related to extreme weather events, energy efficiency, energy security, infrastructure adaptation, alternative vehicles and fuels, and other relevant topics. The program also provides timely information to member departments as they engage in and influence federal resiliency-related legislation.

Another resource available to members of RSTS is a bi-monthly newsletter which provides state DOT case studies, alerts and breaking news regarding extreme weather events, Federal legislative and administrative actions relating to the topic areas and updates from the AASHTO Committee on Transportation System Security and Resilience (TSSR). RSTS also supports TSSR participation in meetings, peer exchanges and other national conferences. RSTS also supports technical assistance through webinars, reports and white papers.

Annual Contribution: \$10,000

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Snow and Ice Cooperative Program (SICOP)

• Website: https://sicop.transportation.org

Related AASHTO Committee: Committee on Maintenance and its Maintenance Operations Technical Working Group

Program Overview

SICOP is a pooled-fund effort established by AASHTO in 1994 with the challenge to identify promising winter maintenance techniques and technologies, making sure they are researched and appropriate for implementation and to help provide implementation guidance in a systems oriented framework. There are many domestic and international winter maintenance committees, consortia, and agencies focusing their efforts in advancing the state of the practice. A primary objective of SICOP is to be aware of this collective work and provide coordination to leverage the individual groups work. This is accomplished through the SICOP steering committee that provides representation for each AASHTO region, American Public Works Association (APWA), National Association of County Engineers (NACE), and relevant TRB Committee Chairs.

Understanding the needs of member states, SICOP represents these interests when partnering with other winter maintenance groups to ensure the regional and national goals are met. From providing technical support to states in developing the next generation of snow plows to participating in research oversight to answering questions from the media to encouraging the development and use of sustainable practices, SICOP provides a wide range of winter maintenance support to ensure states needs are identified and met. More information about SICOP can be found at http://sicop.transportation.org.

State DOT Benefits

Almost every state has had to respond to snow and ice events. SICOP is available to assist states from all regions of the United States. Through its association with various committees and consortia, SICOP provides a voice for member states to ensure their winter maintenance needs are being addressed. Just one example is through the National Winter Maintenance Peer Exchange that SICOP co-sponsors. SICOP stands ready to collaborate with the expertise of the steering committee and other member states in winter maintenance issues that might arise. SICOP is a valuable resource for winter maintenance information. SICOP created and maintains the Snow-Ice Listserv that provides a forum for quick response to pressing questions from the community of winter maintenance professionals.

To address workforce development, SICOP, through separate voluntary contributions, produced and maintains the award winning RWIS/Anti-icing Computer Based Training program that has grown to include additional modules in winter maintenance. This program has evolved into a web-based training program utilized by many states and other governmental entities.

Annual Contribution: \$4,000

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Transportation Curriculum Coordination Council (TC3)

• Website: https://tc3.transportation.org

Related AASHTO Committees: Council on Highways and Streets

Program Overview



TC3 focuses on developing training products for technical staff in the areas of construction, maintenance, and materials. TC3 has a library of 120 on-line training modules covering a variety of topics in the three primary disciplines. As a national resource, TC3 helps states, local government, and industry save money at a critical time of infrastructure investment through course develop-

ment, web-based trainings, information, and resource sharing that is available at substantially reduced cost. All 50 state DOTs have used the TC3 web-based training resources, which are also being used by local governments, universities, consultants, contractors, industry, contractor organizations, and international groups.

State DOT Benefits

The TC3 provides states with the following benefits:

- · Free Access to All TC3 Curriculum
 - TC3 offers 120 web-based training (WBT) courses with a commitment to develop 25 or more additional hours annually. These WBTs make up a comprehensive curriculum developed in accordance with the TC3 matrices. TC3 courses are national-level training targeting the frontline technical workforce in the areas of construction, maintenance, and materials. Employees can access training 24/7 at training.transportation.org, start and stop sessions to fit their schedules, as well as print personalized certificates and see transcripts of completed courses.
- · Participation in State Sharing Program
 - TC3's State Sharing Program provides the published TC3 trainings for internal state DOT learning management systems (LMSs) to ensure improved access to the curriculum for DOT employees.
- Influence in Curriculum Expansion
 - TC3 develops approximately 25 hours of new web-based training each year in addition to updating existing courses as needed. Representation on the TC3 Council allows your DOT to participate in the selection and prioritization of courses that are developed and updated.
- Free Travel Sponsorship to TC3 Annual Meeting
 - Contributing DOTs are provided with one free travel sponsorship for attendance at TC3's annual meeting.

The funds contributed to the TC3 program are used primarily for curriculum hosting and management, marketing activities, administrative costs, and expenditures to cover new course development. The intent is to move to a cost sharing program scenario within five years.

Annual Contribution: \$20,000

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Transportation System Preservation Technical Service Program (TSP2)

• Website: https://www.tsp2.org

Related AASHTO Committees: Committee on Maintenance and its Bridge and Pavements
Technical Subcommittee; Committee on Bridges and Structures

Program Overview

In this increasingly tight economy, participation in the TSP2 program helps the state DOTs preserve not only their pavements but their bridges as well. TSP2 fulfills the research, technical, and program requirements of the member states by helping them to develop and implement their own preservation programs. Program staff field questions and provide technical guidance on preservation issues such as pavement and bridge treatments, materials, strategies, and best practices.

State DOT Benefits

AASHTO, in collaboration with the National Center for Pavement Preservation, has successfully implemented this technical service program. An Oversight Panel guides the implementation and operation of the TSP2 program, including representation from the AASHTO Committees on Bridges and Structures, Maintenance, Materials and Pavements, Performance-Based Management, as well as members from each of the AASHTO regions. Continued accomplishments and resources provided by the program to member states are listed below:

- Technology transfer initiatives in the form of conferences, webinars, articles for publication in trade magazines, and media strategies, brochures, and guides.
- A maintained and functional website that is updated with all of the latest preservation information and links.
- A web-based bulletin board and Listserv to provide an effective means for agency practitioners who are geographically dispersed to discuss topics of common interest related to preservation.
- A reference library with an extensive and current on-line technical reference collection.
- A help desk to provide ready response to preservation inquiries by way of telephone, email, or fax.

Annual Contribution: \$20,000 (\$9,500 for Pavement Preservation, \$10,500 for Bridge Preservation)

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Transportation and Civil Engineering (TRAC) and RIDES

• Website: https://tracrides.transportation.org

Related AASHTO Committee: Committee on Knowledge Management

Program Overview



The TRAC program grew out of the need for new civil engineering and other professionals to enter the field of transportation. TRAC was established as an ongoing AAS-HTO Student Outreach Program aimed at encouraging students in grades 5 through 12 to pursue civil engineering and transportation curriculum in colleges and universities to be followed with a career in said fields. The TRAC program works by providing schools with curriculum enhancements that demonstrate engineering and transportation principles. The program has sent trained transportation volunteers into the class-

room to work directly with students. A partnership with Mississippi provides a new opportunity for states to begin workforce development as early as Kindergarten with RIDES, Roadways Into Developing Elementary Students. RIDES introduces elementary students to engineering and transportation careers with activities that emphasize classification, sequencing, and graphing process skills. Additionally, it helps students make the connection between various modes of transportation and the environment, and links simple machines, humans, and transportation to energy types, propulsion, and "fuel types."

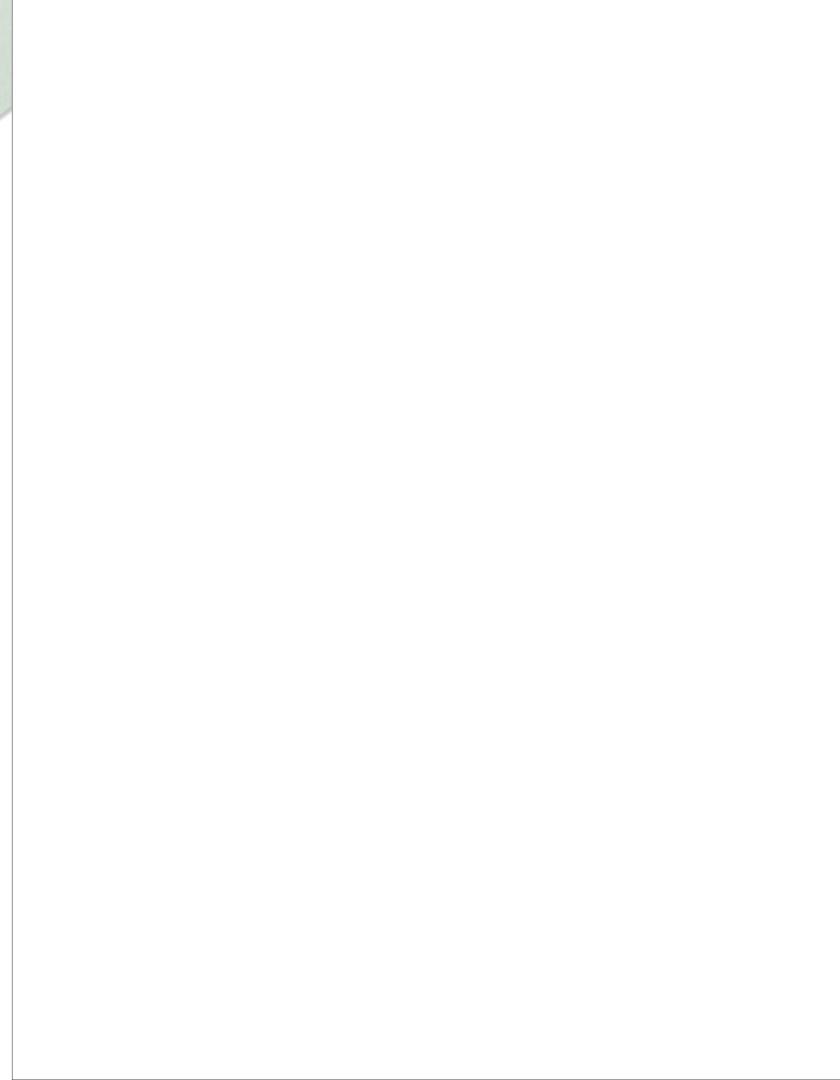
State DOT Benefits

TRAC (Transportation and Civil Engineering), and RIDES (Roadways Into Developing Elementary Students), are hands-on educational outreach programs that enhance math and science skills while connecting students to the work world of transportation. Students who participate in the programs understand the connection between the courses they are taking in school and the world of work. As a result, they are more inclined to take higher level math and science courses and are better prepared to enter the workforce. In addition, the programs provide the opportunity for students to use the same software engineers use in the field, which provides valuable experience prior to entering the workforce.

Annual Contribution: \$14,000

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Guide to AASHTO Technical Service Programs and Products

AASHTO Invoicing Schedule

AASHTO Annual Membership Dues	January
AASHTO re:source (formerly AMRL)	October
AASHTOWare	July
AASHTO Technical Service Programs	July

If you have any questions regarding your invoices please contact:



Jenet Adem
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