



This edition of the STIC *Innovation in Motion* e-newsletter highlights Ultra-High Performance Concrete (UHPC) for Bridge Preservation and Repair, a Federal Highway Administration (FHWA) Every Day Counts Round 6 (EDC-6) innovation, Pennsylvania is pursuing and Bridge Deck Link Slabs, an innovation currently moving through the STIC Innovation Development Process.

UHPC-based repair solutions are robust, and offer superior strength, durability, and improved life-cycle cost over traditional methods. Using UHPC has become popular for field-cast connections between prefabricated bridge elements but is also a promising application for bridge preservation and repair to maintain or improve bridge conditions. In addition, UHPC can be used in conjunction with Bridge Deck Link Slabs, which are an economical way to eliminate bridge joints by connecting adjacent deck sections with a specially designed slab composed of either traditional or UHPC.

This e-newsletter also features an update on [FREEVAL-PA](#), an innovation being advanced through the STIC's Safety and Traffic Operations TAG. FREEVAL-PA is a predictive work zone assessment tool based on the Highway Capacity Manual that can be used to analyze work zones' effect on traffic flow and guides PennDOT's decision-making process for implementing lane closures, crossovers, or other traffic control methods.

Stay tuned for next month's STIC *Innovation in Motion* e-newsletter, to learn more about how Pennsylvania is progressing on the EDC-5 Unmanned Aerial Systems and Collaborative Hydraulics: Advancing to the Next Generation of Engineering ([CHANGE](#)) innovations.

### **PennDOT Continues to Explore Use of Bridge Link Slab Maintenance Process**

Managing bridge deck joints is an ongoing challenge, and PennDOT continues to explore ways to use Bridge Deck Link Slabs as an innovative way to address this bridge maintenance issue.



[Read more](#)



### **Ultra-High Performance Concrete Innovation for Bridge Repairs and Preservation Moves Forward in Pennsylvania**

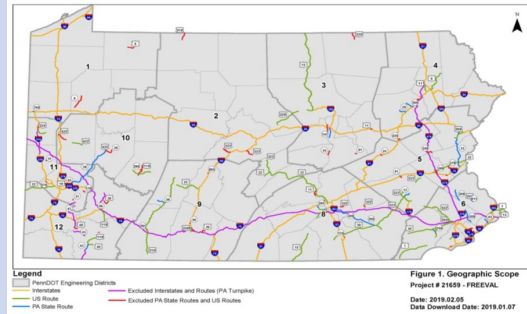
Faced with the responsibility for one of the nation's largest bridge networks, PennDOT is working toward use of an effective Accelerated Bridge Construction material to help expedite bridge repairs and aid in bridge preservation.

[Read more](#)

### **Predictive Work Zone Analysis Tool Officially Deployed July 1**

Effective July 1, use of [FREeway EVALuation-Pennsylvania \(FREEVAL-PA\)](#)

tool, is now required for limited access facilities performing construction, maintenance and permit-related work zone activities on PennDOT highways.



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