State Transportation Innovation Council (STIC)

Innovation in Motion
A newsletter with highlights from the STIC

The STIC supports the rapid implementation of innovative products and tools throughout the state.

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STIC Thanks FHWA’s Moises Marrero

Federal Highway Administration (FHWA) Assistant Division Administrator Moises Marrero has accepted the Division Administrator position with the FHWA in Georgia. Mr. Marrero has been part of the Pennsylvania FHWA Division Office since 2011 and was instrumental in the formation of the Pennsylvania STIC in 2012. He has continued to serve as an ardent supporter and champion of innovations across Pennsylvania. It is with sincere gratitude that we wish Mr. Marrero well and much success in his next chapter with the FHWA.

Moises Marrero has been an instrumental figure in the development of the PA STIC.
Innovation Update

Local Safety Improvements Sought to Reduce Statewide Roadway Fatalities

With an average of 200 fatalities occurring on local roads each year, PennDOT’s Highway Safety Section is working with the Local Technical Assistance Program (LTAP) to find new and efficient ways to apply low cost safety improvements on local roads. The Safety and Traffic Operations Technical Advisory Group (TAG) and LTAP are piloting a new contracting system that supports information sharing between municipalities and PennDOT districts. The information shared will enable PennDOT districts to facilitate low cost safety improvements on local roads. PennDOT is piloting this new process in PennDOT Districts 9 and 11, and will share best practices and lessons learned to broaden the application of low cost safety improvements on local roads throughout Pennsylvania.

The STIC has continuously worked to educate and inform local governments on the benefits of low cost safety improvements. In collaboration with PennDOT and FHWA, the STIC hosted a Local Government Safety Seminar in July 2018 to educate local government officials about roadway safety planning and low cost safety improvements. A recording of the Local Government Safety Seminar is located on the STIC website.

New STIC Webpages Now Live!

Visitors to PennDOT’s website will notice a new look and functionality to the STIC webpages. These new-look pages are the result of an extensive webpage assessment that was conducted to enhance user experience and improve access to information. The STIC webpages will be routinely updated throughout the year with the focus on innovations and information sharing. Visit the site to stay current on innovations being developed and deployed in Pennsylvania.

FHWA Every Day Counts Round 5 Innovations Announced

FHWA recently announced Every Day Counts Round 5 (EDC-5) innovations. To help determine which of the 10 candidate innovations to pursue, PennDOT representatives will attend the EDC-5 Summit in Baltimore, Md., on Oct. 18-19 to learn more details about each of the EDC-5 innovations. More information on the innovations is available on the FHWA EDC-5 webpage.

2018 FHWA STIC Incentive Fund Recipients Named

The STIC recently announced the 2018 recipients of the $100,000 FHWA STIC Incentive Funds. Below is the list of the selected projects.
• Traffic Incident Management (TIM) Training Center - The training center will be a state-of-the-art facility that provides agencies with access to real-life training for unforeseen events that cause safety and mobility issues. Upon discussion with stakeholders, it was determined that the concept should be expanded to include other key areas: connected and automated vehicles, tolling/ITS/traffic signals, work zones and commercial vehicles.

• Geosynthetic Reinforced Soil-Integrated Bridge System (GRS-IBS) Specifications - This project seeks to change the GRS-IBS specifications to expand the use of GRS-IBS on higher volume roads, longer superstructure lengths and locations of heavier stream velocities.

• Workforce Preparedness Study for Electronic Contracting and Communications (e-Construction) - This project was submitted by the Associated Pennsylvania Constructors (APC), who is a driving force to equip our future workforce with new skills. In collaboration with PennDOT and the Pennsylvania Turnpike Commission, APC is committed to ensuring that project managers are prepared and adequately trained for e-Construction. This study will evaluate workforce preparedness for e-Construction and make recommendations for proper training and skills development. Since selecting e-Construction and Partnering as an EDC-4 innovation in 2016, PennDOT has made advancements in digitizing project teams to limit paper-based systems, enhance collaboration by project teams and streamline project delivery.

The 2019 STIC Incentive Funds will be available beginning in October 2018 with the start of the new federal fiscal year. Stay tuned for a special edition of the Innovation in Motion this fall to learn how far $100,000 can go to fuel innovation in transportation!

Beyond the STIC: Developing Tomorrow's Workforce Today
PennDOT is exploring a new program developed by the American Association of State Highway and Transportation Officials (AASHTO) that educates students in Science, Technology, Engineering and Math (STEM) curricula. The program is called Transportation and Civil Engineering and Roadways in Developing Elementary Students (TRAC and Rides) and provides hands-on activities for students in kindergarten through 12th grade. TRAC and Rides has a number of modules that engage students in solving real-world problems, while connecting them to the working world of transportation. PennDOT is currently looking for volunteers to participate on a steering committee for the program. Interested individuals should email the TRAC and Rides Resource Account with their name and resume.

STIC Survey Reveals Innovations Most Beneficial to Locals
This summer, the STIC distributed a survey to municipal leaders involved with transportation planning efforts across Pennsylvania, to better understand local municipalities' interest in various transportation-related innovations and the challenges they face implementing innovations. The survey results will help the STIC better target its communication with municipalities.

Nearly 500 responses were received from municipalities across Pennsylvania, with approximately 60 percent of respondents indicating stormwater management innovations would benefit their municipalities. New paving products and winter maintenance were the next highest areas of interest, with approximately 54 percent and 47 percent of respondents, respectively, noting these types of innovations would be...
beneficial. The innovation categories that showed the most varied interest by municipality size were traffic signals and intersections, and safety improvements. Funding was cited as a primary challenge to innovation deployment by municipalities, with equipment and staffing constraints being the next most prevalent challenges. Moving forward, the STIC plans to consider innovations that address the top areas of concerns for locals. For more information on the survey results, email the STIC Resource Account.

**Call to Action: How you can get involved with the STIC!**

To help develop and deploy transportation innovations across Pennsylvania, consider serving on one of the STIC’s four TAGs: Construction and Materials, Design, Maintenance and Safety and Traffic Operations, or on Innovation Development Teams. Email the STIC Resource Account if you are interested in becoming involved.

**Fact or Fiction**

PennDOT may only select two EDC innovations per round to implement in Pennsylvania.

Fiction: PennDOT strongly supports the FHWA’s EDC program, and typically selects several EDC innovations per round for implementation in Pennsylvania. This year, there are 10 EDC-5 innovations from which to choose. Please see the above article on the EDC-5 innovations and visit the FHWA EDC-5 webpage for more information on these and past EDC innovations. To see what past EDC innovations Pennsylvania has chosen to implement, visit the STIC’s innovation webpage.

**Ask the STIC**

Q: How can I access the STIC webpages from PennDOT’s website?

A: From the PennDOT homepage, scroll down to the bottom of the page and select the PennDOT 20/20 link from under the "About Us" section. Scroll down and select the blue "State Transportation Innovation Council" box to be directed to the new STIC webpages.

**Mark Your Calendars:**

The next STIC Business Meeting will be held on November 14, 2018 at 9 a.m. at the PEMA Headquarters Building in Harrisburg.

For more information, please contact the STIC Team at penndotstic@pa.gov.