## Innovation in Motion

newsletter with highlights from the STIC

DEPLOY EDUCATE

**Attention Concrete Finishers:** In response to the demand of meeting the upcoming April 2022 requirement to have 60% of concrete finishers certified on PennDOT projects, the Pennsylvania Aggregates and Concrete Association (PACA) is offering additional certification classes in 2022. Please visit <u>PACA's website</u> for additional information and to register.



This edition of the STIC *Innovation in Motion* e-newsletter highlights the 2021 <u>PennDOT Virtual Innovation Days</u>, a three-day virtual event focusing on innovative topics including several <u>STIC</u> and <u>Every Day Counts (EDC)</u> innovations, and four newly introduced STIC innovations. This e-newsletter also highlights four new innovations that were recently introduced to the STIC for development as well as two new EDC-6 innovations Pennsylvania is now pursuing.





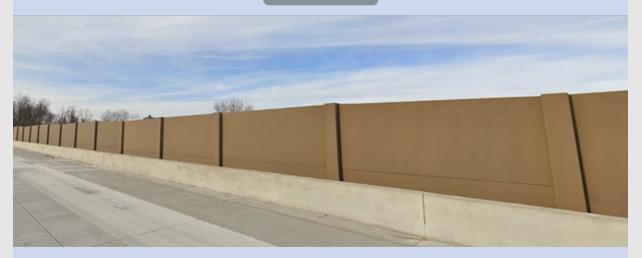
## **PennDOT Hosts Virtual Innovation Days**

Reflecting its 50 years of embracing and pursuing the latest in transportation innovations, PennDOT hosted a <u>Virtual Innovations Days</u> event in early November.

Twelve sessions were held virtually over three days between Nov. 2 and 4, drawing

nearly 850 participants, which included PennDOT and Pennsylvania Turnpike employees as well as federal and municipal government, local planning partner and public transportation agency representatives.

Read more



## **STIC Innovations Introduced for Development**

The last STIC Business Meeting of 2021 was held virtually on Nov. 17. During the meeting, four new STIC innovations were introduced:

- Slotted Median Barrier
- Standardizing Concrete Color on Bridges
- Environmental Monitor Role for Large Construction Projects
- Lighted Light-Emitting Diode (LED) Plow Markers

The **Slotted Median Barrier**, introduced by the Design TAG, was first developed by Texas A&M University. It is designed with a large hydraulic opening on the bottom of the barrier, particularly useful for flood prone areas. These barriers help to reduce hazards, such as vehicle snagging, glare shielding and passage of animals. In addition, the Slotted Median Barrier can be used for paving projects, where drainage and access are needed in the middle of the roadway.



Standardizing Concrete Color on Bridges, the second Design TAG innovation, focuses

on developing standard item numbers and a standard specification for concrete colors on PennDOT bridges, to provide a more consistent look across Pennsylvania and reduce prolonged "review loops," when manufacturers have trouble matching color or finding the correct shade of color for a certain bridge. The goal of the innovation is to establish a list of approximately 30 standard colors for PennDOT concrete bridges.

The Environmental Monitor Role for Large Construction Projects, another innovation from the Design TAG, will require an expert to be on site and manage the implementation of environmental mitigation elements on large construction projects. The goal of the innovation is to include an expert for concerns related to wetlands, streams, wildlife habitats and cultural resources on construction projects, who will coordinate with contractor and PennDOT staff on all environmental and permitting matters to help ensure protection of sensitive environmental resources.



The goal of the **Lighted LED Plow Markers** innovation, first introduced at the STIC Network Showcase at the Every Day Counts Round 6 (EDC-6) Virtual Summit and brought to the STIC by the Maintenance TAG, is to increase safety by equipping PennDOT snow removal equipment with LED Lighted Plow Markers. The lights will be installed on the front plows and wing plows, providing better visibility to operators and motorists during snowstorms and nighttime operations. The flexible lighted markers will be powered by the vehicle and connected through a wiring harness.

All newly introduced innovations will move to the Detailed Development phase of the <u>STIC Innovation Development Process</u>, where an Innovation Owner and Development Team will be identified to prepare these innovations for deployment in Pennsylvania. If you are interested in becoming a Development Team member for any of these innovations, please email <u>penndotstic@pa.gov</u>.

In addition to the four new STIC innovations, PennDOT will pursue two additional EDC-6 innovations. Crowdsourcing for Advancing Operations and Next-Generation Traffic Incident Management (TIM): Integrating Technology, Data, and Training.

<u>Crowdsourcing for Advancing Operations</u> uses data collected whenever and wherever people travel to optimize roadway use for reduced congestion and increased safety and reliability. Increasing quality and quantity of operations data using crowdsourcing enables staff to apply proactive strategies cost effectively and make better decisions that lead to safer and more reliable travel while protecting privacy and security of individual user data.

The <u>Next Generation TIM: Integrating Technology, Data, and Training</u> innovation aims to increase traveler and responder safety and improve the movement of goods on all roadways by providing new tools, data and training mechanisms. Both new and existing TIM programs, including local agency and off-interstate applications can benefit from using enhanced TIM practices on their roadways.



Thank you for your continued support of the STIC and advancing innovations across Pennsylvania. The STIC Management Team wishes you a wonderful holiday season, and a happy, healthy and prosperous New Year.

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