State Transportation Innovation Council (STIC)

Innovation in Motion

A newsletter with highlights from the STIC

INNOVATE
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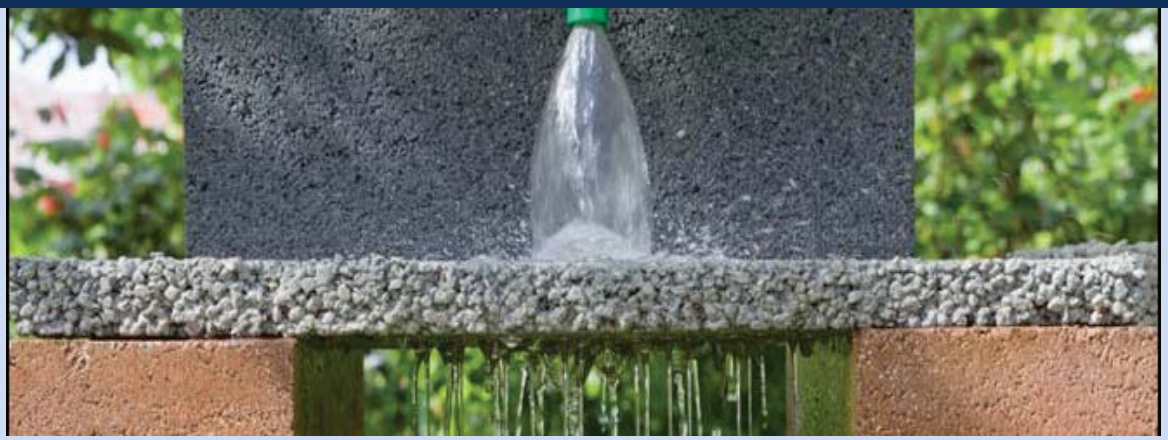
EDUCATE



Putting Pervious Pavement to Work

Pervious pavement has the potential to significantly reduce stormwater runoff and provide lasting environmental benefits, but critics worry about the costs associated with constructing and maintaining the pavement alternative. This article breaks down the myths regarding pervious pavement installation and maintenance.

Asphalt and concrete pervious pavements allow water to pass through the surface and temporarily settle in a stone reservoir before infiltrating into the ground. Although not appropriate for high-traffic volumes or high-speed roads, this "green" technology is especially useful for parking lots, sidewalks and trails where heavy loads are not expected.

The cost to install pervious pavement is approximately $7 per square foot, which is slightly more expensive than traditional pavement. However, at the right location, the benefits of pervious pavement can outweigh the costs. By allowing water to slowly flow into the ground while filtering out many pollutants, pervious pavement provides a valuable stormwater management function that can offset the construction and associated costs of a traditional stormwater retention basin.

Maintenance of pervious pavement is an important component to its durability and benefits. Debris and sediment may lodge in the pavement pores and significantly slow water drainage. On an annual basis, pressure washing or vacuuming the surface will ensure permeability. Regular inspection and testing permeability are also recommended.

Through the Pennsylvania STIC, PennDOT is exploring options to utilize pervious pavement to increase sustainability and meet stormwater management goals.

Please contact the STIC at ra-pdpenndotstic@pa.gov for more information.

Pervious Pavement is approved for use in parking lots, sidewalks and trails.

The PA STIC is Partnering with FHWA to Invest in Innovation

At the May STIC Business Meeting, the PA STIC recommended two project applicants for STIC Incentive Funding. The program is administered by FHWA's Center for Accelerating Innovation (CAI) and provides funding to support or offset the costs of standardizing innovative practices. The projects include:

- The Traffic Incident Management (TIM) Training Facility Feasibility Study: The study will evaluate options to construct a hands-on training facility for first responders to simulate real-world scenarios and learn best practices for safe, quick clearance.
- Geosynthetic Reinforced Soil-Integrated Bridge System (GRS-IBS) Specifications: The project will evaluate the current GRS-IBS specifications and recommend enhancements.

These projects join several other successful initiatives funded through the STIC Incentive Funding program.

Educating Local Officials on Safety Planning Tools

The PA STIC is planning a Local Government Safety Seminar at the PA Farm Show Complex on July 19 to provide local officials and transportation planners with the tools to identify high-crash locations and target effective safety countermeasures to reduce crashes and save lives. The workshop is an important part of PennDOT, FHWA and the PA STIC's commitment to the national goal "Toward Zero Deaths."

The seminar is funded in partnership by PennDOT and FHWA STIC Incentive Funding. The workshop will include local speakers who will share their perspective on how to work with PennDOT and FHWA to deploy safety solutions. The event will also be simulcast live, enabling attendees to participate from remote locations. This innovative approach to simulcast the event makes participating in the workshop both effective and accessible for local governments across the state. Please contact the STIC at ra-pdpenndotstic@pa.gov for more information.

The Local Government Safety Seminar will provide education on various tools that can help reduce crashes and save lives.

Setting Innovation Deployment Targets for Success

The PA STIC's Technical Advisory Groups (TAGs) are the workforce behind the STIC's success. This year, the TAGs are targeting efforts on the key steps to move innovations across the "finish line" into full deployment. The TAGs' top priority initiatives and next steps can be found on the TAG Priorities Document.

At the May STIC Business Meeting, two TAGs presented their strategies for promoting innovation deployment. The Materials TAG presented on Pervious Pavement, which resulted in a deeper dive into construction and maintenance requirements (top of page). The Design TAG presented on the initiative Design/Build Traffic Control Plan.

PennDOT District 12 is piloting the innovative traffic control initiative on the Interstate 70 project.

In contrast to traditional Design/Bid/Build projects, this project delivery innovation allows the contractor and designer to work together to develop the Traffic Control Plan, which results in greater flexibility, efficiency and schedule control. PennDOT District 12 is

currently piloting this method on I-70 in Westmoreland County. The STIC is seeking out additional projects to pilot the initiative. For more information or to share feedback on how you can help, please contact the STIC at ra-pdpenndotstic@pa.gov.

The Future is Now: Highly Automated Vehicles on our Roads

Pennsylvania is leading the nation in the development of policy that paves the way for safely testing and deploying Highly Automated Vehicles (HAV). At the May STIC Business Meeting, PennDOT's Deputy Secretary for Driver and Vehicle Services Kurt Myers and Policy Director Roger Cohen presented on how this transformative technology is expected to change every aspect of society from transportation dynamics to land use and the economy. For more information, please visit PennDOT's Autonomous Vehicle webpage.

Fact or Fiction

Q: Is it true that companies are testing autonomous vehicles on our roadways today?

A: Private companies and research institutions are testing Highly Automated Vehicles (HAV) on Pennsylvania roadways, but Pennsylvania's Autonomous Vehicle Testing Policy ensures that on-road testing is conducted in a responsible and safe manner.

Ask the STIC

Q: What are the maintenance requirements for Pervious Pavement?

A: On an annual basis, Pervious Pavement must be inspected and pressure washed or vacuumed to ensure permeability.

Upcoming Events:

Local Government Safety Seminar July 19: The event will be simulcast live. For more information about this event, please contact the STIC at ra-pdpenndotstic@pa.gov.

Watch for the next edition of Innovation in Motion in August 2017

For more information, please contact the STIC Team at **ra-pdpenndotstic@pa.gov**.