Creating a National Innovation Network

State Transportation Innovation Councils Spearhead Technology Deployment

State Transportation Innovation Councils (STIC) are creating a culture of innovation in the highway community as they lead deployment of new technologies and practices in their states.

The nation's 49 STICs—active in 46 states, the District of Columbia, Puerto Rico and the U.S. Virgin Islands—bring together public and private stakeholders to advance innovations with potential to improve the transportation system. The remaining states are using or developing other forums to implement innovation.

Initiated by the Federal Highway Administration (FHWA), the STIC network puts highway community stakeholders in each state in the driver's seat to choose the innovations that best fit their needs and get those innovations into practice quickly.

"A diverse and well-rounded group of stakeholders is in the best position to determine which innovations are best for their state," said FHWA Administrator Gregory Nadeau. "The STICs are the embodiment of that thinking—bringing together the stakeholders in the highway community to discuss what innovations can have the greatest impact in their state."

STICs consider innovations from a variety of sources, decide which to adopt and set the pace for implementation. Innovation sources include FHWA's Every Day Counts initiative to deploy proven technologies and practices, the American Association of State Highway and Transportation Officials' Innovation Initiative and the second Strategic Highway Research Program.

STIC membership varies from state to state, but can include representatives from public agencies, metropolitan planning organizations, industry associations, professional organizations, environmental and historical preservation groups and university transportation centers. State and federal transportation leaders co-chair each STIC.

Engaging with a STIC

"Private sector associations can get involved in STICs by expressing their interest to the chairpeople," said Mary Huie, program manager for FHWA's Center for Accelerating Innovation. "They can also participate in the activities the STICs are organizing to advance innovation use in their state."

Associations representing transportation stakeholders can become involved in STIC activities in a variety of ways, including:

- Provide feedback on innovations the STIC is evaluating, such as best practices for applying an innovation or obstacles consultants and contractors face in deploying new technologies.
- Partner with state and local agencies to implement innovations, sharing insights and perspectives from their unique role in the project delivery process.
- Invite experts on innovative technologies and practices to speak at association conferences, workshops and meetings.
- Integrate innovations into association training courses.
- Participate in FHWA's national STIC web conferences and state STIC events, such as innovation showcases, demonstration projects and roundtable discussions.
- Publish STIC success stories in association newsletters; feature innovations on association websites; and work with state STICs on other outreach efforts.

Many approaches to innovation deployment

All STICs work to mainstream transportation innovation, but their approaches are as different as the states they represent. The New York STIC, for example, emphasizes creating synergy through the use of multiple innovations on a project.

"As powerful as each innovation is in improving project delivery and quality, reducing congestion and costs and enhancing safety, the much greater benefit is in combining innovations on a project or program," said Daniel D'Angelo, deputy chief engineer of the New York State Department of Transportation and STIC co-chairman.

D'Angelo cites, as an example, the Tappan Zee Bridge replacement, which features seven Every Day Counts innovations, including design-build project delivery, e-Construction and prefabricated bridge elements. The project also uses three Strategic Highway Research Program (SHRP) 2 products, including complex project management strategies. "Because of that synergy, we were able to take what we learned on the project and apply it to other projects," he said.

The Arizona Council for Transportation Innovation (ACTI) focuses on building an innovation culture among the state's public and private transportation partners. One way is through its Innovation Exchange Campaign, a series of panel discussions on innovation themes recommended by stakeholders.

In the past two years, the council organized exchanges on topics, such as accelerated bridge construction, 3D modeling and intelligent transportation systems. The exchanges were held in various cities and webcast throughout the state to encourage broad participation from the public and private sectors.

Combining several Every Day Counts innovations and Strategic Highway Research Program (SHRP) 2 products created synergy on New York's Tappan Zee Bridge replacement.
Photo Credit: New York State Thruway Authority

A key to success for the Arizona council is having a diverse team of public and private stakeholders who are willing to have open discussions, said Dallas Hammit, Arizona Department of Transportation deputy director and ACTI co-chair. "It isn't an FHWA or a state DOT effort. It's an Arizona effort," he said. "We need an open dialogue and accountability from all areas."

Having a STIC in each state creates a national network to exchange best practices on innovations and get them into widespread use across the country. "It's important that we build on the work we've done so far to ensure that the focus on innovation becomes a permanent part of the transportation culture," said Nadeau.

> > > For more information on the national STIC network and state STIC contacts, go to: *www.fhwa.dot.gov/innovation/stic/*