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

LATE 2021

INNOVATIVE PRACTICES CONTINUE DELIVERING VALUE

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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!

ENGINEERING A CAREER PATH FOR WOMEN

By PennDOT Secretary Yassmin Gramian, P.E.



Access to transportation is the keystone of Pennsylvania's economy and critical to our quality of life. We rely on a complex transportation network- a modern convenience often taken for granted- to ensure goods, services and people get to where they need to be. In meeting that mission, it's important to reflect on the many ways a career can take shape – especially for women, who have traditionally been underrepresented in the field.

In 1876, Elizabeth Bragg became the first woman to receive a bachelor's degree in engineering from the University of California at Berkeley, but she never worked as a professional engineer; instead, she was a stay-at-home wife and mother. Bragg paved the way for the next generation of trailblazing women engineers, known for their courage, creativity, perseverance, and achievement, including Lillian Moller Gillbreth, Edith Clarke, Sally Ride, and countless others who entered the profession at a time when opportunities for women were limited.

Today, women make up about 47 percent of the overall workforce, according to the U.S. Department of Labor Statistics, but are underrepresented in science and engineering occupations. Only 14 percent of engineers are women.

PennDOT engineers play a crucial role in the overall success of the department. We rely on a network of engineers, transportation planners, and more to keep Pennsylvania connected – which includes our highways and bridges, along with a robust menu of travel and commerce options like aviation, transit and rail facilities that are so essential to keeping people and goods moving. They are also thinking about how to solve our infrastructure challenges of the future, and how to ensure our cities and communities stay ahead of the curve.

I was once a young girl who dreamed of one day becoming an engineer. While I followed a specific education path to achieve this goal, the reality is that math and science are not often a chosen career path for women.

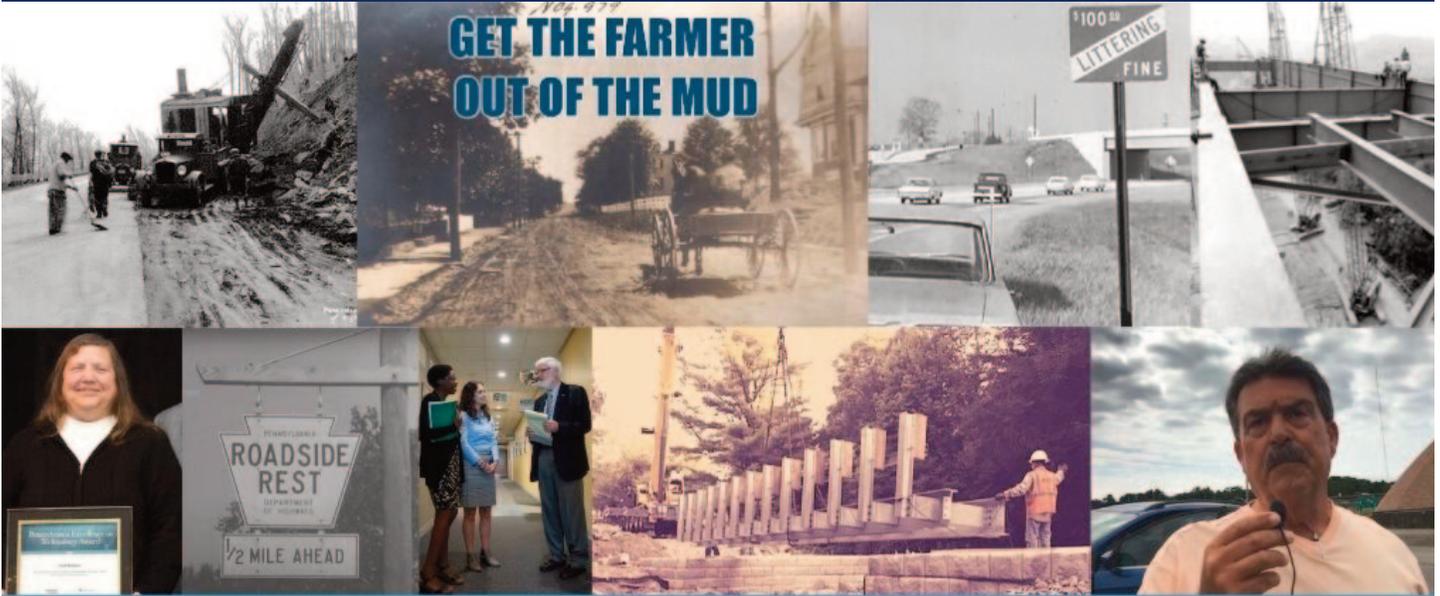
Melissa Batula, PennDOT's Acting Executive Deputy Secretary has had an amazing career journey of her own, proving that the twists and turns on the way shouldn't always be viewed as roadblocks. She previously served as the Deputy Secretary for Highway Administration – the first woman to hold this position. A civil engineer, she started in the private sector with an aptitude for technical draftsmanship and earned her Professional Engineers (PE) license in 2002 and continues to advance her career as an engineering professional through college-level educational opportunities.

Melissa has not been afraid to try different paths along the way, and believes that leadership skills can be developed, just as one learns math or science if you trust yourself to get there. Serving as a mentor to younger professionals in the field, she often advises them to go to their comfort zone in order to propel themselves into new areas.

And, she doesn't make any apologies about being a woman in the mostly male-dominated field. "As a woman, you don't need to reform to be what everyone wants you to be – just be yourself," she said during a recent podcast with the Engineering Management Institute about her career journey.

Melissa is an inspiration to women, girls, or anyone with the knowledge, skills or drive to enter the field. Let's all take some time to recommit ourselves to engaging and inspiring the next generation of women engineers – there are many important discussions to come about the future of transportation, equity, and the latest innovations in safety. Women engineers will play a critical role in designing that future.

CONCLUDING PENNDOT'S 50-YEAR ANNIVERSARY



PennDOT.gov/50years



PennDOT's 50-year celebration came to a close as we began our 51st year as a state agency.

PennDOT was established on July 1, 1970, but Pennsylvania's rich transportation industry began long before our agency was created. By viewing our timeline at PennDOT.gov/50years, you can learn about major milestones spanning the early 1900s through today. We cover everything from the inauguration of the Rural Roads Program in the 1930s to modern milestones like the use of drones and facial recognition technology.

None of those achievements would be possible without the dedicated employees who spent their careers serving the commonwealth. To honor their legacy and see PennDOT's evolution throughout their tenure, we interviewed some of our long-time employees. Scroll through our 50-Year Anniversary blogs to read our employees' stories.

Our success is also dependent on strong leadership. The entire department is overseen by the Secretary of Transportation, supported by other department executives. Secretary Victor Anketus was the first Secretary of Transportation in 1970, followed by Jacob Kassab in 1971. Yassmin Gramian, our current secretary, is only the second woman to hold the position in PennDOT's history. Her predecessor Leslie Richards was the first. Read about the history of PennDOT's secretaries to learn more about each of our secretaries and their accomplishments.

If you're feeling nostalgic, check out our PennDOT Presents series on YouTube. Recorded in the 1960s, the footage highlights the history of snow removal, line painting, rest areas and more.

Thank you to everyone who joined us in commemorating this milestone! Whether you participated in an interview, explored PennDOT's history on our website, or noticed our anniversary posts on social media, you helped make this a special year for our agency. Cheers to 50+ more years!



PENNDOT SECRETARIES: 50 YEARS OF LEADERSHIP



There is a small group of people who can say they've held the title of Pennsylvania Secretary of Transportation. Only 12 individuals have served in this position, each bringing wisdom and innovative ideas to the department.

Five of our former secretaries served our agency within the first nine years of our existence, from 1970 to 1979. These were secretaries Victor Ankietus, Jacob Kassab, William Sherlock, James Wilson and George Pulakos. PennDOT continued aggressively advancing interstate and major highway projects through the 1970s. During this time, the department also started offering free rides for senior citizens on fixed transit routes.

During his tenure from 1979 to 1987, Secretary Thomas Larson left a huge impact on our agency, especially regarding highway maintenance operations. He was recognized as "Man of the Year" by Engineering News-Record in 1982 as PennDOT was known as a national leader among public works agencies.

Secretary Howard Yerusalim led the department from 1987 until 1995. During those 12 years under Yerusalim's leadership, PennDOT advanced multimodal programs and resolved difficult engineering, environmental, and financial issues for the completion of major Interstate highway sections in urban areas.

Yerusalim's successor was Secretary Bradley Mallory who served until 2002. Secretary Mallory was determined to promote a more realistic public impression of the dedicated service provided by department employees. Drawing upon his experience in a variety of PennDOT leadership positions, Secretary Mallory embarked on an outreach campaign to share the PennDOT story publicly.

From 2003 to 2011, the department was led by Secretary Allen Biehler. Secretary Biehler believed that getting local involvement earlier in the process would improve the projects and make them more community focused. He also convened and chaired the Transportation Funding and Reform

Commission (TFRC) to examine transportation funding in Pennsylvania, which eventually led to Act 44.

Secretary Barry Schoch took over in 2011, serving as PennDOT's secretary until 2015. Under Secretary Schoch's leadership, Act 89 of 2013 was passed, leading to substantial investments in our infrastructure and establishing a dedicated Multimodal Fund for non-highway modes. He also piloted a new employee-suggestion system called IdeaLink. Still in use today, the system allows employees to submit ideas directly to decision-makers.

In 2015, Leslie Richards became the first woman appointed as the Pennsylvania Secretary of Transportation. Leslie's theme for these young women in their careers in a male dominated transportation industry was "you have to see one to be one." Among other accomplishments, Secretary Richards addressed funding early in her tenure where she led the charge on the growing fiscal impact of State Police funding on the motor license fund. WTS Pittsburgh and Central PA chapters had nominated her Woman of the Year 2018 and she was nationally recognized. After moving on from PennDOT in 2019, her only regret was that she left before she was able to accomplish all her goals for the department.

Our current secretary, Yassmin Gramian, was confirmed unanimously by the Senate in May 2020. Beginning her tenure amid the COVID-19 pandemic led to unique and unprecedented challenges, but quick and decisive action helped protect citizens, employees and business partners. With more than 30 years of experience, Secretary Gramian brings a wealth of knowledge to the agency. We're eager to see what milestones will be accomplished under her leadership.

More photos and detailed information about each secretary is available on our Secretaries of Transportation page at [PennDOT.gov/50Years](https://www.penn.gov/50Years).

TRANSPORTATION REVENUE OPTIONS COMMISSION SUBMITS REPORT TO GOVERNOR WOLF, GENERAL ASSEMBLY

The Transportation Revenue Options Commission (TROC) submitted its report to Governor Tom Wolf and the General Assembly on July 30, 2021.

On March 12, Governor Wolf signed an executive order establishing the commission, which was tasked with developing comprehensive funding recommendations for Pennsylvania's vast transportation network. TROC is comprised of transportation, economic, and community stakeholders from the public and private sectors, including majority and minority leaders from the House and Senate Transportation and Appropriations committees.

"I wholeheartedly thank the members of TROC for their hard work and engagement," said PennDOT Secretary Yassmin Gramian, who serves as TROC chair. "Throughout this process, we have had thoughtful and productive discussions, and we are now presenting the governor and the General Assembly with a host of well-researched options for consideration."

In 2019, the Transportation Advisory Committee (TAC) identified major risks to transportation funding such as reduced fuel revenues, unpredictable federal funding, and legislative changes to reduce commitments. PennDOT's latest assessment places the annual gap of its needs in all state-level modes and facilities at \$9.3 billion, growing to an annual \$14.5 billion gap by 2030. Additionally, infrastructure maintained by local governments faces an annual shortfall of nearly \$4 billion, growing to \$5.1 billion per year by 2030.

The TROC report presents an overview of transportation funding in Pennsylvania and outlines the commission's review of several potential revenue sources including road user charges, tolling, redirection of funding, fees, and taxes. Analysis of each option includes potential revenue that a given solution could bring the commonwealth, concerns raised by commission members relating to each

The TROC's work was informed by presentations and materials provided during and associated with its nine meetings held since March 25. Those materials – such as a report of PennDOT Efficiencies – can be found with meeting presentations, minutes, and recordings on the TROC page.

"This commission represents nearly 50 transportation stakeholders, with a diversity of positions on the potential funding options discussed," said Gramian. "Those varied perspectives were crucial to our option, and suggested next steps. discussions and are represented in the final report."

The commission was divided into eight workgroups related to a specific revenue need or potential option.

**"An Investment in
Infrastructure is an
Investment in
the Future."**



"As the Transportation Revenue Options Commission met frequently in recent months, it became very clear that our commission benefited greatly from a diverse group of experts and stakeholders," TROC workgroup leader and Revenue Secretary Dan Hassell said. "Because the commission included authorities from state and local governments, members of the General Assembly, and transportation professionals, we were able to analyze the issues at hand from many vantage points. That helped us generate a thorough report that provides solutions to address Pennsylvania's critical transportation funding needs in the near term and in the future."

"We've long advocated for several of the suggested solutions, including fair electric vehicle user fees, a delivery fee for goods and services and the complete removal of the State Police from the Motor License Fund," said Robert Latham, TROC workgroup leader and executive vice president of Associated Pennsylvania Constructors. "We look forward to further exploring and continuing the discussion on the other solutions offered in the TROC report."

"As a representative of local government on TROC, I am excited to see the growth and commitment of PennDOT and other stakeholders in understanding the critical role that local government plays in our transportation network and the recognition that local governments are an integral part of Pennsylvania's economy and its residents' quality of life," said TROC workgroup leader David Sanko, executive director of the Pennsylvania State Association of Township Supervisors.

"This report presents an opportunity to adequately fund the current and significant unmet needs of all the transportation modes in the state," said TROC workgroup leader Ronald Drnevich, who also serves on the State Transportation Commission. "When fully implemented, the options in the report provide for the elimination of the gas tax in Pennsylvania. It needs the support our leadership, our businesses and the public, and is an opportunity that should not be missed."

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VARIABLE SPEED LIMITS AIM TO IMPROVE SAFETY, TRAFFIC FLOW ON THE SCHUYLKILL EXPRESSWAY

By Brad Rudolph, Deputy Communications Director, District 6

PennDOT Secretary Yassmin Gramian was joined by local and elected officials this spring to celebrate the installation of 72 Variable Speed Limit (VSL) signs and an end-to-end Queue Detection and Warning system (QDW) along 14 miles of Interstate 76 (Schuylkill Expressway) between King of Prussia and Philadelphia. The corridor serves more than 130,000 vehicles each day.

"These devices will help reduce congestion and greatly improve safety by warning drivers of changing conditions based on real-time expressway, traffic and weather events," said Secretary Gramian. "This is one of the ways we are using operational strategies and technologies to actively manage travel and traffic flow along this critical corridor."

The activation of the VSL and QDW systems along eastbound and westbound I-76 from the Pennsylvania Turnpike in Montgomery County to the U.S. 1 North Interchange in Philadelphia is the first phase of a long-range, comprehensive, multimodal transportation management plan designed to enhance travel and safety along the I-76 (Schuylkill Expressway) corridor between King of Prussia and Philadelphia.

Once the VSL system was moved from static to automated on May 10, drivers noticed speed limits began to change based on real-time travel conditions. This was an indication of congestion occurring ahead and an effort to improve the flow of traffic and reduce stop-and-go conditions and the potential for rear-end crashes.



The speed limits posted to the new VSL signs on I-76 will serve as enforceable, regulatory speed limits, not recommended speed advisories.

According to PennDOT data, there were 2,580 reportable crashes on I-76 in Montgomery County from 2015 through 2019. Of those, 1,741 were rear-end crashes. VSL deployments in other states have been shown to reduce crashes by as much as 30 percent.

Go to <https://tinyurl.com/ygvjm7dm> for additional information about VSL signs and a list of frequently asked for further reference.

The next phase of PennDOT's I-76 Integrated Corridor Management program, currently in design, will include additional active traffic management strategies such as the modernization of traffic signal systems along several roadways running near the expressway. It will also transform the existing shoulders on portions of the Schuylkill Expressway to accommodate an additional travel lane, or "flexible" travel lane, during peak travel times.

Continued from page 5

"My hope is that we can collectively commit to these long-term funding options that will strengthen the economic climate and help meet Pennsylvania's investment needs at both the state and local level," said Amy Kessler, TROC workgroup leader and director of community development and regional planning at the North Central Regional Planning Commission. "As we have learned, it will take forward thinking, new ideas and many partners working together to grow our economy, create a safer and more resilient transportation network, better connect our rural areas and support technological and operational advancements that will allow every corner of the commonwealth to compete in the global market."

Rebecca Oyler, TROC workgroup leader and president of the Pennsylvania Motor Truck Association, who has expressed concerns about various options, particularly tolling, suggested that the report be "viewed as a list of policy options that can be further examined by our legislative leaders as they consider transportation funding solutions in the future."

"The TROC represents stakeholders from various industries, backgrounds and knowledge to come together for one very

important reason: to ensure our transportation network is viable now and into the future," said Leeann Sherman, TROC workgroup leader and executive director of the American Council of Engineering Companies of PA. "Our transportation network is vital to our quality of life, food security and economic growth now and into the future. The information vetted through and presented by the TROC gives our administration and legislators options to consider as they create a final plan to maintain, modernize and ensure our best Pennsylvania is here for generations."

Now that the report has been submitted, TROC recommended that leadership and technical teams be established to support the Administration and General Assembly in further evaluation and implementation of potential funding options.

"Our work is far from over," said Gramian. "PennDOT is committed to continued collaboration with stakeholders and our colleagues in the General Assembly in support of reliable transportation funding."

For more information about transportation funding in Pennsylvania, visit www.PennDOT.gov/funding.

FLYING FORWARD: PENNDOT'S USE OF UNMANNED AERIAL SYSTEMS PROGRESSES WITH EFFICIENCY GAINS

By PennDOT Bureau of Innovations

PennDOT's use of unmanned aerial systems (UAS) – also known as drones – is assisting the agency in its mission to effectively manage Pennsylvania's far-flung transportation system.

Since its start in 2018, PennDOT's UAS program has been exploring such uses as structural inspection, surveys, traffic analysis, construction inspection and production quantity estimates, incident management, and disaster response. As of spring 2021, PennDOT had 13 licensed UAS pilots and 13 UAS aircrafts. PennDOT's Bureau of Aviation has also certified more than 30 contractor and consultant pilots.

PennDOT's foray into UAS is part of the Federal Highway Administration's (FHWA) Every Day Counts Round 5 (EDC-5) innovation. And, through the State Transportation Innovation Council (STIC), FHWA STIC Incentive Program funding was provided to assist PennDOT in further developing its UAS program and policies. This will help standardize the use of UAS in Pennsylvania for PennDOT.

PennDOT's District 11 is using UAS equipment in a variety of ways, according to J. Brian Walter, P.E., senior civil engineer supervisor and innovation project champion. As part of the Kenmawr Bridge Replacement Project in Allegheny County, UAS flights are typically conducted monthly or when there is a major traffic change, or critical work item. Using the "Reconstruct" software, a PennDOT consultant uses the output from the flights to generate a 3D model, which is then tied to the project schedule to monitor progress.

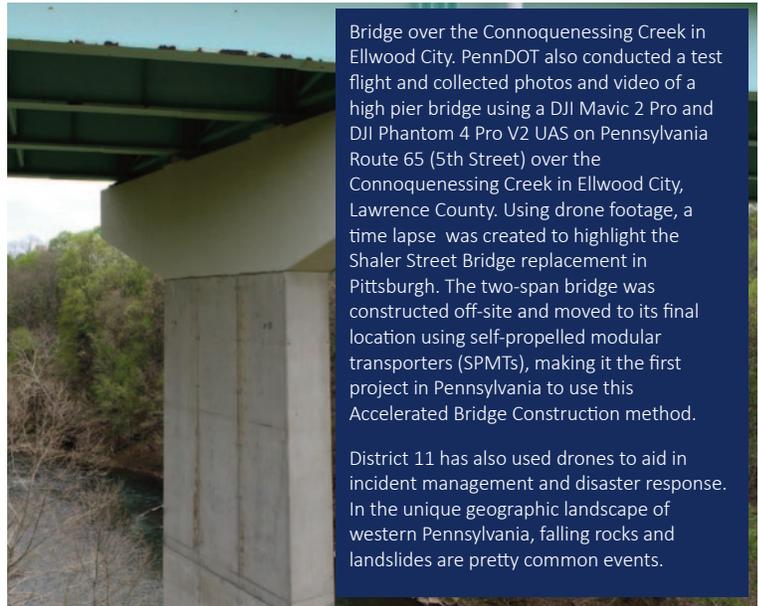
On the U.S. Route 30 relocation project in Beaver County, between Hookstown and the Ohio State Line, UAS will be used to assist in calculating earthmoving quantities.

PennDOT consultant, Michael Baker International, has conducted monthly UAS flights to monitor progress on the Interstate 579 Cap Urban Connector Project in Allegheny County. The project involves construction of a new "cap" park structure spanning over a portion of I-579.

"Our recent purchase of Kittyhawk drone fleet management software will open up new possibilities by allowing livestreaming between our drones and licensed department computers," Walter added.

John G. Melville, aviation specialist supervisor in the Bureau of Aviation, noted that PennDOT's Multimodal Deputate is also using drone footage to create a time lapse video of the Middletown Train Station Project along Route 230 (West Main Street) in Dauphin County.

"The project is anticipated to take approximately two years to complete, and the video will document that process," he said.



Bridge over the Connoquenessing Creek in Ellwood City. PennDOT also conducted a test flight and collected photos and video of a high pier bridge using a DJI Mavic 2 Pro and DJI Phantom 4 Pro V2 UAS on Pennsylvania Route 65 (5th Street) over the Connoquenessing Creek in Ellwood City, Lawrence County. Using drone footage, a time lapse was created to highlight the Shaler Street Bridge replacement in Pittsburgh. The two-span bridge was constructed off-site and moved to its final location using self-propelled modular transporters (SPMTs), making it the first project in Pennsylvania to use this Accelerated Bridge Construction method.

District 11 has also used drones to aid in incident management and disaster response. In the unique geographic landscape of western Pennsylvania, falling rocks and landslides are pretty common events.

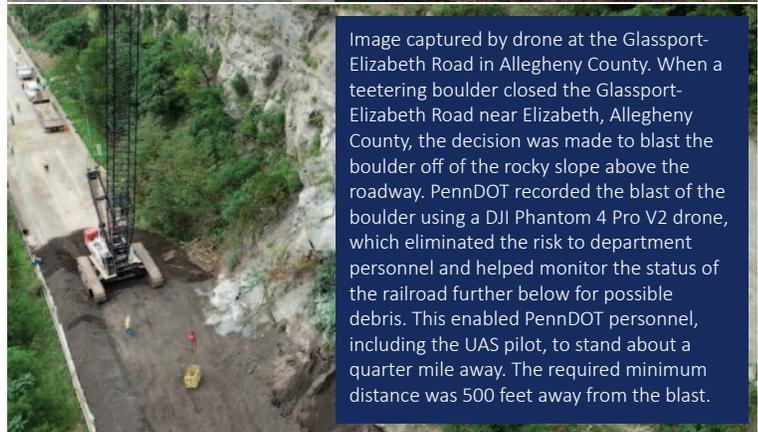
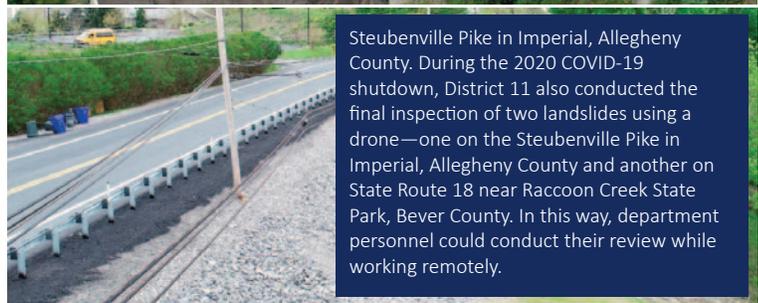


Image captured by drone at the Glassport-Elizabeth Road in Allegheny County. When a teetering boulder closed the Glassport-Elizabeth Road near Elizabeth, Allegheny County, the decision was made to blast the boulder off of the rocky slope above the roadway. PennDOT recorded the blast of the boulder using a DJI Phantom 4 Pro V2 drone, which eliminated the risk to department personnel and helped monitor the status of the railroad further below for possible debris. This enabled PennDOT personnel, including the UAS pilot, to stand about a quarter mile away. The required minimum distance was 500 feet away from the blast.



Steubenville Pike in Imperial, Allegheny County. During the 2020 COVID-19 shutdown, District 11 also conducted the final inspection of two landslides using a drone—one on the Steubenville Pike in Imperial, Allegheny County and another on State Route 18 near Raccoon Creek State Park, Beaver County. In this way, department personnel could conduct their review while working remotely.

Gov. Tom Wolf directed PennDOT to create a public/private task force on drones. According to Melville, the groundwork for that initiative is nearly complete, and the first meeting in May 2021.

PennDOT is also working on a training program for department UAS pilots. Material covered will include both FAA Part 107 regulations and PennDOT's UAS policy.

Melville added that PennDOT expects to resume work with the Pennsylvania Emergency Management Agency and other state agencies on drone uses and coordination.

"We will be discussing pilot training, operational standards and expectations on mutual aid," Melville said.

THREE-DAY WORKSHOP ON UNMANNED AERIAL SYSTEMS HOSTED BY PENNDOT

Experts from Across the Nation Share Their UAS Challenges and Successes

The emerging technology of unmanned aerial systems (UAS) is opening the door to more efficient and safer ways government transportation and other agencies can address construction, design, maintenance and emergency response issues, panels of experts outlined at a three-day virtual workshop hosted by PennDOT and the Federal Highway Administration (FHWA).

Representatives from transportation departments from California, Alaska, Utah, Alabama, Ohio, Pennsylvania as well as those from Penn State, Colorado State, and Texas A&M universities, FHWA, the Federal Aviation Administration (FAA) and consultants shared their insights during the sessions.

E-TICKETING INNOVATION ADVANCES IN PENNSYLVANIA

By PennDOT Bureau of Innovations

In the wake of the COVID-19 pandemic, as highway and bridge construction restarted across Pennsylvania, added emphasis on replacing paper material tickets emerged, especially with electronic ticketing (e-Ticketing) being named an Every Day Counts Round 6 (EDC-6) innovation by the Federal Highway Administration (FHWA).

Pennsylvania has joined Alabama, Florida, Iowa, Kentucky, Minnesota, Missouri, North Dakota, Utah, and Virginia in applying e-Ticketing to asphalt, concrete, and/or aggregate delivery for construction contracts.

John Myler, assistant construction manager in PennDOT's District 11 based in Allegheny County, explained that the common construction practice calls for the issuance of a paper ticket detailing information regarding the materials delivered onsite. The details cover the source and manufacturer of the materials, the design and the quantity.

But the process poses some safety risks, especially when PennDOT and contractor staff have to climb up on and move around the material delivery trucks next to live traffic.

"Instead of paper tickets, we now can have electronic systems made available via web browsers or apps on smart devices that allow us to see the paper ticket electronically," he said.

e-Ticketing enhances data collection, reduces processing time for quality assurance and payment, and allows for better data archiving for future reference. That translates into improved design, construction, maintenance, and operations.

"The e-Ticketing takes our people out of the traffic footprint, and they can stand on the side of the road in a safe position and monitor the trucks as they come in," Myler said.

"Paper tickets get lost; you have to sort them; take data and add up tonnages for all the tickets; a lot of manual labor went into it," he added.

An e-Ticketing Steering Committee is working on implementation. Members include FHWA, PennDOT, the Pennsylvania Turnpike Commission, Associated Pennsylvania



Constructors (APC), the American Council of Engineering Companies of Pennsylvania (ACEC/PA), the American Concrete Pavement Association Pennsylvania Chapter (ACPA/PA), the Pennsylvania Asphalt Pavement Association (PAPA), the Pennsylvania Aggregates and Concrete Association (PACA), and the Pennsylvania Motor Truck Association (PMTA).

Kelly M. Barber, P.E., who is the process lead on the e-Ticketing EDC-6 innovation and is chief of the Systems Management Section in the Construction and Materials Division in PennDOT's Bureau of Project Delivery, said that for the 2021 construction season, there were three pilot projects planned for each of PennDOT's 11 engineering districts.

"We will reassess in the fall with full implementation targeted for 2024," Barber said.

She added that e-Ticketing will cover asphalt, aggregate and concrete on the construction side and asphalt, aggregate, concrete, liquid bitumen and salt for maintenance. The target implementation date for maintenance operations will depend on how this year's pilots go, she said.

LOWER MORELAND HIGH SCHOOL'S "TEAM ROAD WARRIORS" WINS FOURTH ANNUAL PENNDOT INNOVATIONS CHALLENGE

By PennDOT Bureau of Innovations

Lower Moreland High School's "Team Road Warriors" idea of installing power generating plates across Pennsylvania's road network took first place in PennDOT's annual innovations challenge competition.

The fourth annual competition challenged students in grades nine through 12 to develop an innovative and implementable solution that helps address Pennsylvania's transportation revenue shortfall by identifying potential new funding streams, aside from additional gas taxes, tolls or mileage-based user fees, to help ensure adequate transportation funding for the future. This year's challenge was hosted virtually due to the COVID-19 pandemic.

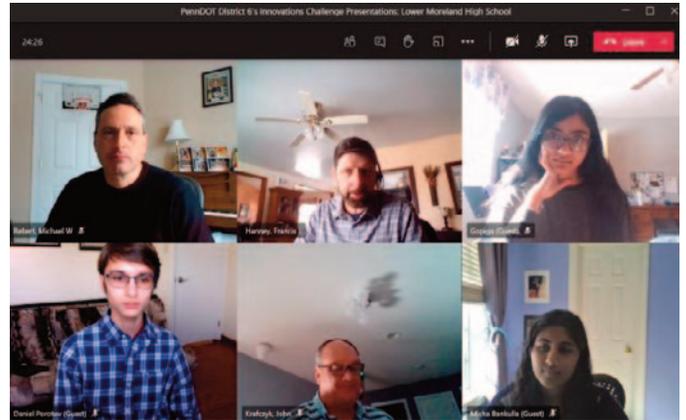
"To meet the needs of its aging infrastructure, Pennsylvania must establish a funding stream that will inject an additional \$5 billion per year into its transportation system," PennDOT Secretary Yassmin Gramian, P.E., said in her introductory remarks during the virtual judging event in April. "And so, we have turned to our upcoming generation to use their creativity to help us address this issue."

The Lower Moreland team, comprised of students Misha Bankulla, Gopiga Dass and Daniel Porotov, developed a solution advocating the use of piezoelectric plates, involving two metal plates with various kinds of crystals between them. The word piezoelectric stems from the Greek word piezein, which means to squeeze or press. In essence, the process relies on squeezing crystals to generate an electric current. Power generated from the devices would be sold to electric producers to generate a new revenue source for Pennsylvania's transportation system.

The team said the plates can be installed either in concrete or asphalt and used on heavily traveled roadways and transportation networks, generating large amounts of sustainably sourced energy. They suggested PennDOT could pursue arrangements for having the plates donated to the department.

One of the challenge judges, former PennDOT Deputy Secretary for Administration Robert Chiappelli, said he liked the clean energy idea and tying it to new revenue for the department.

In the competition, which yielded more than 30 entries and nine regional winners from high schools around the state, second place was awarded to The Hill School's "Team the Blues," consisting of students Edward Proffitt, Rohan Dondeti, Andres Arevalo and Juan Hinostrroza. Their innovative solution, a mobile app called "PA Road Rewards," proposed a variety of games that would reward users and track driving behaviors. Sponsorships and subscriptions would be sold to generate transportation revenue.



Third place was awarded to North Allegheny Cyber Academy's "Team North Allegheny," consisting of students Brendan White and Benjamin Quint. They proposed higher registration fees with a rebate based on miles driven each year.

The top three teams divided a \$5,500 cash prize donated by the Transportation Policy and Education Foundation, the educational arm of the Associated Pennsylvania Constructors (APC), the American Council of Engineering Companies of PA (ACEC/PA), and the Pennsylvania Chapter of the American Traffic Safety Services Association (ATSSA). Lower Moreland was awarded \$3,000, the Hill School, \$1,500 and North Allegheny Cyber Academy, \$1,000.

Other regional winners were students from State College High School, Centre County; Midd-West High School, Snyder County; Dallas High School, Luzerne County; North Schuylkill Jr./Sr. High School, Schuylkill County; Dover Area High School, York County; and Kiski Area High School, Armstrong County.

Their solutions ranged from driving apps; use of wind turbines along roadways to generate electricity; restructured registration fees; leasing rights of way for solar panel installation; using a vehicle registration bar code system to collect both transportation and state park fees; and multi-tiered approaches to address the transportation revenue shortfall.

"We asked the students to develop an innovative and implementable solution, including how to educate and gain the support of Pennsylvanians," Secretary Gramian said. "We were looking for ideas on new and equitable funding streams, and the students delivered an array of innovative solutions. We appreciate the creativity all of the teams brought to the competition. I was so impressed with the work our next generation did on this challenge, and it gives me hope and encouragement for our future."

EAST DOBBINS LANDING PROJECT RESTORES SAFETY AND FUNCTIONALITY AT THE PORT OF ERIE

By Denise Soisson, Manager, PA Port Programs, Bureau of Rail, Freight, Ports, & Waterways

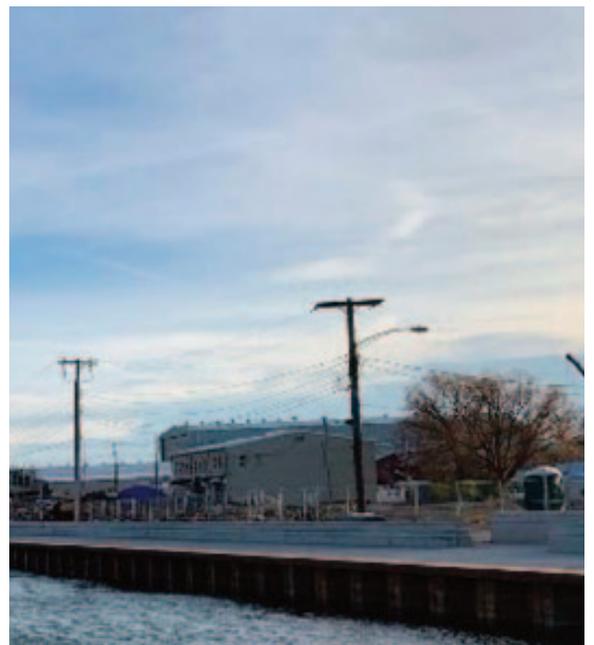


Multimodal port funds were used to replace a dock wall at the Port of Erie, restoring safety and functionality at the site.

Prior to the reconstruction, the nearby sidewalk and parking lot were often submerged due to failing sea walls and rising water levels. Flooding at the West Dobbins Landing is pictured below.

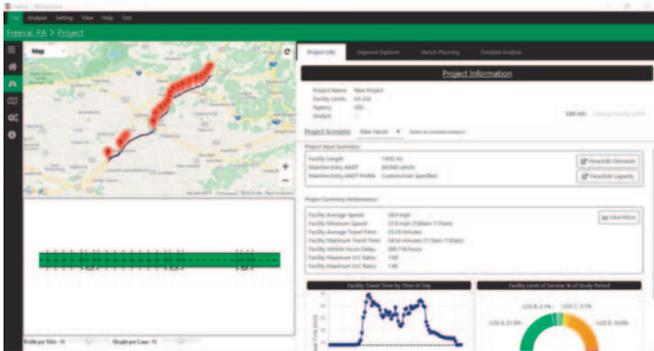


The East Dobbins Landing project in Erie PA constructed a new sheet pile dock wall which accommodated the higher levels of water and was fifteen feet in front of the deteriorating dock wall. The completed dock wall is pictured below.



PREDICTIVE WORK ZONE ANALYSIS TOOL OFFICIALLY DEPLOYED JULY 1

By Rich Kirkpatrick, PennDOT Bureau of Innovations

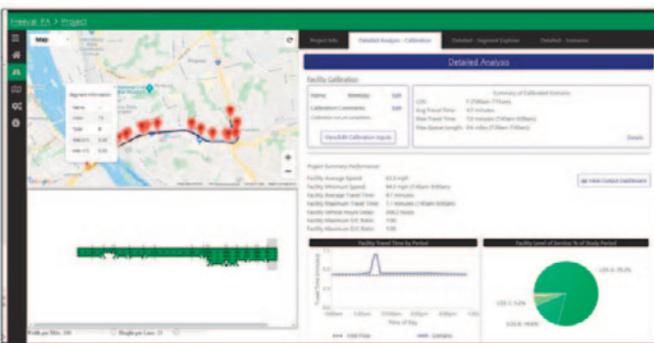


PennDOT is implementing its innovative analysis tool that will help the agency identify and deploy the most effective work zone configurations.

Effective July 1, use of FREeway EVALuation-Pennsylvania (FREEVAL-PA) tool, is now required for limited access facilities performing construction, maintenance and permit-related work zone activities on PennDOT highways.

"It will be the preferred method for analyzing traffic mobility and safety concerns by evaluating work zones prior to deployment to avoid congestion during projects," said Brian Crossley, manager of the Temporary Traffic Control Unit in the Bureau of Maintenance and Operations (BOMO).

This innovation was developed through the State Transportation Innovation Council's (STIC) Safety and Traffic Operations TAG. The FREEVAL tool was first developed by North Carolina State University following a groundbreaking report by the National Cooperative Highway Research Program in 2016.

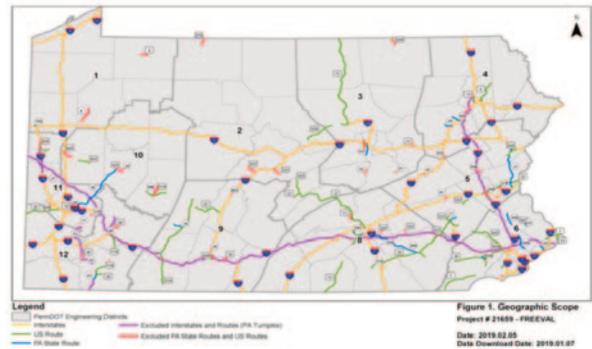


"Other states have effectively implemented the use of this tool and early feedback from those using the evaluation tool has been positive as it can address work zone safety and mobility concerns quickly," Crossley said.

"The tool is operational and training modules have been developed," added Daniel P. Farley, P.E., chief of PennDOT's Traffic Systems Management and Operations Section and FREEVAL-PA innovation owner.

"The Department developed a website that provides virtual training modules and guidance documents," Crossley said. "Participants can go to the website and take the self-paced virtual training modules prior to using the tool."

He added that business partners who are not PennDOT employees can download the tool from the website.



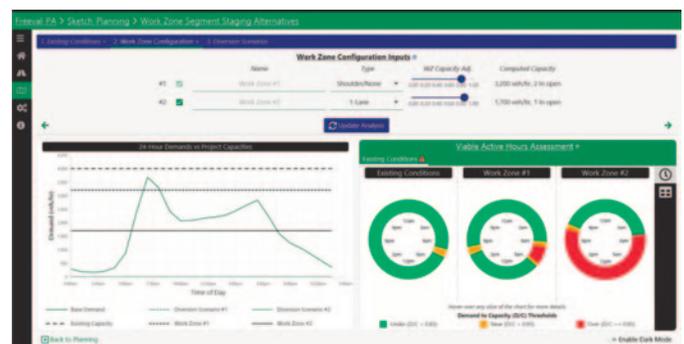
Among the benefits, Farley noted, the tool's time savings in collecting base data and allowing various scenarios to be considered has been very beneficial. Instead of previously relying on spreadsheets, FREEVAL-PA incorporates many visual performance metrics and visualizations to better evaluate the expected performance.

"Demand to Capacity graphs, performance heat maps, and summary metrics provide the mobility and safety measures to appropriately evaluate whether work zone restrictions can be considered on our limited access roadways," Farley said.

"This innovation will now be used to evaluate prior performance on limited access facilities and could be used to measure the effectiveness of solutions and the accuracy of what FREEVAL-PA provided," Farley added.

He said that BOMO looks to utilize FREEVAL-PA as a support evaluation to its upcoming Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Lane Reservation project that has also been supported by the STIC in the past.

"Yearly evaluations will continue regardless of any changes to ensure the accuracy and effectiveness of the tool," he concluded.



RESERVING LANES TO MINIMIZE CONGESTION DURING NEEDED ROAD WORK

By Doug Tomlinson, P.E., Highway Safety and Traffic Operations Division Chief



As part of its mission to improve transportation statewide, PennDOT is moving closer to adopting a new system to minimize congestion while completing needed repairs to the road and bridge network.

Known as a Lane Reservation System, the concept began when PennDOT and the Pennsylvania Turnpike Commission presented the idea to the State Transportation Innovation Council (STIC) in 2016. Since that initial discussion, interest in the idea grew to include agencies in other states through PennDOT's participation with the Smart Belt Coalition and then over time was reduced back to just PennDOT due to funding constraints resulting from the COVID-19 pandemic.

When complete, the Lane Reservation System will be similar to making an online reservation for your favorite restaurant. If you go to OpenTable looking for a 7 p.m. reservation at a popular restaurant on a Saturday night, you're not surprised when you find there are none available. Instead, you may be given other options like a reservation at 4:30 or 9 p.m. PennDOT's Lane Reservation System will perform in a similar fashion for making work zone reservations. If a work crew wants to reserve a lane on Interstate 76 near King of Prussia at 5 p.m. on a Thursday night, they are going to find that reservations are not available. However, they will be able to make a reservation to perform needed road work during off-peak hours as defined in the system.

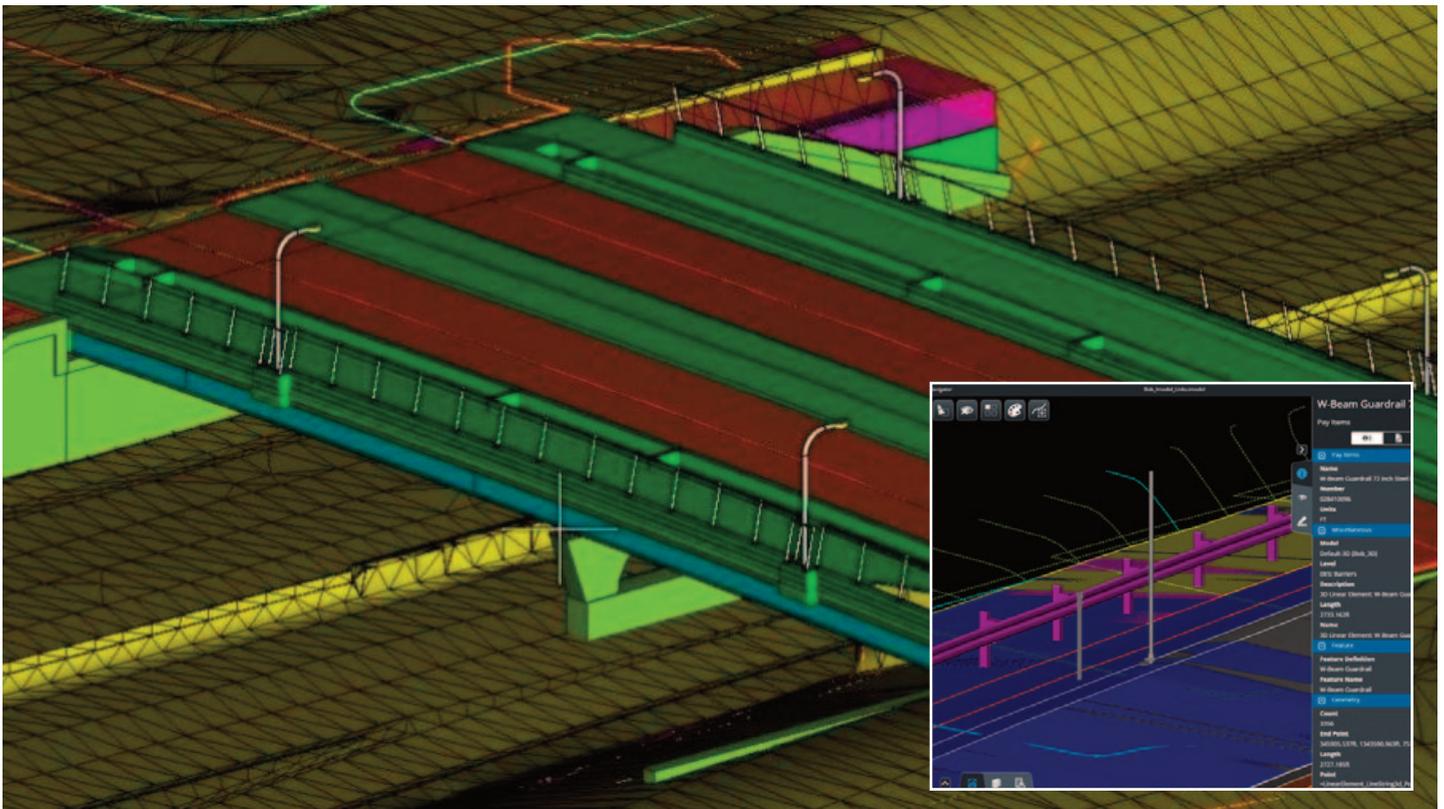
PennDOT will be using various data sources and tools like FREEVAL-PA to determine the most appropriate times to allow work zone reservations. FREEVAL-PA is an innovative analysis tool that will help PennDOT identify and deploy the most effective work zone configurations. This approach will help ensure the safety of the workers, reduce congestion on major roadways, and eliminate conflicts between other work zones in the area. This information can then be shared with others through a standard data feed and will help traffic management centers do their jobs better.

The project will be split funded by PennDOT and a federal Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant, and will incorporate a number of preliminary documents and requirements developed in collaboration with the Pennsylvania Turnpike Commission. The Lane Reservation System will be built on the platform PennDOT currently uses for command and control of intelligent transportation equipment and will offer users a number of ways to access the system such as PennDOT's Road Condition Reporting System for internal staff, as well as a website and mobile-friendly application for those outside of PennDOT's network.

The project is currently going through the final IT approval steps and is set to begin this September. Completion is expected by 2022.

ANOTHER MILESTONE TO PENNDOT'S DIGITAL FUTURE REACHED THIS SUMMER

By PennDOT Bureau of Innovations



PennDOT's journey on the road to a completely digital future reached another milestone last summer with completion of a pilot of Digital As-Builts for guide rail, a Federal Highway Administration Every Day Counts Round 6 (EDC-6) innovation Pennsylvania is pursuing.

Instead of using paper records, contractors delivered more detailed asset information electronically into PennDOT's asset management databases. The pilots were done in five of PennDOT's 11 engineering districts, and contractors submitted such details as the quantity of guide rail, the exact location of all the installed elements and specifics on any different types that are used.

In the pilot projects, contractors submitted such details as the quantity of guide rail, the exact location of all the installed elements, and specifics on any different types that are used.

"We'll gather all the information, and we will be able to ingest it into our asset management system," said Allen Melley, P.E., project development engineer and digital delivery lead in PennDOT's Bureau of Project Delivery.

"With this digital transformation, we will be able to track every asset we have," Melley said.

With the Digital As-Built innovation, Melley said, "we can go through the asset management system and find where and

when an item was installed and all the pertinent information we need to address any issues.

"That's the premise behind Digital As-Builts, capturing information for the life cycle of a project," he said.

PennDOT wants to take a measured approach embracing this innovation.

"It will take time to build out the databases," Melley said.

"We're trying to do an agile process where we do a crawl, then walk, then run approach," he added. "We'll dip our toes in and take small steps, get the process down, and expand as we move forward."

The Digital As-Built is just "one small piece of a gigantic pie....A gigantic initiative that touches every aspect of our business," Melley said.

"We have a goal of 2025," he said. "By then, we aim to be able to deliver projects digitally designed as a 3D model given to the contractors....That will be the record the contractor will be building off of."

But by no means is 2025 an end to innovation.

"So many technological developments are coming out of this that we don't see an end date when we will be completely done innovating," Melley said.

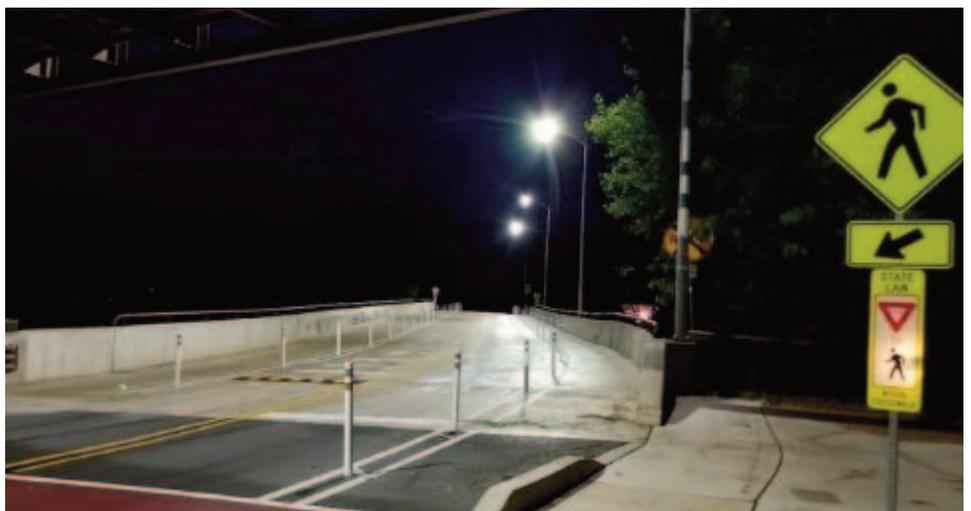
PENNDOT RECEIVES REGIONAL AMERICA'S TRANSPORTATION AWARD FOR IMPROVING MOBILITY AND ACCESSIBILITY AT OHIOPYLE STATE PARK

PennDOT recently received a regional America's Transportation Award from the American Association of State Highway and Transportation Officials (AASHTO). We were recognized for the Ohiopyle Multimodal Gateway Project in the category of Community Development/Quality of Life for providing safer multimodal options around this popular state park.

Ohiopyle State Park in southwestern Pennsylvania receives almost 1.5 million visitors a year, who typically use State Route 381 to access the park. To improve accessibility and safety for motorists, bicyclists, boaters, and pedestrians along Route 381, the Pennsylvania Department of Transportation launched the \$12.8 million Ohiopyle Multimodal Gateway project.

The Route 381 bridge over the Youghiogheny River was replaced with a new structure that includes wider lanes for vehicles and a 10-foot-wide shared use pedestrian and bike path with a wide shoulder. Additionally, nearby Sugarloaf Road was relocated to improve the grade and allow for a reconstruction of the boating parking lot and the creation of a pedestrian underpass. Route 381 was also widened, allowing for continuous sidewalks and on-street parking, and a dedicated bike lane was built away from Route 381 traffic. These enhancements improved safety for all visitors, regardless of travel mode, while improving convenience and accessibility to the park for everyone.

Sponsored by AASHTO, AAA, and the U.S. Chamber of Commerce, the America's Transportation Awards competition recognizes state departments of transportation and highlights the projects they deliver that make their communities a better place to live, work, and play. Project nominations fall into one of three categories: Operations Excellence, Best Use of Technology & Innovation, and Quality of Life/Community Development.



STIC UPDATE: CONCRETE FINISHERS CERTIFICATION MOVES TO IMPLEMENTATION

By PennDOT Bureau of Innovations



An important innovation championed by the Pennsylvania State Transportation Innovation Council (STIC) is reaching a critical milestone.

PennDOT issued its clearance transmittal and the Federal Highway Administration (FHWA) has granted its approval for implementation of the concrete finishers training and certification requirement on all PennDOT projects. The addition to Section 704 of Publication 408, requires 60 percent of concrete finishers to be certified effective as of April 2022.

The training and certification program passed through the STIC Innovation Development Process and came about as Pennsylvania and other states realized that the skill level of concrete finishers can be more important than the physical concrete itself when it comes to quality and longevity of the finished product. The goal of the training, which includes classroom and practical, hands-on work, is to help improve the durability and extend the service life of concrete and eliminate mistakes in concrete finishing that can result in costly repairs or reconstruction.

Last winter, training for inspectors was held at winter schools in PennDOT Districts 1, 2 and 8. Trainings are planned for this winter in Districts 11 and 12.

In 2020, 52 concrete finishers who are members of the National Ready Mixed Concrete Association (NRMCA) completed the training, and 47 flatwork finishers who are members of the American Concrete Institute (ACI) completed the training.

As of August 2021, 11 concrete finishers trainings were held around the state, and 160 NRMCA concrete finishers and 35

ACI flatwork finishers have completed the training.

"The certification classes have been well received by participants," said Jim Casilio, P.E., director of Technical Services for the Pennsylvania Aggregates and Concrete Association (PACA), who has played a leading role in implementing the innovation. "Rave reviews are coming in from them. Because the training results in lifetime certification, the finishers feel they are getting a lot out of the course."

Jim Fitzroy, western Pennsylvania training coordinator and business agent for Local 526 of the Operative Plasters and Cement Masons International, noted that many of his members are skilled workers with extensive experience in the concrete industry. However, the union always welcomes new ideas to allow its members to expand their skill base, and learn about new processes and procedures.

Continued on page 16



Continued from page 15

"We are very interested. It's a nice idea," he said, adding: "The state pays good money for what they want, and they deserve a quality product and deserve to know they have quality finishers on the work."

The training and certification program should level the playing field across the state and ensure more quality work will be done, he indicated.

Casilio's work on the innovation through the STIC attracted the interest of key players, such as Bob Belinda, manager at Centre Concrete in State College, and Ron Seybert, Ferguson Township (Centre County) engineer.

A member of the American Public Works Association, Seybert is its representative on the STIC, and he began talking with Casilio about the issue after hearing his presentation at the November 2019 STIC Business Meeting. Seybert said Ferguson Township had seen the same quality issues in finished concrete and wanted to assist in addressing the problem.

"We wanted to get an awareness among the Centre County region, among engineers and technical people who were doing contracts and inspections of field work, to know what is being done (about this issue)," Seybert said.

"We did a training session for engineers and inspectors the following February to raise awareness of the issue and the problems with concrete finishing and the results we can have when the projects are completed," he said.

"We became an early adopter and included in our contracts a special provision that required concrete finishers to be certified," Seybert added.

Working with Casilio, Seybert reached out to potential concrete bidders to let them know about the classes.

Belinda noted that Centre Concrete's owner, Eric Nicholson, is a former chairman of the board for PACA and previous board member of NRMCA. Nicholson wanted

Centre Concrete to take a proactive role in this initiative. Belinda, on behalf of Centre Concrete, set up a hands-on training class in May 2021 that involved replacing the concrete parking lot at the Pine Grove Mills Veterans of Foreign Wars (VFW) building in Ferguson Township. It drew 40 participants, and all passed the training and were certified.

"It was worth every bit of it to do and was a win/win," Belinda said. "It worked out very well."

"Guys walked away from it with great comments. All of the feedback we received was very positive," he added. "We were very happy with it, and Centre Concrete looks forward to supporting and participating in additional classes in the near future."

Moving forward, Seybert said the goal is to get as many people certified as possible, so contractors are able to meet the new certification requirements and be able to continue to bid for work. He even plans to have the township staff who do concrete work take the training.

"I'm glad PACA came forward and presented the innovation to the STIC, and STIC thought it worthy to move forward, and PennDOT to adopt the requirements that finishers be certified," Seybert said.

"I'm a firm believer in the class and the results of people learning the proper way to finish the concrete," he added. "We want to continue to spread the word around the construction community, to APC and others, to make contractors aware of it and get the training. Keep it going!" For more information, visit the Certified Concrete Finishers Course page on the STIC website.

PA State Law, Act 120 of 1970, established the Pennsylvania Transportation Advisory Committee (TAC) to advise the State Transportation Commission (STC) and the PennDOT Secretary of Transportation. The TAC meets quarterly to discuss a range of transportation issues.

The last meeting involved discussion of the 12-Year Program Survey Results. The 12-Year Program is Pennsylvania's official mid-range planning tool. It lists statewide planned projects and assigns funding to projects over a 12-year period. The comprehensive outreach for the 12-Year Program update started with an online Public Forum on March 23, 2021. A total of 1,905 participants joined the Public Forum.

That outreach was accompanied by an online Transportation Survey made available to the public March 1 through April 14, 2021. The survey was heavily communicated through a variety of social media, blog and other means. The survey received 7,423 responses and respondents mapped 2,445 transportation issues – 402 of which are already being addressed by planned projects!

As you know if you took the survey, questions for the public included:

- How do you travel?
- What are your transportation priorities?
- How much would you spend?
- How can Pennsylvania increase transportation funding?

Answers to those questions and more can be found at www.Talkpatransportation.com.

2023 12-YEAR PROGRAM UPDATE
STATEWIDE TRANSPORTATION
SURVEY SUMMARY

THE COMMONWEALTH
OF PENNSYLVANIA

State Transportation
Commission

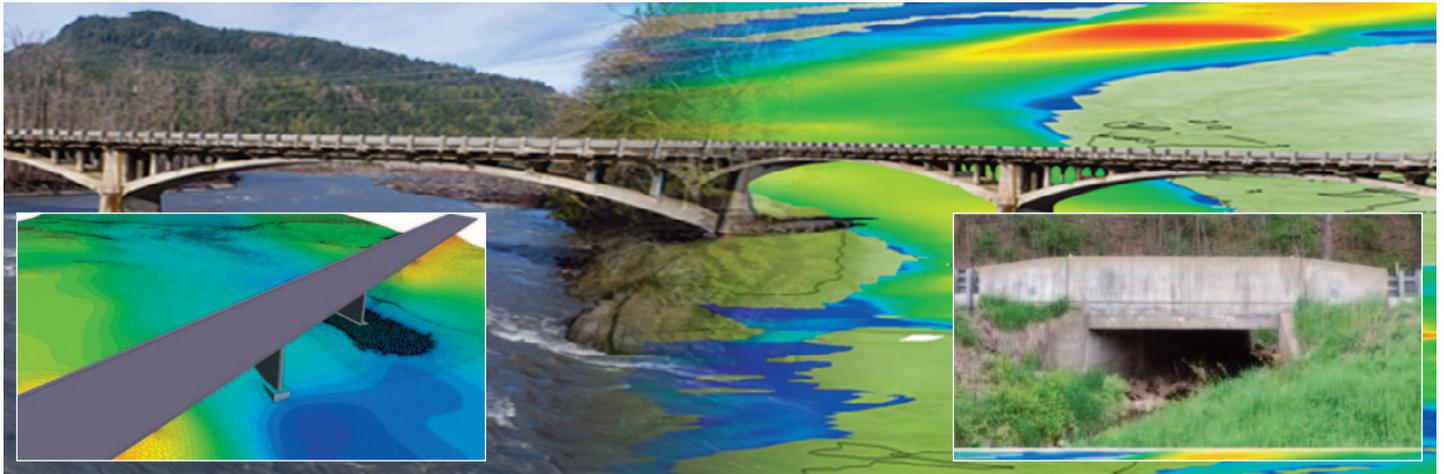
THANK YOU FOR
TELLING US WHAT
YOU Think

**PUBLIC COMMENT
PERIOD SUMMARY**

Thank you for participating in the biennial update of Pennsylvania's 12-Year Program. We are happy to announce we exceeded our goal of 7,000 participants and received 7,423 survey responses from you. Your feedback will help us to do a better job of aligning regional and statewide transportation priorities with your needs.

COLLABORATIVE HYDRAULICS: FOUR PENNDOT DISTRICTS SELECT BRIDGES FOR THE INNOVATION

By PennDOT Bureau of Innovations



PennDOT continues to advance the Collaborative Hydraulics: Advancing to the Next Generation of Engineering (CHANGE) innovation.

The innovation involves shifting from one-dimensional (1D) to two-dimensional (2D) hydraulic modeling to provide improved understanding of the complex interactions between waterways and infrastructure. CHANGE is a Federal Highway Administration (FHWA) Every Day Counts Rounds 4 and 5 (EDC-4 and EDC-5) innovation that Pennsylvania championed.

Extreme weather events place added pressure on designers to incorporate better resiliency into infrastructure. 2D modeling is a critical tool to accomplish this objective. One dimensional modeling requires designers to make assumptions about stream flow characteristics to evaluate potential flooding impacts. Experience around the nation has shown this can lead to costly and destructive design errors.

Using 2D modeling, designers can produce varied and specific projected stream flows around bridge structures and evaluate the potential impacts on surrounding areas. Thousands of elements are shown representing floodplain geometry, and computations are performed at each element.

2D modeling enables more accurate designs of bridge openings, span arrangements, roadway profiles, scour countermeasures, and bank protection. It provides better tools for communicating interactions between waterways, the transportation network, and the environment; allows for a more streamlined project development approach; and improves the ability to design safer, more cost-effective, and resilient structures over waterways.

"The improved detail of 2D modeling helps designers evaluate risk, said Hydrology and Hydraulic Unit Manager in the Bureau of Project Delivery, Nicholas A. Vivian, P.E., who heads the innovation effort. "Most Department projects include private houses and property within the project limits, we need to ensure that the proposed improvements

will not increase flooding risk to these assets. These tools help us evaluate risk and mitigate the effects on property owners and their assets."

Four PennDOT engineering districts have selected bridges that used the new 2D hydraulic modeling.

District 1 – The bridge carrying State Route 4007 over a tributary of Little Brokenstraw Creek in Bear Lake Borough, Warren County. The environmental permit has been approved. The district used 2D modeling to analyze and enhance the current hydraulic conditions of the proposed bridge.

District 2 – State Route 1011 over the Genesee River in Bingham Township, Potter County. The district held a kick-off meeting in March and commenced design. The model was submitted for review this summer.

District 3 – State Route 14 over Towanda, Tannery and Springbrook creeks in Canton, Bradford County. Because of the complexity, a consultant was hired, and a model submission was done in the fall.

District 11 – State Route 65 over Bennett Run in North Sewickley Township, Beaver County. The permit was submitted in the fall to the Department of Environmental Protection.

PennDOT had hoped that each of the 11 engineering districts would develop one bridge project during 2021 using the innovative design technique, said Vivian, P.E. However, a combination of the disruption caused by the COVID-19 pandemic and the installation of new CADD design software delayed the process.

"The pandemic, coupled with the CADD design software change, kept the Hydraulic Unit busy," Vivian said. "Our unit will work with the remaining Districts in the coming months to further advance the 2D modeling effort."

PENNDOT CONTINUES TO EXPLORE USE OF BRIDGE LINK SLAB MAINTENANCE PROCESS

By Rich Kirkpatrick, PennDOT Bureau of Innovations



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

Working through the State Transportation Innovation Council, PennDOT has developed a process to use a combination of Ultra-High Performance Concrete (UHPC) and reinforcing steel to connect bridge decks with a watertight connection, said Mark Nicholson, PennDOT District 1 bridge engineer.

He noted that with the normal bridge expansion and contraction, bridge joints fail over time and allow salt and brine from de-icing efforts to contaminate the bridge compartments.

In 2020, District 1 conducted a pilot with Bridge Deck Link Slabs on SR1009 bridge over Lake Wilhelm in Mercer County. The 181-foot long bridge has three spans and was built in 1969.

With an existing asphalt overlay, the bridge deck was scarified, and a high-pressure water process was used to remove the old deck surface and unsound concrete. This provided an excellent bonding surface for the new applications, which included a latex modified concrete overlay.

Existing joints over the first and second piers were removed, backer rod material was installed below the joint; and grout was installed to provide a smooth surface below the joint material. Gasket material was placed over the grouted surface to act as a bond breaker, preventing the UHPC from bonding to the underlying deck or beams. Then, a single layer of reinforcing steel was installed.



Chimneys were installed over the form work so the UHPC, which was mixed onsite with water and fiber reinforcement, could be poured to create a pressure head. That aided in filling the forms and eliminating voids in the concrete.

Forms were removed the following morning and then the new link was diamond grinded to match the grades with those on the bridge deck.

In the 28-day interim period until the asphalt overlay was applied, the link slab showed no signs of cracking or debonding from the adjacent deck.

The district plans another link slab bridge, on SR 2102 over Interstate 79, but funding issues have delayed that project until next year.

Nicholson did investigate using the innovation on the SR427 bridge in Venango County with the County Bridge Crew. "However, we did the design calculations and determined it was not a good candidate for our bridge crew to perform," he said. He added that he is now reviewing whether the approach can be used on the SR2104 bridge over Interstate 79.

The next steps for this innovation include developing standard design details and procedures. To aid in this process, \$40,000 in Federal Highway Administration (FHWA) STIC Incentive Program funding was recently awarded to support the development of the design procedures and design tools for using Bridge Deck Link Slabs in Pennsylvania. Once that is refined and approved, that information will be included in PennDOT's standard drawings, specifications, and design manuals.

MAINTENANCE: CRANBERRY TOWNSHIP AND PENNDOT'S BUTLER COUNTY OPERATION FORM LONG-LASTING, PRODUCTIVE BOND THROUGH AGILITY

By PennDOT Bureau of Innovations

When it comes to managing Pennsylvania's vast network of more than 120,000 miles of roads, both PennDOT and its local government partners know the stiff challenges they must overcome.



Increasingly, both of these entities are turning to the cooperative Agility program, celebrating its 25th anniversary this year.

One of the most compelling Agility success stories is the solid relationship that has developed between PennDOT's Butler County operation and Cranberry Township.

"It's one of the best programs that has been offered around the state for municipalities in general," said Jason Dailey, Cranberry's Utilities director and former Public Works director. "We have certainly had a really good experience with the program."

Chris Robinson, roadway programs coordinator for PennDOT's Butler County operation, applauded Cranberry Township for its involvement with Agility.

"They and Jason have been absolutely great to us and been a big help," Robinson said. "We've actually received compliments from some of the other groups we've had meetings with on how we were able to make that happen. It's been good for everybody."

One innovative aspect of the Cranberry-PennDOT relationship is access to much-needed meeting space the township provided.

"We've always been creative with it," Dailey noted of the Agility arrangements. "And that goes to the district being very open with it and very forward thinking as well and having a really good insight into how we can utilize this program."

Added Robinson: "In their case, the meeting space isn't really about us saving money, but having a resource available to us that wouldn't otherwise be available, which is a good thing."

Regarding Agility overall, Robinson noted, "There are always opportunities. You always look for things you can do easier than they can. And that is usually where you can find the sweet spot of where the savings are."

Robinson cited how an Agility agreement helped increase winter service on U.S. Route 422 in Butler County. It was a spot not near any PennDOT stockpiles, and PennDOT worked out an arrangement to park one of its plows at a municipality's stockpile.

"The first year we did that, we had phone calls praising us for the increase in service without us actually telling the community anything about it," Robinson said. "So, it was a noticeable difference right off the bat. It is things like that. A little creativity and a little bit just talking about things, you'd be surprised what you can come up with."

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PennDOT's Agility PROGRAM

Did You Know?

The travelling public benefits from PennDOT and its eligible partners exchanging services, equipment and staff without monetary payments. Agility also helps PennDOT and its partners make the most of limited resources, while developing strong and rewarding relationships.



EXAMPLE: Partner performs winter services in exchange for PennDOT seal coating local roads.

Who is Eligible?



LOCAL & COUNTY GOVERNMENTS



SCHOOL DISTRICTS & PUBLIC COLLEGES



VOLUNTEER FIRE COMPANIES & CHARITABLE HOSPITALS

And More!

Program Benefits

- Completes work that otherwise may not have been done
- Provides better service to the public
- Provides smoother, safer and cleaner roads, bridges and roadsides
- Uses funds more efficiently and effectively



LEARN MORE AT: PennDOT.gov > Doing Business > Local Government > Agility Program
EMAIL: PDAGILITY@pa.gov

WORK CONTINUES ON INNOVATION TO IMPROVE ROADSIDE VEGETATION MANAGEMENT

By PennDOT Bureau of Innovations

PennDOT and several local governments are exploring brushing loader attachments for their equipment inventories as a way to improve the efficiency and safety of roadside vegetation management.

The State Transportation Innovation Council's (STIC) Maintenance Technical Advisory Group (TAG) is working on advancing this innovation to help crews be more efficient, increase operator visibility, and reach overhead obstacles that would otherwise prevent effective tree or brush trimming.

A brushing loader attachment can be connected to loaders 25,000 pounds and larger to trim trees and brush along the roadway. From the safety of the loader's cab, an operator can effectively complete tree canopy removal and conduct daylighting and brushing operations, which is a key standard of care activity for all counties in Pennsylvania.

Fermanagh Township in Juniata County held a demonstration in mid-March for a brushing loader attachment it had purchased. PennDOT's Fleet Management Division participated in the demonstration.

"Our Fleet Management Division employees liked the equipment, and it had a lot of benefits," said Dean A. Poleti, P.E., Maintenance TAG leader and maintenance services engineer in PennDOT's District 11 in the Pittsburgh region.



A second demonstration was held later in March at the Interstate 79 interchange in Carnegie, Allegheny County, with a Mower Max piece of equipment. Organized by PennDOT's Fleet Management Division, the demonstration was attended by employees from PennDOT's Operations and Performance Office along with representatives from PennDOT's District 11, including several PennDOT Beaver County equipment operators.

"The Mower Max is a stand-alone piece with different attachments for mowing and vertical vegetation removal," Poleti said, adding: "It is a nice piece of equipment with a lot of versatility."

Continued on page 21

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Dailey pointed to what he called PennDOT's well-earned reputation for its expertise.

"Some of the program offerings, PennDOT is very well known for the high product quality it puts out for its single and double seal applications, and we have taken advantage of that program," he said. "We've taken advantage of their line painting program. In trading for different things, the expertise that it brings, the high-quality product that a local municipality can take advantage of as part of this program. We always realized significant savings.

Dailey noted the simple bartering aspect of Agility.

"Essentially, the Agility program is a this for that," he said. "One is providing one thing and you are getting a good quality product from PennDOT in return. This program really has been a big benefit for us in that fashion."

Besides getting a quality service from PennDOT, cost-savings is another important benefit, Dailey said.

"If it's not 50 percent savings, often times it's pretty close to that, if not more" he said. "There's a mutual benefit that's being shared across between the two entities involved in the program."

Dailey said Cranberry Township has aggressively checked the quality of the Agility services and it has always been excellent.

"And we've looked at the cost benefit and found it always pays to participate in a program like this," he said.

Dailey said Agility inspires creativity on both sides of the transactions.

"The creativity you can bring to it, the flexibility the district offices have to make this program work for everyone, the opportunities are really endless," he said. "If you can think it up, your district will work with you to work to make that happen."

Dailey urges municipalities to take a good look at Agility participation.

"If you are a large municipality or a small community, this program has something to offer everyone," he said. "It is really not just for a sophisticated community. This is a very achievable program than can be done whether you are a township, borough, or third-class city. This program is for everyone." For more information about the program, visit the Agility page on PennDOT's website.

MANAGEMENT TRAINING AND FIELD GUIDEBOOK REACHING NEW MILESTONES

By Rich Kirkpatrick, PennDOT Bureau of Innovations

Maintaining the state's 40,000 miles of roads involves much more than keeping the pavements smooth. PennDOT's maintenance staff must also keep watch over critically important Stormwater Control Measures (SCMs) to protect the environment.

To better prepare its staff for that challenge, PennDOT has developed training modules and a field guidebook covering issues involving retention ponds, sand filters, pervious pavement and constructed wetlands.

Rich Heineman, stormwater section chief in PennDOT's Bureau of Maintenance and Operations, has been heading the project, which was underwritten by \$50,000 in STIC Incentive Program funding from the Federal Highway Administration and a \$12,500 PennDOT match.

"We've done one pilot training where we asked two or three volunteers from each district to help us make sure the content is right for our target audience," Heineman said. "We're going to have another pilot here in September and then it'll be rolled out statewide shortly after that."

In addition, he said, he and his staff will work with each PennDOT district to see what works best for each's field staff. Plans include one-page summaries, videos and online links.

The guidebook and training will also be made available to the Pennsylvania Turnpike Commission and municipalities across the state.



"The training provides more in-depth knowledge on how SCMs work and what type of factors affect how they function, such as invasive plants or sediment building up in the sites," said Thomas R. Yocum, environmental manager in PennDOT's District 9, based in Hollidaysburg, Blair County.

Buddy Brown, assistant environmental manager in PennDOT's District 2, based in Clearfield, said his team was working on getting an accurate inventory of the SCMs and developing a good inspection schedule. The new guidebook and training will help build on that effort.

"When we can get the assistant county managers and foremen that are in charge of completing the work this training, they will have a good understanding of what kind of SCM they are dealing with and how to maintain it," he said. "I think this training is going to push some consistency out there, and the maintenance foremen will know what they have and be able to create a good maintenance cycle."

Continued from page 20

The Maintenance TAG is looking to purchase a brushing loader attachment to use for pilot purposes statewide and see how it works. The piece of equipment would be rotated among the districts to see how PennDOT equipment operators like it and get their feedback.

"With a brushing loader attachment, there is a lot of versatility," Poleti said. "It would keep someone inside the cab rather than have that individual exposed while using a weed whacker or chainsaw working on a hillside where they could fall or twist an ankle. Anything to make the job more mechanical will be safer for employees. The same is for townships or other municipalities. It will help them be more efficient and handle longer stretches of roadside."

Since the attachments usually go on front loaders and not all municipalities have front loaders, Poleti noted there would be Agility opportunities available to make this work statewide.

"If PennDOT owned the front loader attachment, we could send an operator to a township for whatever roadside management was needed, and the township could offer one of their services in exchange," Poleti said. "It definitely has Agility potential."

The Maintenance TAG is also developing a catalog of innovative vegetation management equipment for use by PennDOT county managers and their assistants as well as local governments. Once finalized, the catalog will be an easy reference for PennDOT and its partners to select innovative tools for clearing tree canopies and other roadside vegetation. This could include vegetation removal-related equipment, roadside mowers, tree shearers, forest mulchers and attachments to mow around high-tension cables.

The Innovation Development Team, led by PennDOT's Fleet Management Division Chief and Innovation Owner, Michael A. Martin, has developed a draft of the catalog and is now making modifications and adding equipment photos. He expects that final editing and formatting may take several more months. The catalog will provide best practices and equipment availability for sharing opportunities.

"With the catalog, the maintenance staffs from all of our partners can sit down and identify pieces of equipment that serve as best practices and which they would like to use," Martin said.

ULTRA-HIGH PERFORMANCE CONCRETE INNOVATION FOR BRIDGE REPAIRS AND PRESERVATION MOVES FORWARD IN PENNSYLVANIA

By Rich Kirkpatrick, PennDOT Bureau of Innovations



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

Nearly every one of PennDOT's 11 engineering districts has already completed at least one bridge construction project using Ultra-High Performance Concrete (UHPC) Connections for Prefabricated Bridge Elements (PBE), a Federal Highway Administration (FHWA) Every Day Counts Round 3 (EDC-3) innovation that PennDOT championed.

Now, as part of FHWA EDC Round 6 (EDC-6), PennDOT is championing the use of UHPC for Bridge Preservation and Repair (P&R). Tyler Culhane, senior civil engineer in PennDOT's bridge division; Patricia Baer, unit manager at PennDOT's Materials Testing Laboratory; and Jason Zang, P.E., assistant district executive for construction in PennDOT's District 11 in the Pittsburgh region, are serving as the PennDOT champions for this innovation.

UHPC is a steel fiber-reinforced cement-based composite materials that has exceptionally high mechanical strength and durability properties that far exceed those of conventional concrete materials.

"This is not a typical concrete material," Baer noted. "It works well for connections ... It gets very high strength quickly ... It's a whole different animal than conventional concrete."

With DOTs and other highway agencies across the nation working to keep bridges in a state of good repair, use of UHPC for Bridge P&R is a new method that offers enhanced performance and improved life-cycle costs over traditional methods.

According to Culhane, only District 1 has used UHPC for Bridge P&R purposes, a bridge link slab retrofit on the State Route 1009 bridge over Lake Wilhelm in Mercer County. The bridge involves three spans, two prestressed spread box beams and one adjacent box beam, connected with UHPC link slabs.

Use of Bridge Link Slabs to help address bridge deck joint failure, a common maintenance issue in Pennsylvania, is an innovation currently being pursued by the State Transportation Innovation Council (STIC). Mark Nicholson, PennDOT District 1 bridge engineer, is spearheading the development of this innovation. This is just one of many ways UHPC can help extend the service life of bridges.

According to FHWA, UHPC P&R applications include bridge deck overlays, girder end repairs, expansion joint repairs, PBE construction joint repairs and column or pile jacketing. Some applications, such as bridge deck overlays and replacing expansion joints with UHPC link slabs can extend the service life of bridges well beyond that of traditional repair strategies and are more cost-efficient than bridge replacement.

Future plans for use of UHPC for Bridge P&R included a pilot project using UHPC for a bridge deck overlay and additional pilot projects in the districts using UHPC for various bridge rehabilitations and repairs. The innovation implementation team also plans to evaluate the impact of UHPC on bridge life-cycle costs.

Zang said UHPC is ultimately going to be a big factor in speeding up bridge repair projects, resulting in life-cycle cost savings. This is critically important given that Pennsylvania is home to roughly 25,000 state-maintained bridges and roughly 6,000 locally managed bridges.

PennDOT has instituted a special provision for UHPC use across the state, and the innovation team is working to have the UHPC added to Publication 408, PennDOT's Construction Specifications as well as Bulletin 15, PennDOT's Qualified Products List for Construction.

Once that is accomplished, more suppliers will come forward and help generate more competitive pricing, Zang said.

CARBON COUNTY FOREMAN RECOGNIZED FOR QUICK ACTION AT A CRASH SCENE ON INTERSTATE 80

By Ronald J. Young Jr., Community Relations Coordinator, District 5

Kyle Holman, a highway maintenance foreman with Carbon County, was recently honored at ceremony hosted by the Lake Harmony Volunteer Fire Department and Kidder Township. Kyle received an award for rescuing a family whose vehicle had overturned on I-80.

On December 28, Kyle was patrolling Interstate 80 in his crew cab when he came upon a crash scene in his crew cab. The vehicle was already engulfed in flames and fire/rescue had not yet arrived. One man had managed to get out of the vehicle, but four other people, including a baby, were still trapped inside.

Kyle grabbed the fire extinguisher and with the assistance of a truck driver, put out the fire. Fearing the fire would reignite with the others trapped inside, Kyle used a hammer to break the windshield and got all four individuals out of the vehicle safely. Kyle remained on scene through the crash clean up and safe reopening of the Interstate.



"It was a great pleasure to honor Holman because he and the fire company work together on so many crashes along I-80," said Ralph Lennon, chief of Lake Harmony Volunteer Fire Company. "Holman is a throwback to the days when drivers would happily stop to assist someone who was having a problem with their vehicle."

There's no doubt that Mr. Holman's actions went above and beyond the call of duty.

DONUT' DRIVE DROWSY: A GREATER PITTSBURGH AREA EVENT FOR DROWSY DRIVING PREVENTION

By Steve Cowan, Deputy Communications Director, District 11

In recent years PennDOT has enhanced its outreach on drowsy driving prevention reminding motorists to make sure they are awake and alert behind the wheel. This year District 11 partnered with the Bellevue Police Department and Lincoln Bakery in Bellevue Borough to introduce the "Donut Drive Drowsy" campaign in conjunction with a nationwide focus on the topic.



District 11 Safety Press Officer Yasmeen Manyisha represented the district

The campaign uses a donut mascot to help spread the word of the dangers of drowsy driving to motorists. Drivers waking up early before getting on the road are encouraged to have a light breakfast before driving, such as a donut and coffee. To support the effort, during the week of the campaign, Lincoln Bakery offered customers a free coffee with the purchase of a dozen donuts and hung informational flyers in the store.

Early morning or late-night commutes partnered with lack of sleep often play a significant role in drowsy driving crashes.

The people most impacted by this include those reporting to work early, teen drivers heading to school and commercial vehicle drivers, who regularly are behind the wheel for extended amounts of time.

Daylight Saving Time brings longer daylight hours, but the darker spring mornings can contribute to drowsy driving during the morning commutes. Through the media, District 11 urged motorists to recognize the warning signs of drowsy driving.

These include:

- Having trouble keeping your eyes open
- The inability to keep your head up
- Drifting from the lane or off the road
- Yawning frequently

Drivers were also reminded of tips to avoid and combat drowsy driving, including:

- Getting plenty of sleep prior to driving
- Avoiding alcohol and medications that cause drowsiness or other impairment
- Taking breaks every two hours when taking long trips
- Pulling into a safe and legal place to take a quick nap if needed

It was a great community effort that brought awareness to a topic that is often overlooked. Visit www.PennDOT.gov/safety for more safe driving tips.

SULLIVAN COUNTY PENNDOT REACHES SAFETY MILESTONE

By Maggie Baker, Community Relations Coordinator, District 3

PennDOT District 3's Sullivan County Maintenance Organization reached significant safety milestone on May 28, 2021. The county maintenance organization reached 4,000 days (11 years) without a disabling employee injury. This currently is the longest active streak of its kind in the department. A disabling injury is any injury that results in an employee missing one or more days of work.

"This safety milestone shows the dedication Sullivan County employees have to safety 24/7 culture in the workplace," said PennDOT Secretary Yassmin Gramian, P.E., "Their focus to adhering to safety standards is commendable, as our employees are the department's greatest resource."

"Over the last ten years, Sullivan County employees have continued to impress me with their focus on safety standards," said Sandra Tosca, District Executive for the department's Montoursville-based District 3-0 region. "They realize that workplace injuries not only impact themselves, but everyone around them, including their families and co-workers."



County employees perform a wide range of road and bridge maintenance activities throughout the year. All work is done with a strict adherence to the concepts of safety.

"I'm extremely proud to be part of a team of men and women who embrace the department's philosophy of safety, 24/7," said Sullivan County Maintenance Manager Kenneth Pochatko. "This county makes accountability and responsibility for employees a priority."

LANCASTER COUNTY PROJECT RECEIVES INNOVATIVE TRANSPORTATION SOLUTION AWARD FROM THE CENTRAL PA CHAPTER OF WTS INTERNATIONAL

By Dave Thompson, Community Relations Coordinator, District 8



The Central PA Chapter of WTS International has recognized a project led by District 8 Design Project Manager Supervisor Nexa Castro with the Innovative Transportation Solution Award.

The award, which recognizes an innovative transportation project led by a woman that improves quality of life, went to the 272-037 project in Lancaster County. Nexa accepted the award during a virtual gala in which District 8 Executive Mike Keiser also received the organization's 2021 Honorable Ray LaHood Award.

This project was designed to improve safety along a 5.7-mile section of Route 272 between Herrville Road and Mt. Airy Road in Providence and Pequea townships. Prior to the

project, this section of roadway had seen a fair number of significant accidents, including fatalities.

The project consisted of widening selected shoulder areas, reconstructing the median with mountable curb islands, paving, and the construction of loons and shoulder pull off areas for horse and buggy traffic.

A roundabout initially was proposed, but after ferocious pushback from the municipalities, an alternative design was selected. This, too, received significant opposition, but design and construction moved forward, nonetheless.

"272-037 was challenging, to say the least, but Nexa worked tirelessly to ensure a project was designed that would meet the needs along the Route 272 corridor," Chris Drda said. "This included a lot of outreach and personal contacts with local residents. It's gratifying to see this project, and Nexa, recognized by other transportation professionals for its quality and innovation."

PENNDOT CELEBRATES INTERNS SUPPORTING OUR MISSION

This year the department recognized the students who are supplementing their classroom education with real-world experience.

PennDOT provides a variety of programs for students from elementary through post-secondary school to explore careers in the transportation industry. These programs include college internships, the School to Employment at PennDOT (STEP) high school cooperative program, job shadowing opportunities, tours and group career exploration events.

PennDOT's summer internship program (PDF) provides college students with the opportunity to experience the practical application of the principles they are learning about in the classroom. Students selected for these internships will be exposed to meaningful work as they contribute to ongoing PennDOT projects both in the field and in office settings.

We hire more than 600 summer interns each year. Most internships are designed for students majoring in engineering disciplines, but we also offer non-engineering opportunities, such as business administration, communications, accounting, computer science and more.



While there are a small number of off-season internship opportunities, most PennDOT internships occur from May through August. The application period for these internships is typically December through May annually.

All internship opportunities can be found in the internship section of the commonwealth's employment site.

Many of our former interns are now full-time employees with PennDOT or other state agencies. In fact, the Commonwealth of Pennsylvania was recently recognized by Forbes as one of the best employers for new graduates.

PENNDOT EMPLOYEES HELP CREATE A SAFER HABITAT FOR ENDANGERED TURTLES IN HUNTINGDON COUNTY

By Monica Jones, Safety Press Officer, District 9

PennDOT employees in District 9 helped create a safer habitat for an endangered species of turtles in Huntingdon County. After a couple of nesting seasons, it's encouraging to say the turtles are thriving.

Early in 2020, employees at Huntingdon stockpile collaborated with students from Juniata College to help protect Northern Map Turtles, that create breeding areas where the Route 522 bypass runs through Mount Union. This region along the Juniata River is the largest breeding ground for these turtles in Pennsylvania.



Because dozens of the turtles were getting killed after the new bypass was built, environmental health and safety director for Juniata College, Roy Nagle, reached out to staff at the Huntingdon county office for assistance. Together, the PennDOT team, Nagle and his students 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. Since the start, hundreds of females have been marked, thousands have

been recaptured, and as a result, thousands more new turtles have been released into the Juniata.

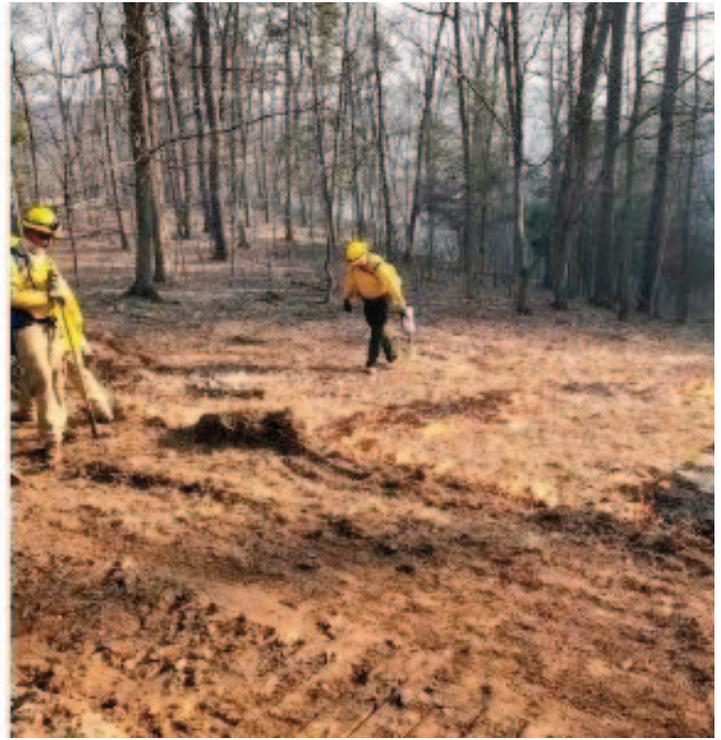
The county office crew say it felt good to be part of this kind of project. "My team took great interest and pride in the work and wanted to make sure everything was done right," says Al Huey, Assistant County Maintenance Manager, Huntingdon County.

Nagle and his students had a plaque created to recognize and appreciate the efforts of the PennDOT team. He hopes to present it to the Huntingdon office sometime. Also, one of his students put together a turtle conservation video (also shown below) that highlights the success of the project. It acknowledges PennDOT as a partner and will be used by the Juniata College for educational purposes.



MEET JASON BARRETT: HIGHWAY DRAFTSMAN DESIGNER AND VOLUNTEER FOREST FIREFIGHTER

By Maggie Baker, Community Relations Coordinator, District 3, Jason Barrett



According to the United States Department of Agriculture, Pennsylvania's forest area covers approximately 58 percent of the Commonwealth's land area, totaling around 16.8 million acres. With this vast amount of forest area, there is always a chance for forest fires. In 2020, Pennsylvania recorded over 1,500 forest fires, which is a 20-year high. These forest fires burned over 3,000 acres of forest, killed two people, injured 12, and destroyed 17 structures.

To fight these forest fires, the Department of Conservation and Natural Resources (DCNR) teams with volunteer forest fire associations throughout the state. Jason Barrett, a Highway Draftsman Designer for PennDOT's Engineering District 3, is one of these volunteer forest firefighters.

Since 2001, Jason has volunteered with the Tiadaghton Forest Fire Fighters Association (TFFFA) and in April of 2017, he became a Pennsylvania Forest Fire Warden.

To become certified as a volunteer forest fire fighter, one must take a minimum of 56 hours of classroom training and 4 hours of live fire training. Each year volunteers are required to take an 8-hour refresher training course and pass a physical fitness test of walking 2 miles with a 25-pound backpack or weighted vest in 30-minutes without running. Most of the training is provided and paid for by DCNR. Over Jason's 20-years of service, he has logged over 800 hours of training.

Since 2001, Jason has responded to numerous forest fires throughout the Commonwealth. During the fire season, he is

likely to carry his fire equipment with him in the event of a call. This equipment can cost thousands to maintain. As a fire warden, Jason is likely to also carry additional equipment such as radios, hand tools, chain saws, leaf blowers, and additional personal protective equipment.

"I have a lot of memories over the past 20-years. The memory that stands out the most was a night spent at the narrows in Cedar Run (Brown Township, Lycoming County)," Jason said. "The forest fire was burning so hot that the rocks on the side of the mountain would roll down onto Route 414 and melt through the asphalt. It was like something you would have seen in a movie and something I will never forget."

Jason began volunteering with TFFFA after his father-in-law (who has been a volunteer for 55 years and a warden for 30) asked him to take the forest firefighter training. He would like to remind everyone that forest fires are something everyone can prevent. DCNR reported that 99.5 percent of the forest fires in 2020 were caused by humans.

We would like to thank Jason and all first responders for your service.

Fires aren't the only danger our first responders face. Do your part to protect them on the road, too. Review Pennsylvania's Move Over Law and always use caution when driving near an emergency scene.

MEET MELISSA ELDER: ADMINISTRATIVE ASSISTANT AT PENNDOT'S MATERIALS TESTING LAB

A Veterinary Assistant. A Trekkie. A crazy cat lady. A gamer. A chocolatier of bonbons and truffles. Renaissance Faire participant. Melissa Elder is not your stereotypical PennDOT employee.

Melissa Elder remembers her first day working for PennDOT. Her manager at the time, Joe Robinson, gave her a tour of the lab where she remembers thinking that it had to be one of the coolest places to work. "I wasn't wrong," Melissa said.



Ten years ago, Melissa started as a Clerk Typist 2 and worked at the Materials Testing Lab. She has moved to a couple of other locations after receiving promotions but returned to the lab as an Administrative Assistant.

"The lab is my home away from home and has some of the greatest people I've ever had the pleasure to not only work with, but just to get to know in general. I've even made friendships with some of my coworkers that I cherish deeply," Melissa said.

Presently, she supports Chris Norris, the Construction and Materials Division Chief, and says it is a blessing to have her as a manager. Melissa loves what she does mostly because she is a great multitasker and feels she is able to create order from chaos.

In 2014 Melissa earned her Associate Degree and would like to continue her education in the future. She has an interest in Psychology and said she strives to constantly grow.

With everything Melissa loves and does, she seems to enjoy a challenge, whether it is at work or home. Melissa and her fiancé are installing a kitchen backsplash and made their own sauerkraut this past fall.

"PennDOT has given me the opportunity to hone my talents, find my work family, and establish myself at the place I would love to work my career and retire from," Melissa said. "And that's an opportunity that I recognize not everyone gets in life, so I am very thankful for it."



MEET CHRIS BONENBERGER: CHESTER COUNTY HIGHWAY MAINTENANCE MANAGER

By Kryz Johnson, Safety Press Officer, District 6

We are so grateful for the people who make careers for themselves at PennDOT. These individuals repeatedly exemplify the care and concern needed to serve the state of Pennsylvania- and continually strive to make PennDOT a great place to work.



Meet Chris Bonenberger. Chris first joined PennDOT back in 2005, and he was recently promoted to Chester County Highway Maintenance Manager.

Bonenberger said: "I started my career with PennDOT 16 years ago, right out of high school, as a maintenance operator. From plowing snow in Lansdale and working on the highway maintenance and construction crews, I worked hard. I continued to move into several new roadway positions over the years, including county assistant maintenance manager and highway maintenance manager. Finally, I felt I was respected and had the resources to continue my development within PennDOT. So many things have changed as we've grown, but quality and teamwork are still incredibly important. I take great pride in my work, no matter what the project is. We never lack for people working together to get it done."

In this position, Bonenberger leads 131 employees, manages a budget of \$34 million, and is responsible for all the maintenance activities on 1,130 miles of state highways in Chester County.

"Chris is a valued member of PennDOT's maintenance organization and brings a wealth of knowledge to this position," PennDOT Assistant District Executive for Maintenance John Krafczyk said. "His highway maintenance experience combined with his managerial background provides a foundation for him to direct highway maintenance operations in Chester County successfully."

The variety of work related to operations and the opportunity to improve employee safety exemplify why Chris enjoys being a member of the PennDOT team. He said that over the past few years, he has seen a great deal of positive change in the organization and, as a result, is thrilled to be part of our ongoing work. Chris also greatly values the productive working relationships and friendships he has developed with colleagues, legislative and municipal stakeholders, and the public.

Chris's favorite challenges to tackle are those that have a profound impact and are meaningful to people. There is no task too small associated with upholding safety standards and improving roadways.

When Chris isn't out in the field or office, he enjoys time with his wife and four children.

MEET JACK HUBBARD: MAINTENANCE SERVICES MANAGER IN PENNDOT'S DISTRICT 5

By Ronald J. Young Jr., Community Relations Coordinator, District 5

District 5 Assistant District Executive for Maintenance Jack Hubbard has been with PennDOT for 27 years.

Jack's first stint with PennDOT was as a college intern for two summers in the District 10 Maintenance Unit.

After graduating from Penn State University with an associate degree in architectural engineering and a bachelor's degree in structural engineering, he went to work for a consultant for several years as a land development designer/project manager.

In 1991 he accepted a Civil Engineering Trainee position at District 5, and two years later was assigned to the Bridge Unit. Then, in 1994, he became an Assistant Project Manager in the Design Unit.

In 1999 he left PennDOT for a few years to be co-owner of a home improvement business but returned in 2002 as the District Grade Crossing Engineer. He then became the Local Bridge Liaison Engineer and Design Project Manager.

In 2005 he accepted a promotion in Central Office in the Right-Of-Way and Utilities Unit as the Grade Crossing Engineer. He held this position until the spring of 2011 when he returned to District 5 as Maintenance Project Manager. Four years later he was promoted to his current position, Maintenance Services Manager.

While Jack has many great memories of his career at PennDOT, one of his fondest was volunteering as the State Coordinator for Operation Lifesaver. Operation Lifesaver is a non-profit organization committed to preventing collisions, injuries, and fatalities on and around railroad tracks and highway-rail grade crossings, with the support of public education programs in states across the U.S.

"With a passion to promote railroad safety, while holding the Grade Crossing Engineer position in Central Office I volunteered as the State Coordinator for Operation Lifesaver," Hubbard said. "I am glad I was able to educate many people about safety around railroads."

As Chief Executive Officer for the State of Pennsylvania Operation Lifesaver program Jack provided 70+ presenters, 8 presenter-trainers, various business partners such as the railroads, Bureau of Rail Freight, Rail Freight Advisory Committee, and Keystone State Railroad Association with new information, updates, changes, and directions disseminated down from Operation Lifesaver headquarters.



Jack has a strong passion for building and home improvement. This passion produced his current residence, a log cabin home atop Pohopoco Mountain in the Poconos.

Years ago, Jack Hubbard and Bob Rhodes bought a one-acre lot (now a three-acre "compound") surrounded by mature evergreens and hardwoods. In 2014 the time was right to start the process of constructing a beautiful log home located in a private community just outside the town of Jim Thorpe in Carbon County. For 16 months most of their non-working time was committed to completing their log home which they finished in August 2015.

Bob and Jack both have experience in construction, and they utilized these skills to design and build the home with assistance from Timberhaven Log & Timber Homes of Middleburg, PA.

The log home's floorplan is open and inviting. On the first floor the living room adjoins the kitchen/dining area with a large center island and easy access to the guest bedroom and bath.

A second-floor loft includes the master bedroom, a sitting area, and a walk-in closet. A few years ago, the basement was finished to add a family room, second kitchen, half bath and laundry room. A garage and timber-frame pavilion were also added.

"The home is located in a great spot, with access to the many outdoor amenities the Poconos have to offer, such as skiing, hiking and biking, and the small towns and businesses throughout the region," Hubbard said.

Their home has been featured in Log Home Living magazine and two times in Log Cabin Homes magazine.

When he is not working or building something, Jack enjoys spending as much time as possible camping with his friends, or as he calls them his "extended camping family."



MEET THE GREETER: MELISSA GUZIEWICZ

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

Having a hobby or activity outside of work can be relaxing. For Wilkes-Barre Driver License Center's Melissa Guzewicz, the art of hand spinning is a hobby worth the time.

Hand spinning is an art form that requires great coordination and patience, as spinners twist together fiber threads to create yarn. The yarn is then used to make various items such as clothing or blankets, among others.

"I got started spinning by finding education wherever I could find it," Guzewicz said. "I recently took a class where I was able to sharpen my skills and learn some new ones, such as how to spin cotton."

Guzewicz has only been spinning for about a year and a half but has been interested in spinning for around 30 years. She finds it fascinating to immerse herself in an artform that has been practiced for thousands of years.

Wool is Guzewicz's usual thread of choice, though she also likes to use alpaca fiber in her projects. She usually shops local for materials, utilizing Pennsylvania farms when possible.

"I greatly enjoy working with The Livestock Conservancy's 'Shave Em to Save Em' program which encourages shepherds to raise rare and endangered heritage breeds of sheep here in America," said Guzewicz. "Not only do I help preserve these essential breeds, but I get a chance to experience all the variations wool has to offer."

Recently, Guzewicz has been working with The Lands at Hillside Farms, a local non-profit farm that has sheep and alpacas. The farm sheared their animals but could not find any



takers for the fleece. Guzewicz offered to take the materials and is planning on spinning them into yarn that she will donate back to the farm.

As she continues to grow her spinning skills, Guzewicz hopes to expand into yarn dyeing, weaving and experimenting with different art yarns.

Guzewicz began her Driver and Vehicle Services career in 2019 as one of the first Real ID Greeters in the Commonwealth. She was intrigued by the possibility of shaping what the position could be.

"Although the position is difficult, I enjoy being a greeter," Guzewicz said. "I think my position helps shape the customer experience."

Helping customers feel heard and valued, encouraging nervous knowledge testers and celebrating with brand new drivers are some of her favorite parts of the Greeter position.

PENNDOT HIGHLIGHTS ACCOMPLISHMENTS IN 2020 ANNUAL REPORT



PennDOT's 2020 Annual Report is available to view on the department website under "About Us." Like years past, the Annual Report seeks to highlight the many accomplishments during the previous year. However, 2020 was no ordinary year, and the dedicated employees at PennDOT never lost track of their mission to enhance, connect and add value to our communities by providing a sustainable, equitable transportation system and quality services for all.

Working during a pandemic presented many challenges but employee innovation overcame them as they surfaced. Some innovations developed will forever change the way we do some things, and some will go away as we move forward.

See more PennDOT accomplishments and many innovations in our digital Annual Report or download the Annual Report PDF to print or share.

KEYSTONE WELCOME CENTER COUNSELORS SAVOR NEW TRAINING TO ENHANCE THE PENNSYLVANIA TRAVEL EXPERIENCE

By Rich Kirkpatrick, PennDOT Bureau of Innovations

PennDOT has taken steps to enhance one of its premier customer service missions, its 14 Keystone Welcome Centers, by instituting a Travel and Tourism Certification Program for its team of 54 Tourist Information Counselors. The Travel and Tourism Certification Program was established to promote high quality travel information services and enhance the personal efforts, skills and achievements of Pennsylvania's Tourist Information Counselors who direct and advise travelers seeking assistance. Outside the Keystone Welcome Center in Erie County. The Welcome Centers encounter more than 3 million visitors each year, and the training certification program will help the counselors deliver even better experiences to travelers.

"We are seeing people from all around world in here. It's pretty amazing," noted counselor Paula Tatalone from the Keystone Welcome Center at Pennsylvania's Great Lakes on Interstate 90 Westbound near the New York border. "Moving forward, we will definitely be able to offer more."

Tourism Services Manager Tiffany Brown, has participated in national meetings where tourism counselor training certification programs were discussed, and she knew Tourist Information Counselors at the Welcome Centers were interested in having a similar program in Pennsylvania.

She and Welcome Center Manager, Megan Hakes, developed a blueprint and moved ahead even in the face of challenges posed by the COVID-19 pandemic. The 20-plus hours of training were offered virtually and included information on:

Immersion in the Pennsylvania Byways program

- Map reading
- Planning and developing travel itineraries
- Heritage areas
- Historic trails
- National Register of Historic Places
- Geography of Pennsylvania

The Talent Development Section in the Office of Administration's Infrastructure and Economic Delivery Center assisted Brown and Hakes with tweaking the training to make it specific to frontline customer service. The training was open to counselors who have been on the job for at least a year. The first round ran from January through June during which 28 counselors completing the training. A second session ran from July through December.

As part of the training, Hakes developed project assignments, such as planning itineraries for a party of eight travelers. Such



planning involved looking at different heritage areas of Pennsylvania.

Welcome Center Manager Megan Hakes. "It was a great learning experience for the counselors to understand what heritage areas are," Hakes said. "I also had them do a project where they learned about Pennsylvania Scenic Byways and National Byways."

The exercise involved using such tools as MapQuest, Google Maps, 511PA, and Bing Maps.

"We helped them hone all those skills using different tools," Hakes added.

A virtual graduation ceremony, including the bestowing of special pins, was scheduled later in the summer.

Tourist Information Counselor Lori Whitlatch, of the Keystone Welcome Center at Laurel Highlands on Interstate 79 Northbound just north of the West Virginia border, said the training was "enlightening."

"It was very in depth ...," she said. "I learned a lot of information I didn't know. I had never done any work with byways ... It was a totally new topic for me. I learned a lot about byways."

Whitlatch, a 20-year veteran counselor, said she most enjoys meeting people from around the world who stop at her center, and she looks forward to applying the lessons learned from the training.

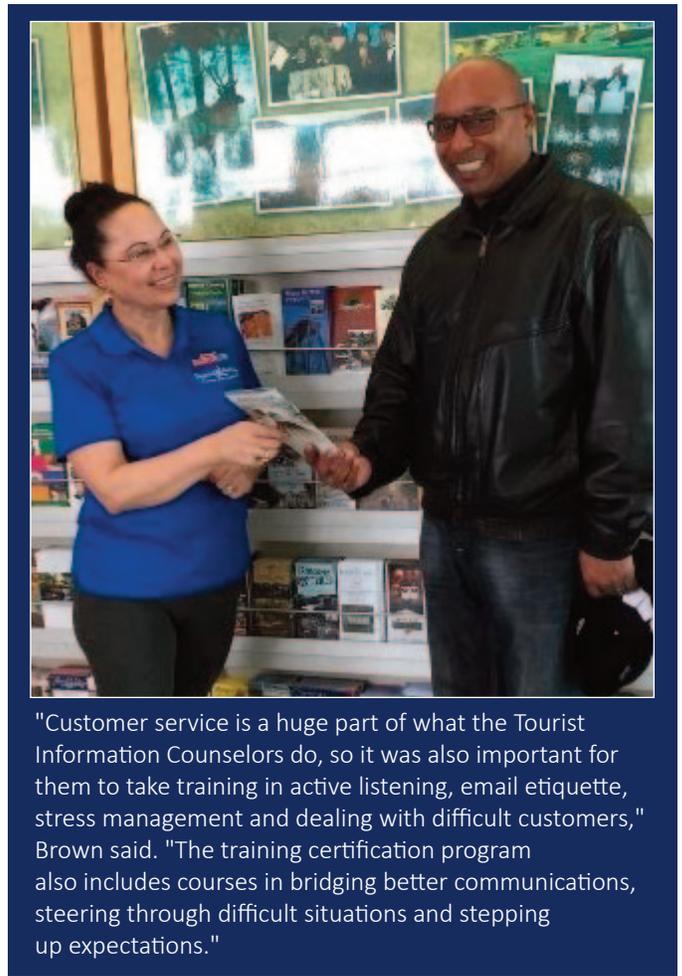
"What we learned, we will incorporate in our everyday work," she said. "It was a great learning tool for us. I enjoyed it, and it was something to stretch my knowledge and education."

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Tourist Information Counselor Lena Cassulis of the Keystone Welcome Center at Delaware Water Gap on Interstate 80 near the border with New Jersey, said the training was great and that her favorite part was "learning about different areas of the state and looking at everything through a magnifying glass to serve all the areas, finding out what the state has to offer."

A counselor for seven years, she added that the training "makes me more knowledgeable to tell travelers a lot more. There are a lot of people traveling through the state, and now we are more aware of different things that are out there."



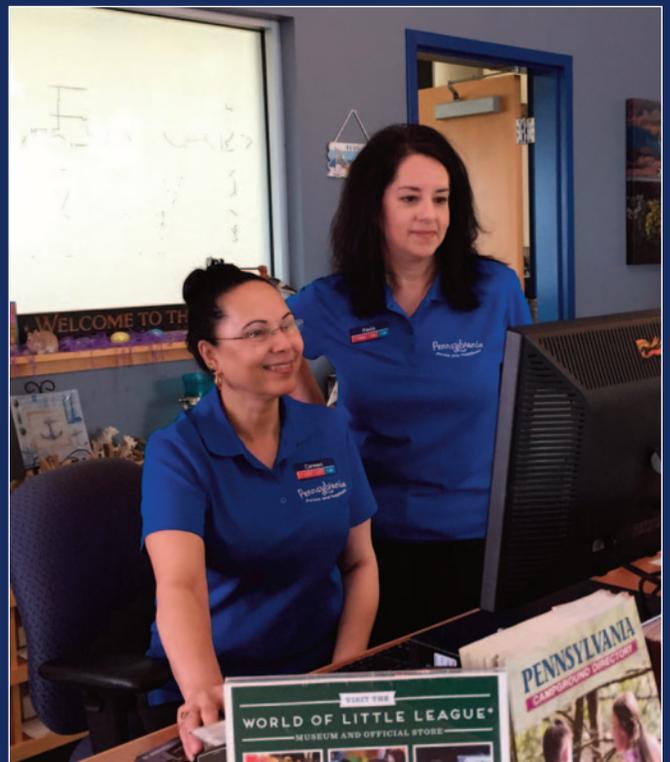
"Customer service is a huge part of what the Tourist Information Counselors do, so it was also important for them to take training in active listening, email etiquette, stress management and dealing with difficult customers," Brown said. "The training certification program also includes courses in bridging better communications, steering through difficult situations and stepping up expectations."

Tourist Information Counselors Carmen Barton (left) and Paula Tatalone (right). Counselor Tatalone, who has been in her position for more than 14 years, felt the itinerary training was her favorite topic.

"It required us to use the entire state," she said. "A lot of us are familiar with what is available in our respective regions. It's nice when we get to do more involving other regions of Pennsylvania. I am on the west side, and I got to dig deep and find itineraries in, for example, Lackawanna County in northeastern Pennsylvania, and it gave us new knowledge of areas we don't get to do too often."

Tatalone added that meeting and helping travelers is her favorite part of the job.

"Some come in lost, some are kind of panicked, and some don't have a destination. To be able to take time and highlight the different areas of the state, travelers are always so happy they're in Pennsylvania."



HISTORIC CRAWFORD COUNTY BRIDGE TO PYMATUNING STATE PARK

By Jill Harry, Community Relations Coordinator, District 1



The historic Messerall Truss Bridge in Crawford County was on the move recently.

The 145-year-old metal bowstring truss, one of a very few of its kind left in the country, was lifted by crane as the first major step in refurbishing, repurposing, and rehomeing the structure.

It is a big step for the small bridge, which has been closed to traffic since 1987.

"This bridge has been on our radar for decades. It is no longer able to support motor vehicles, so finding the right fit was important to preserving it," said Don Burden, historic preservation specialist with PennDOT. "Watching the move was an amazing experience knowing what a longtime coming it was."

Since 1876, the bridge has been perched above Pine Creek in Oil Creek Township, Crawford County.

On August 10, 2021, that tenure came to an end as it was hoisted off its abutments and gently placed at a landing area on the grounds of Northwest Hardwoods a process that took a little over 20 minutes. From there it was dismantled and taken to a workshop for rehabilitation.

Next year, the bridge will be reassembled and outfitted with a wooden deck at its new home — Pymatuning State Park. It will then become part of the park's popular and expanding multi-use trail.

The work is a partnership between PennDOT and the Pennsylvania Department of Conservation and Natural Resources (DCNR).

"As part of our environmental process, we look at various ways to preserve historic bridges. Repurposing is one of those options," Burden said. "This particular structure was owned by

Crawford County. The county recently transferred ownership of the bridge to DCNR. We worked with the county and DCNR to create this partnership that helps all the parties while maintaining a piece of history. It is an outcome that was worth the wait."

Once in place at Pymatuning, the 103-foot bridge will carry the bike trail over Linesville Creek, an important link in the expansion plans at the park. The overall project includes resurfacing the existing path and constructing a new section that will increase the length of the trail from just over a mile to more than three miles.

"This project is important to the park. During the design phase, we heard from many members of the public who were happy we are to lengthening the trail into the nearby Borough of Linesville," said Dan Bickel, Pymatuning State Park manager. "To also include the Messerall Truss Bridge in the plan has made it that much more exciting."

The bowstring truss bridge was among the earliest metal truss bridge designs, and despite the number of them built mostly in the 1870s, Messerall is one of the last to remain standing. It was constructed by the Wrought Iron Bridge Company of Canton, Ohio, and was last rehabilitated in 1960.

The contractor on the trail project, including moving the bridge, is Horizon Construction Group Inc, of Sandy Lake, PA. The contract cost is \$2.3 million which is being paid entirely with federal funds.

Find more information about the project on our Pymatuning State Park Trail Project page, located on the PennDOT District 1 page. There's also a YouTube video of the bridge move.

The DCNR shares information about the park on their Pymatuning State Park Facebook page.

ACTIVE TRANSPORTATION: POLICY, PLANNING, AND THE PANDEMIC

By Roy Gothie, Statewide Bicycle and Pedestrian Coordinator

In December 2020, PennDOT completed its first Active Transportation Plan. The intent of the plan is to support a safe, high-quality, connected network of trails, sidewalks, bikeways and roads for people who walk and bike, regardless of age, skill, ability, race, or ethnicity.

Developed in coordination with the Pennsylvania Department of Health (DOH) and the Pennsylvania Department of Conservation and Natural Resources (DCNR), the plan emphasizes that the policies and practices supporting walking and biking also address community health outcomes, contribute to the local economy, and promote sustainable, equitable transportation options.

These same issues would be moved front and center for communities across Pennsylvania a few months later when most Pennsylvania residents transitioned to a new normal – working or learning from home – and limiting their time with groups. The pandemic changed everything.

Over the next 15 months, we learned how valuable our non-motorized transportation network is to our communities. Being able to safely and easily walk or bike to parks, trails, grocery stores and other community resources suddenly became critical to residents who were sheltering at home. But not every neighborhood is walkable or bikeable.

As many enjoyed the physical and mental benefits of outdoor activity, the Pennsylvania Environmental Council reported trail use in Pennsylvania rose as much as 200% in 2020. Mirroring that growth, national sales of e-bikes surged 145% and regular bike sales increased 65% as reported in the New York Times.

These changes did not go unnoticed. PennDOT accelerated the development of new design guidance for bicycle facilities in 2020: www.dot.state.pa.us/public/pubsforms/Publications/PUB%20787.pdf The recently completed chapter in the design manual offers a wide array of facility types including two-way bike lanes, contraflow bike lanes, and guidance on the use of green pavement markings.

This new material is intended to assist local and regional partners advancing their active transportation plans into targeted projects that benefit all travelers.

While the pandemic isn't yet over, communities across Pennsylvania can take advantage of the resources developed by PennDOT and other state agencies to create safer, more connected, and healthier places to live now and for years to come.

CENTRE REGION, STATE COLLEGE RECOGNIZED FOR BICYCLE FRIENDLINESS

By Marla Fannin, Community Relations Coordinator, District 1

The State College – Centre Region area was named a Silver Level Bicycle Friendly Community by the League of American Bicyclists December 16, 2020. This distinction follows Bronze Level BFC designations in 2012 and 2016.

"This Bicycle Friendly Community award is the culmination of years of work put in by the Centre Region and its citizen advocates for better biking," said Bill Nesper, Executive Director of the League of American Bicyclists, in a release issued at the time of the designation.

The Pennsylvania State University was designated as a Gold Level Bicycle Friendly University in the spring. This is an improvement over a Silver Level designation it received in 2016.

The recognition the Centre Region and Penn State have received from the League are a testament to the work of organizations like the Centre Region Council of Governments, each of the six Centre Region municipalities, Centre Moves, Penn State and CentreBike. These organizations cooperatively and individually strive to grow cycling through a combination of in person and virtual cycling education and encouragement events as well as group ride outings. They also work with PennDOT to identify opportunities to improve infrastructure for cyclists in the area.

Across the nation, more than 850 communities have applied for recognition as Bicycle Friendly Communities, and there are 485 across all 50 states that hold the designation. There are currently 212 colleges and universities across 47 states and the District of Columbia recognized by the league as Bicycle Friendly Universities.

Criteria examined by the league in awarding these designations include bicycle infrastructure, availability of bicycle education programming and overall promotion of cycling through events like Bike to Work Day.

There are five levels of recognition for the BFC award: diamond, platinum, gold, silver, bronze, plus an honorable mention category.

"The gold designation from the League of American Bicyclists is a great acknowledgement of how far we've come since our original Bronze designation in 2012," said Transportation Services' Sustainable Transportation Program Coordinator Cecily Zhu in a release at the time of Penn State's designation. To learn more about the league's BFC program, visit www.bikeleague.org/community. To learn about cycling events in the Centre Region, visit <http://www.crcog.net/bikes>.

PENNDOT RECEIVES NATIONAL RECOGNITION FOR OUR AVIATION BOARD TRAINING INITIATIVE



PennDOT's Bureau of Aviation Director Anthony McCloskey (left) accepts award from NASAO President and CEO Greg Pecoraro (right).

Annually, the National Association of State Aviation Officials (NASAO) gives awards to states who establish innovative practices and maintain a service-oriented approach to state aviation programs, projects and activities.

PennDOT's Bureau of Aviation Director Anthony McCloskey (left) accepts award from NASAO President and CEO Greg Pecoraro (right).

As part of an event at the Colorado Springs Airport on September 14, 2021, PennDOT was selected to receive the "Most Innovative State Program Award," for our Aviation Board Training Initiative.

PennDOT Bureau of Aviation Director, Anthony McCloskey P.E. was in attendance to deliver remarks and highlight the training.

"PennDOT is grateful and excited to win this award," McCloskey said. "The Bureau of Aviation has worked hard to share this training with our partners in Pennsylvania and hope it can be useful throughout the country."

PennDOT's Aviation Board Training is an initiative to educate airport authority boards on their responsibilities as board members and learning what drives decision-making to improve their airport's vision for years to come.

The intent is to provide an additional resource for those airport authority board members to understand their fiduciary responsibilities, to focus on their mission/vision, and to develop a high level strategic/business plan that develops goals and objectives to measure success.

The training's four modules cover a variety of topics including: governance, federal/state funding, business and airport master planning, and strategic business goals and objectives.

The Department will continue to train those eligible airports that receive federal funding throughout 2022. Eventually, the material will be placed on the Bureau's website.

This NASAO award was established in 1984 and has a long tradition of calling the aviation community's attention to individual states aviation programs. Many innovative aviation programs that began at the state level have spread to other states or in some cases have been adopted or accepted by the federal government and the aviation community.

Eligibility is open to any state aviation agency that has developed, or has contracted for the development of, an original aviation program, project, or activity.

For more information on the PennDOT's Bureau of Aviation visit the aviation page on our website.

REAL ID ENFORCEMENT DATE EXTENDED TO MAY 2023

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



Citing the impact of the COVID-19 pandemic, the U.S. Department of Homeland Security announced earlier this year that it was postponing the enforcement date for REAL ID, extending the current deadline of October 1, 2021, to May 3, 2023.

REAL ID is optional in Pennsylvania. There is no requirement that any resident obtain a REAL ID; the Pennsylvania Department of Transportation continues to offer standard-issue driver's licenses and photo IDs.

REAL ID is a federal law that affects how states issue driver's licenses and ID cards if they are going to be acceptable for federal purposes. A federally-acceptable form of identification (whether it's a Pennsylvania REAL ID driver's license or ID card, a valid U.S. Passport/Passport Card, a military ID, etc.) must now be used on and after May 3, 2023, as identification to board a commercial flight or visit a secure federal building that requires a federally acceptable form of identification ID for access.

PennDOT reached the milestone of 1 million REAL ID compliant driver licenses and ID cards in December 2020. PennDOT anticipated 1.3M driver license or identification card holders would have request a REAL ID product before the original deadline. As of today, more than 1.4M individuals have obtained their REAL ID, which is consistent with PennDOT's projections.

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

Proof of Identity: Examples include original or certified copy of a birth certificate filed with the State Office of Vital Records/Statistics with a raised seal/embossed or valid, unexpired, U.S. Passport;

Proof of Social Security Number: Social security card, in current legal name;

Two Proofs of Current, Physical PA Address: Examples include a current, unexpired PA driver's license or identification card, vehicle registration or a utility bill with the same name and address; and

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

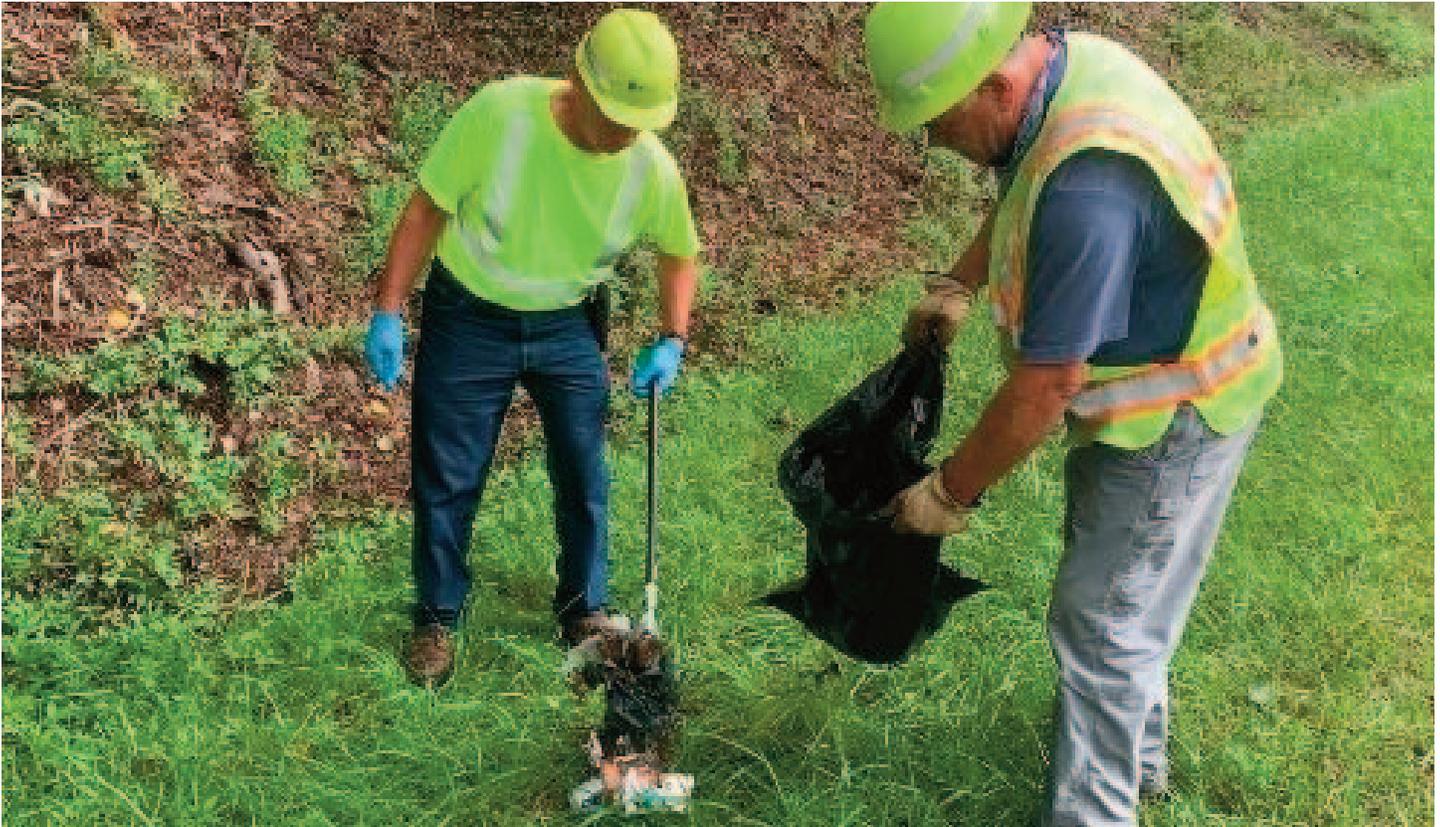
Customers have three options for obtaining a REAL ID product: Customers may order their REAL ID online if they have been pre-verified and their REAL ID product will be mailed to them within 15 business days; they can visit any PennDOT Driver's License Center that is open for driver license services, have their documents verified and imaged, and their REAL ID product will be mailed to them within 15 business days; or they can visit one of 12 REAL ID Centers and receive their REAL ID product over the counter at the time of service.

When a customer gets their first REAL ID product, they will pay a one-time fee of \$30, plus a renewal fee (current renewal fee is \$30.50 for a four-year non-commercial driver's license and \$31.50 for a photo ID). The expiration date of their initial REAL ID product will include any time remaining on their existing non-REAL ID product, plus an additional four years, unless the customer is over 65 and has a two-year license. This expiration date structure means that the customer won't "lose" time that they've already paid for. After the initial REAL ID product expires, the customer will pay no additional fee, beyond regular renewal fees, to renew a REAL ID product.

Visit [PennDOT.gov/REALID](https://www.penn.gov/REALID) to learn more.

FIGHTING THE BLIGHT OF LITTER IN PENNDOT'S DISTRICT 2

By Marla Fannin, Community Relations Coordinator, District 2



Combating the blight of litter has been in the spotlight in 2021. District 2, based in Clearfield County, has been working hard to educate the public on this subject and has held two different events focused on littering.

In late April, District 2 held an event to explain the creation of and penalties of littering in a Litter Enforcement Corridor. As partners in this effort, PennDOT was joined at the event by the Pennsylvania State Police (PSP), and Keep Pennsylvania Beautiful (KPB).

During the event, the partners explained what a Litter Enforcement Corridor is, why they're important and what the penalties are for littering in them.

The event took place along Route 1001 (River Road) in Clearfield at Elliott's Park. River Road is one of nine roads in Clearfield County to be designated as a Litter Enforcement Corridor. Sections of Route 120 in Elk and Clinton counties have also been designated as a Litter Enforcement Corridor. To date, more than 350 miles have been designated in the three counties.

Litter Enforcement Corridors have a high aesthetic or historic value worth preserving or need some additional help with litter issues. Approved segments are marked with signs to notify motorists of additional litter fines: doubled penalties for motorists caught scattering rubbish and tripled when it is done by a commercial business. Litter Enforcement Corridors also offer increased safety for workers or volunteers who are picking up trash in a designated corridor.

In mid-June, District 2 held a celebration event to recognize the efforts of Adopt-A-Highway volunteer groups in Elk and McKean counties. The event was held at the Rails to Trails trailhead located in Mt Jewett. Two of District 2's long-standing Adopt-A-Highway groups attended the event. They are the Mt Jewett Rotary and the Spencer family.

Susan Skowyra, PennDOT Maintenance Manager for Elk and McKean counties, noted: "Our Adopt-A-Highway program is healthy and active thanks to our many volunteer groups. With more than 120 groups across the two counties, we are having a significant, positive impact on reducing the amount of litter across state routes. These volunteer efforts also help us stretch funding further. We were thrilled to note their achievements at the June event."

Additionally, all nine counties in District 2 dedicated Maintenance crews for a summer litter pick-up blitz. Between August 10 and September 3, each county cleared litter from high-traffic roadways. Combined, our crews addressed sections of 30 different roads across the district.

As an example of the impact litter clean-up can have, Elk County reported picking up 170 bags of trash. McKean County reported picking up 264 bags of trash, as well as 1.5 tandem loads of miscellaneous items, such as car parts, furniture, washers and more.

