

PENNDOT HONORS ITS 2023 STARS OF EXCELLENCE



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Pennsylvania Motorcycle Safety Program: www.penndot.pa.gov/PAMSP

Or find us on social media at:



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This quarterly newsletter highlights our latest efforts to improve mobility and quality of life in Pennsylvania.

As always, feel free to send story ideas or requests for information you want to see. If you're involved in an interesting or innovative project or initiative, have ever wondered about other parts of PennDOT's operations or have other suggestions, email the Communications Office at DOTcomm@pa.gov.

We hope you enjoy this latest issue!

PENNDOT HONORS ITS 2023 STARS OF EXCELLENCE



Each year, PennDOT recognizes select employees with its highest honor – the Star of Excellence Award – for embodying the department's values of service, performance, and integrity.

The accomplishments of this year's 31 honorees, who were celebrated at a September 26 ceremony at the State Museum in Harrisburg, exemplify PennDOT's mission to provide the very best transportation services to Pennsylvanians every day.

"I'm continually impressed by the hard work and dedication of the PennDOT team," Secretary Carroll said. "These folks work tirelessly each day to provide safe and efficient transportation for Pennsylvania's residents."

The 2023 Star of Excellence Award winners are listed below. View the award ceremony program (PDF) at www.penndot.pa.gov/PennDOTWay/Documents/STARs%202023.pdf or browse the full album of pictures at <https://flic.kr/s/aHBqjAWh3n> to learn more about their outstanding contributions and achievements.

District 1

Vincent Mazzocchi, P.E.
Benjamin Vincent, P.E.

District 2

Eric J. Murnyack, P.E.
Brent L. Lykens P.E.

District 3

Sheena M. Shannon
Dale E. Wolf

District 4

Ralph Del Rosso
Jeremiah Gonzalo, E.I.T.

District 5

Kevin Matthews
Albert Gino

District 6

Tamara Chiesa
Frank J. DiJoseph

District 8

Michael R. Ferguson
Nevin W. Lehman

District 9

Amanda Ehredt
Jim Kaseler, P.E.

District 10

Matthew J. Burkett
Carla K. Studebaker

District 11

Andrea A. Nash
Michael Szurley, P.E.

District 12

Suzanne Buzzelli
Cristin M. Covert, P.E.

Communications

Joel E. Morris

Administration

Joseph Linderman

Highway Administration

Brenda C. Waters
Matthew R. Weaver, P.E.

Multimodal

Thomas M. Tomczyk
John Taylor

Planning

Robert J. Mulkerin, Jr.

Driver and Vehicle Services

Craig Yetter
Diosdado Arroyo

STEP, THE STUDENT TO EMPLOYMENT PROGRAM IS RENAMED TO THE HIGH SCHOOL INTERN (HSI) PROGRAM

By Olivia Schwab, District 1 Intern



STEP, the Student to Employment Program, has a new name. It is now known as the High School Intern (HSI) Program. According to HSI Coordinator Doug Hassenbein, the new name allows teens and young adults to easily recognize the program is an opportunity available for high school students. It also better represents the whole state, as the HSI program is being made available to all commonwealth agencies.

At PennDOT, the HSI program allows vocational technology students to co-op for half a day throughout the school year and work full-time hours during the summer. The program is available to juniors and seniors recommended to PennDOT by their local vo-tech career counselors, also known as co-op coordinators. Seniors may work until the HSI program ends on June 30 each year.

"Recruitment should start at the earliest level as possible," said Kristi Settlemire, Human Resources Officer for PennDOT District 1. "Programs like this are beneficial to PennDOT and students. It allows us to show students what type of careers are available while also preparing for our future as an employer."

Students benefit by gaining professional work experience, a paycheck, and possible advancement within the organization. For example, Cambridge Springs graduate Alyssa Atkinson was a diesel mechanic vo-tech student who participated in the program when it was still called STEP. She became a full-time employee in July 2016, took advantage of various opportunities for advancement, and is now the head mechanic in Erie County.

Alyssa isn't the only District 1 success story. A majority of HSI program students have become full-time upon graduation, according to Kristi.

"The High School Intern Program provides an opportunity for PennDOT to work with and evaluate students, helps with recruitment for positions that are hard to fill or in high demand, and allows students to become familiar with department operations and procedures," said Erie County Manager Jim Shaut. "It provides the student with a wide variety of equipment to work on they may not experience at a different shop."

Erie County currently has one intern on staff. Cambridge Springs student Brody Beck has been working for PennDOT since spring of this year. He is a diesel mechanic student in vo-tech and says he loves learning to work on various equipment at PennDOT such as rollers, tractors, and dump trucks.

Another Erie County success story, Erie high school graduate Salvador Murillo has been working full-time with PennDOT for a year. He did automotive tech in high school, interned for PennDOT through the HSI program, and upon graduation heard PennDOT was hiring from his co-op coordinator. Murillo said he enjoys working on various vehicles and equipment, which can be challenging sometimes, but is worthwhile to learn.

PennDOT is currently in the process of hiring HSI Program students. Students considering the HSI Program should tell their co-op coordinators they are interested and go to employment.pa.gov for more information.

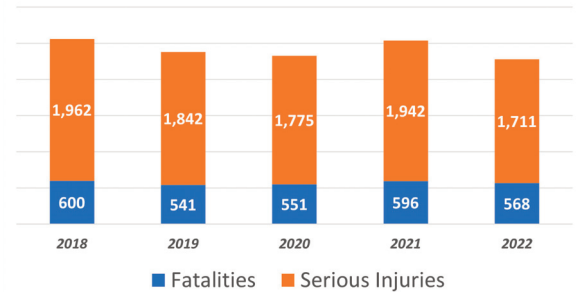
Jim's advice to students unsure if the HSI Program is right for them: "It's a great opportunity to learn and decide if this is the right employer. They may even want to explore different positions within the department."

HOW TO REDUCE LANE DEPARTURE CRASHES: A FORRRWD THINKING APPROACH

By Jaclyn Huss, PennDOT Bureau of Innovations



Lane Departure Crashes



Pennsylvania sustains more traffic fatalities and serious injuries each year due to vehicles departing their travel lane compared to any other crash type, according to the Pennsylvania Crash Information Tool (PCIT).

Two-thirds of all fatal and serious injury lane departures include a collision with a fixed object, most commonly trees, utility poles, embankments, and guiderail.

More than half of all fatal and serious injury lane departures occur on rural roads. Given Pennsylvania's large rural network, this issue must be addressed through a systemic and spot-specific infrastructure improvements, according to Pennsylvania's 2022 Strategic Highway Safety Plan.

Implementing the Federal Highway Administration's (FHWA) Focus on Reducing Rural Roadway Departures (FoRRRwD) approach is a key initiative to reduce rural roadway departures. FoRRRwD uses a logical approach with innovative tools and techniques to reduce deaths and serious injuries in rural roadway departure crashes. It is a FHWA Every Day Counts Round 5 (EDC-5) innovation that Pennsylvania championed.

What are the benefits of FoRRRwD?

Proactive approach. Systemic analysis enables professionals to mitigate high-risk locations, sometimes before crashes even happen.

Targeted investments. Projects are based on data and risk, so investments can be made with more confidence. **Flexibility.** There is a wide range of analysis and countermeasure selection tools to fit any level of data and expertise.

Safer roads. The combination of proven countermeasures installed at targeted, high-risk locations is the key to reducing rural roadway departures.

Pennsylvania's 2022 Strategic Highway Safety Plan outlines other strategies, such as modifying roadside clear zone in the vicinity of hazardous fixed objects, reevaluating passing zones, and utilizing the highway safety manual to identify and evaluate proposed improvements. Behavioral safety efforts that deal with seat belt use, distracted driving and impairment are equally important to improving this emphasis area.

The strategies to combat lane departure crashes are aimed at keeping vehicles on the roadway and within the proper lanes of travel. This includes installing systemic infrastructure improvements, such as centerline and shoulder rumble strips, high friction surface treatments (HFST), cable median barrier, guiderail end treatments, retroreflective signing, roadway delineation, and pavement markings.

For example, HFSTs improve the traction of vehicles by increasing the pavement surface's skid resistance to combat lane departure crashes around curves and at intersections.

On State Route 611 in Northampton County where HSFT was applied, for example, the frequency of crashes was reduced by 100 percent. Additionally, fatalities at this location went from eight to zero and injury crashes went from 190 to 71, a 63 percent decrease. When PennDOT evaluated the cost-benefit ratio of HFST, it found that it saves roughly one life each year for every 15 locations it was applied. In addition, the research found that HFST reduced wet road crashes on horizontal curves by 75% and run-off-road crashes by over 50%.

Another countermeasure is high tension cable median barrier (HTCMB) placed in the median of high-speed divided highways and freeways to combat cross median crashes. HTCMB was installed on a 2-mile stretch of I-95 in Delaware County. There were three fatal and two suspected serious injury cross median crashes at this location in the five years before the installation of this barrier. Crashes of this severity were reduced by 100 percent in the five years after the installation of the countermeasure at this location. Additionally, statewide usage of HTCMB has reduced cross median crashes by almost 80% and fatal and serious injury crashes by over 30%.

Local municipalities seeking more information on implementing HTCMB and other safety countermeasures in their jurisdictions, the Local Pennsylvania Assistance Plan center can assist. These centers are dedicated to transferring transportation technology through training, technical assistance, and other customer services to municipal elected officials and their staff.

PENNDOT RECEIVES REGIONAL AASHTO AWARDS FOR FERN HOLLOW REPLACEMENT, WESTMORELAND COUNTY INTERCHANGES



PennDOT was recently announced as the recipient of a regional America's Transportation Award from the American Association of State Highway and Transportation Officials (AASHTO).

The department was recognized for its efforts to replace the collapsed Fern Hollow Bridge in Pittsburgh, and for the planning and construction of specialized high-traffic intersections in Westmoreland County. Awards were won in the categories of "Operations Excellence" and "Best Use of Technology," respectively.

In January 2022, Pittsburgh's Fern Hollow Bridge collapsed, severing an important connection between Pittsburgh neighborhoods and adjacent Edgewood and Wilkinsburg communities, and disrupting public transit, emergency and school travel. The team of PennDOT, the City of Pittsburgh and FHWA along with their talented contractors and consultants utilized emergency procedures and expedited design and construction processes to open to traffic in just 11 months rather than the potentially four-to-five-year project, avoiding years of detours.

"The Fern Hollow replacement represents some of the most impressive and demanding work the department has done," said PennDOT Secretary Mike Carroll. "I am proud to have AASHTO recognize the excellence of our team and its efforts in the community."

In addition, the \$25.3 million replacement bridge incorporated measures to improve bike and pedestrian accessibility with the inclusion of a shared use path and sidewalk access. The new accessibility measures increased dedicated pedestrian and bicycle width by 50% compared to the previous bridge.

In Westmoreland County, increasing traffic volumes and deficiencies in roadway design at the I-70 Yukon and Madison interchanges impeded safe travel. The redesign of the interchanges included a \$93 million reconstruction project of nearly four miles of roadway on I-70 to widen the median and shoulders, rebuilding of the interchanges at Exits 53 and 54 by lengthening the ramp acceleration and deceleration lanes and providing an eastbound auxiliary lane between the two interchanges. In addition, the project included replacement of four I-70 bridges, one I-70 buried culvert, a new proposed culvert and maintenance on one Route 3010 structure.

"Data collection and collaboration with local stakeholders to determine where the need is greatest is imperative to good design," said Carroll. "In Westmoreland County, we were able to create a safer system of interchanges and lanes to support the area's growing communities and commerce."

The new interchanges provide improved access to Commerce Crossing at Westmoreland and other nearby businesses and residences, and were designed to handle higher traffic volumes, including the substantial flow of truck traffic on the roadway, which prepares the region for future growth. The interchange project is part of the ongoing I-70 Interstate modernization initiative.

To learn more about projects on the I-70 corridor in District 11, please visit www.I-70projects.com.

PENNDOT SECRETARY PROVIDED MID-YEAR UPDATE ON PA ROAD, BRIDGE CONSTRUCTION PROGRESS



In just six months, 74 bridge projects were completed – including the quick repair to I-95 in Philadelphia – and 1,200 miles of roadway were improved. These were just a few of the mid-2023 results PennDOT Secretary Mike Carroll promoted during a visit to Pittsburgh.

At the July 20 event at the Route 3027 Smithfield Street bridge preservation project, Secretary Carroll stressed the importance of transportation investments, which enhance the Commonwealth's vitality and economic competitiveness.

"Under the direction of Governor Shapiro, PennDOT is doing tremendous work across Pennsylvania to make travel safer and smoother," Carroll said.

The Route 3027 Smithfield Street bridge project is funded through nearly \$9.5 million in state investments. It is one of more than 1,500 projects worth over \$9 billion currently or expected to be underway on state-maintained roads this year.

On July 20, PennDOT shared more construction progress results between January and June 2023, including:

- 126 construction contracts for highway, bridge, and other improvement projects were completed statewide (in addition to work by department maintenance crew).
- 403 bridges were put out for bid to be repaired, replaced, or preserved.
- 74 state and local bridges were completed.
- Nearly 1,200 roadway miles were improved.
- 352 miles of road were paved.

Information about state infrastructure in Pennsylvania, including completed work and significant projects, is available at www.penndot.pa.gov/results. Find PennDOT's planned and active construction projects at www.projects.penndot.gov.

GOVERNOR SHAPIRO ANNOUNCED NEARLY \$36 MILLION IN GREEN LIGHT-GO GRANT FUNDS TO COMMUNITIES ACROSS THE COMMONWEALTH TO IMPROVE TRAFFIC SAFETY

Governor Josh Shapiro announced that 77 municipalities across the Commonwealth will receive over \$35.5 million to support traffic signal upgrades, increasing safety, and mobility across Pennsylvania's communities through the Pennsylvania Department of Transportation's (PennDOT's) "Green Light-Go" program.

Green Light-Go grants are provided as reimbursement to municipalities for updates to improve the efficiency and operation of existing traffic signals. These projects will be funded through the appropriation for fiscal year 2023-24. Grant funding through the Green Light-Go program may be utilized for a range of operational improvements including, but not limited to, light-emitting diode (LED) technology installation, traffic signal retiming, developing

special event plans and monitoring traffic signals, as well as upgrading traffic signals to the latest technologies.

Governor Shapiro has made clear that his Administration is committed to transforming Pennsylvania government to more effectively serve Pennsylvanians by cutting through red tape and working as safely and efficiently as possible. It is that same spirit that was demonstrated in the effort to successfully open Interstate 95 in just 12 days, and now the PennDOT's team of expert engineers and work crews continue to work efficiently for people across Pennsylvania.

To view the distribution specifics of these funds, visit Green Light-Go on PennDOT's website.

PENNDOT URGES SAFETY, OFFERS GENERAL DRIVER TIPS

By Cori Ritter, Communication Office Intern



PennDOT reminds all drivers to stay safe on the roads when behind the wheel of a car – whether alone or with passengers – driving safely should always be a top priority. In the last year, 1,179 people died on our roadways. Even one life taken; is one too many.

Safety is everyone's responsibility, so follow these tips to keep you and others on the roadways safe:

- Don't drink and drive.
- Obey the speed limit; driving too fast gives you less time to react.
- Do not talk or text on your cell phone while driving. Texting is illegal.
- Use your turn signals so other drivers know what you are doing.
- Focus on the driving task, the road and the conditions around you.
- Don't eat or drink while driving (these are also distractions!)
- Adjust radio and climate controls before beginning your trip, have your passenger adjust the controls for you or adjust the controls when you are stopped.

- Plan ahead to know where you are going and get directions.
- Leave early and give yourself plenty of time to get to your destination.
- Expect the unexpected.

Remember, when behind the wheel, "Start SMART, Stay SMART."

Start SMART

- S** - SEAT belt on, seat adjusted.
- M** - MIRRORS adjusted and clear.
- A** - AIR conditioning, heating and defrost controls set.
- R** - RADIO and audio panel set.
- T** - THOROUGHLY check the area for traffic, people or objects.

Stay SMART

- S** - Watch your SPEED.
- M** - Frequently check your MIRRORS.
- A** - AVOID distractions.
- R** - Remember the RULES of the road.
- T** - Give yourself enough TIME to reach your destination.

PENNDOT EXPEDITES TAX REIMBURSEMENT PROGRAM PROCESSING VITAL TO AIRPORTS

By PennDOT Bureau of Innovations



Aviation plays a significant role in Pennsylvania's economy, and PennDOT's e-Grant program is helping to support the 121 public-use airports and related facilities.

Paul Bendigo, trustee to his family's privately-owned public-use Bendigo Airport in Tower City, Dauphin County, appreciates that support.

In 2022, PennDOT's Bureau of Aviation improved their process by transitioning its Real Estate Tax Reimbursement Program for public-use airports from being paper-based to the online e-Grants program.

"It did run a lot more smoothly this past year," Bendigo noted.

As one player in an industry that contributes nearly \$24 billion to the state's economy, Bendigo's airport is home to roughly 20 privately-owned aircraft. When his family invested in a new runway and taxiway in 1999, Dauphin County assessed the improvement as a structure and assessed the pavement of the runway and taxiway at nearly \$200,000 in addition to the land assessment of approximately \$150,000. In 2022, the airport paid nearly \$9,000 in real estate taxes and received roughly \$6,200 from the Tax Reimbursement Program.

"Without the reimbursement program, it would be hard for us to stay open, because that's the only thing that can give us a level playing field with publicly-owned airports that don't have to pay any real estate taxes," Bendigo said.

Bendigo added that the privately-owned public airport business "is very challenging ... with the cost of fuel and the cost of maintaining airplanes, it's not what it was when my father opened the airport

to the public in 1963. "We've been providing this public service for this whole time," Bendigo said. "The Real Estate Tax Reimbursement Program helps us out tremendously."

Before the transition to e-Grants, Justin Palmer, Aviation Specialist supervisor in PennDOT's Bureau of Aviation said, "airports mailed or emailed in tax documents, the Office of Administration (OA) verified the documents, the Bureau of Aviation determined eligibility areas, and OA processed the request."

With the transition to the new online process, the sponsor creates a Keystone log in account on e-Grants, signs a one-time agreement, creates a new application, uploads the tax information, and signs and submits the documents electronically.

"The application process is greatly improved, and the turnaround time is less than 28 days," Palmer added.

The funds used for the program come from a portion of the Aviation Restricted Account, which is supported by aviation fuel sales taxes. Palmer added that roughly 20 public airports apply for the program each year.

"Obviously, there is the benefit to the airport owner," he noted. "The reduction of their overall tax bill. It's an appreciation or a gesture of good will that we try to extend to these airports. We are doing everything we can to help them survive. Owning a public airport is not a lucrative business. It's a very difficult industry. It's a little way of helping the smaller airport owners in a very small way."

BUREAU OF PUBLIC TRANSIT: ANNUAL REPORT

By Danielle Spila, Director Bureau of Public Transportation



The Pennsylvania Department of Transportation's Bureau of Public Transportation (BPT) is required under Act 44 of 2007 to publish an Annual Performance Report each April with facts and performance details on each public transportation provider in the Commonwealth. The Annual Report addresses BPT's transit agency performance review program including executive summary findings from its annual transit agency reviews. In addition, the Annual Report includes data profiles of all urban and rural public fixed route transit systems, as well as community transportation (i.e., Shared-Ride and Medical Assistance Transportation Program providers), intercity bus, and passenger rail systems within the Commonwealth.

The FY 2021-22 report also highlights:

- How PennDOT is supporting Pennsylvania's transit agencies as they prepare for the future and respond to changing travel patterns, trends, and conditions that have resulted from the COVID-19 pandemic. Transit agencies are exploring strategies to prepare for future transit service, including:
 - Designing new/expanded facilities
 - Integrating multi-fuel sources and technologies
 - Redesigning transit services; and
 - Implementing innovative technologies.
- Major capital projects at Coatesville and Downingtown Train Stations; Southeastern Pennsylvania Transportation Authority (SEPTA); Port Authority of Allegheny County (PAAC); Allied Coordinated Transportation Services, Inc. (ACTS), Butler Transit Authority (BTA), Indiana County Transportation Authority (IndiGO), Schuylkill Transportation System (STS), and Susquehanna Regional Transportation Authority (SRTA).

To read the Annual Performance Report, go to:

<https://www.penndot.pa.gov/Doing-Business/Transit/InformationandReports/Documents/BPT%20Annual%20Report%202021-22.pdf>

COLLABORATION WITH COLLEAGUES FROM COLORADO

By PennDOT District 12

It is not unusual for Transportation professionals across the nation to work collaboratively to solve problems. This happens in many ways, including national organizations working together to conduct and share research, as well as discussing challenges and solutions. However, sometimes the collaboration occurs on a smaller scale.

This year Uniontown-based District 12 team members had the opportunity and privilege to talk to our counterparts in the Colorado Department of Transportation (CDOT). This opportunity allowed our industry leaders to travel back in time, share information, and collaborate across many miles.

Bryce Reeves, an employee of CDOT, is currently working on a new project along U.S. 287 in Boulder County, Colorado. Their office became aware of a similar project along Route 22 in District 12 which prompted this outreach. This was a unique request not only because Route 22 improvements were completed in 2013, but also because they became aware of our project during a conversation with a work colleague who coincidentally lived near Route 22 twenty years ago! The work on the 25-mile-long Route 22 corridor was broken up into several sections with design and construction spanning a period of 30 years.

Although several of the key players on the Route 22 Corridor Project are no longer with us, our current District 12 staff was happy to assist. A virtual Teams meeting was set up between our offices to discuss traffic concerns and share details and technology used to improve safety and efficiency, as well as best practices for public involvement and project delivery. This meeting ended with an open-door invitation for future meetings and collaborations with their office.

Great partnerships are built on shared visions cemented with mutual respect and trust. District 12 would like to thank William L. Beaumariage, P.E., ADE-Construction; Liberty A Hill, P.E., Plans Engineer; and Bryan Walker, P.E., District Traffic Engineer, for their willingness to share information. We'd also like to thank Bryce Reeves, P.E. II, Region 4 Traffic and Local Agency Resident Engineer, at CDOT for his outreach that allowed for a great collaborating opportunity. When there is teamwork and collaboration, wonderful things can be achieved.

Any business leader will tell you that relationship building is paramount to the success of their organization. We welcome this new relationship with CDOT. The next time we have a unique challenge or want to discuss an innovation we are considering we may take an opportunity to reach out and see if CDOT can be of help. We look forward to future collaborations and more partnering opportunities such as these!

In the meantime, it gave us an opportunity to bring back memories on a series of roadway projects that we considered a major success and improvement to the transportation system in Westmoreland County—one that we are very proud of.

PENNDOT, PA TURNPIKE HIGHLIGHT POLLINATOR INITIATIVES



Roadside pollinator plantings, led by PennDOT, PA Turnpike and other partner organizations are taking place around Pennsylvania. PennDOT has overseen more than 40 acres of pilot pollinator plantings with an additional 25 acres of habitat in progress. Areas targeted for pollinator-specific plantings are continually monitored by maintenance teams for the presence of invasive species and weeds as well as healthy growth and pollinator activity.

In addition to plantings, PennDOT seed mixture updates took effect earlier this year. Seed mix updates removed notable non-native and invasive plants and added pollinator-friendly plants such as black-eyed susans (*Rudbeckia hirta*), ox-eye sunflowers (*Heliopsis helianthoides*) and common milkweed (*Asclepias syriaca*).

"The degradation and loss of pollinator habitats is a risk to those affected species as well as pollinator dependent crops across the state," said PennDOT Executive Deputy Secretary Cheryl Moon-Sirianni. "We invite every Pennsylvanian to join us in their own gardens, or with PennDOT through the Adopt and Beautify program."

The PA Turnpike has piloted five pollinator habitats across the state. Within those locations there are 19 different plots for a total of over 10 acres which utilize a variety of seed mixes and management practices. These plots include many of PennDOT's seed mixes of 16 different native plants. The seeds include an array of native wildflowers like lanceleaf coreopsis (*Coreopsis lanceolata*), mint plants like anise hyssop (*Agastache foeniculum*), herbaceous perennials like milkweed species (*Asclepias* sp.) and wild bergamot (*Monarda fistulosa*), as well as the flowering plant foxglove beardtongue (*Penstemon digitalis*).

At the PTC administration building in Dauphin County, the turnpike has overseen the planting and maintenance of this pilot site, with Lance-leaved coreopsis currently blooming.

"Pollinator habitats provide an array of colors and fragrance," said PA Turnpike CEO Mark Compton. "But more importantly these natural gardens, comprised of native plants, promote, protect and preserve pollinating animals."

PennDOT's Pollinator Habitat Plan, adopted in 2019, is operated in partnership with other federal and state agencies, private and community organizations, to create naturalized gardens and meadows planted with pollinator-friendly plant species at designated sites. Highway rights-of-way have been recognized nationally as lands that have potential to provide habitats for pollinators and support corridor connectivity for pollinators.

In November 2022, Act 112 established the Pollinator Habitat Program Fund to be supported in-part by purchases of the new Pollinator license plate PennDOT announced earlier this year. The fund will create naturalized gardens and meadows planted with pollinator-friendly species of flowering plants specifically for bees, butterflies, beetles, and other insects which may have been adversely affected by the loss of their native habitat. Sixty-five percent of the proceeds from the license plate will be deposited into the Pollinator Habitat Program Fund.

The Pollinator license plate is now available for passenger cars or trucks with a registered gross weight of not more than 14,000 pounds. Applicants for the Pollinator license plate must submit a completed Form MV-911, "Application for Special Fund Registration Plate." More information, including eligibility requirements and image of license plates, is available on the Registration Plates page on PennDOT's Driver and Vehicle Services website at www.dmv.pa.gov.

Habitat loss, fragmentation and degradation, increased pesticide use and introduced diseases are threatening pollinators around the world. Native pollinator-positive plants are a critical link in Pennsylvania's eco-system providing habitat for pollinators like butterflies, bees and hummingbirds to support crops and local biodiversity.

If you're interested in taking part in this initiative, please consider planting native pollinator-friendly plants. Additionally, interested citizens can apply to the PennDOT Adopt and Beautify and Keystone Pollinator Habitat programs to get involved locally.

BIRD BOX PROJECT HELPS POLLINATORS IN CAMBRIA COUNTY



You've heard of Habitat for Humanity, well, how about Habitat for Pollinators? Helping pollinator species of bees, butterflies and other insects is a significant environmental focus for PennDOT. Over the past several years gardens full of wildflowers that attract these pollinators have been planted along PennDOT roadways across Pennsylvania. In District 9, county employees have grown pretty blooms at county offices and in open areas near state roads.

One of the MR-2's in Cambria County came up with an idea to help support the birds that also do the job of pollinating crops, specifically, Blue Birds. Bart Borlie started making bird boxes out of scrap lumber he had lying around the stockpile to put in some of the newly planted pollinator habitats in the county. He successfully built 30 boxes and thought, why stop there? Borlie then suggested having school kids paint the boxes, which led to having a local Girl Scout Troop paint them to earn a badge.

Management Analyst 2, Tara Callahan-Henry, being heavily involved in Scouts with her own children, coordinated the effort to have a sister troop from Girl Scouts of Western PA take on the project. Cambria County Maintenance Manager Mike Peachey took it from there and the girls got creative! They each painted different designs on the boxes earlier this Spring then, crews installed them in several of their pollinator habitats.

PENNDOT SAFE ROUTES TO SCHOOL PROGRAM MAKES A COMEBACK



PennDOT is finding ways to encourage students to safely walk or ride their bikes to school. Infrastructure that supports walking and biking to school promotes healthy, daily exercise, cuts down on vehicle emissions, and creates more livable and sustainable communities.

In the past, walking and biking were the main ways students traveled to school, but the practice has dwindled through the decades. Walking or bicycling as the main form of school travel steeply decreased from 50% in 1969 to 10.4% in 2017. As children and teens become more sedentary, there is growing concern about their overall health.

To foster more walking and bicycling to and from school, PennDOT is promoting the Safe Routes to School (SRTS) program. SRTS provides funds from the State Transportation Alternative Set-Aside (TASA) program to eligible school districts, municipalities, and nonprofit organizations that want to encourage students from kindergarten through twelfth grade to safely walk or bike to school. Proposed projects must be within two miles of a school to qualify.

SRTS funds two types of projects: infrastructure and non-infrastructure. Infrastructure projects improve walking and biking safety through construction projects. Some examples include sidewalk construction; curb ramps; crosswalks; upgrading traffic signals for pedestrian crossing; bicycle parking facilities; and on-road bicycle lanes or bicycle pathways separated from vehicle traffic.

Non-infrastructure projects include educational and encouragement programs and events, such as student sessions on bicycle and pedestrian safety; volunteers and managers of SRTS programs for a city, school district or region; public awareness campaigns; and traffic education and enforcement near schools.

PennDOT accepted applications for the latest round of funding this summer and fall. To learn more about SRTS, go to: <https://bit.ly/PennDOTSRTS>.

MOTORISTS ARE REMINDED ABOUT THE DANGERS OF FLOODING, URGED TO NEVER DRIVE THROUGH FLOODED ROADWAYS



PennDOT, Pennsylvania Emergency Management Agency (PEMA), and Pennsylvania State Police (PSP) urged motorists to never drive through flooded roadways.

When heavy rain is in the forecast, motorists should be alert for potential flooding on roadways and in low-lying areas. Drivers should always obey warning signs and traffic control devices, and never drive through flooding or standing water on roads. Shallow, swiftly flowing water can wash a car from a roadway. Also, the roadbed may not be intact under the water.

Anyone who drives around barriers intended to close a road can face increased penalties if emergency responders are called to rescue motorists who disregard traffic control signs.

Motorists are also reminded that Pennsylvania law requires headlights to be turned on anytime a vehicle's wipers are needed. Drivers should turn on their full headlights during rain events as the daylight running lights feature on some vehicles does not automatically turn on the taillights.

Some of Pennsylvania's biggest impacts from tropical systems have occurred in September (Lee, 2011 and Ida, 2021) and October (Sandy, 2012). More than half of all tropical cyclone-related deaths in the United States over the past decade have been from inland flooding.

The National Weather Service reminds everyone to "Turn Around, Don't Drown!" in flash flooding! For more information about flooding, visit <https://www.weather.gov/safety/flood>. You can check the forecast throughout hurricane season by visiting www.hurricanes.gov and www.weather.gov.

More information about how to prepare for any type of emergency, including specific information for people with access and functional needs or pets, is available on the [Ready PA](#) webpage.

LIKE FATHER, LIKE SON

By Jessica Ruddy, Community Relations Coordinator, District 4



Proverb. Fathers and sons resemble each other, and sons tend to do what their fathers did before them.

It all started when Preston was only 4 years old. He remembers the day as if it was yesterday. His father and a PennDOT crew were working outside of his daycare center. He watched and was in awe of the equipment and how much fun the crew was having at work. Gene and his crew were not just co-workers. They were family.

Gene and Preston Perry exemplify the old proverb. Gene Perry began his career at PennDOT 28 years ago as a Winter Temporary Equipment Operator. Today, Gene is the Assistant County Manager in Wayne County and lives in Susquehanna Depot in Susquehanna County with his wife and two children.

Preston, Gene's 1st and only son started out as a Government Services Intern when he graduated high school and then attended college for a short time. Preston decided that college wasn't for him and decided to head back to PennDOT as a Transportation Equipment Operator Trainee and become full-time in November of 2022 as a certified B Operator. Ultimately Preston's goal is to work his way up to an S Operator and move up the proverbial ladder as his father has.

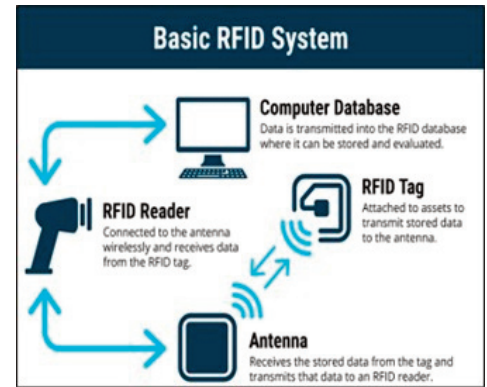
He has no regrets about his decision to leave college. He missed his co-workers teaching him how to operate the equipment he once watched his father use that day outside of the daycare center. Preston affectionately remembered his first storm when his dad went out into the elements and shared his vast knowledge. A night he will never forget.

Outside of PennDOT, Preston is a volunteer fireman at 3 stations with Susquehanna being his primary location, he also loves the outdoors. Whether it's four-wheeling, hunting, or fishing, he enjoys the beautiful landscape of Susquehanna County with his two Golden Retrievers, Mazy, and Clarabelle.

Preston looks forward to continuing to learn at PennDOT, working with his co-workers who are family, and helping to make his community a better place for all who live and travel through.

TAG YOU'RE IT: RFID TAGS ARE STICKING AROUND

By PennDOT Bureau of Innovations



The Federal Highway Administration's (FHWA) State Transportation Innovation Council (STIC) Incentive Program continues to help Pennsylvania advance innovations, making it easier for PennDOT to deliver more timely and efficient transportation services to the traveling public.

With up to \$100,000 per year from FHWA, the STIC Incentive Program has supported such recent advances in extending bridge life as well as innovative construction and inspection approaches.

The Radio-Frequency Identification (RFID) Tags Test Usage pilot project was selected to receive STIC Incentive Program funding in 2022. The goal of the project is to investigate the potential use of RFID tags for various PennDOT assets. By scanning an RFID tag, limitless data about the product to which it is attached becomes accessible.

For example, a precast concrete tag could display the manufacturer, date cast, test results, material certification, etc. Onsite material samples could be tagged and sent for testing where the tag is scanned to receive details about the sample. Once completed, data could be deleted, and the tag sent back out for use. Tags could also be used by maintenance forces when permanent items, such as signs, structures, guiderail, etc., are tagged.

John Myler, assistant construction manager, PennDOT District 11, is overseeing the pilot project. Two additional District 11 employees, James Hontz, district materials manager and Dean Poleti, P.E., maintenance service engineer, are assisting with integrating RFID tags with PennDOT technology, along with Phil Petrina, a program analyst in the Bureau of IT Project Development and Delivery. Additionally, a consultant team from WSP, including Lou Ruzzi, P.E., Chris Mills, RCDD, and Bill Fabrizi, P.E., are also contributing to the work on this project.

What is RFID?

RFID is a wireless, non-contact system that uses radio-frequency electromagnetic fields to automatically identify and track tags attached to objects. The system is comprised of two components – tags and readers. The reader is a device that has one or more antennas that emit radio waves and receive signals back from the RFID tag. Some examples of where RFID tags are found are in credit cards, car key fobs, and access control badges.

There are two types of RFID tags – passive and active.

Passive tags require no battery and are powered to read at short ranges via magnetic fields. The tag contains electronically stored information that can be read up to several feet away. Since a passive RFID tag does not have any power source, an RFID reader within range is needed.

Active RFID tags are continuously operating, battery-powered sensors that gather and transmit data to a reading device. Unlike a passive tag, an active RFID tag has an onboard, long-lasting battery that enables the tag to transmit data continuously, regardless of whether it's in the field range of a reader.

For the purposes of the pilot project, Myler and his project team, are using passive RFID tags. Each tag has a unique identifying number that correlates to the information being stored about the asset in a backend database.

Why RFID?

With PennDOT's e-Construction and Partnering efforts and its Digital Delivery Directive 2025 initiative, Myler noted that the use of technology will continue to expand at PennDOT, along with the need to collect and store even more data moving forward.

With the replacement of paper processes and the need to capture and store this data in these systems of record, Myler believes the use of RFID tags is an additional opportunity for PennDOT to leverage more of the data collected in the future.

"The Proof is in the Tagging"

Since RFID is a mature technology and has been used a lot of different ways in a lot of different places, Myler and the project team began their evaluation by conducting outreach to other states and industry partners to collect and build upon lessons learned and eventually customize the technology to fit PennDOT's needs.

The team also evaluated the RFID tags and readers to see how they would perform in a variety of conditions.

"There are seven factors that we looked at to evaluate RFID tags," Mills said. "We evaluated them for frequency range, environment, mounting services, size, attachment method, reading range, and memory storage."

Continued on bottom of page 14

MICHAEL RIMER HELPS PENNDOT'S CENTER FOR PROGRAM DEVELOPMENT

By Larry Shifflet, Deputy Secretary for Planning

Michael Rimer, AICP, began his PennDOT career in 2015 as a Transportation Planning Specialist Supervisor in the Statewide Programs Section of PennDOT's Center for Program Development and Management (CPDM). Recently, Mike has been instrumental in the development of Pennsylvania's 2045 Long Range Transportation Plan and 2045 Freight Movement Plan.

Mike brought over 20 years of Planning experience with him to PennDOT. He began his Planning career at the Tri-County Regional Planning Commission as a Community Planner for the South-Central Pennsylvania region. He then went on to serve as the Township Manager for West Hanover Township in Dauphin County and then onto Manheim Township in Lancaster County. Mike's experience with regional planning and local governments has provided him with a working understanding of land use as it pertains to transportation planning.



Throughout his career, Mike has achieved and continues to maintain his American Institute of Certified Planners (AICP) professional certification. In June 2023, Mike was promoted to Manager of CPDM's Air Quality and Federal Initiatives Section. This section is responsible for the overall development and

implementation of programs and measures required for compliance with the Clean Air Act. They also coordinate several federal programs on behalf of PennDOT, such as the Scenic Byways, Safe Routes to School, Recreational Trails, Carbon Reduction and the Transportation Alternatives Program.

Please join us in congratulating Mike and wishing him well in this new professional endeavor.

Continued from page 13

For example, the tags were put under water, in concrete and asphalt, and baked in an asphalt oven at 320 degrees, none of which damaged the tags. "This shows the quality and the ruggedness of these tags and that they can have a long-life span in many different situations encountered on a construction site," Myler said.

The RFID readers were also evaluated to ensure inspectors have a device that won't break if it falls, and is Ingress Protection (IP) rated, which means it is effectively sealed from the elements. The team also tested reading capabilities of the tags through walls and evaluated Bluetooth and Wi-Fi connections to ensure secure data transmission and access to asset information.

Through the evaluation, the team noted some limitations that prevented reading some of the tags. For example, most tags cannot be read through steel; although, there are some tags that have a metallic side and when placed on a sign, it uses the steel of the sign to amplify the signal.

"It requires learning what these different RFID tags are used for and understanding the limitations each one has versus another," Myler said. "All tags have benefits depending on how you intend to use them. Some tags can be recycled and reused, some can be read without seeing them, and most are durable and can last over time."

What's Next?

The next phase of the project is determining where to store the data being collected. A software application that translates the unique identifier to the asset and all the information that's included is needed for future use of the RFID tags.

"There are several options to explore regarding storing this data," Myler said. "We are looking at off-the-shelf products as well as

the possibility of developing an internal system that can be customized, or maybe a hybrid solution."

According to Myler, additional next steps include

- Procurement of RFID tags and readers for each PennDOT district and central office
- Development of a program management initiative for RFID statewide implementation
- Development of standard operating procedures for the RFID program
- Development of a user manual for the RFID program
- Development of training procedures for application of tags and use of readers, and data management
- Develop RFID tag options for varied use cases

Myler shared that the STIC Incentive Program funding is being utilized to purchase two RFID readers for each PennDOT district. Along with the readers, each district will receive a handful of RFID tags and guidance on how to connect the reader to Bluetooth. The team is also working on getting the applications approved within the PennDOT app catalog, so employees can access this software on department devices. The hope is that eventually PennDOT partners, including local government, can benefit from this technology as well.

"With these types of technology solutions, it's beneficial to take very small steps," Myler said. "We want to make sure there is a good return on our investment and that it's a program that makes sense. We want this to be an innovative solution for PennDOT and our partners."

PENNDOT HOSTS TRANSFORMATIONAL TRANSPORTATION TECHNOLOGY WEBINAR



INNOVATION IN MOTION

Webinar Series



Earlier this year, PennDOT's Bureau of Innovations (BOI) hosted the first webinar of the 2023 Innovation in Motion webinar series titled Transformational Transportation Technologies focused on Electric Vehicles (EVs), Connected and Automated Vehicles (CAVs), and how infrastructure must adapt to meet the ever-changing demands of the transportation landscape.

Presenters included Colton Brown, alternative fuels infrastructure coordinator in PennDOT's Strategic Development and Implementation Office, and Natasha Fackler, infrastructure implementation coordinator in the Governor's Office of the Budget to discuss the benefits of EVs and brief attendees on PennDOT's EV initiatives.

In addition, BOI welcomed Gunnar Rhone, P.E., an engineering specialist in PennDOT's Strategic Development and Implementation Office, to provide an overview of CAV technology and discuss the wide-ranging transportation challenges that these technologies can address.

Brown and Fackler provided an overview of EVs including financial, environmental, and economic benefits before discussing how the vehicles are charged. Brown and Fackler also provided insight on some of the programs currently in the works at PennDOT for EVs. These programs include ADA accessible charging stations, transitioning fleet vehicles to EV, education and outreach, and the EV Mobility Plan, which recommends the installation of at least 5,000 new EV-charging ports on at least 2,000 sites by 2028.

"PennDOT is working on transitioning a large portion of its fleet to electric vehicles by 2025," said Brown. "So far, PennDOT has over a 100 plug-in hybrids and many more electric vehicles on order, and there's also over 300 charging plugs either installed or in progress at PennDOT fleet locations."

Later, Fackler covered the Bipartisan Infrastructure Law (BIL) and the National Electric Vehicle Infrastructure (NEVI) program.

"Pennsylvania received \$171.5 million from the Bipartisan Infrastructure Law across five years to support our electric vehicle initiatives," said Fackler. "In the first year we will be focusing on filling out our alternative fuel corridors."

Later, Gunnar Rhone covered the ins and outs of CAVs including how they work, network and connection requirements, and the ongoing testing happening in Pennsylvania today.

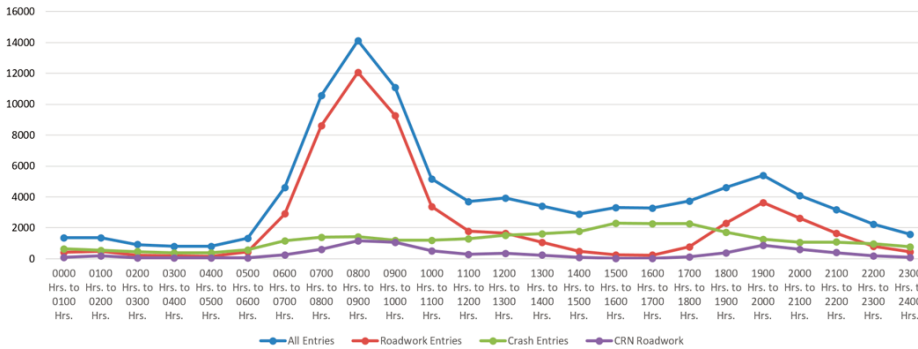
"Full deployment is really far off in the future," said Rhone. "We're building everything that's needed to deploy them right now in a way that has benefits for the public right now."

To watch the full webinar and see other webinars, visit the "Innovations in Motion Webinars" playlist on the department's YouTube channel, www.youtube.com/pennsylvaniadot.

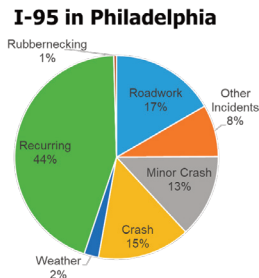
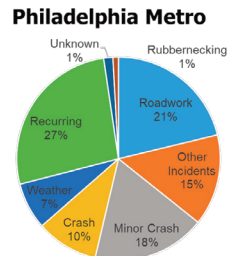
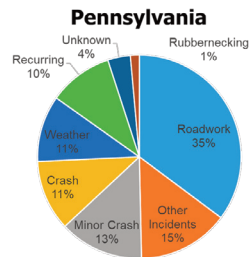
More information on the National Electric Vehicle Infrastructure (NEVI) Formula Program can be found on the PennDOT.pa.gov.

More information on the CAVs and testing can be found on the PennDOT website.

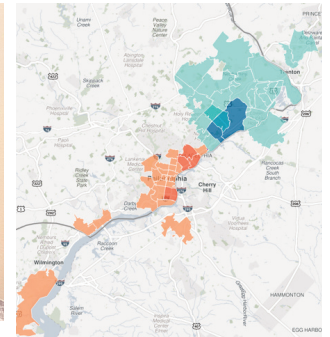
TRAFFIC AND SAFETY: TOOLS OF THE TRAFFIC TRADE



Ryan McNary



Scott Benedict



This summer PennDOT’s Bureau of Innovations hosted the second webinar of its 2023 Innovation in Motion webinar series titled Tools of the Traffic Trade, which focused on the next generation of online tools to improve work zone safety and traffic incident management.

Presenters included Ryan McNary, chief of the Traffic Operations and TSMO Performance Section in PennDOT's Bureau of Operations, and Scott Benedict, senior traffic control specialist in PennDOT's Bureau of Operations to discuss the status and benefits of traffic safety tools and initiatives.

During his presentation, McNary provided an overview of the pilot Lane Reservation System, and its potential impact on the more than 4,000 miles of core roadway network. The Lane Reservation System will consider historical congestion and capacity levels to allow construction and lane closures to be scheduled with a holistic view of its impact on traffic, capacity, and congestion. Data on upcoming lane closures can then be used to alert drivers of impending congestion.

Later, McNary shared updates on two Federal Highway Administration Every Day Counts (EDC) Round 6 innovations – Crowdsourcing for Advancing Operations and Next Generation Traffic Incident Management (TIM): Integrating Technology, Data, and Training, which include efforts to increase crowdsourced data collection to better feed PennDOT’s Incident Management System. The technology pulls together the speeds and incidents from a subset of vehicles on a given segment of roadway to provide real-time information, enabling PennDOT to create travel time messaging and increase roadway situational awareness. Additionally, virtual queue protection delivers automated

messaging to drivers approaching congestion and construction, by using INRIX crowdsourced data to dynamically calculate how far ahead traffic is stopped or slowed down. Virtual queue protection helps decrease crashes in select corridors.

PennDOT also entered into an agreement with the Maryland Department of Transportation to use a web-based video sharing platform called MView. The platform provides access to a network of more than 15,000 camera feeds in several states to municipalities for free, allowing partners to have better situational awareness when incidents occur.

During his presentation, Benedict discussed the benefits of utilizing available Trip Path Data from the Regional Integrated Transportation Information System (RITIS). Trip Path Data included origin and destination data sets collected from vehicles to inform planning. This anonymized data is available statewide, requires no manual collection, and can be used to analyze the impact on traffic caused by specific events in hindsight, such as the I-95 bridge collapse in June, to better inform future needs.

More information on Traffic Incident Management can be found on the [FHWA website](#) : EDC-7: Next-Generation TIM: Technology for Saving Lives | Federal Highway Administration (dot.gov).

More information on Lane Reservation System is available on [PennDOT's website](#) : State Transportation Innovation Council > Innovations > Lane Reservation System.

More information on The Eastern Transportation Coalition is located at [tetcoalition.org](#).

PENNDOT SURVEY CREW USES ALTERNATIVE METHODS TO SURVEY MOSHANNON CREEK

By Sara Caldwell, District 2 Intern

When it comes to surveyors, they'll go wherever they're needed to perfectly map out a project. Surveying creeks can often be a dangerous job, and with silt in the creek bed and steep embankments leading to the water, trips and falls are common. Luckily for District 2's Survey Unit, this treacherous activity could soon be washed away thanks to new and innovative methods.



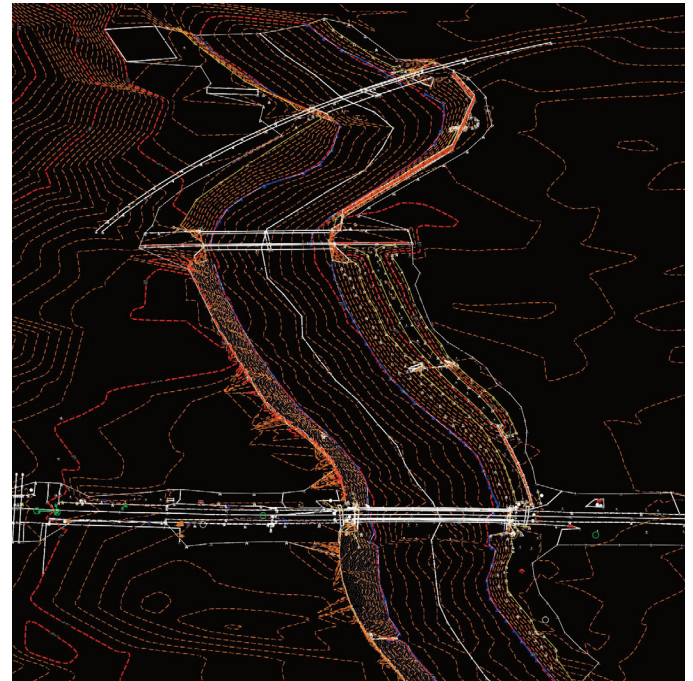
District 2's Survey Unit recently experimented with alternative methods to survey Moshannon Creek in Philipsburg. Ed Natoli's Survey Corps safely used a land, sea, and sky approach to produce a complex 3D digital model of the project area, where they would otherwise be in harm's way.

Land:

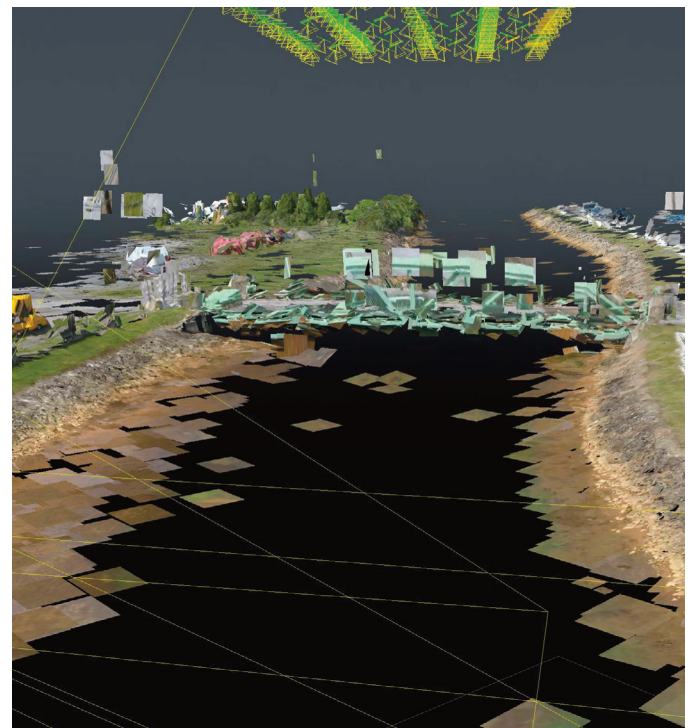
By using conventional surveying methods, terrestrial scanning, and supplementing online data from state sources such as Pennsylvania Spatial Data Access (PASDA), Natoli's crew was able to safely gather topographic information within the entire project area.



Water:



Using small unmanned aerial systems, more commonly referred to as "drones," the Survey Unit was able to supplement the big picture from the sky by using digital photogrammetry software. In this case, Bentley Systems' ContextCapture, which takes the aerial photographs from the drone, stitches them together, and produces a 3D digital terrain model.



FLIGHT OF THE DRONES: PENNDOT'S UAS PROGRAM CONTINUES TO EVOLVE



The use of Unmanned Aerial Systems (UAS), also known as drones, is taking off around the country for both private and public use. For PennDOT, and other state DOTs, drones offer a unique approach to solving a myriad of complex issues and have proven to be a useful and necessary tool in the transportation toolbox.

From the beginning, PennDOT's UAS program has explored a variety of uses for these units. Drones have been deployed for structural, construction and stormwater mitigation inspections, surveys, traffic analysis, incident management and during disaster response, saving time and resources.

To position Pennsylvania as a place to safely test and deploy UAS technology, a public-private UAS Task Force was created in 2018 and charged with developing a multi-year strategic plan to establish a framework for identifying, integrating and managing UAS technologies. FHWA State Transportation Innovation Council (STIC) Incentive Program funding helped the task force develop the strategic plan along with manuals and a robust training program to ensure PennDOT staff and approach to UAS meet Federal Aviation Administration (FAA) safety regulations.

PennDOT has nearly 30 licensed UAS pilots statewide and 36 UAS units. PennDOT has also trained and certified over 100 third-party UAS pilots to fly missions for PennDOT.

Pilot projects have allowed for further evolution of the UAS program at PennDOT.

In District 11, which encompasses Allegheny, Beaver and Lawrence counties, PennDOT and its consultants conducted monthly flights to monitor the progress of the I-579 Cap Urban Connector Project, which was the recipient of the 2022 America's Transportation Awards National Grand Prize. The park project, which reconnected a community divided by an interstate several decades ago, consists of a new "cap" park structure spanning over a portion of I-579.

As part of the Kenmawr Bridge Replacement Project in Allegheny County, UAS flights were typically conducted monthly or as needed for critical work items. Using the "Reconstruct" software, a PennDOT consultant used the output from the flights to generate a 3D model, which was then tied to the project

schedule to monitor progress. The "Reconstruct" software was also used to monitor progress on the construction of a roundabout on McLaughlin Run Road in Upper St. Clair Township, Allegheny County.

District 11 is also currently piloting use of the "Datumate" drone mapping software on the Freedom Road roundabout project in Beaver County. The software can be used to measure the cut and fill areas, distances within the project, trim cross sections and note safety as well. It can be used for clash detection, to calculate earthmoving volumes and cross section design. The software helps to track progress to see if a portion of the projects is on track, close to being behind or late.

Other PennDOT districts continue to ramp up their UAS efforts as well. District 6, based in southeastern Pennsylvania, is building a robust UAS program using drones for supplemental and progressive construction inspection flights, pre-construction imagery for design activities, high mast inspections, and storm damage surveys. More recently, District 6 used a drone to monitor progress on the I-95 bridge collapse's cleanup and reconstruction efforts.

The district has also used drones to conduct a rockslide evaluation along I-476 and tested live streaming of drone flights in Microsoft Teams.

The Pennsylvania Turnpike Commission (PTC) also used \$50,000 in STIC Incentive Program funding from FHWA to assist in the purchase of four UAS vehicles that were transferred to the Pennsylvania State Police (PSP) for crash reconstruction work. The PTC also purchased an additional four UAS units for its own purposes. The drones have been a valued addition to their equipment and resulted in significant time savings and shorter road closures as the PSP needs less on-scene time during incidents and can map accidents without having to close the road.

PennDOT is not alone in their drone advancement efforts and frequently collaborates with other states to exchange information, ideas and lessons learned. PennDOT's next steps to further evolve the program include additional outreach, review of software being piloted, addressing UAS data storage challenges, expansion of PennDOT's drone fleet, which includes the recent purchase of 13 Skydio drones, and publication updates.

STATE TRANSPORTATION INNOVATION COUNCIL MEETS IN HARRISBURG

By PennDOT Bureau of Innovations

Pennsylvania's ongoing efforts to develop and implement more efficient and modern ways of delivering the best in transportation services were highlighted July 26 at the latest meeting of the State Transportation Innovation Council (STIC).

"PennDOT is populated with unbelievable talent, and has wonderful partners, starting with the Federal Highway Administration (FHWA), which was on full display to help with the I-95 bridge collapse earlier this year," PennDOT Secretary Mike Carroll said during the meeting. "Projects like this do not happen without full and complete support from FHWA and our partners in the consulting and contracting world."

The meeting featured the announcement of the Federal Highway Administration (FHWA) Every Day Counts Round 7 (EDC-7) innovations PennDOT has selected to pursue as well as the 2023 FHWA STIC Incentive Program funding recipients. The meeting also included the introduction of a new STIC innovation as well as updates on current STIC innovations and the project recipient of the 2022 STIC Incentive Program funding and highlighted other innovative projects that have been completed across the state.

Of the seven EDC-7 innovations, PennDOT selected the following five to pursue:

Nighttime Visibility for Safety – This innovation promotes traffic control devices and properly designed lighting to improve safety for all.

Next Generation Traffic Incident Management (TIM): Technology for Saving Lives – This innovation aims to increase traveler and responder safety, transforming response operations from routine to extraordinary.

Enhancing Performance with Internally Cured Concrete (EPIC2) – This innovation requires a lower water to cement ratio, and provides moisture internally to reduce shrinkage and cracks, which increases the strength and durability of the concrete.

Environmental Product Declarations (EPDs) for Sustainable Project Delivery – This innovation helps states support procurement decisions and quantify embodied carbon reductions using life cycle assessments for sustainable pavements.

Strategic Workforce Development – This innovation seeks to build the workforce through effective solutions, proven training, and customizable outreach.

Following the announcement of the EDC-7 innovations, the two project recipients of the 2023 FHWA STIC Incentive Program were also announced – Teen Driver Work Zone Safety Course and Construction CMS Queue Protection Corridor Integration. The STIC Incentive Program funding offers up to \$100,000 annually to help states offset the costs of standardizing innovative practices. Each of the 2023 recipient projects will receive \$50,000.

PennDOT, the Pennsylvania Turnpike Commission (PTC) and the American Traffic Safety Services Association (ATSSA) will utilize the funding to collaboratively develop and implement a Pennsylvania-specific Teen Driver Work Zone Safety Course. Based on a free

national course, this training will help teens better understand common types of work zone crashes and which driving habits can be used to better prevent these incidents.

The Construction CMS Queue Protection Corridor Integration project will use the STIC Incentive Program funding to purchase and install PennDOT-owned 4G cell modems and/or SIM cards into contractor project work zone Portable Changeable Message Signs (PCMS). This will allow Regional Traffic Management Centers to view and change the work zone signs, and the work zone signs to be added to the corridor management tool in PennDOT's Advanced Transportation Management System (ATMS). The signs can then be set up to operate as a queue detection system. There are several projects where this technology could be used.

To highlight how far the STIC Incentive Program funding can go in advancing innovation in Pennsylvania, John Myler, assistant construction manager, PennDOT District 11, presented on the Radio Frequency Identification (RFID) Tags pilot project, which received the funding in 2022. The RFID Tags pilot project, designed to track and manage assets, is currently more than 60% completed. Myler provided an overview of the pilot project and shared how the use of RFID tags aligns with other initiatives PennDOT is currently pursuing, including e-Construction and Partnering and the Digital Delivery Directive 2025, and the need to capture and leverage a large amount of data moving forward.

"It requires learning what these different RFID tags are used for and understanding the limitations each one has versus another," Myler said. "All tags have benefits depending on how you intend to use them. Some tags can be recycled and reused, some can be read without seeing them, and most are durable and can last over time."

Following Myler's presentation, Mary Robbins, Ph.D., P.E., of the Pennsylvania Asphalt Pavement Association presented on Cold Central Plant Recycle (CCPR) of Asphalt Flexible Pavements, a new innovation being introduced by the STIC's Construction and Materials TAG. The presentation included an overview of the process and its benefits, as well as a holistic view of which recycled asphalt options are most appropriate given the variety of possible situations.

According to Dr. Robbins, CCPR uses 100 % Reclaimed Asphalt Pavement (RAP), a material deemed of beneficial use by the Department of Environmental Protection, to create a new flexible asphalt base that provides almost the same structural capacity as a hot mix asphalt base while reducing carbon emissions.

"CCPR is great for pavements that are in fair condition, being the pavement structure has moderate to severe distresses, but is not quite at the end of life, and the underlying materials are considered to still be in good condition," Dr. Robbins said. "It is not meant to be a final wearing surface, so while it might be open to traffic during construction, it should be topped with an asphalt overlay or surface treatment."

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The Construction and Materials TAG is looking to pilot CCPR on higher volume roads in PennDOT districts where most of the RAP is stockpiled, to show that it is a cost-effective and sustainable solution for future use. Projects using CCPR in Virginia on Interstates 64 and 81 saw significant costs savings and sections of those Interstates completed in a much shorter timeframe.

In addition to the new STIC innovation, the meeting included a presentation on a current STIC innovation under development – Snow Plow Cameras and Automated Vehicle Locator (AVL). Maintenance TAG Leader, Matt Burkett, PennDOT District 10, provided an update on the innovation that is currently being piloted on various vehicles in PennDOT Districts 10 and 11.

"The cameras are intended to increase real-time situational awareness for districts, counties, area command and Pennsylvania Emergency Management Agency (PEMA) staff to more consistently determine if restrictions need to be placed, such as speed restrictions or lane restrictions," Burkett said. "The plan is to also integrate camera images into 511PA to provide motorists with real-time access to road conditions to improve decision-making." Currently 40 snow plows, three paint trucks, and 27 assistant highway maintenance manager vehicles are equipped with the monitoring technology.

Following Burkett's presentation, two projects that received innovation awards in 2022 were highlighted – the I-579 Urban Space Cap Project and the I-70 and Route 51 Emergency Bridge Repair.

Winner of the national grand prize in the 2022 American Transportation Awards competition, the I-579 Urban Space Cap Project sought to reconnect downtown Pittsburgh to one of the

most important minority communities in the city, the Hill District, which was disconnected when the highway was built in the 1950s.

According to Project Manager Bob Byrnes, P.E., PennDOT District 11 and Nick Burdette, P.E., HDR Inc, design consultant on the project, the plan was to build a bridge over the existing highway and build a 3-acre park on top of the bridge to make it easier for pedestrians and bicyclists to access downtown. Using innovative design and construction approaches, three separate structures were built to bridge the concrete canyon and create a tree-lined park featuring rain gardens, art, story walls, an outdoor classroom, an amphitheater and integrated seating.

"I believe that since this project was such a success, and awards were won, the City of Pittsburgh will want to do more projects of a similar nature," Burdette said. There is a section south of the city that is raised and currently separates two neighborhoods. The City of Pittsburgh is already looking at options to lower the highway or possibly create more access underneath."

Jeremy Hughes, P.E., District 12 bridge engineer, presented on the Emergency Bridge Repair on State Route (SR) 51 over Interstate 70, which won PennDOT's George McAuley Innovation Award in 2022. The 3-span steel bridge, built in 1954 and rehabbed in 1989, was severely damaged when a tractor trailer hit one of the bridge beams. Sharing some best practices and lessons learned, Hughes reviewed the steps taken to determine the extent of the damage and subsequent unique course of action to address the bridge hit and complete the emergency repair in just 78 days.

For more information on the STIC, visit www.penndot.pa.gov/stic.

PENNDOT, PENN HIGHLANDS FIT HELMETS AT CLEARFIELD COUNTY FAIR

At the end of this summer, PennDOT continued its successful working relationship with the trauma program at Penn Highlands DuBois, PA.

The partners held a bicycle helmet fitting program during Kids' Day at the 162nd annual Clearfield County Fair on Tuesday, August 1.

A trio consisting of Safety Press Officer Tim Nebgen, Engineering Scientific and Technical Intern Sara Caldwell, and Trauma Program Manager for Penn Highlands DuBois, Holly Hertlein, fitted fairgoers with free bicycle helmets purchased through leftover funds from Penn Highlands' community education budget.

In total, Penn Highlands supplied 170 helmets. The team arrived at the fairgrounds at 9:00 AM and exhausted its supply of helmets shortly after 11:00 AM. They also offered the kids a variety of safety themed coloring and activity books that included PennDOT's ABC Coloring Book, School Bus Safety Activity Book, and Traffic Safety Activity Book. Penn Highlands supplied the crayons.

Holly's daughter, Regan, pitched in by decorating some of the helmets with cat and puppy stickers when she was not otherwise occupied with sitting in the empty helmet boxes and decorating them with crayon art.

This is the second year the two entities have partnered at the Clearfield County Fair. PennDOT's working relationship with Penn Highlands on traffic safety outreach and education started in 2018 when they first partnered on a media event drawing attention to the dangers of impaired driving during the St. Patrick's Day Impaired Driving Enforcement campaign.

That event also featured PennDOT and Penn Highlands staff offering patients and hospital employees the opportunity to operate the impaired driving simulator to illustrate the dangers of impaired driving.

Additionally, PennDOT has partnered with Penn Highlands during the Pedestrian Enforcement Wave and at National Night Out in Clearfield Borough in 2022 and 2023.

For more about highway safety at PennDOT visit, www.penndot.pa.gov/safety.



INTERN FINDS NEW CAREER PATH AT PENNDOT

By Olivia Schwab, District 1 Intern

Austin Kent had his sights set on a career in engineering while he was still in high school. After graduating from West Middlesex in 2018, Austin went to Youngstown State University to study chemical engineering.

A friend at school told Austin about his experience being a Systematic Technique to Analyze and Manage Pennsylvania's Pavements (STAMPP) intern with PennDOT in District 1. Austin was interested and filled out an application. He liked it, and decided he was going to try it again the next summer.

"I was planning on coming back to do STAMPP, then COVID hit and PennDOT did away with interns," Austin said. "Then I got a call-in mid-June or early July from PennDOT, asking if I wanted to join construction. I needed a summer job, so I agreed, and here I am in my fourth year of construction."

Austin liked STAMPP, but found he enjoyed working as an Engineering Scientific and Technical Intern (ESTI) even more.

"I've really loved the job since then; it's different every day, and you're not stuck in an office," he said. "I enjoy that I get to see everything. There's a process for how things are done and it's exciting to see a project from start to finish."

He liked it so much that Austin switched his major to civil engineering. Working as an ESTI made him realize how much he enjoyed the job, and civil engineering better suits the duties of what he would like to do in the future. Although switching majors pushed back his graduation date, he decided to stick with what he enjoys.

Austin has gained a wide variety of professional work experience working alongside project manager Nik Tskouris. He said he has learned how to communicate efficiently and develop good relationships with contractors.

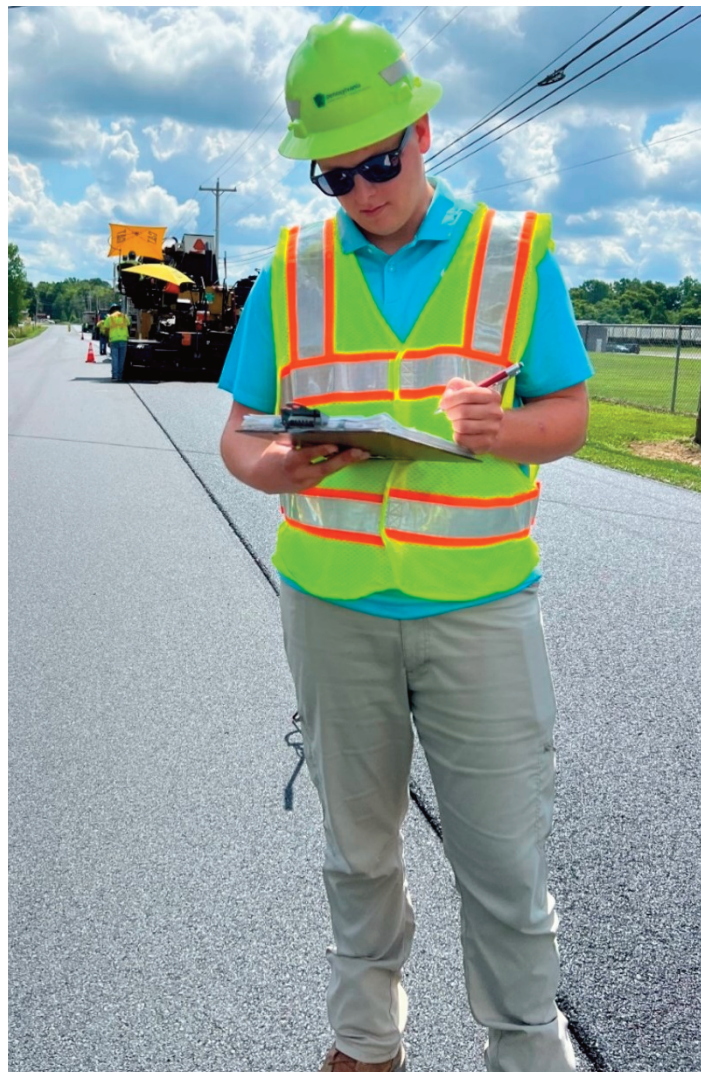
Austin's first summer as a construction intern in Mercer County consisted of drainage work and sidewalks with ADA ramps. The following year, his work included inspecting sidewalk updates and the installation of a retaining wall.

Austin worked on a project to replace a box culvert and pave a roadway in 2022. This summer he is assigned to a bridge rehabilitation project on Werner Road (SR 4017) and patching on Interstate 80.

Austin says his favorite part of the job is "developing connections with people in PennDOT and seeing the variety of tasks PennDOT is responsible for." Moving forward he has his sights set on becoming a Public Service Intern (PSI) and beginning Civil Engineer Training (CET) upon graduation in 2025.

A good work environment, friendly and helpful coworkers, and enjoying the job are some of the factors that Austin said helped him reach the decision to pursue a full-time career with PennDOT.

Outside of work, you can find Austin volunteering as a first responder, firefighter, and EMT at Shenango Township Volunteer Fire Department. If he can find the spare time, he enjoys golfing.



Nik says that returning interns like Austin are very beneficial to the department. They save PennDOT training time and have the ability to contribute a lot more with their experience.

"Having a college degree with no relevant job experience is a bad idea, you need experience before graduation. It's competitive," Nik said "PennDOT allows students to experience a variety of duties and gives them a better chance at being hired full-time. If not, it looks good on a resume, and lots of clients look for people with PennDOT work experience."

Construction interns help with inspections, project management, and receive hands-on experience to prepare them to become full-time employees. Austin recommends students considering becoming an ESTI to "go for it, because you can learn something new every day and it's a good work environment."

Students interested in applying for an Engineering Scientific and Technical Intern position should visit employment.pa.gov. The website provides an option to receive email notifications for job posting alerts tailored to specific job categories.

DISTRICT 8'S DAVE FRATANGELI RECEIVES NATIONAL AWARD

By Dave Thompson, Community Relations Coordinator, District 8



District 8 Design Senior Project Manager Dave Fratangeli isn't one to brag or promote himself. He lets his work do the talking.

In the case of the 322-036 project – the design and construction of a diverging diamond interchange in Lancaster County – his work shouts.

He is the recipient of the American Society of Highway Engineers (ASHE) 2023 National Project of the Year Award in the Under \$20 Million category for his work as design project manager on the project.

At the time of its opening in 2021 at the Route 222/Route 322 Interchange in Ephrata and West Earl townships, Lancaster County, it was only the state's second interchange of its kind in operation and the first in District 8. A second DDI – the third in the state – opened in District 8 that year at Interstate 83 and Route 851 (Exit 4) on York County.

The \$10.9 million project included pavement resurfacing, reconstruction and widening, ramp reconfiguration, new traffic signals, drainage, signs, sidewalks, storm water management and highway lighting. While the DDI configuration was already unique in Pennsylvania, this interchange had the added component of providing shared lanes for bicycles and horse and buggies due to the interchange's use by the Amish community.

Its completion vastly improved the previous conventional diamond interchange where safety and congestion were ongoing issues.

Projects submitted for the award were judged based on a wide range of criteria, including complexity, use of innovation, social and economic considerations, safety, aesthetics, sustainability and whether the project met or exceeded customer needs.

Acting Assistant District Executive for Design Ben Singer accepted the award at a June ceremony in Atlanta, but he made no bones about who the award rightfully belonged to.

"Dave demonstrated great project management and leadership skills to deliver the complex Diverging Diamond Interchange (DDI) at the US 222/322 interchange in northeastern Lancaster

County," Ben said. "He took ownership of the project from the beginning in design until the project was completed in construction. He made sure he was involved in each aspect of the project delivery process working closely with his design consultant and more importantly the project stakeholders."

According to Ben, despite his quiet demeanor, Dave proved to be an excellent communicator.

"Dave did a great job of working with the various groups that represent the different modes of transportation that travel through the interchange daily, including non-motorized vehicles such as the Plain Sect Community. He listened to their concerns about the change in traffic patterns and worked with them to come up with solutions that would best address their concerns without compromising the purpose of the project," he said. "The success of the project was largely due to Dave coordinating, working, and leading with various groups, from design, construction, maintenance, and other project stakeholders toward a common goal, which was improving traffic flow and safety at the interchange."

"Project Manager Dave Fratangeli exhibited great leadership which was integral to the success of the US 322/222 DDI project. Mr. Fratangeli was very responsive and proactive in coordinating with the consultant design team, PennDOT support units, agencies and stakeholders," said Robert Wills, of York-based project design consultant firm Whitman, Requardt & Associates, LLP (WRA).

Assistant District Executive for Construction Kevin Keefe, who currently serves as acting district executive, said Dave's commitment resulted in a well-designed project that, given its complexity, was completed with as few headaches as possible to the public and contractors. It also resulted in a project that met the intended goal of improving safety and operations at the interchange.

"I'm proud of Dave for the excellent work he did with the Lancaster County diverging diamond interchange," Kevin said. "This new interchange was successful largely due to his efforts. I congratulate him for this well-deserved award."

ON THE ROAD TO REDUCING GREENHOUSE GAS EMISSIONS

By Danielle Klinger-Grumbine, Bureau of Innovations



Pennsylvania's State Transportation Innovations Council (STIC) remains focused on moving innovations forward that increase the efficiency and resiliency of Pennsylvania's vast transportation system. Coupled with the goal of finding innovative ways to minimize the transportation industry's carbon footprint and decrease greenhouse gas (GHG) emissions, the STIC's Construction and Materials Technical Advisory Group (TAG) recently introduced Cold Central Plant Recycle (CCPR) of Asphalt Flexible Pavements, which aims to do just that.

When it comes to asphalt pavements, there are two easy and effective ways to reduce carbon emissions. One is to increase the use of Reclaimed Asphalt Pavement (RAP) by putting more RAP into the asphalt mix; the second is to reduce the temperatures that are used to produce it.

CCPR of Asphalt Flexible Pavements does both. It uses 100% RAP, a material generated when asphalt pavements are removed for reconstruction, rehabilitation, or resurfacing and deemed of beneficial use by the Department of Environmental Protection, to create a new flexible asphalt base that provides almost the same structural capacity as a hot mix asphalt base while reducing carbon emissions. Additionally, as the name suggests, the material is mixed cold, meaning no heat is added during the process.

"CCPR is great for pavements that are in fair condition, being the pavement structure has moderate to severe distresses, but is not quite at the end of life, and the underlying materials are

considered to still be in good condition," said Dr. Mary Robbins, technical director for the Pennsylvania Asphalt Pavement Association. "It is not meant to be a final wearing surface, so while it might be open to traffic during construction, it should be topped with an asphalt overlay or surface treatment."

CCPR takes RAP that is either milled from the project site and/or RAP that has been stockpiled previously, and it is mixed at the plant with a liquid, such as asphalt emulsion or foamed asphalt, and a small amount of cement, to create the new flexible asphalt base. It addresses some of the deeper distresses on roadways by focusing on the underlying materials, provides a longer life span than the typical mill and fill and is more cost-effective.

To show that it is a cost-effective and sustainable solution for future use, the Construction and Materials TAG is looking to pilot CCPR on higher volume roads in PennDOT districts where most of the RAP is currently stockpiled. Projects using CCPR in Virginia on Interstates 64 and 81 saw significant costs savings and sections of those Interstates completed in a much shorter timeframe.

The current PennDOT specification for CCPR limits its use to lower volume routes, with less than 15,000 vehicles per day. However, the largest quantities of RAP in Pennsylvania are stockpiled in the urban areas, such as PennDOT's District 6, in the Philadelphia region, and PennDOT's District 8 in the Harrisburg region. By piloting this innovation on higher volume roads, the Construction and Materials TAG is hoping to expand its use in the future.

REAL ID DOCUMENTATION CHANGE IS DESIGNED TO HELP CUSTOMERS

By Craig Yetter, Community Relations Coordinator, Driver and Vehicle Services

Wishing to obtain a REAL ID product must present proof of Social Security Number. PennDOT is now expanding acceptable options beyond a Social Security Card.

PennDOT now accepts the following documents as proofs of Social Security Number:

- A Social Security Card;
- OOA W-2 form;
- A SSA-1099 form;
- A non-SSA-1099 form;
- A pay stub with the applicant's name and full Social Security Number on it.

There have been no changes to the rules surrounding the name, as it appears, on the proof of Social Security Number. The name on the proof must still be the current legal name of the applicant. If the name on the proof does not match the current legal name on their documents, the customer must update their name on the documents and provide an updated proof of Social Security Number in order to apply for a REAL ID.

REAL ID is a federal law that affects how states issue driver's licenses and ID cards if they are going to be acceptable for federal purposes, such as boarding a domestic flight or entering a federal building that requires federally acceptable ID upon entry. A federally acceptable form of identification (whether it's a Pennsylvania REAL ID driver's license or ID card, a valid U.S. Passport/Passport Card, a military ID, etc.) must be used for these purposes on and after May 7, 2025.

There is no requirement that any resident obtain a REAL ID; PennDOT continues to offer standard-issue driver's licenses and photo IDs.

To date, PennDOT has issued approximately 2.2 million REAL ID products.

Customers can obtain a REAL ID by presenting documents for verification and processing at any driver license center. Federal regulations require that to be issued a REAL ID-compliant product, PennDOT must verify the below documents:

- **Proof of Identity:** Examples include an original or certified copy of a birth certificate filed with the State Office of Vital Records/Statistics with a raised/embossed seal or a valid, unexpired, U.S. Passport;
- **Proof of Social Security Number:** A Social Security Card, W-2 form, SSA-1099 form, non-SSA-1099 form, or a pay stub with the applicant's name and SSN on it;
- **Two Proofs of Current, Physical PA Address:** Examples include a current, unexpired PA driver's license or identification card, vehicle registration or a utility bill with the same name and address; and
- **Proof of all Legal Name Changes** (if current legal name is different than what is reflected on proof of identity



document): Examples include a certified marriage certificate(s) issued by the County Court for each marriage, court order(s) approving a change in legal name or amended birth certificate issued by the State Office of Vital Records/Statistics. If current name is the same as what is reflected on proof of identity document (usually birth certificate or passport), a customer does not need to show proof of legal name changes.

Customers have three options for obtaining a REAL ID product: Customers may order their REAL ID online if they have been pre-verified and their REAL ID product will be mailed to them within 15 business days; they can visit any PennDOT Driver License Center that is open for driver license services, have their documents verified and imaged, and their REAL ID product will be mailed to them within 15 business days; or they can visit one of 13 REAL ID Centers and receive their REAL ID product over the counter at the time of service.

For a full list of driver license centers and their services, please visit the PennDOT Driver and Vehicle Services website.

When a customer gets their first REAL ID product, they pay a one-time fee of \$30, plus the applicable renewal fee (current renewal fee is \$39.50 for a four-year non-commercial driver's license, and \$42.50 for a photo ID). The expiration date of their initial REAL ID product will include any time remaining on their existing non-REAL ID product, plus an additional four years, unless the customer is over 65 and has a two-year license. This expiration date structure means that customers won't "lose" time that they've already paid for. After the initial REAL ID product expires, customers pay no additional fee, beyond regular renewal fees, to renew a REAL ID product.

REAL ID-compliant products are marked with a gold star in the upper right corner, standard-issue (non-compliant) products include the phrase "NOT FOR REAL ID PURPOSES," per federal regulations. Sample images can be viewed on [PennDOT's website](#).

More information about REAL ID in Pennsylvania Services, including [frequently asked questions](#) and information on [documents required for REAL ID](#), can be found at PennDOT's [REAL ID](#) page.

PAVEMENT SOLUTIONS HELP IMPROVE PERFORMANCE, LESSEN TRAFFIC IMPACTS

By PennDOT Bureau of Innovations



Targeted Overlay Pavement Solutions (TOPS) build on conventional overlay methods and include new overlay materials and techniques. TOPS, a Federal Highway Administration (FHWA) EvI 95

ery Day Counts Round 6 (EDC-6) innovation that Pennsylvania championed, offers 13 options to help ensure safe, longer-lasting roadways.

Of the 13 options available, PennDOT has piloted Highly Modified Asphalt and Bonded Concrete on Asphalt and has already adopted the use of Unbonded Concrete Overlay on Concrete, High-Performance Thin Overlay, Stone Matrix Asphalt, Asphalt Rubber GapGraded and Ultra-Thin Bonded Wearing Course.

In August 2023, PennDOT received a \$700,000 grant from FHWA's Accelerated Innovation Deployment (AID) Demonstration program to improve the long-term resiliency of pavement on roads throughout the state. The funding will be used to deploy solutions like Stone Matrix Asphalt and Highly Modified Asphalt in several PennDOT districts. These pavement

solutions are more durable and cost-effective than traditional overlay methods and extend the lifespan of a roadway in a relatively short timeframe. This reduces the need for long-term lane closures and continuous roadway reconstruction p

TOPS is already being used on many projects throughout Pennsylvania. More recently, PennDOT piloted Bonded Concrete on Asphalt Overlay with Fibers on State Route 28 in District 10, which is located in the northwestern region of the state. The project used a special provision, which included the newly drafted language for using fibers.

In District 6, in the southeastern region of the state, Highly Modified Asphalt was used during the paving of a high-traffic area on Interstate 95. In District 1, in the northwestern corner of the state, Highly Modified Asphalt was used as part of a larger pilot project on approximately one mile of Interstate 79.

Asphalt Rubber Gap-Graded was tested along sections of four different roadways: State Route (SR) 15 in Adams County, District 8, I-78 in Berks County, District 5, I-376 in Lawrence County, District 11, and SR 15 in Snyder County, District 3.

PENNDOT REOPENED KEY STATE ROADS IN BUCKS, NORTHAMPTON COUNTIES WEEKS AHEAD OF SCHEDULE

In mid-July, less than two weeks after roads were closed due to devastating flooding, PennDOT had reopened all state roads in Northampton County and Route 532, a key state road in Bucks County, weeks ahead of schedule.

On July 16, Secretary Carroll joined Governor Shapiro and PEMA Director Randy Padfield as they visited Bucks County just hours after the flooding. The Governor made clear this would be an "all hands on deck," effort and the Administration would support the impacted communities for as long as it takes to repair and reopen. Less than two weeks later, Governor Shapiro delivered on that promise.

Route 532 was closed Saturday night, July 15, and reopened on July 26. State roads in Northampton County that were closed on Sunday, July 16 were safely and efficiently reopened by July 24. Shapiro Administration Sent Disaster Support Personnel to Vermont to Assist in Recovery Efforts

ADMINISTRATION SENT DISASTER SUPPORT PERSONNEL TO VERMONT TO ASSIST IN RECOVERY EFFORTS

The State of Vermont accepted an offer from the Shapiro Administration to provide a team of geo-technical and civil engineers from the PA Department of Transportation (PennDOT) to assist in response and recovery operations following severe flooding that occurred earlier in July.

PennDOT dispatched three geotechnical engineers from its Montoursville, Dunmore, and Bridgeville-based regions, and a civil engineer from its central office in Harrisburg. Their principal duties involved assisting with the evaluation of slope stability near numerous buildings and transportation infrastructure affected by the severe weather.

The request for assistance was made via the Emergency Management Assistance Compact (EMAC), a formal agreement that allows states to share resources, such as personnel or equipment, during disasters. EMAC was created to serve as an all-hazards national mutual aid system and has been ratified by the U.S. Congress with participation from all 50 states, the District of Columbia, Puerto Rico, Guam, the U.S. Virgin Islands, and the Northern Mariana Islands.

Deployed staff began working with their counterparts in Vermont August, and their deployment was estimated to last approximately two weeks. All costs associated with the deployment are paid by the requesting state.

58 TRANSPORTATION PROJECTS RECEIVE NEARLY \$50 MILLION IN 58 TRANSPORTATION PROJECTS TO IMPROVE SAFETY, MOBILITY, AND LOCAL ECONOMIES ACROSS THE COMMONWEALTH

Governor Josh Shapiro announced that his Administration will fund 58 highway, bridge, aviation, ports, and bike and pedestrian projects in 37 counties using \$49.6 million in funding from the Multimodal Transportation Fund, which provides grant funding to ensure that a safe and reliable system of transportation is available to all Pennsylvanians.

The program is intended to provide financial assistance to municipalities, councils of governments, businesses, economic development organizations, public transportation agencies, and ports and rail freight entities to improve transportation infrastructure that enhance communities, pedestrian safety, and transit revitalization.

Reflecting PennDOT's commitment to improving locally owned infrastructure, several of the projects will also help local governments address bridges and roadways in need of repair or replacement.

On September 25, 2023 at 8:00 AM, PennDOT began accepting applications for the next round of funding for grants under the Multimodal Transportation Fund. Applications were due by 4PM on November 10, 2023. PennDOT expects to announce grant recipients next year for funding that will be available in July 2024.

The bipartisan budget Governor Shapiro signed earlier this month includes increased transportation funding by reducing the Pennsylvania State Police's reliance on the Motor License Fund, freeing up \$125 million annually over the next four years to put those dollars directly into road and bridge projects.

To view the list of 2023 awarded projects, visit www.penndot.pa.gov and click on Multimodal Program under the "Projects & Programs" button. PennDOT evaluated the applications and made selections based on such criteria as safety benefits, regional economic conditions, the technical and financial feasibility, job creation, energy efficiency, and operational sustainability.

PENNDOT RECEIVES \$11.3 MILLION FEDERAL GRANT FOR FREIGHT RAIL IMPROVEMENTS IN WESTERN PA

The Pennsylvania Department of Transportation (PennDOT) announced that it is the recipient of a \$11,250,367 Consolidated Rail Infrastructure and Safety Improvements (CRISI) grant through the Federal Railroad Association (FRA). The grant funds will support the Buffalo & Pittsburgh Railroad's (BPRR) Rebuilding Western Pennsylvania project, one of 70 projects to receive a share of \$1.4 billion in funding. These investments are aligned with Governor Shapiro's commitment to improving Pennsylvania's infrastructure and supporting economic growth.

The Rebuilding Western Pennsylvania project will be making a series of infrastructure improvements to the Main Line Subdivision and P&W Subdivision of the Buffalo & Pittsburgh Railroad in Jefferson, Armstrong, Butler and Lawrence counties.

The project will improve safety, freight reliability, and supply chain efficiency. The rail line interchanges with Canadian National Railway, CSX, and Allegheny Valley Railroad and supports the transportation of multiple commodities such as aggregates, automotive products, chemicals, coal, food and feed products, metals, minerals, and lumber. Construction is expected to be complete at the end of 2026.

The project's estimated cost is approximately \$25 million, with the CRISI grant providing 45% of the funds. PennDOT will provide \$4 million and BPRR will provide \$9.75 million in matching funds.



Pennsylvania has 65 operating railroads – the most of any state in the country – and ranks fifth in total track mileage with more than 5,600 miles. The 2020 Pennsylvania State Rail Plan reported that in 2017, 193.5 million tons of freight in 4.9 million railcars moved over the state's rail transportation system.

More information on PennDOT's work related to rail freight in Pennsylvania can be found on [PennDOT's website](#).

PENNDOT FINALIZES AGREEMENT TO EXPAND WESTERN PA PASSENGER-RAIL ACCESS

PennDOT finalized an agreement with Norfolk Southern Corporation (NS) to expand passenger rail service on the Pennsylvanian Amtrak line in Western Pennsylvania. Thanks to this expansion, more Pennsylvanians will have access to modern, safe, reliable passenger rail that gets them where they need to go – connecting Pennsylvania communities and bringing jobs, economic development, and infrastructure investment along with it.

Currently, the Pennsylvanian Amtrak service travels roundtrip between New York City and Pittsburgh via Harrisburg once daily. The agreement that Norfolk Southern and PennDOT entered into supports increasing those Pennsylvanian passenger services to twice a day. To support these expanded passenger operations, the Commonwealth will invest more than \$200 million in infrastructure and safety improvements that will be constructed and maintained by Norfolk Southern. PennDOT has applied for grant funds through the Federal Railroad Administration to help pay for these improvements.

The future improvements and construction will stem from a previously released Norfolk Southern operational feasibility study requested by PennDOT and includes upgraded rail lines, sidings, and necessary communications signals infrastructure. The renegotiated agreement with Norfolk Southern for the

infrastructure work needed to support the additional Pennsylvanian ensures that safety and the best interests of the Commonwealth are fully addressed.

The Pennsylvanian is a key passenger rail route connecting the citizens of the Keystone State from east to west, and, in conjunction with the Capitol Limited, with Cleveland, Chicago and beyond. The Pennsylvanian travels Norfolk Southern's Pittsburgh Line, which is part of the Premier Corridor, a main artery for double-stack intermodal traffic moving between Chicago and metropolitan New York. It is one of the busiest and fastest links on Norfolk Southern's network, connecting with major terminals in Toledo, Cleveland, Pittsburgh, Harrisburg and the Lehigh Valley. In a typical year, more than half of Norfolk Southern's time-sensitive parcel and less-than-truckload shipments use the route at some point. The company's trains deliver or pick up freight at 140-plus locations along the corridor, serving more than 800 customers.

Pennsylvania has 65 operating railroads – the most of any state in the country – and ranks fifth in total track mileage with more than 5,600 miles. The 2020 Pennsylvania State Rail Plan reported that in 2017, 193.5 million tons of freight in 4.9 million railcars moved over the state's rail transportation system.