



KEEPING YOU UP
TO DATE WITH ALL
OF PENNDOT'S
PROJECTS AND
INNOVATIONS
THROUGHOUT
THE YEAR.

SUMMER/FALL 2020

THE NEW DRIVER AND VEHICLE SERVICES EXPERIENCE



WELCOME TO THE DOTcom!

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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 Press Office at DOTcomm@pa.gov.

We hope you enjoy this latest issue!

PENNDOT OFFERS NON-BINARY GENDER DESIGNATION OPTION ON DRIVER LICENSES, ID CARDS



In keeping with its dedicated efforts to provide commonwealth citizens with fair and equitable services, PennDOT announced that it now offers a non-binary gender designation option for its driver licenses and photo identification cards.

Gender designation options on Pennsylvania driver's licenses and photo ID cards are "M" (male), "F" (female) or "X" (non-binary). Customers who wish to change their gender designation should fill out Form DL-32, "Request for Gender Change on Driver's License/Identification Card," and bring it to any PennDOT Driver License Center to complete the process. This process does not require the signoff of a medical or social service provider.

"PennDOT is taking a very important step towards better serving Pennsylvanians of all gender identities. By removing barriers to make these changes, we are providing Pennsylvanians the agency to live their lives as their true selves," said Rafael Álvarez Febo, Executive Director for the Pennsylvania Commission on LGBTQ Affairs. "Your state issued ID is quite possibly the most important identity document you use on a daily basis, it should reflect your truth."

A gender designation change must be completed in person at a PennDOT Driver License Center. Driver license center locations can be found by clicking on "Find a Location" at www.dmv.pa.gov.

Pennsylvania joins 16 other states in offering a non-binary option for its customers.

The designation is offered free-of-charge for identification products. Applicable duplicate fees will apply to customers to obtain a duplicate license or photo ID card reflecting the change in designation.



FROM THE **secretary** YASSMIN GRAMIAN, P.E.

In the months since COVID-19 reached our shores – like many Pennsylvanians – PennDOT has had its share of challenges, surprises, and inspirations. With each new or continuing challenge I am heartened by the ways we’re adapting and innovating our business for the better.

We are an agency of people who care deeply about their communities and their neighbors – the people we serve every day. We’ve seen some truly remarkable innovations in the many ways that we do business. I’ve always been proud of how PennDOT makes innovation a priority, and I’m so proud that even though the circumstances that we’ve all been living under for the last several months have been challenging, we’ve been able to make some positive changes for the organization.

For example, the communication and collaboration that we’ve had with our partners in the industry has been invaluable during this time. I am so appreciative of the open dialogue that we’ve had, and I know that while it has certainly been a challenge, getting through these times together has strengthened our relationship.

I also think that virtual public engagement will continue to be critical for us, and I’m proud of how quickly our team was able to adapt to this necessity. Even before the pandemic we recognized that virtual options expand our accessibility to our customers, and I expect virtual meetings and outreach are here to stay.

While we expand options using technology and enhanced processes, we will never lose sight of the Pennsylvanians who have personal or economic challenges that make our services or operations difficult to access. My commitment to serving you – regardless of your circumstance or background – will not waver.

I am thankful for the PennDOT family’s dedication and innovation during these challenging times, and for the public’s partnership in helping to make our transportation system the best it can be now and in the future.

Learn more about Secretary Gramian in her bio at www.penndot.gov/about-us/DepartmentExecutives.

For more information please visit our website: www.PennDOT.gov. Or find us on social media at:



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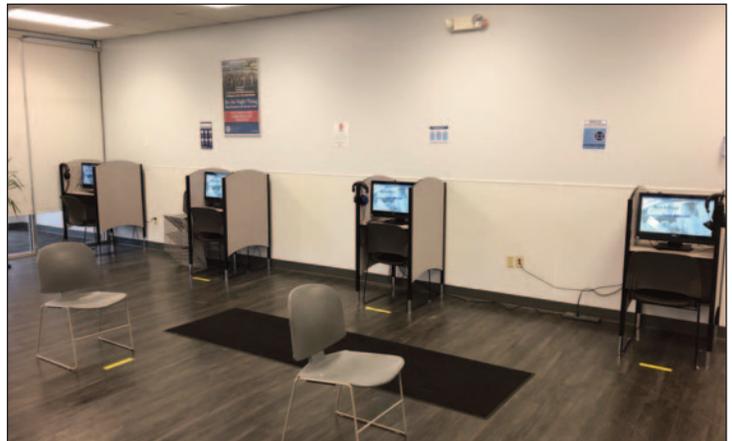
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THE NEW DRIVER AND VEHICLE SERVICES EXPERIENCE

By: Diego Sandino, Community Relations Coordinator, Driver and Vehicle Services



PennDOT has resumed driver's skills tests, including motorcycle skills tests, at reopened driver license centers, with several changes to skills testing and driver license center operations to keep our customers safe and help prevent the spread of COVID-19 as they visit our sites.

After re-opening, driver license centers focused on customers whose driver's skills tests were canceled due to the COVID-19 emergency, giving them priority in rescheduling skills tests. All backlogs have been cleared and all other customers are now able to schedule a skills tests in the appointment system. PennDOT-Authorized Third Party Testers are also available for non-commercial testing and adhering to restrictions on work and social interaction set by Governor Tom Wolf and the Department of Health.

Modifications to the skills test made to mitigate potential exposure of PennDOT staff and customers while maintaining the integrity of the testing process, include:

- PennDOT staff remain outside the vehicle during the entire skills test and the test taker and accompanying driver remain in the vehicle.
- All customers and accompanying drivers must wear appropriate face masks during testing.
- Examiners are required to wear appropriate personal protective equipment such as masks, gloves, eye protection during the exam.

At all locations, protocols and equipment have been added to help stop the spread of COVID-19, such as the installation of Plexiglass sneeze guards at each counter to provide barrier protection to both our customers and employees. Other safety protocols include:

- Customers are required to wear masks while in the facility;
- Cleaning procedures have been enhanced to sanitize facilities on an ongoing basis;

- Increasing the ability to maintain appropriate social distance by reducing the number of seating and the number of customers in the facility;
- Admittance to the facility is limited to only the customer requiring service, unless assistance is needed by an accompanying person; and
- Markings on floors have been added to assist with social distancing along with signage to communicate special instructions to customers.

In support of social distancing and to reduce the need to visit a driver license center, online services continue to be offered at no additional cost - 24 hours a day, seven days a week. Customers may renew their driver's license or photo ID online and receive an updated product using their existing photo in the mail within 15 days.



Additionally, vehicle registration renewals may also be completed online, as well as driver-history services; changes of address; driver license and vehicle registration restoration letters; ability to pay driver license or vehicle insurance restoration fee; and driver license and photo ID duplicates.

More COVID-19 information is available at www.health.pa.gov. For more information, visit www.dmv.pa.gov or www.PennDOT.gov. For a list of PennDOT Authorized Third Party Vendors, please visit our website at www.dmv.pa.gov.

PENNDOT'S PUBLIC PARTICIPATION PLAN IS VITAL TO US ALL



PennDOT recently completed the update of its Public Participation Plan (PPP). The PPP is a publication that outlines the various public participation methods PennDOT uses for planning a transportation system that allows for the safe and efficient movement of people and transporting of goods throughout the state.

PennDOT's goal is to provide you with the information necessary to make your voice heard and ensure your participation in our transportation planning processes.

Your input is very important to us when we develop the Statewide Long-Range Transportation Plan (LRTP), the Twelve-Year Program (TYP), the Statewide Transportation Improvement Program (STIP), and the PPP. These four documents are updated on a recurring basis with support from Pennsylvania's Metropolitan Planning Organizations (MPOs), Rural Planning Organizations (RPOs), the State Transportation Commission (STC) and the you, the public.

The State Transportation Commission (STC) updated the 12-Year Program. The new plan anticipates \$64.8 billion being available over the next 12 years for improvements to roads, bridges, transit systems, airports and railroads.ate Transportation Commission (STC) and the you, the public.

The 12-Year Program, or TYP, is a multimodal, fiscally-constrained planning tool used to identify and prioritize Pennsylvania's transportation projects and the funds needed to complete them. State law requires the STC to review and update the 12-Year Program every two years. No capital project can move forward unless it is included in the 12-Year Program.

The newly adopted program, which takes effect October 1, anticipates the following funding availability in the first four years

of the TYP from federal, state and local sources:

- \$11.4 billion for state highway and bridge projects;
- \$9.4 billion for public transit;
- \$321 million for multimodal projects;
- \$228 million for rail freight; and
- \$138 million for aviation.

The TYP also highlights some of PennDOT's major accomplishments over the past two years, such as becoming REAL ID-compliant, as well as impacts to transportation in Pennsylvania because of the COVID-19 pandemic.

Four Rural Planning Organizations, 19 Metropolitan Planning Organizations and one independent county partnered with PennDOT in the review and development of the update. Now that the STC has approved the update, it has been submitted to the Federal Highway Administration and the Federal Transit Administration for review and approval. The Federal Highway Administration coordinates with the U.S. Environmental Protection Agency to review the plan's conformity with air quality requirements.

Public input early in the 12-Year planning process played a key role in identifying investments in the various transportation modes.

The State Transportation Commission is chaired by the Secretary of PennDOT and consists of 10 appointed citizens as well as the majority and minority chairs of the state House and Senate Transportation committees.

For more information about the TYP, visit www.TalkPATransportation.com.

INTERMODAL CARGO GROWTH INCENTIVE PROGRAM EXTENDED FOR OCEAN CARRIERS

Pennsylvania's Intermodal Cargo Growth Incentive Program (PICGIP), which aims to increase cargo activity by incentivizing shippers to move cargo through Pennsylvania ports, will be extended through 2022. The program was previously slated to end in June 2020.

Originally established in 2015 through PennDOT's Multimodal Fund, the PICGIP makes up to \$1 million available annually to participating ocean carriers that move cargo through Pennsylvania's ports. The fund helps secure fulltime employment at the terminals and increase economic activity through indirect and induced jobs.

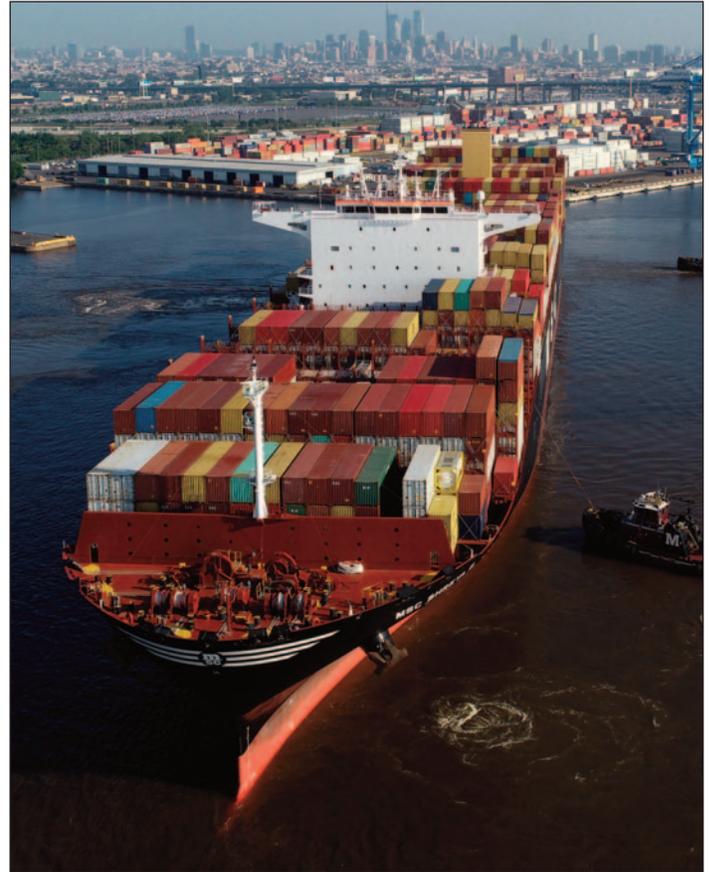
All carriers who have not been to the Port of Philadelphia in the past six months must fill out an application on PennDOT's website, while existing participants are required to complete the data verification form to be eligible for the program.

"The Intermodal Cargo Growth Incentive Program is essential for us to compete with other ports in attracting new ocean carriers and new trade lanes to Pennsylvania. This program supports the ocean carrier during the difficult initial phase of entering a port for the first time, or starting a new service," said PhilaPort CEO and Executive Director Jeff Theobald. "Once the carrier is up and running, and we have the business, the incentive ends. This is a well-designed program, and PennDOT has done a great job assisting us with implementing it."

New carriers enrolled in the program receive \$25 per new container unit loaded or discharged from vessels to a Pennsylvania port. Existing participants qualify for the incentive payment by exceeding established benchmarks.

In the past five years, over 1.8 million units of cargo passed through Pennsylvania ports with 175,000 units exceeding benchmarks resulting in \$4.1 million in incentive funds awarded to 10 grantees.

Carriers already participating in the program should have received grant information directly from the program managers.



For more information and to view PennDOT's Intermodal Cargo Growth Incentive Program application/guidelines visit [PennDOT.gov](https://www.penn.gov/PennDOT), and click on the "Rail Freight and Ports" page.

WE'VE TURNED 50! HELP US TELL PENNDOT'S STORY



Photo courtesy of the PennDOT Employees Association

PennDOT was created on July 1, 1970 – that means we recently celebrated 50 years of building communities. We're reaching out to current employees who were here from the beginning (or close to it), but we need help from you, too!

If you, a friend or family member worked for the department when we began, we'd love to hear your stories. Please fill in our 50th Anniversary Submission Form (open it in Chrome) and we'll do the rest! If you have questions, email us at DOTcomm@pa.gov.

Through the years, PennDOT's dedicated employees have been the backbone of our organization. We appreciate your help in sharing their stories!

We're always looking for innovative solutions to improve transportation for the future, but we still realize the importance of our history. Visit [PennDOT.gov/50Years](https://www.penn.gov/PennDOT.gov/50Years) to learn more about our past.

PENNDOT'S PITTSBURGH REGIONAL DISTRICT MAKES FIRST USE OF SELF-PROPELLED TRANSPORT TECHNIQUES TO SPEED UP WEEK-LONG BRIDGE REPLACEMENT OVER BUSY U.S. ROUTE 19

By Richard Kirkpatrick, Bureau of Innovations



As a result of hard work and ingenuity, PennDOT and its project team addressed these construction challenges and were able to provide commuters access to U.S. 19 much more quickly using accelerated bridge construction (ABC) techniques. Using prefabricated bridge materials produces shorter construction schedules and helps ensure consistency in product quality. PennDOT's use of ABC techniques on this project is but one example of how PennDOT is delivering improved and more timely infrastructure to the people of Pennsylvania.

Faced with replacing a bridge over busy U.S. Route 19 in Allegheny County, PennDOT's District 11 chose to use self-propelled modular transporters (SPMTs), marking the first of their use in Pennsylvania and fulfilling a key component of PennDOT's accelerated bridge construction (ABC) initiative.

Because U.S. Route 19 carries approximately 27,000 vehicles a day to and from downtown Pittsburgh, Interstate 79, and Pittsburgh International Airport, minimizing closures during the replacement of the Shaler Street Bridge was an absolute necessity. Using the SPMT process allowed the bridge replacement to require only two weekend closures instead of long-term corridor restrictions and closures.

To make the short-term closures possible, Shaler Street's new bridge beams and deck were assembled at a nearby site off of U.S. Route 19's mainline. The two components were then moved onto the new support structures using SPMT units. To demonstrate how the process works, the project team created a YouTube video detailing the Shaler Street bridge replacement.

Notably, U.S. Route 19 is divided at this location, a challenge for the SPMTs. "We were dealing with a bifurcated road; we evaluated the move path for a traversable slope and clearance between the moving bridge and the existing buildings," said Project Manager Chris West.

Additionally, West added that PennDOT's Right of Way unit also had to reach an agreement with a property owner so a staging area close to the project could be created.

ABC is part of the Every Day Counts initiative championed by the Federal Highway Administration (FHWA), and its methods are used in a variety of projects, including quick construction box culverts, prefabricated bridge elements and systems, bridge slides, and geosynthetic reinforced soil-integrated bridge systems (GRS-IBS).

Although the replacement of the Shaler Street Bridge is the first time SPMTs were used in Pennsylvania, PennDOT's District 8 has been making use of other ABC techniques in recent years. One example is the Harrisburg region's deployment of ABC techniques to replace the 98-year-old Herr Street Bridge in 10 days. Herr Street is a key link for commuters entering and leaving the Capitol Complex area of Harrisburg. ABC was also used to replace the Pennsylvania Route 581 bridge over 10th Street in Lemoyne, Cumberland County—a project that lasted just a few weeks instead of months. And, PennDOT's District 5 in the Lehigh Valley region used ABC techniques to replace six bridges over Interstate 78 in Berks County.

"We are proud to deliver the replacement of the Shaler Street Bridge as part of the U.S. Route 19 Improvement Project in the City of Pittsburgh," said PennDOT District 11 Executive Cheryl Moon-Sirianni. "By using this innovative Accelerated Bridge Construction method, we did not only dramatically reduce the replacement time of this structure, but it also served as the catalyst for future use of this technology across Pennsylvania."

COVID-19 VIRTUAL INSPECTIONS

By: Robyn Briggs, Community Relations Coordinator, District 6

Montgomery County was the first county to shut down on Friday, March 13 due to the coronavirus outbreak. The next week, and weeks to follow, the pandemic would force other counties in District 6 to close as well as other PennDOT Districts across the state. However, during that first week of closures, District 6 Traffic Control Specialist Manager Fran Hanney thought quickly on how to update highway occupancy permits (HOP) inspections so that essential work could continue for the public's safety. "We live in an age of technology," said Hanney. "I brainstormed how we could let these activities continue while still protecting workers."

Hanney was placed on a PennDOT Central Office committee to develop policies for HOP's and Utilities through the COVID-19 time period. "I was honored and grateful to be placed on the committee and develop statewide policy," he said. PennDOT's permits office personnel had been working with PECO Energy Company on their COVID-19 comprehensive plan so utility work could continue. Hanney said PennDOT adopted that plan and changed it a little to meet the department's needs. The new plan developed a virtual inspection which allows PennDOT to verify if specific work is being done correctly on jobs, such as, backfilling, paving, testing, and work zone set ups. "We were searching for a mechanism that allowed us some form of oversight," Hanney stressed. "Otherwise, if we do not witness what the permittee is doing, that's not good for anyone."

The new inspection consists of the permittee having daily

communication with PennDOT Permit staff through pictures and a virtual form that needs to be filled out and emailed. If a permittee does not send the required pictures or paperwork, they are aware that their work can be denied and shut down for failure of complying with the virtual inspection.

The new form is titled - Job Aid COVID-19 Interim Virtual Inspection Requirements for Underground Construction Within PA State Highways. The form explains to the permittees that their work must be reviewed and classified as emergency, life-sustaining work or received a waiver from the Department of Community and Economic Development. Work must also adhere to the Governor's social distancing guidelines in order to proceed. The permittee must then submit daily photo documentation of work performed, daily log of work activities, material certifications, test results, and other pertinent information that documents proper restoration of the state highway.

Nothing has been determined yet if the new virtual process would continue post COVID-19, but Hanney points out that for now it allowed work to continue and helped save some jobs. COVID-19 forced many PennDOT workers to telecommute. Hanney acknowledged that although the pandemic brought a very unfortunate situation to everyone, it has also highlighted that PennDOT employees are able to adjust outside of the normal business office environment. "Telecommuting has proven we can be an effective workforce anywhere."

PENNDOT DISTRICT 1 IS TAKING EDUCATION EFFORTS ONLINE

By: Jill Harry, Community Relations Coordinator, District 1

When the COVID-19 pandemic shut down PennDOT offices across the state, District 1 employees were putting the final touches on an outreach event for area teens. The program was put on the backburner as the team was forced onto other tasks. The success of telework procedures and the use of Skype to hold a variety of meetings and trainings got the planning committee thinking – perhaps the event could be revamped instead of postponed.

The original idea was to host up to 50 teens at the District 1 office in Venango County with a curriculum based on the Boy Scouts of America's merit badge lessons on engineering and traffic safety. Members of the Civil Engineer Council and the Information and Data Management unit would teach the lessons on topics, including becoming a Professional Engineer and career opportunities, holding a traffic study, and safe driving behaviors.

Inspired by online learning offerings hosted by other groups, the team realized many of the topics could be taught through group video conference calls. A shift in planning went into effect and the event was slightly rescheduled from one evening in mid-June to a series of one-hour afternoon sessions in late June.

While the event was targeted toward teens in the northwest region, it was open to anyone age 12 to 17. Advertising for the event was done online, mainly through regional PennDOT Facebook and Twitter accounts, and the local BSA office. Within hours of the first post, the first registration requests were already received, and all spots for that session were filled. Thank you to everyone who signed up!

Free Merit Badge Events

Earn BSA Merit Badges through Classes Taught by PennDOT Representatives



Engineering: June 22 to 24, 2020



Traffic Safety: June 29 to July 1, 2020

2 to 3 PM each day

Curriculum will follow BSA requirements.
Some prerequisites may be required.



Open to students age 12 to 17.
Lessons will be taught via Skype.

Space limited. Register by June 19, 2020.
Sign up by emailing Jill Harry at jharry@pa.gov.

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FROM DRAB TO FAB – ACCELERATED BRIDGE REPLACEMENT ON ROUTE 30 NEAR PITTSBURGH MAKES BIG DIFFERENCE FOR MAINTAINING TRAFFIC AT A TIGHT SPOT

By: Richard Kirkpatrick, Bureau of Innovations



For many years, PennDOT District 11 in the Pittsburgh region had been performing many inspections and repairs to a small structurally deficient bridge along Route 30 over Bessemer Avenue in East Pittsburgh Borough.

Constructed in 1930, the bridge was just miles from busy Interstate 376 and downtown Pittsburgh. Given the location's narrow urban corridor and high traffic volumes of about 22,000 vehicles a day, the district looked carefully at all options for replacing the structure. Neither a long-term full closure with a lengthy detour nor a long-term single lane restriction was desirable. Instead, the district determined that the structure was a good candidate for an Accelerated Bridge Construction (ABC) project, an innovation championed by the Pennsylvania State Transportation Innovation Council. To further accelerate, the district decided it should be replaced in a single weekend.

"The Department always considers ways to minimize the impacts construction has on motorists' commutes, especially in the heavily congested areas within our region," said District Executive Cheryl Moon-Sirianni. "Because we value our customers' lives and time, when cost effective, we use Accelerated Bridge Construction techniques to save months of lengthy detours and congestion."

The contract was awarded to Brayman Construction Corporation in November 2015. Crews worked over the winter and early spring

prefabricating the various components needed for the planned ABC project scheduled for May 2016.

Crews went on site to demolish and replace the bridge structure in 57 hours. Despite rain through much of the weekend, crews were able to quickly finish the bridge replacement.

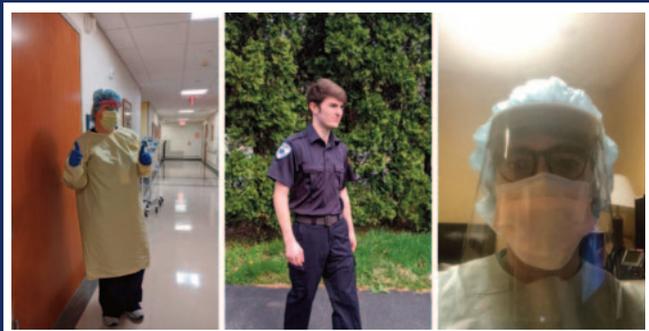
Beginning at 9 p.m. on the first night, a Friday, the bridge was closed, and by Saturday night the structure was demolished. From Saturday night through Sunday morning, crews set the new precast deck and the approach slabs panels. Then from Sunday afternoon through Monday morning, Ultra-High Performance Concrete (UHPC) was used to bond the individual pieces into a uniform structure. By 6 a.m. Monday morning, the bridge reopened to traffic.

Several factors allowed this bridge replacement to occur rapidly. The substructures were in good condition and were adequate to continue to carry the load of the new structure and traffic. The tops of the existing abutments were cut off and replaced with new precast caps. The deck was fabricated locally in Saxonburg, Pa., pre-assembled and then unassembled prior to being transported to the project location. Additionally, UHPC achieves high strengths in a very short time frame.

An additional weekend closure to place a latex overlay and conduct paving operations occurred two weeks later.

ON THE FRONT LINES OF COVID-19

By: Brad Rudolph, Deputy Communications Director, District 6



You don't have to look very far among the employees of PennDOT District 6 to find someone related to a healthcare worker — nieces and nephews, children and even spouses who are on the front lines combatting COVID-19. It is these brave men and women who are truly heroes in this time of uncertainty.

For Mike Lee who works in project delivery for District 6, the heroes are both his wife Christine, a registered nurse at Tower Health Reading Hospital, and his son Matthew, an EMT for Western Berks Ambulance Association.

Mike says that over the last several weeks, Christine has been caring for many hospitalized patients who have tested positive for COVID-19, as well as many patients who are still waiting to get their test results. Similarly, Matthew has been transporting a combination of positive COVID patients and some awaiting confirmation of the virus. A junior at Alvernia University, Mike earned his National Certification as an EMT last summer and is pursuing a career as a physician's assistant.

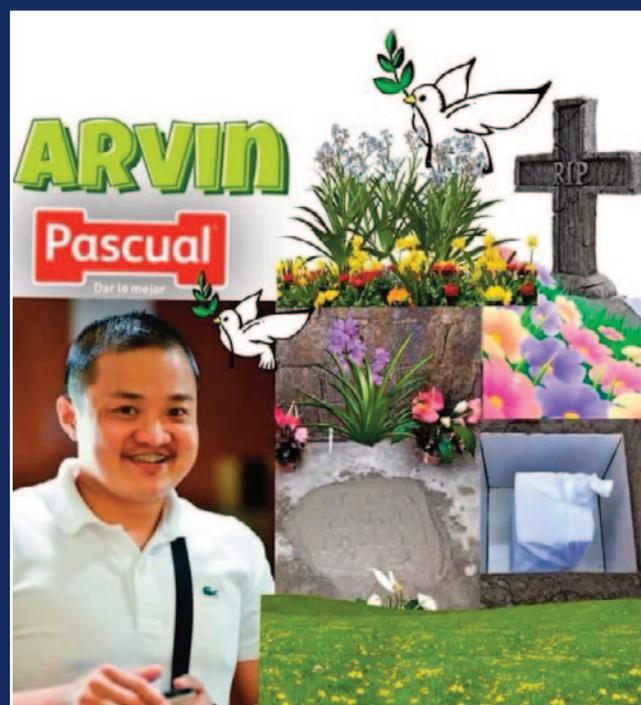
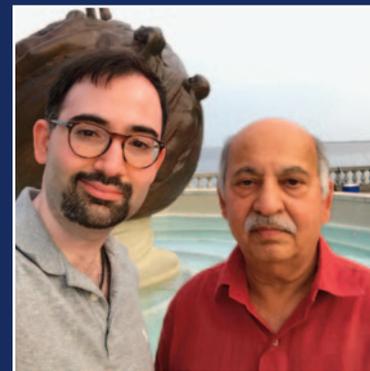
"Christine has a specific routine once she arrives home to help keep us safe from the exposure she endured," Mike said. "She's concerned, but not scared, regarding her own health, her co-workers' health, and the health of her patients. She continues to serve the shifts she is assigned."

Besides dealing with the obvious implications of exposure to the coronavirus, healthcare workers in Pennsylvania and around the United States are dealing with a shortage of personal protective equipment (PPE). Dennis Sterling, construction cost manager for District 6 says his wife, Kim has been helping with that by sewing masks and donating them to the hospitals where both of their children and son-in-law work as doctors treating COVID patients.

"If there is a message, those who listen to Doctor Levine, Governor Wolf, and President Trump by staying inside, social distancing, and wearing a mask – you are helping tremendously whoever you are," Dennis said.

PennDOT employee Pinakin Chokshi and his son, a doctor in Florida. "We should all appreciate healthcare workers who are fighting this pandemic," said Pinakin Chokshi, whose son Ravi is an OB/GYN in Florida. One weekend per month Ravi works with COVID-19 and ICU patients and Pinakin shares that they, too, are lacking PPE and ventilators. "It's really scary, but it's part of his job. He is taking extreme care to avoid infections."

According to the Pennsylvania Department of Health, there have been nearly 2,000 COVID-related deaths in Pennsylvania as of late April. Centers for Disease Control and Prevention (CDC) are reporting more than 50,000 deaths in the United States and more than 200,000 globally.



Raymundo Pascual, who works in District 6 construction unit recently lost his nephew Arvin, a nurse caring for COVID patients in Cabanatuan City, Philippines, after contracting the disease. His story made headlines as he was the first Filipino nurse to die from the virus.

"He died alone. No funeral, no viewing. Only his immediate family was there when he was buried," Raymundo explained. "The pictures my family sent to me are so much to bear, especially the picture of my brother grieving for his lost son."

To reiterate Dennis Sterling's message, it is extremely important Pennsylvanians and Americans to follow the quarantine guidelines issued by Governor Wolf so we can mitigate COVID-19's impact. To be a family member of someone on the front lines of COVID can be scary, which is why we all must do our part to help flatten this curve.

WORKING THROUGH COVID-19: DISTRICT 4 EMPLOYEE STEPHANIE MAREK MADE CUSTOMER SERVICE HER TOP PRIORITY

By: Michael Taluto, Community Relations Coordinator, District 4

As COVID-19 began spreading across Pennsylvania, changes happened quickly. Stephanie Marek, Permit Supervisor in District 4, went above and beyond the call of duty to make things work for our customers in northeastern PA.

Nothing of this nature has ever occurred during Stephanie's career.

"Honestly, there was a time way back when that the weather was so terrible that the entire District Office was shut down for the day," she said. "Shutting down the District Office was unheard of back then. Even so, I had to come into the District Office to take care of issuing hauling permits for our customers."

Fast forward to March of 2020 and this was not the case. As many employees across the Commonwealth ventured into teleworking, Marek and her staff were able to do the same.

Once home, Stephanie reached out to every customer she knew and dealt with on a regular basis. Many phone calls later – and with the help of Tom Shelanskey of the District IT Unit – they were able to route faxes from the Permit Unit fax machine directly into Marek's email. "It was wonderful to know that my customers wouldn't miss a beat," she said.

"From the beginning – since many of my customers are truck drivers and are out on the road – I gave them my personal cell phone number as a fax for them wasn't an option," Marek explained. "They were able to take a photo of the permit application and send it to my phone so that I could issue a permit. The customers were so appreciative of this service."

Employee Spotlight



The customers were also very happy to know that they didn't have to leave their offices and drive to the District Office to have a permit issued, keeping them socially distant and safe.

"They were pleased that we were still able to issue permits and mail in their required payment," she said. "Many customers have called and thanked us for making things so easy during the telework transition. They asked if we can keep these processes permanent, as it saves them time and money by not traveling to the District Office to obtain a permit."

Stephanie Marek is the District 4 Clerical Supervisor of the Special Hauling Permits Unit. She has been with the Department for 26+ years – all within the Permits Unit. Stephanie and her husband of 22 years, Chris, have two children.

"Teleworking had its challenges in the beginning," Marek said. "With my husband working from home and my college student going to school virtually, we all had to find our niche to make sure it all worked."

TWO CURVES ON INTERSTATE 80 USE NEW LED SIGNS FOR ENHANCED SAFETY

By: Joshua Kaufer, Community Relations Coordinator, District 1

PennDOT District 10 is using new technology to keep drivers safe by installing solar powered sequential LED chevron signage at two curve locations in the District 10 area that have a substantial crash history. The sequential chevron system both warns and gives motorists a higher level of visual guidance when approaching and driving through the curve.

Previously, static chevron and curve warning signs alerted motorists of the upcoming curve on Interstate 80, located just east of the Brookville interchange, and on US 119 in Indiana County at the Wake Robin curve. However, the static signs didn't lessen the number of crashes on and around these locations.

According to case studies, sequential LED chevrons, which light up and follow along with the motorist as they drive through the curve, reduce the number of curve-related accidents. A Federal

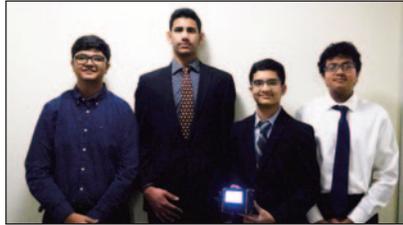


Highway Administration evaluation project found that systems like sequential LED chevrons reduce vehicle speeds and crashes on horizontal curves where, statistically, the crash rate is triple that of other highway segments.

Not only have the LED chevrons proven effective, they are better than other alternatives regarding cost. Solar energy powers the LED chevrons, so the District doesn't have to provide power to the signage and they were installed by Department Maintenance crews. It is a low-cost solution that reduces crashes and maintains safer roadways for the future.

A CHALLENGE WITHIN A CHALLENGE: CONDUCTING PENNDOT'S INNOVATIONS CHALLENGE JUDGING DURING A PANDEMIC

By: Danielle Klinger-Grumbine, Bureau of Innovations



Each year, PennDOT's Innovations Challenge invites teams of high school students in ninth through 12th grades to use their problem-solving, creative, and strategic-thinking abilities to solve real-world transportation challenges. This year's challenge was no different, except for the challenge of determining how to conduct statewide judging amidst the COVID-19 pandemic.

The third annual challenge asked students to look at cost-effective technologies and innovative methods, aside from laws and educational campaigns, that can be developed in the next five to 10 years to help PennDOT more efficiently, effectively and safely control litter along roadways.

More than 70 submissions were received from high schools across the state. Regional judging events were held at PennDOT district offices earlier this year, determining the 11 regional winning teams that would move on to be judged at the statewide level.

With schools closed and the panel of judges teleworking, PennDOT's Bureau of Innovations (BOI) quickly identified options to move forward with the statewide judging and recognize the regional winning teams for their efforts in developing these innovative solutions. Coordinating with the respective faculty advisors, BOI was able to provide each team's essay and presentation materials electronically to the judging panel for independent reviews and scoring.

With their "Pennsylvania Trashout" website and mobile application to motivate and award prizes to individuals who pick up trash, the team from Monroe Career & Technical Institute in PennDOT's Engineering District 5 was announced as this year's challenge winner.

The teams from Seneca Valley High School in PennDOT's Engineering District 10 and Reach Cyber Charter School in PennDOT's Engineering District 8 finished in second and third place, respectively. The Seneca Valley High School team proposed "Litter Gitters," or specialized trash receptacles that are installed at strategic locations for motorists to dispose of trash. The Reach Cyber Charter School submitted their "Litter Impact" mobile application to get individuals involved in community cleanup in a fun way.

The winning school will be awarded an engraved Plexiglas trophy, and the winning team members will divide a \$1,500 scholarship from the Keep Pennsylvania Beautiful organization and the Pennsylvania Chapter of the American Traffic Safety Services Association. The second-place team will receive a \$900 scholarship and the third-place team a \$600 scholarship from these organizations also to be divided among team members.

Other finalists were students from Northwest Pennsylvania Collegiate Academy, Erie County; Bradford Area High School, McKean County; Mid-West High School, Snyder County; North Pocono High School, Lackawanna County; Hanover Area Jr./Sr. High School, Luzerne County; PA Virtual Charter School, Montgomery County; South Fayette High School, Allegheny County; and Norwin High School, Westmoreland County.

Their solutions ranged from a litter sorting belt, statewide litter pick-up competition, and a rechargeable automated robot for collecting litter to several mobile applications, including one for individuals to report littering offenses and one that incentivizes throwing away litter in the proper trash receptacles.

CAMBRIA COUNTY PREPARES FOR ITS FIRST ROUNDABOUT IN 2021

By: Jessica Urbas, Sr. Civil Engineer Supervisor, District 9



January 2021 will be historic for PennDOT's District 9. Cambria County will be preparing for its first roundabout as part of the Geistown Corridor Improvement Project. What began in 2014 as a pavement project has morphed into a corridor project that enhances safety and mobility along Route 3016 in Geistown Borough and Richland and Stonycreek Townships. Other design elements of the 1.75-mile project include a road diet concept along Route 3016, signal upgrades at five intersections, access management, elimination of a structure, addressing drainage concerns and 3,400 feet of sidewalk.

Built in 1951, the original engineers of the Geistown Cloverleaf foresaw a different evolution of the area's community and roadway network. Today's configuration consists of a partial cloverleaf interchange connecting Route 3016 to Route 756 and a divided, four-lane Route 3016 within a neighborhood and business setting. The arterial provides connectivity between the City of Johnstown, its western suburbs and U.S. 219.

When District 9 solicited engineering services for the project, the scope was left open-ended and expectations were to eliminate the existing median curb with approximately 2,000 feet of paving. To the district's surprise, almost all firms suggested an alternatives analysis phase with conceptual designs including a roundabout, SPUI, realignments and an at-grade intersection.

In June of 2016, the District introduced four alternative designs to the community at business workshops and a public meeting: (1) the existing configuration (2) local improvements (3) at-grade signalized intersection (4) roundabout. Public consensus was to proceed with the roundabout alternative as it simplified traffic movements, created a cohesive community feel, increased mobility and safety and supported multimodal initiatives.

The local municipality has been supportive of the project throughout the design process.

"The Geistown Roundabout project is an amazing example of local, state, public, and private stakeholders coming together to redefine a major transportation intersection in our region and change the face of our municipality for decades to come," said Matt Sernell, former Geistown Council President. "PennDOT's work and willingness to ensure all parties are involved has become a key factor in the project's success to date."

Slated as a two-year project, construction will begin in April 2021 and the roundabout is expected to be open to traffic in November 2021. Paving, sidewalks, drainage and traffic signals will be constructed in the second season. An animation of the final condition can be found at <https://www.youtube.com/watch?v=AiWWhb6UFTFw>.

PENNDOT'S SOUTH-WESTERN PA DISTRICT TAKES LEAD ON EPG INNOVATION

By: Richard Kirkpatrick, Bureau of Innovations



PennDOT's District 12 in southwestern Pennsylvania looks for ways to deploy Expanded Polystyrene (EPS) Geofoam, a rapid embankment construction technique used in Accelerated Bridge Construction.

This innovation, championed by the Pennsylvania State Transportation Innovation Council (STIC), involves the use of a lightweight, rigid foam plastic in place of traditional embankment or back-fill materials. It is much lighter than traditional materials and can be used to reduce ground settlement, ground instability, or lateral pressures exerted by the fill.

"We look for opportunities to use it where it's effective, cost beneficial, and makes sense," said Roy Painter, P.E., the district's geotechnical engineer. "It reduces stresses on underlying soils and increases the stability of the embankments against failure."

The technology was used for a project on Pennsylvania Route 217 to protect the existing bridge and piers against settlement during construction of a new bridge and embankments. It was also used in two locations on U.S. Route 119 in Fayette County, for a gabion wall settled backfill leveling and for cross-pipe settled backfill leveling.

The benefits include accelerated foundation construction, which reduces project schedules; reduced need for labor in construction; little to no lateral load on retaining structures; and it can be constructed easily in limited rights-of-way.

"If you have to be in the right of way, it can work better," Painter noted. "Also, it does not take as much time for the bank to settle."

PENNSYLVANIA HIGHWAY FATALITIES REACH NEW LOW IN 2019



Statewide highway fatalities reached a new low in 2019, dropping to 1,059, the lowest since record keeping began in 1928 and 131 less than in 2018.

"While this is certainly good news, even one life lost is one too many," said PennDOT Acting Secretary Yassmin Gramian. "We must continue to work with our partners to decrease traffic deaths through education and outreach. We urge all Pennsylvanians to always wear their seat belts and never drive impaired or distracted."

Notably, the number of unrestrained fatalities dropped from 398 in 2018 to 330 last year, the lowest it has been in the last 20 years. Other areas that saw significant decreases in 2019 were fatalities in aggressive driving crashes, fatal crashes involving a driver 65 years of age or older, and pedestrian fatalities:

- There were 129 fatalities in aggressive driving crashes in 2018 compared to 95 in 2019;
- Fatalities in crashes involving a driver 65 or older dropped from 330 in 2018 to 281 in 2019; and
- Pedestrian fatalities decreased from 201 in 2018 to 154 last year.

Aside from the year-to-year decline, longer-term trends also continue to decrease. For example, compared to 2015, there were 141 fewer total traffic deaths, 83 fewer unrestrained deaths, and 42 fewer deaths in crashes involving impaired drivers.

While fatalities for most types of crashes were down for 2019, some types saw fatality increases in 2019:

- There were 174 motorcyclist fatalities last year, up from 164 in 2018;
- Fatalities involving stop-controlled intersections increased to 92 from 67 in 2018;

- Fatalities in vehicle failure-related crashes increased from 45 to 52.

Despite the year-over-year increase, long-term trends for all three categories continue to decrease.

According to national data, over 90 percent of crashes are caused by driver behavior. For this reason, PennDOT focuses on data trends to drive enforcement and education improvements and invests approximately \$18 million annually in federal grant funds statewide to support these behavioral safety programs.

In addition to behavioral safety, PennDOT focuses on infrastructure improvements to roadways in an effort to further reduce fatalities and serious injuries. More than \$403 million in Federal Highway Safety Improvement Program funds were invested on 464 unique safety projects from 2015 to 2019. Another \$50 million of state funds were invested in low-cost safety improvements at approximately 2,800 locations between 2014-2018. Examples of low-cost safety countermeasures include centerline and edge-line rumble strips and signing and pavement markings. There were approximately 11,000 miles of rumble strips added or replaced during this time.

For more information on reportable crash data, visit PennDOT's Pennsylvania Crash Information Tool [Crashinfo.penndot.gov](https://crashinfo.penndot.gov) (PCIT) website, or for additional information on the department's highway safety initiatives, visit [PennDOT.gov/safety](https://penndot.gov/safety).

PennDOT's media center offers resources for safety organizations, community groups, or others who share safety information with their stakeholders. It features graphics sized for social media, highlighting topics such as seat belts, impaired driving and distracted driving can be found online at www.PennDOT.gov in the "Media Center" under the "About Us" footer.

WORKING TOGETHER: PENNDOT AND YOUNGWOOD BOROUGH ADDRESS SAFETY ON U.S. ROUTE 119

By Richard Kirkpatrick, Bureau of Innovations

The borough of Youngwood, Westmoreland County, is neighbor to a confluence of high-speed roadways – Interstate 70; the main Pennsylvania Turnpike; the Amos Hutchinson extension of the Turnpike, Pennsylvania Route 66, which is part of the Greensburg bypass; and the U.S. Route 30, the Ed Hutchinson Bypass. Even the main route through town, U.S. Route 119, is four lanes, and the downside is the high-speed traffic continues unabated within the town.

As part of the PennDOT Connects program, PennDOT's District 12 and the borough are teaming up to take steps to calm the traffic on Route 119 using an approach known as a Road Diet. The State Transportation Innovation Council (STIC) also has championed Road Diets across Pennsylvania; The utilization of Road Diets was a Federal Highway Administration (FHWA) Every Day Counts (EDC) Round 3 initiative that Pennsylvania adopted. Others have been tried in Carlisle in Cumberland County, Sharon in Mercer County, Boalsburg in Centre County and Beaver Falls in Beaver County.

"We had a lot of public involvement," said Liberty Hill, District 12's plans engineer. "This is in line with the PennDOT Connects initiative. This has been a big PennDOT Connects project. We have had lots of community outreach and stakeholder meetings."

This past summer, the "PennDOT Connects – Connecting Communities" initiative won in the Quality of Life/Community Development Small Project category in the regional America's Transportation Awards competition.

PennDOT Connects began as a policy issued by former Secretary Leslie S. Richards to strengthen the commitment of PennDOT to collaborate with Metropolitan Planning Organizations (MPOs)/Rural Planning Organizations (RPOs) and local governments during the planning process. PennDOT Connects identifies community needs and contextual issues early in project planning through a collaborative process.

Road Diets are one example of the innovations growing out of the STIC. The aim is to deliver the very best transportation services to communities across Pennsylvania. STIC is a collaboration between the FHWA and PennDOT and features extensive outreach and collaboration with the highway construction industry, local governments and other entities.

The renovation on the four-lane U.S. Route 119 through the borough includes taking lanes from 12 feet wide to 11 feet wide with 8-foot parking lanes and installing chicanes, a type of S-curve configuration.

"It's a straight, four-lane highway. People build up speed in the straight away. Added chicanes to put curves in and it will slow people down," Hill said.

"The chicanes are innovative," Hill added. "There are not many places that have these. We also are building bulb outs for parking areas to give shelter to pedestrians who want to cross the road. It gives them a place to stand while waiting to cross the road."

"It was originally scheduled as just a road improvement project. The pavement needed to be reconstructed through the town. We thought that while we were there, we would do the right thing for safety."



"We are actually lowering the speed limit from 35 mph to 25 mph," Hill said. "We are also installing flashing warning devices, including a speed minder that will post driver's speed compared to the posted speed limit."

Also, the project calls for painting optical speed bars that give drivers a better feel for how fast they are going. They are paint bars along the edge line and the spacing reduces as a driver proceeds through them.

"We are throwing a lot of innovative things into this project," Hill said.

The project also will extend sidewalks to the bike trail, so people can come into town for ice cream and other treats and to reach shopping areas.

The Southwestern Pennsylvania Commission also invested a \$1 million Smart Grant into the project.

"There has been mixed reaction, but it is mostly positive," Hill said. "Everybody knows the traffic needs to be slowed down in town because of pedestrians and the park. It is a walkable community."

Borough Manager Diane Schaefer agrees.

"This will improve the residential homes living on those main streets," she said. "Ultimately anybody with a business on Route 119, it will help them with people not flying through."

"Some people say it will not slow traffic down and some are hopeful it will work, and we will continue to move forward," she added. "I do welcome the development. Speaking on behalf of the borough, people do think this will be a welcome approach."

Schaefer also had high praise for the innovations championed by PennDOT.

"Youngwood Borough has worked so well through this program," she said. "I can't speak highly enough of the team at PennDOT, the engineering team. The communications have been wonderful. I am a board member for the State Association of Boroughs and I tell people that. This is a good thing."

Added Hill: "Some people are skeptical whether it will work, but most everybody we talked to is thrilled we are trying this, and we have the backing of the community."

Full reconstruction work is currently underway and expected to be completed in late summer 2023

ROBOT MAY IMPROVE SAFETY AND EFFICIENCY ON HIGHWAY CONSTRUCTION PROJECTS

By: Dave Thompson, Community Relations Coordinator, District 8



Robotic technology could make a tedious and time-consuming construction process safer, faster and more efficient.

A robot designed to tie rebar on bulk tie operations was deployed recently at a local bridge replacement project in Cumberland County. PennDOT District 8 has oversight on the design and construction of the county-owned bridge, which carries Orrs Bridge Road over Conodoguinet Creek in Hampden Township.

The robot, owned by Pittsburgh-based TyBot LLC, uses sensors and artificial intelligence to locate and tie rebar intersections on bulk tie operations.

District 8 officials were on hand on a hot, muggy day in early June to observe the operation: District Executive Mike Keiser, Assistant District Executive for Design Chris Drda, and Assistant District Executive for Construction Kevin Keefe.

According to company rep Danielle Proctor, the robot, which is mounted on the same rails used to place concrete on the bridge deck, can tie about 1,000 rebar intersections an hour – the approximate output of six-to-eight workers.

That's good news for LaMar Childs, owner of Spring House, PA-based rebar contracting company LB Construction Enterprises, which is performing the rebar work on the bridge. The Orrs Bridge Road project requires the tying of approximately 40,000 rebar intersections.

Mr. Childs said using technology for bulk tying operations is safer and allows him to direct his workers to other tasks or projects.

The technology doesn't replace workers, but simply allows them to perform other work that is less tedious and tiring, he added.

"In general, tying rebar can be backbreaking work," he said. "Any time I can reduce the wear and tear on my employees works well for me."

The machine works autonomously using a camera-like "eye" to locate rebar intersections, position itself over them, and then ties them with 16.5-gauge wire. A quality control technician follows it to ensure it is working properly.

It has a success rate of 98-to-99 percent, Ms. Proctor said. Missed intersections are marked with paint and tied by hand.

TyBot has been used on a handful of projects in Pennsylvania and has been deployed in other states, as well, according to Ms. Proctor. Another system that carries and places rebar soon will be available that can work in tandem with the current rebar tying technology, she said.

"This is an example of how new ideas and innovation improves safety and efficiency in our ongoing work to maintain and improve our transportation system," Mike Keiser said. "It's great to see technology that can operate within the social distancing guidelines related to the Covid-19 pandemic. Additionally, I'm very happy to see transportation projects, regardless of whether they are state or local, back up and running."

SAFETY EDGE (SM) PAVING PROVIDES ADDED MARGIN OF SAFETY

By: Jill Harry, Community Relations Coordinator, District 1



When people think of what they rely on PennDOT for, perhaps paving is one of the most important missions the state transportation agency delivers.

In its efforts to be as innovative as possible, PennDOT embraced the Safety Edge SM paving technique. This approach minimizes vertical drop off at the pavement edge, making it easier for vehicles that drift off the road to return safely.

"We routinely use this method of construction statewide in Pennsylvania and use it in District 9 (the Blair County and surrounding region) on every project that meets Publication 408 criteria, such as pavement that doesn't encounter curbs or sidewalks or pavement that doesn't have the face of the guiderail directly over its edges," said Garth Bridenbaugh, District 9 construction services engineer.

"PennDOT implemented Safety Edge SM as part of Federal Highway Administration (FHWA) Every Day Counts Round 1 (EDC-1). PennDOT agreed to pilot it, which began in 2011, then implemented it on a statewide level soon after. Currently, it has widespread use across the state and is part of the standards and specifications."

The edge is installed with a shoe that easily attaches to existing paving equipment.

Safety Edge SM is now included in the PennDOT Design Manual and is to be used as a standard pavement edge treatment for bituminous pavements and shoulders, except in urban areas with curbs and sidewalks.

Safety Edge SM is one of the innovations that was championed by the Pennsylvania State Transportation Innovation Council.

One additional benefit, said Mark Colussy, planning director for Huntingdon County, located in the District 9 area, is the additional width of the roadway with the Safety Edge SM application.

"We can use as much cartway as we can get on our rural roads," he said.

Colussy said he was pleased with PennDOT District 9's offering a combination of improved technology, better roadways and cost savings.

"I am a fan of the innovative technologies and am supportive of looking at other opportunities," he added.

MAJOR RECONSTRUCTION PROJECT STARTS IN VENANGO COUNTY

By: Jill Harry, Community Relations Coordinator, District 1



The \$33 million project to reconstruct the four-lane portion of Route 8 initially started in March with repairs to the detour route. The statewide construction halt meant a pause in the project until increased health and safety protocol could be established.

Work resumed with the first wave of critical project restart approvals. Route 8 serves as a main connection between rural Venango County and Interstate 80.

The two-year project includes reconstructing the roadway and rehabilitating several bridges along the route through Sandycreek, Irwin and Victory townships, Venango County. During the 2020 construction season, work will concentrate on approximately 12 miles of the northbound lanes. In the 2021 construction season, the southbound lanes will be reconstructed.

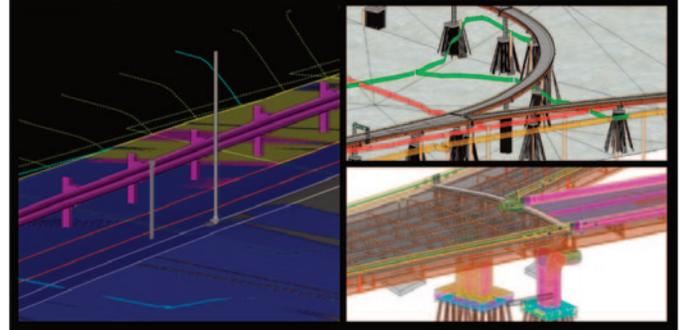
Since the early design phases, the project has garnered a lot of attention from the local leadership and the community. The first of two public meetings drew a large crowd of nearly 300 and featured a public comment portion that lasted over an hour. A general consensus among the attendees was the desire to keep the roadway in its current configuration as an interstate lookalike.

As part of the work restart, the Route 8 project was selected as a location to test the ability to use drones to assist with construction inspection duties. District 1 drone pilot Travis Myers conducted a flight over a portion of the northbound work area and captured images of ongoing drainage work. Additional flights of the work area are being considered for activities scheduled throughout the summer.

Information on the project is available online at www.penndot.gov/district1 by clicking on the Construction Projects/Roadway link under the Resources heading, picking the Venango County box then choosing the Route 8 Reconstruction Project tile.

PENNDOT EMBRACING 3-D DESIGN AND CONSTRUCTION PROCESS

By: Richard Kirkpatrick, Bureau of Innovations



PennDOT is moving to embrace the world of three-dimensional (3-D) to streamline and enhance the project design and construction process in ways that are very fitting for a 21st Century organization.

The Computer-Aided Design and Draft (CADD) core working group led by Kelly M. Barber, P.E., Highway Administration program manager and section chief; William Harrison, CADD Manager; Leroy Posey, highway design manager; and Allen Melley, P.E., civil engineer manager, have been working on details.

Under the Digital Delivery program, which Melley leads, by 2025, construction projects will be able to be bid using 3-D technology rather than in traditional paper-based construction plan formats.

The initial focus is on an Open Roads Designer (ORD), which is an upgrade to the existing CADD platform, with training now in process for PennDOT staff and PennDOT pilots planned for this spring. Barber is focusing on this area.

With the existing process, designers work with two-dimensional (2-D) plans, which the building contractors then translate into three dimensions. With the Digital Delivery initiative, dubbed Planless 2025, the 3-D models will have details for all elements to be built and serve as the “document of truth,” from which the contractors will work. PennDOT expects this evolution will improve quality.

3-D plans already are being developed for the massive rebuilding of the Eisenhower Boulevard interchange at the junctions of Interstates 83 and 283 and U.S. 322 in Dauphin County.

“It’s a team effort, department-wide,” Melley said. “It’s a different way of doing business ... We are moving to be a leader.”

PennDOT’s team is also reaching out to counterparts in Utah and Iowa who also are working on 3-D plans.

Eventually, all the 3-D plans would be used in PennDOT’s asset management and cover all of PennDOT’s road and bridge network. Inspectors would work with iPads and see all road or bridge details in 3-D, aiding in their work.

“It’s fascinating to be working on something that will change the department,” Melley said.

PRESERVING HISTORIC METAL TRUSS BRIDGES

By: Kara Russell, Historic Preservation Supervisor, Highway Administration

This article was originally published by the Pennsylvania State Historic Preservation Office.

Pennsylvania has a long and important history related to metal truss design, fabrication and erection. PennDOT's SPIKE funding may help with their preservation as part of the commonwealth's transportation infrastructure.

Pennsylvania is full of historic metal truss bridges

Pennsylvania's varied terrain necessitated the building of many thousands of bridges. Additionally, the era of metal truss experimentation heightened during the second half of the 19th century and early part of the 20th century. These two things together resulted in the erection of a wide variety of metal truss bridge types and designs across the commonwealth.

Cons Road Bridge over Towanda Creek in Bradford County. The demands of modern vehicular traffic, in combination with the age of these structures and other factors, however, has resulted in the loss of much of the historic metal truss bridge (HMTB) population.

PennDOT's Efforts to Preserve HMTBs

In recognition of this, PennDOT, in conjunction with the PA SHPO, developed a management plan that seeks to find ways to preserve at least some of the remaining population of historic metal truss bridges.

Many of these bridges are owned by counties and municipalities, rather than PennDOT, which necessitated a broad outreach effort.

In 2017, PennDOT and SHPO staff met with the bridge owners, planning partners (Metropolitan Planning Organizations [MPOs] and Rural Planning Organizations [RPOs]), and interested parties to discuss those historic metal truss bridges that weren't already part of a planned project.

The purpose of the meetings was to make owners aware of the historical importance of these bridges and to collect more information on their current and future use. The primary goal was to determine, at least preliminarily, the needs of these crossings and whether each historic bridge is capable or could be capable through rehabilitation and/or on-going maintenance, of meeting those needs into the future.

One of the primary messages relayed by local owners and the MPOs and RPOs, was the difficulty of advancing the more rurally-located bridges (i.e. those with very low traffic volumes) onto the Statewide Transportation Improvement Program (STIP), by which the bridges could receive federal and/or state funds for rehabilitation.

It was clear that a dedicated program for the preservation of locally-owned historic metal truss bridges was needed.

Potential Funding Option

PennDOT is pleased to communicate that PennDOT Deputy Secretary Larry Shifflet, as part of the 2021 State Transportation Improvement Program Update, has recommended a program to benefit county and municipally owned historic metal truss bridges beginning in federal fiscal year 2023.

The proposed program will consist of \$1 million dollars in 2023, \$1 million dollars in 2024, and \$2 million dollars each year for the remainder of the twelve-year program (8 years).



The funds will be coming from Federal "STP" funding (SPIKE Funds). The program will utilize toll credits and therefore not require a local match. Bridges to benefit from this program will be selected by a committee of PennDOT, FHWA and PA SHPO representatives.

Identifying Eligible Projects

The program will utilize the following criteria in selecting bridges for the rehabilitation program:

Bridges evaluated as "exceptional" or "high" historic preservation priority. These are the rarest and/or most unique of the remaining population of historic metal truss bridges.

Bridges not already funded on the STIP.

Bridges whose owners have committed to maintain the bridge and have expressed an interest in the historic preservation value of the bridge. This commitment came verbally in the management plan but will be more formalized as a "maintenance plan" as part of rehabilitation planning.

The public interest in, and the public visibility of, the bridge. Emphasis will be placed on bridges that are highly visible and/or have strong public support for their preservation.

Cost will be factored in to the selection. To the degree all other factors are equal, funds will be leveraged to get the "most bang for the buck" in terms of bridges that need less work, in order to preserve as many bridges as possible with these funds.

It is hoped that additional funds can be brought into the program to advance bridges through design prior to 2023 such that the 2023 funds can advance one or more bridges into construction. The emphasis of the program, at least initially, will be on bridges that can be rehabilitated to meet vehicular needs. A separate program is being piloted to support the adaptive use of bridges that cannot meet transportation needs.

Looking for More Information?

More information on this program will be posted to PennDOT's cultural resource's website <http://tinyurl.com/yy6uqxrm> as the details of this program are refined and with the finalization of the STIP in October 2020.

Questions about the program can be addressed to PennDOT's Cultural Resources Unit Manager, Kara Russell, at krussell@pa.gov.

(CRM) PROGRAM WEBSITE NOW HAS A BRIDGE MARKETING PAGE

By: Daryl St. Clair, Special Assistant to Deputy Secretary, Highway Administration

In late 2019, PennDOT's Cultural Resources Management (CRM) Program website underwent a complete transformation, bringing its design and content in line with other Commonwealth sites. One of the most noticeable changes is to the bridge marketing page, where the public finds information about historic metal trusses available for purchase. The bridges no longer meet vehicular traffic needs but remain valued reminders of Pennsylvania's innovative iron and steel industries. Rather than relegating them to the scrap yard, PennDOT seeks adaptive reuses for these National Register-eligible resources. Forty-three bridges, ranging from the 1876 Cedar Street Bridge in Franklin County to the 1915 Walp Road Bridge in Luzerne County, are featured on the marketing page. The effort aligns with the larger goals of the CRM Program to rehabilitate significant metal trusses in situ that can be brought up to current traffic standards and to identify new uses for those that cannot. PennDOT is working hard to try and save a small part of the Commonwealth's history.

The Mott Street Bridge Rehabilitation Project in Milford Borough and Dingman Township, Pike County is a recent successful example of adaptive reuse. The county-owned 1903 steel pin-connected Pratt thru truss was closed to vehicular traffic in 1988



and to pedestrians in 2011. Transportation Alternatives Program funds were used to rehabilitate the structure in place. PennDOT consulted with the Pennsylvania State Historic Preservation Office, the National Park Service, Milford Borough, Dingman Township, and local property owners to ensure work would not adversely affect what makes the bridge eligible for the National Register of Historic Places. In 2020, the bridge reopened to provide pedestrian connectivity between historic downtown Milford and the Delaware Water Gap National Recreation Area.

CUSTOMERS REMINDED TO NEVER USE THIRD-PARTY WEBSITES FOR DRIVER AND VEHICLE SERVICES TRANSACTIONS

By: Diego Sandino, Community Relations Coordinator, Driver and Vehicle Services

Driver and Vehicle Services reminds its customers to exercise caution while renewing their driver's license or vehicle registration online, and to make sure that they're on PennDOT's official Driver and Vehicle Services website, dmv.pa.gov, for making these transactions.

"PennDOT is proud to provide our customers with comprehensive online services, like vehicle and driver's license renewal, address changes, and much more," said PennDOT Deputy Secretary for Driver and Vehicle Services Kurt Myers. "However, it's important that customers ensure that they are on PennDOT's official site before completing a transaction."

Third-party websites can appear "official," and often pay search engines to appear at the top of search results for common terms, like "renew vehicle registration" or "driver's license." Many third-party sites charge additional fees for completing transactions – there are no additional service or convenience fees for completing online transactions on PennDOT's website.

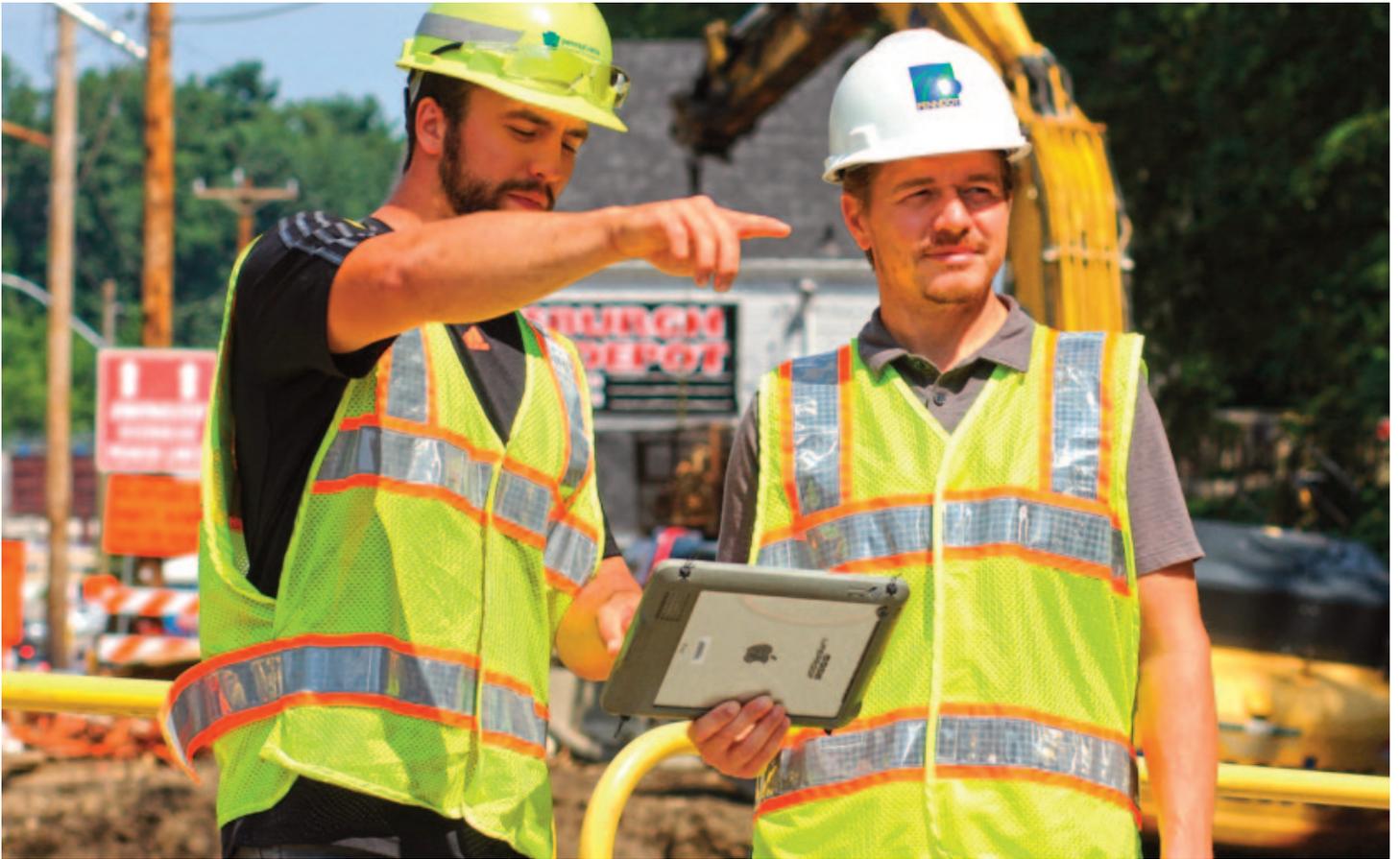
There are a few simple tips to help customers ensure that they are visiting PennDOT's official website:

- Rather than using a search engine to reach the PennDOT Driver and Vehicle Services website, enter the web address (www.dmv.pa.gov) directly into your browser's address bar.
- PennDOT does not charge any additional service or transaction fees for completing online transactions. If you are charged any additional fees, you aren't on the PennDOT website.
- Look for the words "An Official Pennsylvania Government Website" in the top left corner. Many commonwealth websites display these words as an additional security measure.

If a customer has concerns about a third-party website, they can contact the PA Attorney General Bureau of Consumer Protection at 1-800-441-2555, or visit their website.

PENNDOT ADVANCES E-CONSTRUCTION PLANS

By Richard Kirkpatrick, Bureau of Innovations



PennDOT is taking a leading role nationally in advancing, one of the Every Day Counts (EDC) program innovations set by the Federal Highway Administration (FHWA). To support this EDC Round 4 innovation, FHWA and PennDOT co-hosted a workshop in Pittsburgh in spring 2019 that drew more than 200 individuals from 28 states.

Workshop presentations focused on three tracks: innovation, technology, and collaboration. Presenters included representatives from several state DOTs, product vendors, and consultants. Presentations highlighted case studies and best practices related to specific technological tools and mobile applications; use of technology to improve data collection, project management and processes; and the use of construction partnering throughout the life of a transportation project.

Since 2013, PennDOT has developed and release eight mobile construction apps and two more are in development. The goals of the mobile construction program are to provide tools that increase field staff productivity, transform processes through efficient technology, and improve data collection and reporting. These mobile apps and other improvements have cost between \$18 million to \$19 million to develop, but the team calculates a productivity savings of more than \$80 million across all users.

John Myler, assistant construction manager in PennDOT's District 11-based in Allegheny County, reviewed progress at a recent Pennsylvania State Transportation Innovation Council (STIC) business meeting; the STIC helps champion EDC innovations such as eCP. He told the gathering that his team is working on e-Ticketing 2.0, the evolution of using electronic tickets. Currently, e-tickets are used for asphalt, and District 11 is piloting the use of e-tickets for concrete and aggregate loads as well.

The improvements are much more than merely replacing paper with technology, Myler said.

"We are creating living documents," he said. "The information we are capturing is not just information from paper but data that can be used for all sorts of analysis. We can look at how materials are performing over time and over companies. We can see where we are having success and not doing so well. This is information we never had before, and now we are capturing it every day."

Even more so, Myler noted, these advances are demonstrating that PennDOT is a cutting-edge agency where careers can be built for the long term.

"With our future employees coming out of school, they are

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very familiar with these technologies," he said. "We have interns who are very impressed when we hand them an iPad and show them the tools we have developed within PennDOT. That helps us in the challenge to find new employees and puts us a step ahead of a lot of other groups. It tells them we are not the Titanic that cannot turn around. We are accepting and developing new technologies."

The team is also exploring ways that data captured by these construction apps can be stored and made available for maintenance crews. Radio-frequency identification (RFID) tags are another technology on PennDOT's radar. These tags can be used to track materials and assets, and they store information about each item that can be referenced when the asset needs future maintenance. PennDOT also is beginning to expand access to these applications to contractors and make the apps functional for both PennDOT staff and contractors.

Associated Pennsylvania Constructors (APC) received 2018 FHWA STIC Incentive Program funding to study the level of workforce preparedness for implementation of eCP across Pennsylvania. More than 200 people participated in the study. Bob Latham, APC executive vice president, reviewed the results at a recent STIC business meeting.

Most respondents had at least heard of e-Construction technology. However, less than half use e-Construction technology on a regular basis. Only one in five respondents is using mobile technology for "job-specific applications" as opposed to simply reviewing documents and web searching. Respondents felt the top benefits are increased efficiency and ability to share real-time information. Top obstacles were training and app accessibility. Respondents identified a centralized access point for the apps, online training and statewide guidance and standards as the most desired support tools.

Most respondents had heard of and/or participated in Partnering. They said benefits included increased communications, transparency and efficiency. Less than half of respondents noted reduced costs as a benefit. Time needed to build consensus was noted as the top obstacle. Respondents felt statewide guidance and in-person training were the top support tools needed.

Looking ahead, APC staff said there was a general sense of interest in paperless, efficient processes, but there is a need for greater awareness, training, and encouragement and support. The next goal is a strategic plan for eCP implementation tied in with PennDOT's "Planless by 2025" effort.

Phil Petrina, mobile program manager in PennDOT's Bureau of Information Systems, said his team has developed 22 apps for PennDOT's use. They focus on short timeframes to release a product in portions as soon as possible. This allows the team to adapt quickly to needs and challenges and find problems sooner. Petrina's team also engages in focus groups to gain feedback from users.

"Currently, we are meeting with aggregate suppliers to gather detailed requirements around the bill of lading for trucks leaving the plant," Petrina said. "Our goal is to see how we can automate and digitize the ticket process and receipt of said materials at the job site."

Editor's note: Much of the information in this article comes from Carrie Machuga with McCormick Taylor, who prepared a report on this topic based on the July 2019 business meeting of the State Transportation Innovation Council.

PENNDOT ISSUES GUIDANCE AS ADOPT-A-HIGHWAY ACTIVITIES RESUME

PennDOT announced guidance for groups looking to beautify their communities as its Adopt-A-Highway (AAH) activities resume across the state, including mask wearing, social distancing and frequent hand sanitizing. These activities were suspended as part of Pennsylvania's efforts to help mitigate the spread of COVID-19.

PennDOT's AAH volunteer coordinators have received guidance to help ensure continued virus mitigation as the groups' important volunteer cleanup activities continue.

In continued preventive measures against the spread of COVID-19, volunteers must adhere to all Centers for Disease Control (CDC) and PA Department of Health guidelines while carrying out AAH activities, including social distancing, wearing of masks by individuals, washing hands frequently and using hand sanitizer whenever appropriate.

As always, PennDOT will provide volunteer groups with safety vests, trash bags, work gloves, and other equipment as requested by their PennDOT AAH coordinator. For safety, the Pennsylvania State Police (PSP) will be notified of all scheduled events and PennDOT will pick up bagged litter from the roadside.

While AAH cleanups will commence on state-maintained highways, areas that are non-state maintained can be cleaned and adopted through Keep Pennsylvania Beautiful. More information is available at <https://www.keppabeautiful.org/keep-it/adoption-program>.

To join an existing AAH team or start your own, please visit the Adopt-A-Highway page under "Roadway Beautification" at www.PennDOT.gov.

PENNDOT'S BUREAU OF INNOVATIONS ADAPTS TO VIRTUAL FACILITATIONS

By: Danielle Klinger-Grumbine, Bureau of Innovations

With the onset of the COVID-19 pandemic and commonwealth agencies moving many employees to telework status, PennDOT's Bureau of Innovations (BOI) quickly adapted to continue providing meaningful facilitations for department organizations now in a virtual environment.

No stranger to helping other PennDOT organizations evaluate processes and make recommendations for change, BOI found itself looking inward to identify how it could transition its typical in-person facilitations to ones that would be equally successful online.

"When we started teleworking, I thought how can we do everything we do in person in a virtual environment," said Amanda Frank, a management analyst 2 in the bureau. "How do we make the most of this and find opportunities to improve upon what we already do and broaden our bureau's various services offerings."

With BOI conducting dozens of facilitations each year, and in the spirit of innovation, team members put their heads together to find ways BOI could serve the department and successfully run virtual facilitations.

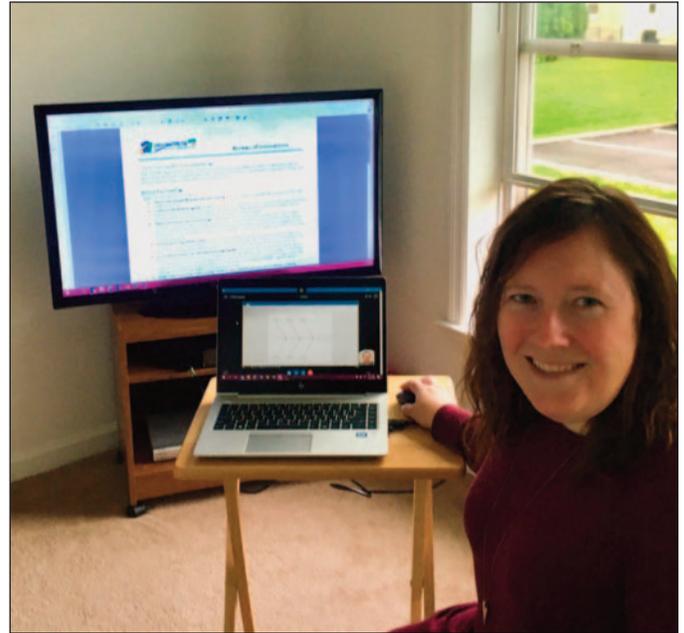
"We realized very quickly that an online facilitation would not look the same as an in-person facilitation," said Frank. "Parts would have to run differently, there would be hiccups, and we needed to be okay with that."

BOI ran a trial facilitation with some of its team members serving as facilitators, while other served as participants. The practice run allowed the team to push the boundaries of what could be done in an online format and maximize the tools available.

"It allowed us to test Skype and its limitations and identify how to get the most out of it to run a successful facilitation," said Frank. "The trial run also allowed us to identify the BOI resources that would be required to run a successful virtual facilitation. We were able to determine how many people we need and what roles they would serve during the facilitation."

Gleaning best practices from the trial run and facilitations it has conducted thus far, BOI developed a virtual facilitation guide that not only shares essential tips for successfully conducting a virtual meeting but provides guidance to those participating in the meeting as well.

"Using this guidance, we've been able to facilitate in a virtual environment something that is close to what we are able to facilitate in an in-person meeting," said Frank. "That surpassed what my expectation was when we started teleworking. It's been a happy surprise and has changed our bureau's perception of what we can do in this environment."



While BOI has adapted quickly, the move to virtual facilitations has proven challenging in some respects. "When you are facilitating online, you are missing the non-verbal cues that you would normally get during an in-person setting," said Frank. "If someone wants to interject and say something, you don't have the opportunity to read that in their body language, so it's more difficult to facilitate group discussions in a virtual environment. You have to get creative and change up your approach."

To interact with participants and keep them engaged during online facilitations, BOI is using the polling feature in Skype. "During in-person facilitations, we've typically used sticker dots or texting software to allow participants to vote and gain consensus," said Frank. "The polling feature in Skype provides that same functionality and has proven beneficial to keeping participants involved."

Through their experiences, BOI team members have found that it's important to have a good idea of what you want to accomplish during the virtual facilitation, and more importantly, how you want participants to interact, including using the chat feature, polling, round robin approach, or other similar facilitation tactics.

"The round robin approach has been successful for us, asking each participant at various points throughout the meeting if they have anything to add to the discussion," said Frank. "Regardless of the approach used, the most important thing is to have a game plan and set clear expectations for your meeting participants."

PENNDOT TAKING HYDRAULIC MODELING TO NEXT DIMENSION

By: Richard Kirkpatrick, Bureau of Innovations



With thousands of waterways draining into five different major river basins, Pennsylvania's topography poses a challenge for PennDOT, especially as it applies to the construction of bridges.

With its eye on using innovative approaches to more efficiently carry out its mission, PennDOT has embraced next generation hydraulic tools to design the largest bridge project now underway in Pennsylvania.

PennDOT and its contractors used a cutting edge two-dimensional (2D) hydraulic modeling analysis tool to design the 15-span, 14-pier bridge carrying the new Central Susquehanna Valley Transportation Project (CSVV) expressway over the West Branch Susquehanna River between Lewisburg and Sunbury.

The project relied on TUFLOW, a relatively new 2D computer program that simulates depth-averaged, 1D and 2D free surface water flows. TUFLOW was used to better model the flow of water around the piers of the structure, which was critical in assessing flooding impacts to surrounding areas.

"Conventional one-dimensional (1D) hydraulic analysis for the CSVV river bridge originally indicated the new structure would cause minor increases in flood elevations that would extend several miles upstream," said Matthew Beck, P.E., an assistant plans engineer for PennDOT District 3. "Although numerous bridge piers are required across the West Branch Susquehanna River's fairly wide floodplain, results did not seem realistic. We looked to more advanced analysis tools that could more accurately model the backwater effects of piers in areas of subcritical flow."

The hydraulic modeling results demonstrated that the project would cause localized increases in the 100-year flood elevation in the floodway of the West Branch Susquehanna River. It also showed that those increases would be localized around the piers, extending only a few hundred feet upstream, rather than several miles as originally indicated by conventional 1D modeling.

The Federal Highway Administration (FHWA) is encouraging states to shift from 1D to 2D modeling through the "CHANGE: Collaborative Hydraulics: Advancing to the Next Generation of Engineering," an Every Day Counts (EDC) innovation, championed by the Pennsylvania State Transportation Innovation Council.

The 2D modeling results "can significantly improve the ability of highway agencies to design safer, more cost-effective and resilient structures on waterways," according to FHWA. Among the benefits FHWA cites are more accurate representation of flow conditions, streamlined project development and better tools for communicating often complex interaction between waterways, the transportation infrastructure and the surrounding environment.

"Other agencies support the use of next generation hydraulic tools as well," Beck said. "The 2D analysis allowed us to obtain Federal Emergency Management Agency and Pennsylvania Department of Environmental Protection approvals based on realistic modeling and ultimately allowed this major transportation improvement project to move forward in a timely manner."

SAFETY PARTNERS THOUGHT OUTSIDE THE BOX TO CELEBRATE NATIONAL BIKE MONTH AMID COVID-19

By: Timothy Nebgen, Safety Press Officer, District 2

CENTRE REGION MAY 1 - 31
FAMILY BIKE SCAVENGER HUNT
 Family = Solo or People Under the Same Roof
 HELP US CELEBRATE NATIONAL BIKE MONTH

Ride your bike at 4 of the following 6 locations and snap a photo with your bike at each spot:

LOCATION	PHOTO WITH
Millbrook Marsh Nature Center.....	Barn
Tudek Park Butterfly Garden	Butterfly Bush
Autumn Meadow Park	Amphitheater
PA Military Museum	Abigail
Haugh Family Preserve	Silo
Orchard Park	Bike Repair Station

Send your favorite photo to FamBikeSH@centrebike.org for a chance to win a \$50 Weis gift card. Info: www.centrebike.org

To help avoid exposure to COVID-19 and still enjoy the outdoors:

- Maintain at least six feet from other individuals.
- Don't recreate in groups – adhere to social distancing

CRPA Centre Regional Planning Agency, CentreBike, centre moves, CENTRE REGION Parks & Recreation

MAY IS STILL BIKE MONTH
 The Centre Region is a Bicycle Friendly Community

BIKE MONTH | BINGO!
 HELP US CELEBRATE NATIONAL BIKE MONTH

Watched a video on bike repair	Sped in the sun	Participated in a Centre Region Bike Month event	Rode some place I'd never been before	Added air to my tires
Sped at least 5 miles in one day	Encouraged a friend to start riding	Visited www.centrebike.org	Rode in a park	Read the PA Bicycle Driver's Manual
Decorated my helmet for bike month	Attended a virtual Bike Month meeting	FREE SPACE	Did an ABC Quick Check	Found a member of CentreBike
Rode on a trail	Watched a video about being a Bar	Posted a photo of my bike on social media	Visited www.cycling.org/ website	Checked my lights
Visited www.bikeleague.org	Watched a video on how to take your bike	Labeled my chain	Visited www.CRPAnet.org	Rode on May 15 - Spring Bike Anywhere Day

Send a photo of you and your Bingo Card to bmb@centrebike.org. You can win 1 of 3 - \$25 gift cards to a local bike shop

Salsbury's BICYCLES & HOCKEY EQUIPMENT, THE BICYCLE SHOP, FREEZE THAW CYCLES

CRPA Centre Regional Planning Agency, CentreBike, CENTRE REGION Parks & Recreation

MAY IS STILL BIKE MONTH
 The Centre Region is a Bicycle Friendly Community

COVID-19 mitigation efforts have compelled everyone to make sacrifices over the past three months, but PennDOT's partners at the Centre Regional Planning Agency (CRPA), CentreBike, State College Borough, Centre Moves and Centre Region Parks & Recreation thought outside the box to ensure safety messaging during National Bicycle Safety Month wasn't one of the things sacrificed.

"The Centre Region has a passionate community of cyclists working diligently to promote the benefits of bicycling to a wider audience," said Trish Meek, a transportation planner with CRPA. "Failing to celebrate National Bike Month in some fashion would have been a disservice to them and the entire region."

Included in a slate of virtual activities organized by the partners was Bike Month Bingo. A Bingo card with 24 cycling related activities was created for the community to engage in over the course of May's 31 days. Once a participant had completed enough activities to have Bingo, they were asked to send a picture of themselves with their Bingo card to CentreBike so they could be entered into a drawing for one of three \$25 gift cards to State College's bicycle shops.

The cycling related activities included several safety related items such as watching a video on bike repair, adding air to bicycle tires, reading the Pennsylvania Bicycle Driver's Manual,

performing an ABC quick check or checking the lights on a bicycle. Additionally, four of the blocks on the Bingo card directed participants to visit websites that included safety videos.

Not all activities slated during the bike month celebrations were virtual. The partners also included a family bike scavenger hunt, which encouraged individuals and families to ride their bikes to four of six specified locations and take a photo with the object indicated in the instructions. Participants were then asked to submit their favorite photos to CentreBike so they could be entered into a drawing for a \$50 Weis gift card. Participants were also directed to adhere to social distancing guidelines of maintaining six feet of distance between individuals and limiting groups to fewer than 10 people.

The winners of all gift cards were drawn June 1, and the total number of participants in the various activities were announced at www.centrebike.org.

Although National Bike Month is only celebrated in May, biking is a healthy, accessible and affordable mode of transportation any time of year. Visit our Ride a Bike page for more information on biking in PA, including laws, safety tips, and information about our Active Transportation Plan that aims to improve conditions for walking and bicycling across the state.

PRESERVING HISTORIC ARTIFACTS DURING BRIDGE CONSTRUCTION IN WASHINGTON COUNTY

By: Raymond Deep, Community Relations Coordinator, District 12



PennDOT District 12 recently completed the replacement of two bridges in Washington County. A box culvert structure was placed on State Route 3041 (Cash Day Road) over Short Creek in Morris Township, and an elliptical pipe culvert was placed on Route 4049 (North Main Street) over a branch of Chartiers Creek in Washington, Washington County.

Along with the structure replacement, both projects included minor roadway approach work, drainage upgrades, guide rail upgrades, utility relocation, signing and pavement markings and other miscellaneous construction. The project on Cash Day Road came with additional challenges to protect pieces of Pennsylvania history.

Cash Day Road

Route 3041 was known to be a site that could potentially have archaeological findings deposits if undisturbed soil was found during the project excavation.

An archaeological monitor from Markosky Engineering was present for all roadway excavation and earthen disturbance within a previously defined archaeological site boundary. Excavation was conducted with an excavator guided by the archaeological monitor in the areas of potentially undisturbed soils. The monitor also excavated, by hand, areas where potentially undisturbed areas were observed to confirm the presence or absence of undisturbed soils. Excavated undisturbed soils were examined for the presence of artifacts and the exposed undisturbed surfaces were examined for the presence of cultural features. Early in the construction, the contractor encountered undisturbed soil that did have archaeological artifacts.

The archeological monitor documented and photographed the chert flakes that were recovered from the excavated areas. Native Americans used this chert to make tools, and the flakes represent the castoff material and weapons. The archaeological monitor then had excavation stopped until PennDOT's

Historical Preservation Specialist was notified, and the findings were discussed.

The area of the undisturbed soils and artifacts were covered with a tarp and surrounded with orange construction protective fencing.

Following state and federal guidelines, the Historic Preservation Specialist contacted the State Historic Preservation Office, the Federal Highway Administration United States Army Corps of Engineers and Consulting Parties within 48 hours.

The District 12 Geotechnical Unit and archaeologist, along with a contracted archaeologist, worked together to come up with a solution to preserve and protect the artifacts while constructing the project. A redesign was developed that minimized excavation. The construction was able to resume with only a slight delay.

In the end, the project was able to be constructed with minimal disturbance of the area and maximum preservation of any significant history.

The effective communication between the Markosky's staff, PennDOT personnel and the contractor was key in ensuring the project was a complete success.

North Main Street

The Route 4049 bridge replacement was a more straightforward project because there were no historic artifacts in the area. It was completed over a 4-day weekend in coordination with the Washington County Fair Grounds and museum schedules. A relocated waterline had to be encased in concrete after construction to allow for the placement of rock for scour protection.

With more than 25,000 state-owned bridges, Pennsylvania has the third-largest number of bridges in the nation. Visit our website to learn more about bridge projects and programs in Pennsylvania.

WHY DID THE TURTLES CROSS THE ROAD? TO GET TO THE PENNDOT NESTING GROUNDS!

By: Monica Jones, Community Relations Coordinator, District 9



PennDOT employees in District 9 are doing their part to protect the environment by helping a species of turtles. Huntingdon County is home to the largest Northern Map Turtle nesting area in Pennsylvania. Specifically, part of it runs through the area where the Route 522 bypass was built in Mount Union, just north of Hill Valley Creek, back in 1999.

These riverine (river-dwelling) turtles are a species of conservation concern in Pennsylvania, and they are classified as endangered in Maryland. In central PA, they only occur in the Susquehanna and Juniata Rivers. At least 50–100 of these turtles were killed on the new road, which prompted environmental health and safety director for Juniata College, Roy Nagle, to reach out to staff at the Huntingdon county office for assistance. Former PennDOT employee, Dain Davis, along with Al Huey, Mike Peachey and others have been involved at various stages, with the effort to create new breeding habitats.

"We have been working with various students from Juniata for 20 years now," said Tom Yocum, environmental planning manager from District 9. "We strive to lessen the environmental impact of highways as much as possible and have definitely seen the benefits of this effort."

The crew from the stock pile, built fencing along the highway and around the area where the turtles breed. This keeps them off the

highway – not only for their own safety, but also for the safety of motorists. It also protects them from predators, like raccoons, that can sniff out a nest and destroy it within 24-hours of the eggs being laid.

Artificial nesting grounds for the Northern Map Turtles. Along with the students, the PennDOT team built artificial nesting mounds where reproducing females can safely lay eggs. The group marks each female, as well as all their offspring, so that they may be tracked over time. Professor Nagle oversees this process and has been quite pleased with the success of the results.

"Since the project started, we've measured and marked more than 600 females and made 1,800 recaptures. From there, we've released about 750 new turtles into the Juniata," said Nagle. "In fact, one of the hatchlings born and marked in 2000 just came back as a 19-year-old female and produced a clutch of baby turtles of her own. It's been amazing to witness."

This spring, our county office crew hauled in new sand and gravel to create new nesting mounds for the breeding season, which begins in June. Together with the Juniata College researchers, they will observe a new generation of map turtles at the site.

PENNDOT FACILITY IN MONTOURSVILLE WAS PART OF NEW DEAL PROJECT

By: Maggie Baker, Community Relations Coordinator, District 3



Did you know, the Public Works Administration (PWA), which operated during the Great Depression, built some of the buildings that the Pennsylvania Department of Transportation (PennDOT) still use to this day? In addition, the PWA built thousands of miles of highways across the United States, including part of the Pennsylvania Turnpike.

In 1937, the PennDOT facility at 716 Jordan Avenue in Montoursville, Lycoming County, was part of a large PWA project which included building 19 new garages and office buildings for what was then known as Department of Highways. The goal was to build satellite maintenance buildings in strategically located areas throughout the state to maximize efficiency throughout the Department's field force.

The project included the replacement of old sheet metal buildings with a new one or two-story fireproof structure with a brick exterior. The centrally-located buildings would provide the Department force with an updated service area to store the necessary equipment needed to maintain and construct the increasing demands of the growing highway system.

The overall cost of the Montoursville building was \$124,323, with PWA providing \$53,525.

The PennDOT Facility in Lewistown, located on West 4th Street, Mifflin County, was also built using PWA funding. The building was built in 1937, under the same project scope that the Montoursville PennDOT facility was built. This building cost \$128,452, with PWA providing \$54,425.

Not long after the PWA began building these maintenance buildings, the Pennsylvania Turnpike Commission began initiating plans to build a superhighway that would stretch across most of the Commonwealth.

During the Great Depression, the Commonwealth did not have the funds to support a project of this scale, so the Turnpike

Commission turned to several funding sources within Franklin D. Roosevelt's New Deal to help fund the roadway. The Turnpike Commission pursued funding through the state's Works Progress Administration, PWA and the Reconstruction Finance Corporation, with agreements that tolls would repay any remaining debt.

Work on the superhighway began on October 27, 1938 and was required to be completed by June 1940. It took over "15,000 laborers working for 115 contractors and subcontractors from eighteen states" to complete the project.

An engineering marvel, that stretched 160 miles through rugged terrain, including seven tunnels and 300 structures, the Pennsylvania Turnpike became America's first superhighway and the first limited access superhighway in the nation.

On October 1, 1940, the Pennsylvania Turnpike officially opened becoming a success not only by providing thousands of jobs, but later, the Turnpike "served as a blueprint for the national interstate highway system" after President Dwight D. Eisenhower signed the Interstate Highway Act in 1956.

The PWA was established by the National Industrial Recovery Act on June 6, 1933 and spent over \$6 billion on 34,000 projects between 1933 and 1939. The PWA was not a work relief program, but rather a program to help build America's infrastructure and stimulate private sector industry.

Many of these PWA projects are still used and maintained throughout the Commonwealth. District 3 in Lycoming County still utilizes the facility for their maintenance force office and the building in Lewistown is also still utilized by PennDOT.

Other notable PWA works include: the Hoover Dam (Nevada); the Triborough Bridge (New York); the Lincoln Tunnel (New York); and the Overseas Highway (Florida Keys).