

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

PENNDOT HONORS 2021 STARS OF **EXCELLENCE**





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

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

We hope you enjoy this latest issue!

SMART MOBILITY ON CENTER STAGE AT SXSW 2022

By PennDOT Secretary Yassmin Gramian, P.E.



In March, Secretary Yassmin Gramian traveled to Austin, Texas, for the annual South By Southwest (SXSW)

Conference, which brings together a global community of thinkers to discuss cutting-edge ideas and diverse topics. Selected to speak among thousands of applicants, the Secretary joined Raj Rajkumar of Carnegie Mellon University's (CMU) Mobility21 initiative, Courtney Ehrlichman of Panasonic Smart Mobility, and Andrew Woelfling of Argo Al for a discussion entitled "Driving AV Technology Forward for Citizens."

The panel highlighted how Pennsylvania's public, private, and academic sectors are working together to safely grow the autonomous vehicle (AV) industry in the state, serving as a global model for deploying the technology and creating new jobs in the process.

Why Pennsylvania? Panelists explained how the Commonwealth and its world-class research universities have long served as a breeding ground for technological advances, with CMU becoming known as the "birthplace of self-driving"

vehicles" in the 1980s. The DARPA Grand Challenge, an initiative of the U.S. Department of Defense, was established in 2004 to advance the development and deployment of AV technology. In 2007, a CMU and General Motors team – led by Rajkumar – took home the \$2 million prize after its AV navigated a 60-mile urban course in 60 minutes.

PennDOT, under Secretary Gramian's leadership, has worked diligently to sustain Pennsylvania's leadership in AV research, while ensuring that public safety remains the paramount priority as AVs are tested on roadways.

During the panel, Gramian stressed that as a public agency, "PennDOT is responsible for the safety, accessibility, mobility and quality of life for all people in the state. When it comes to AV technology, public agencies must be engaged at every level with the private sector and academia to ensure we have all of the means needed to take AV technology to the next level."

The Secretary also emphasized that PennDOT is just a piece of the puzzle for advancing AV technology.





PENNDOT HONORS 2021 STARS OF EXCELLENCE VIRTUALLY

Each year, PennDOT recognizes select employees for their outstanding performance in providing the very best transportation services to Pennsylvanians every day. There were 32 employees from around the state given a Star of Excellence Award, the agency's highest recognition.

These recipients represent a variety of organizational positions, spanning from highway maintenance and driver and vehicle service workers, to traffic control specialists, communications staff, and design and engineering specialists.

Because of the continuing presence of COVID-19, they were honored during an online ceremony.

From the descriptions of our Stars' achievements, you will see how the day-to-day work of exceptional individuals spells great success for PennDOT: significant savings for taxpayers, improved service delivery, and advancements in safety and productivity.

Winners of the 2021 Star of Excellence Awards are listed below. For more information on why each winner was selected, view the Star of Excellence ceremony program (PDF) at https://bit.ly/3LwF9ju.

DISTRICT 1

Mark A. Nicholson, P.E. - Bridge Engineer

Zachary H. Miles, EIT – Senior Civil Engineer Supervisor (Transportation)

DISTRICT 2

Adam D. Bechdel – Acting Highway Maintenance Manager

Janet L. Caldwell - Stock Clerk 3

DISTRICT 3

Melissa Kiessling – Plant Maintenance Materials Coordinator

Tom Poploskie – District Chief of Survey

DISTRICT 4

Dawn E. Kidder – Roadway Programs Manager

Lonell C. Shalkowski, P.E. – Assistant Portfolio Manager

DISTRICT 5

Thomas Fish – Transportation Construction Inspection Supervisor

Shane Rohrbaugh – Transportation Equipment Operator Specialist (TEOS)

DISTRICT 6

Michelle McGrath - Clerk Typist 2

Patrick Pietrak – Building Maintenance Foreman

DISTRICT 8

Mike Dieter – Transportation Construction Manager 3

Sheila Hromadik – Civil Engineer (Bridges)

DISTRICT 9

Jason A. Vancas – Transportation Construction Manager 2

Luke Llewellyn – Assistant Highway Maintenance Manager

DISTRICT 10

Amber Lowmaster - Roadways Program Technician 2

Matthew Forni – Maintenance Repairman 2



DISTRICT 11

Lori Musto – Allegheny County Manager

Lori Miles – Construction Support Services Manager

DISTRICT 12

Michele DeFrancesco – Clerk Typist 3

Melissa R. Maczko – Administrative Assistant 1

CENTRAL OFFICE

Amanda M. Frank – Management Analyst 2, Administration

Jodi Nolt – Administrative Officer 2, Administration

Larissa Newton – Digital Director, Communications

Ngani Ndimbie – Executive Policy Specialist, Policy

Connie Sprague – Employee Safety Division Manager, Highway Administration

Daniel J. Whetzel – Emergency Incident Management Section Chief, Highway Administration

Michele Harter, P.E. – Program Manager 1, Highway Administration

Raymond Green – Transportation Planning Manager, Planning

Anthony Stever – Operating Program Division Manager, Multimodal

Shane Moyer – Bureau of Support Services Director, Driver and Vehicle Services

Note: If you're having trouble viewing the slideshow, you can view the album on Flickr at https://bit.ly/3vWf7zq.



PENNDOT CELEBRATES EMPLOYEE INNOVATION AT ANNUAL

AWARDS CEREMONY By PennDOT Bureau of Innovations

PennDOT Secretary Yassmin Gramian, P.E., hosted the annual PennDOT Virtual Innovation Award Ceremony in December 2021, recognizing the groundbreaking work by 48 PennDOT employees over the past year.

"As we search for solutions to our growing infrastructure needs, it is crucial that we demonstrate to our customers that we are committed to efficient and effective operations," Secretary Gramian said in her welcoming remarks. "As we continually search for the best solutions to our growing infrastructure needs, it is crucial that we empower our employees to recommend, practice and participate in the actions we must take to meet those needs.

"The innovations we celebrate today are testament to the passion of our employees and their desire to demonstrate to our customers that we are committed to efficient and effective operations," the Secretary added.

Acting Executive Deputy Secretary Melissa J. Batula, P.E., introduced and highlighted each award winner's idea or smart practice.

"Innovation and problem solving are at the heart of what we do each and every day," she said. "PennDOT is an amazing agency driven by you, our outstanding employees, who come to the job each and everyday intent on doing their very best and always looking for ways to improve."

Among the award winners included an effort to increase efficiency of the brine production in District 1 from 5.000 gallons per hour to 7,500 gallons per hour with no loss of quality or consistency; raising the exhaust outlet on PennDOT's paint trucks to prevent overheating of the paint system's compressor; switching to an electronic filing system for fuel reports to reduce paperwork and save processing times for clerical staff; and the deployment of Automated Flagger Assist

Devices, which are placed at the end of work zones and can be operated by one person using a remote controller, increasing safety and saving money. During the event, Secretary Gramian also presented the first-ever George W. McAuley, Jr., P.E., Innovation Award to District 12's Safety, Quality and Innovation Council.

The award is named for the late executive deputy secretary, who, Secretary Gramian said. "was



committed to PennDOT's success and to ensuring it would aggressively pursue every innovation possible to do its job better." "This award recognizes an employee-driven team that promotes and foster innovation at all levels of the organization."

In 2021, the 26 permanent members of the council developed a plan that brought new vigor and direction along with an added focus of promoting and celebrating innovation. The plan sets forth the council's new mission to maintain a high-quality standard to implementation of innovation, new program development and Lean continuous process improvement.

"This gets to the heart of George's desire to give every PennDOT employee a seat at the table when it comes to promoting and implementing change," the Secretary said.

HELP PENNDOT PUT THE BRAKES ON HUMAN TRAFFICKING

Human trafficking is happening every day and everywhere – here in Pennsylvania and across the United States. It's estimated that at least 25 million men, women, and children around the globe are held against their will and trafficked into forced labor and prostitution as a direct result of human trafficking.

While Human Trafficking Awareness Day – or #WearBlueDay, an initiative of the Department of Homeland Security's Blue Campaign – is observed on January 11 as a way to raise awareness and put the brakes on this horrific crime, it is important year-round.

As the secretary of PennDOT, the agency that oversQees programs and policies affecting highways, urban and rural public transportation, airports, railroads, ports, and waterways, I'm well apprised of the role that transportation systems play in helping to perpetuate – or STOP – this epidemic. Traffickers often frequent bus stops or transit centers to find potential victims or use mass transportation to shuttle their victims to and from places where they will be sold. Catching these criminals while in transit is often one of the few opportunities to recognize and report traffickers before the victims disappear.

Since 2016, PennDOT has been a national leader in working with DHS, the U.S. Department of Transportation, and other government, non-governmental, law enforcement, and private organizations to make Pennsylvania a safer place and bring those who exploit human lives to justice. PennDOT has trained close to nearly 600 driver license and welcome center employees, as well as almost 15,000 transit agency employees in how to spot the signs. And, our efforts have been employed by other states and jurisdictions across the country.

To learn more about PennDOT's efforts, visit our human trafficking media center. You can also follow the @DHSBlueCampaign on Facebook, Twitter, and Instagram for more information about #WearBlueDay and other campaign efforts throughout the year.

NORTHWEST EMPLOYEE RECOGNIZED FOR HELPING STRANDED MOTORISTS By Jill Harry, Community Relations Coordinator, District 1

Mindy McFetridge
(second from left) was
awarded a Workplace
Hero award for her
actions to help two
stranded motorists. She
is pictured with
Venango County
Manager Paula Klingler
(left), District 1
Executive Brian
McNulty, and Assistance
District Executive —
Maintenance Doug
Schofield.

Before closing the book on 2021, District 1 paused to add a name to the list of honored members of its team.

Late last year, Venango County equipment operator Mindy McFetridge was given the Workplace Hero award for her actions of going above and beyond to provide service to two people stranded on the side of the road on November 15, 2021.

"PennDOT is an organization based on service to the public, and our employees work every day to fulfill that mission," said Brian McNulty, District 1 Executive. "Mindy is a great example of how the community service mindset can positively impact the lives of strangers and how kindness can be life-saving."

McFetridge was traveling with her daughter in the Grand Valley area of Warren County when the two spotted a vehicle stopped on the side of the road. When the vehicle and its senior occupants, Timothy and Anita Wahl, were still there an hour later that afternoon, the duo pulled over to see what type of help was needed.

Cell phone reception in that area was unreliable and the weather was wintry and cold. McFetridge offered to assist with locating towing services for the couple, who are from New York state. Along with making the phone calls and tracking down a hauler who could cross state lines, McFetridge offered the out-of-area visitors food and shelter from the chilly temperatures.

Early the next morning, the Wahls finally arrived home, safe in major part because of McFetridge's actions and dedication to community service.

"I cannot express to you how hopeless our situation felt to us. We are new to the area and had no one to call. To have a stranger open her heart and home to help us was nothing short of a miracle," Timothy Wahl wrote to PennDOT following the incident.

On December 22, McFetridge was awarded a plaque in recognition of her excellent customer service. McNulty presented the honor and relayed the story to the small group gathered for the informal ceremony.

"It could happen to anyone. All you can do is hope that someone else would help you," she said. "Around here, lending a helping hand is just what we do."

PennDOT became aware of Mindy's actions when Timothy Wahl submitted a comment through the Kudos form available on www.penndot.gov.

"We are proud to have Mindy as part of our team and not surprised at all by her actions. It is in her nature to care about her community and help others without hesitation. She is the definition of excellent customer service," said Paula Klingler, Venango County Manager.

McFetridge is a nine-year employee with PennDOT Venango County and works out of the Pleasantville maintenance facility.

Workplace Hero is an award open to PennDOT employees who, during work hours or as a representative of the department, take actions that prevent the death or serious injury of a co-worker or member of the public.

McFetridge joins the ranks of other District 1 employees to receive the honor in recent years, including 2018 Mercer County employees Jim Tuchek, Rick Stoyer and George Nunemaker, and 2019 college interns Jacob Southwick and Nick Swatzler.

ON ITS WAY: HISTORIC BRIDGE DISASSEMBLED FOR REPLACEMENT AND REUSE

By Jill Harry, Community Relations Coordinator, District 1



t was an all-day affair to remove the historic Kelly Road Truss Bridge from over the Shenango River in Mercer County.

The steel thru truss structure was one of two one-lane bridges in the area. It was built in 1897 but has been closed since 2005 due to severe deterioration.

Next to the 125-year-old bridge is a two-span, rolled I-beam stringer bridge built in 1967. It is classified as poor condition.

Traffic currently uses the "newer" of the two bridges with traffic controlled, currently by temporary signals.

Work to replace the bridges, which are owned by Mercer County and connect the City of Hermitage and Sharpsville Borough, started in early November.

Work includes replacing the existing open-grid bridges with a one-span steel girder bridge with sidewalk and two 10-foot travel lanes. The project also includes new roadway approaches and updated guiderail.

To make room for the new bridge, the old ones will have to go. The I-beam stringer bridge will eventually be demolished, but the truss bridge will be refurbished and repurposed in part. Portions of the historic structure will be installed on a walking trail in a nearby park.

The process of making that happen started in November when workers began the preparation process to remove the truss in

sections. On December 7, 30- to 40-foot sections of the bridge, which weighed 20 to 30 tons per piece, were hoisted into the air and moved to a nearby landing spot. The process took 12 chilly hours but was completed in a single day.

"We used every bit of sunlight to finish the work, but the team was great and made it happen," said PennDOT project manager Nik Tsikouris.

Once on land, the bridge was further disassembled and taken to a workshop to be repaired and painted.

In 2022, the end portals of the bridge will be reassembled for use by cyclists and pedestrians to use. The work is for historic preservation and it will no longer sit over water.

The contractor is Mekis Construction Corporation of Fenelton, PA. The contract cost is about \$4 million. Work is expected to be completed early in the 2023 construction season.

This is the second locally-owned truss bridge District 1 helped remove and refurbish this year. In July, the Messerall Truss Bridge in Crawford County was moved in one piece.

Through a partnership with the Department of Conversation and Natural Resources, the bridge will be refurbished and relocated to Pymatuning State Park next year as part of the bike trail system.

WARREN COUNTY EMPLOYEES HONORED WITH INNOVATION

AWARD By Jill Harry, Community Relations Coordinator, District 1

Two District 1 employees in Warren County received special recognition for implementing a new system to limit the number of costly brine pump replacements needed at stockpiles during the winter months.

Warren-Forest County Manager Adam Elms and Warren County Equipment Operator Frank Byers were presented with an Innovation Award in December. The two worked together to create a new storage area for brine pumps and a mock brine pumping area for testing and troubleshooting.

"This is a great example of employee-initiated ideas leading to more efficient and effective operations," said Doug Schofield, District 1 Assistant District Executive – Maintenance. "In this case, Mr. Byers saw a way to improve his work and acted on it by developing a unique solution."

Elms said Byers, who in 2019 was serving as Warren-Forest's designated "brine maker," was tasked with repairing the pumps and completing preventative maintenance on the system.

Byers quickly realized he was able to work on the pumps but didn't have the ability to test them in-house and, therefore, diagnose specific problems. This often led to troubles arising in the field when the brine was typically being used to pre-wet materials during winter roadway maintenance. When the pumps failed, they were back to the main garage for repairs or complete replacement. Each incident costing time and money and interrupting efficiency in winter services



To help reduce these incidents, Byers got to work on creating a system to troubleshot issues by run pumps in the garage as if they were out in the field. This helped identify and rectify problems sooner and with less interruption to services. This ultimately cut down on costs and has led to a faster, more consistent brine production with an overall improved process.

Elms, who was recognized for his support of innovation and facilitating the implementation of the idea added, "We don't really see too many problems with the pumps now. It's really a credit to Frank and his ingenuity."

Elms and Byers were two of the 48 PennDOT employees recognized for ideas and smart practices submitted through IdeaLink 20/20 and PennDOT WorkSmart, online employee engagement systems that allow employees to share their ideas and efficient work practices. The brine pump idea was submitted through the WorkSmart program.

WESTERN PENNSYLVANIA EMPLOYEES GO ABOVE AND BEYOND TO HELP DRIVERS IN A CRASH

By Tina Gibbs, Community Relations Coordinator, District 10

On November 15, 2021, Jefferson County PennDOT responded to a tractor trailer crash on Interstate 80 eastbound, just east of the North Fork Bridge.

The tractor trailer went through the guiderail and rolled over the embankment on the south side of the interstate. The driver and passenger were both taken by ambulance.

We recently received the following post from Star Floyd, one of the people injured in the crash, in December.

"My partner and I (13 weeks pregnant) were in a tractor trailer crash on Interstate 80 with our three dogs. Our three dogs escaped following the crash and were out of the vehicle. Two were found immediately, but we didn't find the third before we were taken to the hospital. The amazing PennDOT crew of Candy Schaffer, Jeff Kaza, and Terry Mitchell, continued to look and found my dog. They contacted the hospital to make arrangements to get her back to me. My partner was in the hospital for three days longer than



me. Karen Burkett brought me dog food, Jeff's wife took me to get new clothes, and Candy helped me find shelter. I was so blessed and thankful for them. I have no one in PA and both of our wallets and phones were at the crash site. Thank you to all my PennDOT angels. I don't know how I would have made it through this horribly stressful event by myself. You are a blessing to this world."

This crew could have finalized the crash scene and moved on to the next job, however they continued to think of the people involved in the crash and offer support to them. Kudos to Candy Schaffer (TEOB), Jeff Kaza (TEOB), Terry Mitchell (Highway Foreman III), and Karen Burkett (Assistant Highway Maintenance Manager).

PENNDOT TRAINS DRONE PILOTS, SPOTTERS TO MONITOR SINKHOLES, ROCKSLIDES, HIGHWAY PROJECTS AND BRIDGES

By Daryl St. Clair, Special Assistant to Deputy Secretary

Inmanned Aerial Systems (UAS), or drones, have proved to be a useful tool for PennDOT. Drones are used to remotely view areas which are not accessible by foot, that provide a safety hazard to personnel, or where a "bird's eye view" is needed. The Bureau of Construction and Materials, Central Office Geotechnical Section (CO Geotech) has used drones since 2012 to view and monitor sinkholes, land/rockslides, and to provide an overview of highway projects and bridge construction.

PennDOT requires an operator and spotter for drone flights. PennDOT's Bureau of Aviation requires both the drone operator and spotter to obtain a UAS pilot license from the FAA. The operator is to submit an AV-14 Form, which explains the flight location and conditions, to their UAS Coordinator. Approval for the flight must be obtained in advance of the drone flight, and when the drone is in flight the operator must always keep the drone within their line of site. The drone is not authorized to be flown over traffic or people, and flight is not recommended when precipitation and strong winds are forecast. CO Geotech's UAS system has greatly increased capability to assist districts, while improving the safety of field views when used as approved and under correct conditions.

CO Geotech currently uses the DJI Phantom 4 RTK and the DJI Mavic Mini drones. Both drones can fly approximately 30 minutes on a fully charged battery, with up to 2.5 hours of



flight time using backup batteries. The operator uses the drone's camera to take high resolution photos and videos. Stabilizing systems in the drone keep the images clear and stable, even in a moderate wind. The drone's "home" function can be used to automatically return the drone to its takeoff location at any point during the flight to facilitate a safe landing.

As UAS is an emerging technology, CO Geotech coordinates with the FAA, as well as PennDOT's Bureau of Aviation, and Photogrammetry and Surveying Section to ensure FAA and PennDOT UAS requirements and regulations are followed. CO Geotech also provides feedback to these agencies to assure useful results, and safe and efficient UAS operation.

For further information on CO Geotech's drone, or for more information on drone use for geotechnical applications, please contact the Central Office Geotechnical Section.

FIVE NEW REPLACEMENT SALT STORAGE BUILDINGS OPEN ACROSS PENNSYLVANIA

By Bureau of Office Services

PennDOT's Bureau of Office Services opened five new replacement salt storage buildings for use during last season's winter operations.

The buildings are located in Ridgway (Elk County), Blossburg (Tioga County), Courtdale (Luzerne County) and Natrona Heights (Allegheny County) and Armell (Washington County). The availability of these buildings enabled our county maintenance staff to provide more efficient and timely winter operations for the travelling public.

The immediate need for these new replacement salt storage buildings became clear when the previous buildings had to be closed during last winter due to structural damage caused by excessive snow loads on the roofs and other winter-related damages. In spring 2021, the buildings were fast-tracked into design with an accelerated construction schedule that started in August 2021.



These glue-laminated, truss design winter material storage buildings feature concrete walls, high interior clearances, LED lighting, maintenance free and recycled products, safety warning signs and material fill height markings. This new design of the glue-laminated building is how the department will eventually replace older hi-arch gambrel and husky style buildings moving forward. PennDOT now has a total of ten buildings statewide featuring this new design in its inventory of over 1,700 various types of winter material storage buildings.

Crews are excited to have these new buildings, and the Bureau of Office Services is pleased to help support the needs of the Districts and the traveling public at these locations.

PENNDOT, DCNR DISCUSS TRANSPORTATION FUNDING AT HISTORIC HARRISBURG AREA BRIDGE

By Dave Thompson, Community Relations Coordinator, District 8

When Wolf administration officials wanted to highlight benefits from the passage of the federal Bipartisan Infrastructure Law (BIL), they had to look no farther than PennDOT District 8's Route 462 Veterans Memorial Bridge.

Known locally as the Columbia-Wrightsville Bridge, the bridge spans the Susquehanna River, connecting the historic communities of Columbia in Lancaster County, and Wrightsville in York County. The 1.26-mile-long bridge, itself a historic structure, was built in 1930 and is listed on the National Register of Historic Places. The bridge is slated to undergo a major rehabilitation project beginning in 2023.

During a media event held at Columbia River Park with the bridge as a backdrop, PennDOT Acting Deputy Secretary for Highway Administration Mike Keiser, Acting District 8 Executive Chris Kufro, and Department of Conservation and Natural Resources Recreation and Conservation Manager Lori Yeich highlighted benefits of the law, including its impact on the state's bridges.

"The passage of the Bipartisan Infrastructure Law is the largest federal infrastructure investment in decades, and the largest ever investment for bridges specifically," said Acting Deputy Secretary Keiser.

In addition to the Columbia-Wrightsville Bridge being "one of Pennsylvania's most picturesque," it also includes an important bike route and connects parks and other recreational amenities on either side of the river, he said.

He noted that investing in infrastructure – whether highways and bridges, bike and pedestrian facilities, or trails and parks – has historically paid dividends for the communities in which they are located. This type of infrastructure has been "chronically underfunded for many years, which makes these investments even more challenging," he added.

The new law is largest infrastructure investment since 1993. "We really hadn't had any adjustment at the federal level since that time," he said.

Pennsylvania is expected to receive an estimated \$4 billion in new federal highway and bridge funding over five years, including an estimated \$1.6 billion for bridges.

The bridge funding is welcomed, as the state is home to a large number of state and local bridges, many of them aging, Keiser said. Each year, about 250 bridges are added to the state's list of bridges in poor condition, he noted.

"Pennsylvania is ready to put these funds to good use on meaningful projects that will modernize our infrastructure and create sustainable, good-paying jobs that will be



transformative of our transportation system and local economies," he added.

Acting District 8 Executive Chris Kufro noted the river park was an excellent location to discuss infrastructure funding. The Columbia-Wrightsville Bridge is iconic, he said, and plays a major role in the economies and quality of life of the communities on either side of the river.

"It is long overdue for another major rehab so it can be enjoyed for future generations," he said.

He lauded the excellent project collaboration PennDOT has had with local communities as the bridge project has been developed. "They provided valuable input, not only toward the bridge, but also toward key enhancements that will be part of the project corridor," he said.

This includes bicycle and pedestrian enhancements that will "regionally connect a wealth of local recreational parks and trails immediately on each side of the bridge."

The communities also provided valuable input into the bridge's adjacent intersections, which are being designed as gateways to both historic communities, he added.

"And finally, stakeholders are also providing feedback into the proposed lighting enhancements on the bridge, that will not only help all three modes of transportation on the bridge but will be readily viewed from residence and businesses that line the riverfronts," he said.

"We appreciate the spirit of cooperation and look forward to advancing this project, which is vital to the communities and the region," he said.

DCNR's Lori Yeich said the bridge project is an excellent opportunity to increase connections between communities on either side of the river, as well as regional trail systems.

She said most people think of traditional infrastructure as that which accommodates motor vehicle – cars, truck and motorcycles.

"We have all joined together in a partnership to connect other modes of transportation just as important, and that is to connect people through bicycles and pedestrian accommodations."

Creating infrastructure that connects people to places they care about also creates infrastructure for sustainable economic development, she said.



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

Nearly 800,000 veterans call Pennsylvania home, PennDOT is proud to offer services that benefit the nation's fourth-largest veteran population.

Veterans can show pride in their service by requesting a veterans' designation on their driver's license or ID card. There is no charge for the designation, however, applicants must pay any applicable initial issuance, renewal or duplicate driver's license or ID card fees. To qualify, a person must self-certify and have received a Certificate of Release or Discharge from active duty (DD214) or equivalent for service in the United States Armed Forces, including reserve components, or the National Guard.

Veterans can further distinguish themselves through a variety of military-themed registration plates identifying their branch of service or depicting certain military honors received during their tour of duty. Details on specific requirements and the many types of plates offered can be found on the PennDOT Driver and Vehicle Services website — www.dmv.pa.gov — by clicking on the "Vehicle Services" link, then "Military Personnel Veterans" in the dropdown, and then "Military Plates."

All Pennsylvania vehicle owners can show their support of veterans by purchasing a "Honoring Our Veterans" license plate, which was authorized by Act 194 of 2012 and features an image of the American Flag and a Bald Eagle and contains the words "Honoring Our Veterans."

The plate is available for passenger cars and light trucks up to 10,000 pounds as well as motorcycles, and costs \$35. Fifteen dollars from the sale of each license plate goes to the Veterans Trust Fund administered by the Department of Military and Veterans Affairs. The funds are used to support and assist Pennsylvania veterans and their families through grants to veterans' service organizations and other charitable organizations. Funds were also used to implement the veterans' designation on Pennsylvania driver's licenses and the new system permitting contributions to the Veterans Trust Fund when motorists obtain or renew their driver's licenses or vehicle registrations. For more information and to get a copy of the application, visit https://www.dmv.pa.gov/VEHICLE-SERVICES/Registration%20Plates/Special-Fund/Pages/default.aspx.

In Pennsylvania, Commercial Driver's License (CDL) Knowledge and/or Skills Test can be waived for Pennsylvania residents who are on active or reserve military duty or recent honorably discharged veterans if those service members have at least two years of experience operating a commercial motor vehicle as part of their military job requirements.

The waiver applies to CDL applicants who wish to operate vehicles similar to those they operated in the military. To determine if you qualify for the Military CDL Knowledge and/or Skills Test Waiver in Pennsylvania, please visit https://www.dmv.pa.gov/Information-Centers/Military-Veterans/Pages/Military-Personnel.aspx.

TRANSPORTATION FUNDING IN PENNSYLVANIA

Transportation funding is a complicated topic, but we're striving to be transparent and help Pennsylvanians understand this complex issue.

Sometimes this means celebrating important milestones, such as the recent passage of the Bipartisan Infrastructure Law. However, it also means calling attention to problems where they exist. An example of this is Pennsylvania's gas tax, which isn't a reliable funding source in today's world.

We recommend visiting the Funding page, www.penndot.pa.gov/about-us/funding, of our website to see a comprehensive overview of transportation funding in PA, but here are some of the most common questions we're asked.

"Pennsylvania will be getting money from the new federal infrastructure bill. Why are you still talking about funding?"

The passage of the Infrastructure Investment and Jobs Act is the largest federal infrastructure investment in decades, and PennDOT is grateful for this meaningful, historical action. It will allow Pennsylvania to invest \$4 billion in additional dollars over five years to modernize our infrastructure like roads, bridges, ports, and rail, while creating sustainable, good-paying jobs that will be transformative of our transportation system and our local economy.

There's no doubt that these critical investments will have a major impact across the state. However, a one-time investment doesn't eliminate the need for reliable, sustainable funding at the state level.

You can try your hand at budgeting for PA's transportation system with our interactive Closing the Gap tool.

"Where are you spending our tax dollars?! It must be lining someone's pockets..."

Each year, we publish a detailed breakdown of PennDOT's financial information in our annual report. The same information is also available on our PennDOT Results page at: www.penndot.pa.gov/about-us. Additionally, the PA Auditor General conducted an independent audit on our agency in 2019 to make sure all funds were being used appropriately.

"You're giving money to the State Police. That's your only funding problem, right?"

Close, but not exactly.

According to Pennsylvania law, the Pennsylvania State Police receives funds from the Motor License Fund (MLF) to support their highway safety activities.

Steps have been taken in recent years to decrease the amount of funding they receive. In 2016, legislative action capped expenditures from the MLF going to the PA State Police beginning with the 2017-18 budget and concluding with the 2027-28 budget.



At PennDOT, we understand that police presence is important to maintaining safe highways and adequate funding is needed to support this. However, we want to see a more sustainable solution to the State Police funding challenge that allows more funds from the MLF to fund infrastructure improvements — like fixing bridges and repairing potholes.

In fact, the Transportation Revenue Options Commission (TROC) recommended that solutions for funding PSP be explored outside of the Motor License Fund. Those recommendations can be found in the TROC report at: https://bit.ly/3PeGBt5, which was submitted to the governor on July 30, 2021.

"Why do you spend money on public transit instead of roads and bridges?"

In Pennsylvania, we don't take money away from roads and bridges to fund public transit. Gas tax revenues do not fund public transit, and Act 89 of 2013 established the Multimodal Transportation Fund. This stabilizes funding for ports and rail freight, increases aviation investments, establishes dedicated funding for bicycle and pedestrian improvements, and allows targeted funding for priority investments in any mode.

While roads and bridges are an extremely important part of Pennsylvania's transportation infrastructure, all transportation-related infrastructure falls under the umbrella of PennDOT's responsibilities. PA's vast transportation network includes roads, bridges, aviation, rail freight, public transit, etc. It's all part of helping Pennsylvanians get where they need to go safely, while also making sure companies can transport goods across the state efficiently to serve our population.

Please note that PennDOT's multimodal program is separate from the Multimodal Transportation Fund administered by the Commonwealth Financing Authority.

"Where can I learn more about all this?"

Great question! Please visit <u>penndot.pa.gov/funding</u> for more information about transportation funding in Pennsylvania.

Our funding challenges are complex and there is no simple, one-size fits all solution. If you'd like to receive updates about transportation funding in PA, sign up for our PennDOT Pathways newsletter.

COMMONWEALTH, NORFOLK SOUTHERN OPERATING AGREEMENT TO EXPAND WESTERN PA. PASSENGER-RAIL ACCESS



Pennsylvania Department of Transportation (PennDOT) and Norfolk Southern Corporation (NS) have reached an agreement to expand passenger rail access in western Pennsylvania. The milestone follows a February 2022 announcement that the parties would jointly examine opportunities to eliminate chokepoints and improve Pennsylvania's rail system to better permit freight and passenger trains to operate together.

Currently, the Pennsylvanian Amtrak service travels roundtrip between New York City and Pittsburgh via Harrisburg once daily. The agreement that Norfolk Southern and PennDOT developed anticipates increasing those Pennsylvanian passenger services to twice a day. Eastbound service would depart Pittsburgh at 7:00 AM and 12:30 PM and westbound service would depart Harrisburg at 9:41 AM and 4:40 PM.

To support these expanded passenger operations, the commonwealth will invest more than \$200 million in infrastructure and safety improvements that will be constructed and maintained by Norfolk Southern. The future improvements and construction will stem from a previously released Norfolk Southern operational feasibility study (PDF) and includes upgraded rail lines, passenger platforms, sidings, and necessary communications signals infrastructure.

PennDOT will redirect state Multimodal Transportation Fund dollars to fund the project, as part of the Bipartisan Infrastructure Law's (BIL) funding is intended to replace train sets on the Amtrak passenger-rail network. PennDOT had been setting aside funding to meet requirements from a 2008 federal law for Pennsylvania's contribution toward train set costs. Additionally, PennDOT anticipates applying for additional BIL funds to support station and platform improvements along the route.

Over the past four months, PennDOT and Norfolk Southern collaborated to develop the operating agreement framework and finalized the improvements necessary to increase passenger-rail service on the Norfolk Southern-owned corridor between Harrisburg and Pittsburgh. The parties anticipate a final definitive agreement to be developed by the end of 2022. Construction can begin after the definitive agreement is executed, with the new service anticipated to start within three years of the definitive agreement's execution.

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

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

MEET TIMOTHY BURKE

A PENNDOT EMPLOYEE OUTRUNNING MULTIPLE SCLEROSIS

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



When Third-Party Non-Commercial Compliance Manager Timothy Burke was diagnosed with Relapsing-remitting Multiple Sclerosis (MS) 21 years ago, he began experiencing physical and cognitive difficulties that would come and go. However, instead of letting the disease defeat him, he decided to "outrun MS" by participating in marathons and other endurance events.

Burke began distance training after 11 years with MS. His current training regimen consists of a four-day routine of speed running, short to middle distance running, and long distance running.

"I made the decision that as long as I was running, MS would have to chase me to gain ground," Burke said.

Exercise can help to ease the symptoms of MS, and Burke engages in plenty of exercise, averaging about 25 miles of running a week. He increases his running distances the closer he gets to a race to help prepare himself for the challenges of a marathon.

Burke has completed six full marathons, having run 26.2 miles in each one. He has also competed in a 51-mile ultramarathon.

In addition, Burke has also participated in two Olympic distance triathlons, which include 1.5 miles of swimming, 25.5 miles of biking and 6.2 miles of running.

"So far, I have been able to stay ahead of the disease progression and achieve every running goal I've set for myself," Burke said. "I don't win many races, but every time I cross the finish line, it's a victory."

On top of his participation in athletic activities, Burke also serves as a National MS Peer Connection volunteer. His duties include having conversations with those who have recently been diagnosed with MS, and fielding questions from their friends and family.

"[The program] can help those living with MS, as they can get information and reflection from someone who lives with it every day," said Burke. "I'm always available to answer questions and provide counsel on how to move forward in the shadow of this debilitating disease."

PENNDOT ELIMINATES TRUCK WEIGHT CLASS STICKERS

In support of its continuing focus on modernization and streamlining processes as well as an added convenience to customers, PennDOT announced that the use of weight class stickers has been eliminated, effective January 29, 2022.

A vehicle's weight classification is printed on the vehicle's registration card carried within a vehicle and produced during a vehicle stop. Eliminating weight class stickers will have no bearing on revenue as application fees are collected in accordance with established fee schedules.

PennDOT published its intent to eliminate weight class stickers in the Pennsylvania Bulletin in May of 2020.

All motor vehicle forms and publications related to weight class stickers are being updated to remove the reference of a "weight class sticker." The updated forms will be available on our website at www.dmv.pa.gov.

More information can be found on PennDOT's Driver and Vehicle Service website under the Elimination of Truck Weight Class Stickers page.

Customers may still obtain a variety of driver and vehicle products and services, including all forms, publications and driver training manuals, online through PennDOT's Driver and Vehicle Services website, www.dmv.pa.gov

NEARING COMPLETION: CHESTNUT STREET BRIDGE PROJECT

By Brad Rudolph, Deputy Communications Director, District 6

In support of its continuing focus on modernization and streamlining processes as well as an added convenience to customers, PennDOT announced that the use of weight class stickers has been eliminated, effective January 29, 2022.

The Chestnut Street Bridge over the Schuylkill River in Center City Philadelphia reopened on March 19, marking the substantial completion of PennDOT's \$105.1 million project that included repairs to eight other nearby structures on both sides of the river. The bridge had been closed to through traffic since August 2019.

During the Chestnut Street Bridge closure, crews repaired and repainted the bridge's steel superstructure; placed a new concrete deck; installed wider sidewalks; replaced the bridge's decorative lighting, parapets, and railings; and created a dedicated, parking-protected bicycle lane that extends along Chestnut Street between 34th Street and 22nd Street.

Structural repairs also were completed on historic stone arch bridges carrying Chestnut Street over the CSX Railroad and over 24th Street on the east side of the Schuylkill River. 24th Street will remain closed at Chestnut Street until rehabilitation of the masonry stone facades of both bridges finishes in early summer.

On the west side of the river in the vicinity of 30th Street Station, the structural components of two Schuylkill Avenue viaducts over Interstate 76 (Schuylkill Expressway) between



Market Street and Chestnut Street, and between Chestnut Street and Walnut Street, were repaired, repainted and redecked.

Completion of a number of minor construction items will complete the entire project by early summer.

The structures on Chestnut Street were constructed between 1910 and 1960 and carry an average of 18,300 vehicles per day. The structures on Schuylkill Avenue were constructed in the late 1950's and carry an average of 8,600 vehicles per day.

For more information on the project, visit www.chestnutstreetbridges.com

#PASUPERLOAD22 MAKES ITS WAY ACROSS PENNSYLVANIA

Did you spot the superload? The Pennsylvania Department of Transportation (PennDOT) along with the Pennsylvania State Police and the United States Department of Transportation coordinated a superload being transported from West Milton, New York to Wampum, Pennsylvania. Traveling more than 400-miles across the state.

The superload was 213 feet long and weighed 294 tons. For scale, an adult blue whale weighs about 150 tons and can Essentially, the driver is towing the equivalent of two blue whales or 73 Hummer H1s according to Kristen Shaw of The Drive.

This shipment consisted of an empty steel tank that was removed as a part of the decommissioning of the D1G Prototype reactor at the Kenneth A. Kesselring Site in West Milton, New York. The D1G Prototype was used to train U.S. Navy Sailors on the safe operation of the nuclear propulsion systems on the U.S. Navy's nuclear-powered fleet and was shut down in 1996. Upon arrival in Wampum, the tank will be disassembled and recycled/disposed.

The superload travel plan involved 16 counties and featured ramp maneuvers, unusual traffic patterns, and slow-moving vehicles. The superload moved as a rolling slowdown using



two traffic lanes which resulted in traffic stoppages and travel delays. The majority of the transport took place during nighttime hours.

As luck would have it, mother nature made an appearance. Winter storm Izzy blanketed the entire state. Rain, sleet, snow and ice caused delays. While the trailer was parked for two nights due to the storm, there was only a one-day delay in reaching its resting place.

It was a monumental task to coordinate across two states and several governmental agencies. Kudos to everyone involved in this long journey!

BIPARTISAN INFRASTRUCTURE LAW FOR ELECTRIC VEHICLE INFRASTRUCTURE, UNVEILS EQUITY PRINCIPLES FOR INDUSTRY DEVELOPMENT





In February, officials from the Pennsylvania Departments of Transportation (PennDOT) and Environmental Protection (DEP) highlighted benefits to Pennsylvania from the passage of the federal Bipartisan Infrastructure Law (BIL), specifically for electric vehicle (EV) and alternative fuel infrastructure.

PennDOT also unveiled its EV Equity Guiding Principles for private industry and other agencies to consider as they plan and deploy EV charging infrastructure. The principles aim to increase accessibility to the infrastructure and maximize benefits for all Pennsylvanians.

The BIL provides states with \$7.5 billion to expand the EV charging network. Over five years, Pennsylvania will have access to \$171.5 million in formula funds for EV charging infrastructure and \$2.5 billion in discretionary grant funding opportunities for all alternative fueling infrastructure. The funding supports the commonwealth goal of expanding EV charging along the previously designated Alternative Fuel Corridors (AFCs) and Interstate lookalikes. Federal AFC criteria was updated this week to require AFC designated ready corridors to have charging stations no more than 1 mile from an Interstate exit or highway intersection (previously 5 miles) and no more than 50 miles apart. The department will review all corridors to align ready and pending corridors with the new criteria

Formula funds will flow through PennDOT and will be primarily focused on developing electric charging infrastructure on AFCs, taking miles from pending to ready status. From PennDOT's most recent update, there are currently 1,051 Interstate miles pending and 692 Interstate miles in ready status, under the previous designation criteria. Should PennDOT determine, and U.S. DOT certifies, that the AFCs are fully built out, then Pennsylvania may use funds to build EV charging equipment on any public road or in any publicly accessible location, including but not limited to parking facilities at public buildings, public schools, and parks.

The new discretionary grant program will allow Pennsylvania's eligible entities like municipalities, school districts, planning organizations and more to apply for funds to support local

communities in installing, operating, and maintaining EV charging equipment. Grant funds will also be available for electrifying school bus fleets and EV battery manufacturing and recycling programs.

PennDOT and DEP – following guidance issued from U.S. DOT – will collaborate with key stakeholders such as network companies, planning partners, and businesses on EV charging development. The newly announced equity principles will help the department evaluate EV proposals in accordance with the federal guidance and fall into five categories:

- Make EVs more affordable;
- Make EV charging more accessible;
- Invest in fleet electrification;
- Invest in traditionally underserved, low-income, persons of color and otherwise vulnerable population areas; and
- Increase EV awareness, education, and technical capacity.

The commonwealth's previous work and the new funding will support growing EV usage and industry transitions. There are more than 23,000 EVs registered in Pennsylvania, more than double the roughly 9,700 that were registered in March 2019. To enhance traveler information for the growing number of EV drivers, the state's traveler information system – <u>511PA</u> – now also includes EV charging station locations as an option on its traffic map. Using data from the U.S. Department of Energy, the map shows locations across the state by connector type, including CCS, J1772, CHAdeMO, Tesla, and NEMA.

More information on PennDOT's Alternative Fuel Corridors can be found on the department's website.

More information on Electric Vehicles in PA, including details on the DEP Alternative Fuel Rebate that provides higher rebates on the purchase of new or used EVs to income-eligible Pennsylvanians, can be found on DEP's website.

INNOVATIVE THINKING LEADS TO UNCONVENTIONAL PENNDOT AGILITY EXCHANGES By Penndot Secretary Yassmin Gramian, P.E.

Outside-the-box and unconventional thinking is at the heart of PennDOT's Agility Program, which celebrated its 25th anniversary in 2021. While service-for-service Agility exchanges are traditionally executed between PennDOT and local governments, innovative thinking has led to exchanges with several non-traditional PennDOT partners over the past 25 years, including airports, career and technology centers, hospitals, school districts and even volunteer fire departments.

One such non-traditional Agility exchange began with an idea from Joe Rossi, a former equipment operator in PennDOT's District 4, located in northeastern Pennsylvania. While working

on the front lines for PennDOT and through his work as assistant chief and president of the Union Dale Volunteer Fire Department in Susquehanna County, Rossi saw an opportunity to help advance the agency's innovative Agility Program.

Over the years, the fire department assisted PennDOT in informal ways, by hosing off equipment and allowing PennDOT to park chipping equipment at the fire station so it could be near a project area.

With the fire department in need of significant repairs to its parking lot, it is not in a position to pay the estimated \$20,000 for a full repaving.

"I inquired if there was a way PennDOT could help us with patching the parking lot, and the Agility Program was mentioned," Rossi said. "We could get involved since we had helped them in the past, and they were glad to help us."

"It was a good idea," Rossi said. "Being a volunteer fire department, we don't have the resources to go in and do pavement repairs. Not everyone knows how to do blacktop. It would've cost us a small fortune."

In return for the patching that PennDOT will perform, the fire department agreed to allow PennDOT to store chipping stones and other materials needed for nearby projects.

"We are fortunate to have such a good partner like the Union Dale Fire Department," said Erin Mazikewich, assistant highway maintenance manager in Susquehanna County. "When planning future projects, it helps to know that we may have a storage location closer to the actual job site. The reduced time in hauling from the fire department's storage location to the job site can result in more timely completion of

our project. We appreciate all the fire department does in and for the community, and we're happy to be able to help them out through the Agility Program."

In addition to volunteer fire departments, the following are some other examples of PennDOT Agility Program exchanges with non-traditional partners and in some instances non-traditional services that were exchanged.

In District 1's Warren and Forest counties, PennDOT has had a long-standing Agility agreement with the Allegheny National Forest. PennDOT painted lines and did some paving on forest roads. In return, the U.S. Forest Service provided conference

room space and graded some of PennDOT's dirt roads.

PennDOT's District 12 based in Uniontown had an Agility agreement with Fayette County Airport. The airport gave PennDOT space in an empty hangar that PennDOT could use for equipment and spare furniture storage and in return PennDOT painted the airport's yellow taxiway lines, did some crack sealing and sprayed herbicide for weed control.

District 12 also had an Agility agreement with the Washington County Fairgrounds in which

PennDOT received storage space, and PennDOT used a flush truck to wash down bleachers and did some fairground roadway repairs.

District 5, based in Allentown, had an agreement with the Lehigh Valley International Airport. PennDOT applied salt brine to some airport roadways and received use of airport wash facility to clean PennDOT trucks. The airport also took responsibility for plowing some turning lanes into the airport.

"There have been numerous Agility success stories across Pennsylvania over the past 25 years, several with non-traditional partner organizations," said Bob Snyder, acting Agility Program manager in PennDOT's Bureau of Innovations. "PennDOT and its partner organizations, non-traditional or otherwise, have continued to recognize the potential for innovative 'win-win' opportunities to make the program work for everyone involved and ultimately benefit the citizens of the commonwealth."

Do you have an innovative Agility exchange idea? Learn more by visiting the Agility webpage on PennDOT's website or by contacting pdagility@pa.gov.



SEVERAL PROJECTS/ INITIATIVES HIGHLIGHTED IN DISTRICT 2 MEDIA EVENT

By Marla Fannin, Community Relations Coordinator, District 2

In late March, District 2 held a special media event that touched on three different topics.

The event was staged outside of the Elk Visitors Center in Benezette, Elk County and covered the following:

- A construction preview of the 98 projects anticipated to start or continue in D2's 9-county region
- Discussion of the benefits coming to regional roads and bridges due to the federal Bipartisan Infrastructure Law (BIL).
- A celebration of the start of the Winslow Hill Road safety and elk viewing improvement project.



District 2 was joined by the state Department of Conservation and Natural Resources (DCNR), as well as PennDOT's Deputy Secretary for Multimodal Transportation Jennie Louwerse.

The event highlighted the importance of the 5.6-mile paving project on Winslow Hill Road (T-520), including roadway widening/reconstruction, improvements of roadway shoulders to enhance pedestrian movements, emergency vehicle accommodation, drainage, and guide rail. District 2 expects the completed project to enhance safety for residents and visitors during the elk viewing season. The \$2.8 million project is funded by the state Multimodal Transportation Fund.

This District 2 event got tremendous media coverage. Media in attendance included WJAC-TV, WTAJ-TV, DuBois Courier Express, St Marys Daily Press, Kane Republican, and Ridgway Record. The Courier-Express has filed three different stories from this one event: Main story from the event, second story about a signal project in DuBois highlighted during the event, and a column from the reporter about getting outdoors and seeing the elk.

Overall highlights in the PennDOT Engineering District 2 region include more than 210 miles of paving and repair or replacement of 53 bridges. These improvements include projects supported and accelerated by the Bipartisan Infrastructure Law. In 2022 alone, the BIL is bringing at least \$22 million in additional funding to be allocated by the department and its local Metropolitan and Rural Planning Organization (MPO/RPO) partners.

MEET SARAH MCINNES GEOTECHNICAL ENGINEER

By Brad Rudolph, Deputy Communications Director, District 6



In honor of International Women's Day this March, PennDOT's Philly region put the spotlight on the very talented and accomplished Sarah McInnes, who has been a member of the PennDOT family for nearly 27 years.

A Harleysville native, McInnes was recently promoted to senior assistant construction

engineer for services. She said at PennDOT she learned what it meant to be a civil servant. "Our leadership encourages flexibility, innovation and movement regardless of your position. I've had amazing opportunities that have shaped me and made me a well-rounded person here."

McInnes started with PennDOT in 1996 as a CET and subsequently joined the geotechnical unit as an entry level engineer. McInnes says she has always had a passion for math and science and that PennDOT always seemed like fate too, as her father worked for the department for many years in construction and as a bridge inspection engineer.

In 2008, McInnes was promoted to district geotechnical engineer and served in that role until her recent promotion in September 2021. Her enthusiasm for PennDOT goes beyond geotechnical engineering. Through her own curiosity and by the mentorship of others, she gained experience and knowledge in a variety of other roles at District 6, which ultimately led to her transitioning into construction.

She said she was fortunate to always experience equality during her time at PennDOT. While there was a little bit of the "old boys' club" mentality she had to dig through, she said that her experience at PennDOT has been an experience of growth. That growth is possible due to the culture here at PennDOT. A culture that allows individuals regardless of any attribute to be who they are and fully grow into whatever role they have.

McInnes holds a bachelor's degree in civil engineering from Syracuse University and a master's degree in civil engineering from Villanova University. During the summers of her university programs, she worked three different PennDOT internships, two in construction and one in the traffic unit.

As we celebrate the accomplishments and lives of women like McInnes, it's important to remember the role we can play in the promotion of equality, equity, and human rights. A more equal and equitable world is only possible if we continue to make advancements in human rights not just through laws, but also in our day-to-day life.

WOMEN'S HISTORY MONTH: MEET NICOLE TYLER

PENNDOT'S FIRST DIRECTOR OF EQUITABLE TRANSPORTATION

By PennDOT Secretary Yassmin Gramian, P.E.



As part of women's history month, we did some reflecting. Transportation needs to work for everyone, no matter who you are or how you travel. At PennDOT, we're working to shift our perspective: we must not only be experts of our transportation system itself, but also in the challenges and inequities that our system perpetuates as we integrate new solutions and plan for future investments.

A core part of this is the concept of transportation equity, a personal passion of mine as Transportation Secretary. As part of this journey, I oversaw the release of the department's first Dismantling Systemic Racism and Inequities (DSRI) report. This process gave insight into PennDOT's diversity, equity and inclusion (DEI) efforts, assessed structural racism in transportation and evaluated programs and initiatives that could help correct these issues.

Nicole Tyler, PennDOT's first Director of Equitable Transportation. Last November, we welcomed Nicole Tyler as PennDOT's first Director of Equitable Transportation. Nicole is leading the implementation of the report recommendations and moving forward other important equity, inclusion and belonging initiatives. With a background in creating and delivering DEI training programs, Nicole is a firm believer in the importance of creating and supporting a quality transportation system that works for everyone, regardless of gender, age, ability, ethnicity, or race.

For Tyler, that effort must start from within the department, where she has been focused on shifting mindsets and leading change.

"My vision is to move PennDOT toward a place where our employees value the perspectives of those around them because of, not in spite of, their differences – and that is a big distinction," said Tyler. "I want PennDOT to be a workplace where everyone has a genuine sense of belonging."

From there, Tyler says that employees will be better able to "ensure that equity and inclusion are embedded in all that we do – both in the workplace and out in the community."

From the very start of a project or planning phase, Nicole is working with the PennDOT team to collaborate with partners and stakeholders to best determine how to embed equity in all our short and long-range planning – making it part of the process, not just an afterthought.

It is incredibly exciting to see the changes underway at PennDOT. As a woman and person of color, Nicole brings a needed perspective to the department and our executive team. And she is bringing us new ways to think about, talk about, and advance equity and inclusion across the department and in all that we do. Her focus on valuing what each team member brings to the table has been welcome and needed.

Please join me in recognizing the work PennDOT is doing – large and small – to eliminate barriers to transportation access, foster diverse community connections, enhance mobility, and provide an equitable transportation system that serves all Pennsylvanians.

BEHIND THE SCREEN WITH ALLISON BECK

Allison Beck is the Deputy Digital Director for PennDOT and works in the Central Office. She has been working behind the scenes of our social media and websites for over two years.

On social media, she posts to our statewide PennDOT accounts, responds to comments, and makes some videos and social media graphics. Her favorite graphic from last year was a meme in response to comments joking that the traffic cone was the Pennsylvania's state flower. She also sends the department's monthly e-newsletter, the DOTcom.

Allison says that she entered the communications field because she wanted to have a part in spreading important information to the public. And she enjoys interacting with the public through social media. "It's rewarding to help people find answers to their questions and inform them about what we do and why we do it," she said.

PennDOT's social media accounts are busy! In 2021, posts from the department's statewide social media accounts earned more than 36 million impressions (views). Facebook is PennDOT's most popular social platform with more than 200,000 followers. You can also find us on Twitter, Instagram, LinkedIn and YouTube. Our regional Facebook groups and regional Twitter accounts provide more localized updates.

Once at PennDOT, Allison realized there was more to the agency than bridges and roads. She wishes that everyone could understand that PennDOT is a large agency made up of people who are trying their best to provide good service to the public. "There are jobs that I didn't even know existed at PennDOT," she said. "It is really cool to get an inside look at the innovative stuff happening at all levels."





While Allison said people usually ask her about REAL ID when she tells them she works at PennDOT, she was proud to be part of our 50-year anniversary initiative. "We had to adapt our original plan due to the COVID pandemic, but we ended up with a webpage and a video that highlight how far the department has come in the past 50+ years," she said.

Outside of work, Allison and her husband, Justin, love to work on home improvements. "We bought a fixer-upper about three years ago and there's never a shortage of things that need a little TLC," she said. They also have a sassy cat named Tinky and dog, Sadie, who was the flower girl at their wedding this past December.

Allison is also an adviser for her college sorority, Alpha Omicron Pi at Shippensburg University, and recently became a board member for the Harrisburg Area Riverboat Society. One thing about her that may surprise you is that she has high standards when it comes to pizza and is a Yankees fan (she lived in Brooklyn, NY for five years). However, she admitted to only be interested in sports for the food!

PENNDOT, TURNPIKE, PSP, HIGHWAY SAFETY NETWORK URGE SAFE DRIVING AHEAD OF STATEWIDE AGGRESSIVE DRIVING COORDINATED ENFORCEMENT

In 2020, there were 5,615 aggressive-driving crashes, resulting in 91 fatalities and 401 suspected serious injuries. Preliminary 2021 data indicates fatalities in aggressive-driving crashes – crashes involving two or more aggressive driving factors – may have increased by as much as 40 percent.

According to 2020 Pennsylvania State Police (PSP) data, troopers issued more than 107,000 speeding citations, including more than 2,000 for driving 100 mph or faster. In 2021, those numbers saw an increase as speeding citations totaled more than 129,000. In addition, more than 2,200 tickets were issued for driving 100 mph or more.

Speeding is an aggressive driving factor and is usually defined as driving in excess of the posted speed limit or driving too fast for conditions. It can have dangerous consequences by reducing a motorist's ability to react to changing traffic or road conditions, putting the driver, passengers, and others on the road at risk.

In 2020, there were 24,978 speeding-related crashes, resulting in 433 fatalities and 1,387 suspected serious injuries.

The coordinated enforcement is part of an aggressive-driving enforcement was part of enforcement through April focused on speeding, distracted driving, and work zone awareness. The goal of targeted enforcement is to reduce the number of aggressive driving related crashes, injuries, and deaths on roadways throughout the state. Motorists exhibiting other unsafe behaviors such as driving too fast for conditions, following too closely, or making careless lane changes will also be cited.

Continued on page 30

PENNDOT EMBRACING NEW APPROACH TO ELIMINATING BRIDGE BUMPS By PennDOT Bureau of Innovations

PennDOT has made significant progress in addressing a persistent ride-quality issue: the bump that drivers often encounter when approaching or exiting a bridge.

In typical bridge construction, the roadway must transition from an area supported by compacted but flexible soil embankment layers, known as backfill, to a more rigid bridge abutment support. Due to several factors, including seasonal temperature changes, loss of backfill by erosion, poor drainage, and high traffic loads, the portion of the backfilled roadway can settle over time while the abutment resists settlement. This creates an abrupt elevation change, or "bridge bump," at the transition point. Across the United States, about 25 percent of bridges suffer from bumps at their ends, and state transportation agencies spend an estimated \$100 million per year fixing them. To address this issue, PennDOT has been developing a Geosynthetic Stabilized Bridge Approach (GSBA) through the State Transportation Innovation Council's Construction and Materials Technical Advisory Group. This innovative approach involves enhancing roadway backfill with layers of geosynthetic material adjacent to a bridge abutment, which significantly reduces pavement settlement.

Typically, roadway backfill is placed in layers, with compaction occurring after each layer. A 2005 Iowa DOT research study demonstrated the effectiveness of enhancing backfill with layers of porous backfill (open-graded aggregate) bound by geosynthetic fabric to minimize the "bridge bump." The fabric and backfill work together to resist the settlement problems encountered with typical backfill, keeping the backfillsupported roadway at the same elevation as the adjacent abutment-supported roadway.

Dennis Neff, P.E., geotechnical engineer in PennDOT's Bureau of Construction and Materials, said a new statewide GSBA construction standard will be in place in 2022.

To date, GSBA has been used successfully on more than 100 bridge approaches in Pennsylvania. Aside from improved ride quality, GSBA reduces future maintenance costs. PennDOT maintenance forces typically apply asphalt patching or minor grinding to address the "bridge bump." But those remedies do not address the underlying cause. The other maintenance option requires excavation and replacement of the subgrade and pavement, which is costly and requires long-term traffic control setups that inconvenience motorists. GSBA has the potential to reduce maintenance costs by about \$3 million a year.





DEP AND PENNDOT ENCOURAGE EVERYONE TO JOIN LITTER CLEANUP EVENTS AND "PICK UP PENNSYLVANIA"



The Pennsylvania Departments of Environmental Protection (DEP) and Transportation (PennDOT) joined a community litter cleanup as part of the spring Pick Up Pennsylvania campaign and encouraged residents, local leaders and businesses across the state to do the same in their communities.

Keep Pennsylvania Beautiful coordinates the statewide Pick Up Pennsylvania campaign each spring and fall. Gloves, trash bags and safety vests are provided by PennDOT and DEP. In addition, DEP and the Pennsylvania Waste Industries Association sponsor no- or low-cost trash disposal for registered events at participating landfills for the month of April.

Volunteering is easy. People can organize their own local event and register it at Pick Up Pennsylvania or can sign up to participate in an already registered event. From March 1 through May 31, there were 843 events with 40,000 estimated volunteers.

Hundreds of thousands of Pennsylvanians, including Scout troops, businesses, watershed organizations, Trout Unlimited, Rod and Gun Clubs, and others, have participated in Pick Up Pennsylvania events for over 20 years.

Groups in PennDOT's Adopt-A-Highway program, which involves volunteers cleaning roadsides year-round, are longtime participants. Adopt A Highway volunteers collect litter on a two-mile section of state highway at least twice a year. In 2021, the program had over 4,250 participating groups, more than 103,300 registered volunteers, and nearly 8,800 miles of adopted state-maintained roadways.

Governor Tom Wolf announced the first ever statewide Litter Action Plan last fall. Reflecting the work of more than 100 stakeholders from state and local government, community organizations, businesses, and the legislature, the plan specifies many ways that all entities and individuals can prevent littering.

CREATE EDUCATIONAL



Michael Kensinger and his group, the "Friends of Tipton Wetlands" have been working on habitat improvements to several local wetlands which he refers to as the Tipton Wetlands.

Two of the three sites are wetland mitigation sites which were constructed by PennDOT in the mid 1990's, when the section of I-99 between Hollidaysburg and Tyrone were completed.

The District 9 office has approved several requests from members of the Boy Scouts to incorporate trails, educational signs, and benches to these sites over the years, with the primary purpose of enhancing the educational opportunities for the public at the wetlands.

When the wetlands were constructed and planted, PennDOT installed some nesting structures to improve the wildlife habitat in the short term until the site matured and nature could provide nesting areas. Nearly 30 years later, many of the wooden nest boxes have deteriorated. While the trees are maturing and do provide some habitat, it never hurts to add nesting structures for species such as birds, ducks, owls, and bats.

Michael is doing the habitat improvement work through an Adopt and Beautify Agreement, a legal agreement that allows groups or members of the public to conduct approved "beautification" projects on PennDOT Property and Right-Of-Way.

These types of agreements are typically used for planting flower gardens or dramatic entryway gardens to communities. The Adopt and Beautify program was modeled after another successful program, the Adopt-A-Highway program in which groups agree to conduct litter pick up along state routes several times per year. Both programs have the litter pick up requirement and both provide signage recognizing the group's efforts.

Michael's request is rare but not unique (we have a similar arrangement at a wetland in Huntingdon County), however, it is much appreciated as he is doing the community a great service by improving the natural places that we are fortunate to have in central Pennsylvania.

Any habitat improvement work is usually demanding in terms of labor and time and while the recipients can't say thank you, there's no question that the wildlife appreciates his efforts to provide nesting sites and remove litter from their habitat.

REDUCING RURAL ROAD RUNOFF CRASHES: A JOINT EFFORT ACROSS PENNSYLVANIA By PennDOT Bureau of Innovations

PennDOT, Pennsylvania's Local Technical Assistance Program (LTAP) and local officials across the state are teaming up in the ongoing effort to tackle the vexing problem of rural roadway departure crashes.

According to the Federal Highway Administration (FHWA), every year, nearly 12,000 people die in crashes when their cars leave the travel lane on a rural road. That's 30 people every day.

Roadway departure crashes are a major problem on all public rural roads. Nationally, 50% to 60% of them happen on state networks. That means more than 40% occur on locally-owned roads, according to FHWA.

As an FHWA Every Day Counts Round 5 (EDC-5) innovation Pennsylvania selected to pursue, the Reducing Rural Roadway Departures initiative involves LTAP contacting municipalities to offer training and assistance dealing with this critically important safety issue.

Michael Dudrich, transportation planning specialist in PennDOT's Bureau of Planning and Research, said that between 2011 and 2019, 363 local officials attended training classes on techniques to improve local road safety. The classes were updated in 2019, and since then, 72 more local officials have attended.

From the PennDOT perspective, Gavin Gray, acting PennDOT chief engineer and former chief of the Highway Safety Section, notes that all roadway departure crashes have increased since the start of the COVID-19 pandemic. On the state highway system, Gray said, the use of systemic treatments like rumble strips and high friction surface treatments as well as use of FHWA's proven countermeasures should yield more positive results in the future.

In addition, Gray said, "the new Strategic Highway Safety Plan has lane departure crashes as an emphasis area for the next five years because it's our leading contributing element to infrastructure-related crashes."



Patrick Wright, a traffic engineer with Pennoni, an engineering consulting firm that works with LTAP, provides training at LTAP classes as well as writing articles and hosting webinars aimed at helping municipal officials deal with roadway safety issues.

"We are constantly reviewing the training," he said. "We are making sure we are getting the latest and most accurate information [to the students.]"

As examples of the success stories generated by LTAP, he pointed to work LTAP did with North Londonderry and North Lebanon townships, both in Lebanon County.

John Dubbs, assistant roadmaster for North Londonderry, turned to LTAP for help with a troublesome curve on Hoffer Road. After studying the crash data, Dubbs turned to Wright for help.



"At one supervisors' meeting, we were getting complaints from residents that they felt they continually had people leaving the roadway and tearing up their yards," he said. "LTAP is a huge resource. Every question you come up with, there is an expert (to help)."

With LTAP's assistance, the township considered rumble strips, but noise to nearby residents was an impediment. LTAP helped with a pavement assessment as well, but ongoing maintenance concerns gave the township pause.

"We actually doubled up on curve warning signs, put on either side of the street and added post delineators," Dubbs noted.

He praised LTAP for the thoroughness of its advice.

"We always get a big packet when getting assistance from LTAP with recommendations and advice on how to do everything," he said. "On this one, we got the flip side if we didn't install the rumble strips and what the downside was, and we had the

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information that helped us make the decision. It's more than just 'we recommend this,' but here is the positive and negative of everything we discussed."

In North Lebanon Township, Roadmaster Ed Brensinger turned to Wright and LTAP for help with a curve on Kimmerlings and Kochenderfer Road.



"We had seven incidents on that turn in a two-month time frame that was really concerning," Brensinger said.

Wright did a curve analysis and developed recommendations.

"On both turns, we added signage with advisory speeds and additional chevrons," Brensinger said. "We determined that in addition to signage, we needed to do something for skid resistance ...," he said. "We had a paving contractor come in with a milling machine and milled off half an inch and scarified it.

"Since we changed the signage and scarified the road, we have not had any incidents at that turn," Brensinger added.

He is also very supportive of the LTAP training classes. They include background information on curve safety, how to study a curve following federal and state regulations, signing requirements, and examination of other curve safety features such as shoulder edge drop-offs, drainage issues, and removal of fixed objects. Hands-on training examples with photos, videos, and local Pennsylvania examples highlight the curve course. As new information became available, such as the FHWA guide "Low-Cost Treatments for Horizontal Curve Safety 2016", the course was updated.

A course on Roadside Safety Features provides information and resources for municipalities to understand the importance of roadside safety and to be able to determine the most appropriate countermeasures. While not a design class, it focuses on practical applications of roadside safety concepts, such as roadside hazard identification and improvement, hazard removal and relocation, pavement markings, delineators, and chevrons, and higher cost barrier improvements. Information is also presented on guiderail warrants, types, and end treatments.

"We were well satisfied with the LTAP program, and we want to get guys lined up for more," Brensinger said. "Our goal is always to keep guys going to things. There is a wealth of information in those classes; Patrick is a good instructor."

PENNDOT'S ADOPT-A-HIGHWAY PROGRAM RECOGNIZED FOR NINTH CONSECUTIVE YEAR

For the ninth consecutive year, PennDOT is the recipient of the Agency Partner of the Year Award from Keep Pennsylvania Beautiful for the department's Adopt A Highway (AAH) program.

Keep Pennsylvania Beautiful President Shannon Reiter traveled to Harrisburg to present the award to AAH program coordinator, Carl Wesneski.

"PennDOT has been a dedicated partner of Keep Pennsylvania Beautiful and our Pick Up Pennsylvania program since its inception," Reiter said. "They have been instrumental in the provision and distribution of program supplies through their sixty-seven county offices and are integral to the program's success. It is our privilege to work with such a committed partner who shares our vision of a clean and beautiful Pennsylvania."

Since 1990, from litter abatement through community involvement, to saving of taxpayer dollars, the AAH program continues to be an asset to PennDOT and the citizens of the Commonwealth.

Last year the program had over 4,200 participating groups, more than 103,000 registered volunteers, nearly 8,800 miles of adopted state-maintained roadways.

"I accept this award on behalf of the AAH District and County Coordinators whom, along with our 4,000-plus volunteer groups, make the program work," said Wesneski. "Thank you for all you do and keep up the great work!"



On behalf of PennDOT, Roadway Program Coordinator, Carl Wesneski (L) accepts the Agency Partner of the Year Award from Keep Pennsylvania Beautiful President Shannon Reiter (R)

DELIVERING ON THE PROMISE OF STIC INNOVATIONS: DESIGN-BUILD WORK ZONE TRAFFIC CONTROL PLAN GAINS WIDE ACCEPTANCE AND USE ACROSS THE PENNDOT SYSTEM

By Rachel D. Duda, P.E., Assistant District 12 Executive for Design



Advancing transportation innovations to save Pennsylvania taxpayers money and hassles is a primary goal for PennDOT, and it has experienced great success with the Design Build Traffic Control Plan (DBTCP).

Championed through the Pennsylvania State Transportation Innovation Council (STIC), which is celebrating its 10th anniversary in 2022, this innovation allows highway contractors and the designers to work closely on the final design of the Traffic Control Plan to keep drivers moving as efficiently as possible through construction areas.

A conceptual plan, rather than a finalized plan, is provided in the project's bid package. DBTCP allows the contractor flexibility in selecting materials, construction methods and available resources. DBTCP reduces the need for change orders because the construction team will be responsible for the completeness and quality of the Final Traffic Control Plan. In addition, DBTCP will allow the construction team to explore cost savings, to respond to schedule changes and to receive input from other members involved in the construction of the project.

Steve Bolt, the STIC Innovation Owner, has spoken to each of PennDOT's 11 engineering districts and found that at least 75 projects have used the Design Build concept for Work Zone Traffic Control.

"We've had positive results across the board," said Bolt, regional director with Remington & Vernick Engineers.

As an example, District 12, based in Uniontown, has used DBTCP for all its recent projects along Interstate 70. For the latest project, the project manager took lessons learned from the earlier I-70 projects and fine-tuned the new plan. One of the lessons learned throughout the projects is that the contractor's DBTCP can change the conceptual plans and hence lead to some environmental changes and needs. To

account for that, District 12 includes a provision in the bid package that spells out that the contractor is responsible for any required permit and plan revisions."

"Design Build Maintenance and Protection of Traffic offers the district another tool to improve our service to the travelling public," said Vince Greenland, P.E., assistant district executive for design in PennDOT District 9, based in Hollidaysburg. "It provides us with the flexibility to let the contractor work as efficiently as practicable, as their means and methods evolve on a project and in turn minimize disruption to our customers."

Added Christopher C. Flad, P.E., acting district traffic engineer in PennDOT's District 8, based in Harrisburg:

"Under the right circumstances, Design-Build Maintenance and Protection of Traffic can be an effective tool at the district's disposal to help deliver projects safely and efficiently. Empowering the contractor in this way matches the construction process to the contractor's resources and support network, which ultimately benefits the safety of the workers as well as those traveling through the project area."

He noted that since 2015, on just three projects, the innovation saved roughly \$100,000 in design costs and saved time as well.

Overall, this innovation brings the ingenuity of the contractors into the final design of the work zone traffic control process. We have seen a benefit in time-savings and cost-savings, while bringing all of the partners closer in communication with each other, thus making a better construction project.

For more information on this and other STIC innovations, visit www.penndot.pa.gov/stic.

PENNDOT LEAN SUCCESS STORIES CONTINUE TO MULTIPLY

By PennDOT Bureau of Innovations

PennDOT has seen many Lean accomplishments over the past year, several of which have resulted in huge efficiency gains for the department. Across our organization, employees are taking the initiative to review the work they are doing every day and look for opportunities to work more efficiently. Here are three recent Lean successes that resulted in transformative benefits for the department and the way we perform our operations.

Ensuring roadway projects are done accurately and efficiently is number one priority at PennDOT. A team within the department's Operations and Performance Office (OPO) embarked upon a Lean project that resulted in dramatic improvements in PennDOT's Quality Assurance (QA) Review Process. OPO performs QA field reviews for highway and bridge maintenance operations across the PennDOT system. Previously, reports and supporting documentation for these QA reviews were paper based.

"With the paper-based version, the process for routing, cataloguing and performing trend analysis of QA reviews and supporting documentation was time intensive and wasn't transparent," said Chris Roehm, OPO's Lean Coordinator.

To resolve the issue, OPO developed and implemented a QA Database and Integrated Remote QA Application to facilitate QA results, provide centralized

provide centralized storage of QA results and documentation, and standardize QA reporting. This drastically reduced process workflows and timeframes for all parties involved, as hardcopy forms, scanning, emailing documents and manually entering scores into a spreadsheet have been replaced with a modern-day system that can provide same day delivery of QA results, practically in real-time.

Another great way to incorporate Lean into the work you do every day is to do an organizational clean up on anything that needs organized better. This Lean tool is referred to as 5S: Sort, Straighten, Shine, Standardize and Sustain.

With a team in the agency's District 1 office, in northwestern Pennsylvania, looking and planning ahead for its next project, they found that their files were filled with outdated materials and decided it was time to tackle the reams of materials as part of a virtual housecleaning.

"We collaborated and identified that we needed to clean this up and standardize the (computer) drives and get rid of stuff we had dating back to 2006," then District 1 Lean Coordinator Marvin Hall said. "There were multiple versions of files, many duplicates and files stored in incorrect folders, which meant wasted time and significant frustration searching for needed information, often taking several minutes or hours to find files."

The new layout is clean, organized and easily accessible; folders are organized and maintained each month or as needed by members of the Information Data Management (IDM) Unit, and audits are performed either monthly or quarterly.

"The IDM Unit is District 1's leading effort in the process improvement and 5S methodologies, and we felt cleaning up our filing system was essential to setting the example," said Hall.

Lastly, when the COVID-19 pandemic hit, PennDOT's critical mission of holding administrative hearings for driver licensing

issues was severely impacted. In-person hearing could not be held, and that exacerbated already tough issues with tracking and processing hearing-related matters.

In response, Kelly Morales, manager of the Driver Safety and Improvement Unit in PennDOT's Bureau of Driver Licensing, deployed what she had learned from her interest in Lean tools and strategies. She and her team mapped out how

and her team mapped out how hearings were conducted and identified wastes and improvement opportunities. It included a new early review process and reduced steps for the docket clerk.

"We reined it in, and now when work comes in and petitions come in, they are reviewed first," Morales said. "I preach highly of Lean," she said, noting that you always need to look at everything you do each day and ask why you are doing it a certain way that may need reconfiguring. "This has really worked, and I continue to monitor it and look for ways to move it to other areas."

For more information about these and other PennDOT Lean successes, contact PennDOT's Bureau of Innovations at DOTInnovations@pa.gov.



MEET MIKE HORRELL LAWRENCE COUNTY MANAGER

IN WESTERN PENNSYLVANIA

By Yasmeen Manyisha, Safety Press Officer, District 11

Mike Horrell has moved up through PennDOT District 11, starting as a temporary winter operator in Lawrence County in 2003. After his second winter he became full time as an A Operator, eventually transitioning to a B operator. Once a TEO S position became available, he decided to apply as he had gained extensive experience operating the equipment, became a trainer and acted in a foreman role. He later became a foreman and in January 2019 and was promoted to Assistant Highway Maintenance Manager of the county. Just days before the initial Covid shutdown in March 2020, Mike took on an acting role as the Lawrence County Maintenance Manager. Although he expected to fill the role for a short amount of time, Mike was excited for the experience and even more excited to apply for the position when it became open. He was hired in November 2020.

As the Lawrence County Maintenance Manager, Mike addresses a variety of work every day to keep the county running efficiently. He embraces that fact that in the "Maintenance World" things can change by the hour depending on weather, equipment, emergencies, and personnel. He also enjoys constantly having to be on his toes and creating backup plans, sometimes even for his backup

Mike has really valued two things during his time with PennDOT: providing great customer service and challenging his employees to be the best they can. Although it can feel impossible to please everyone, he finds it very rewarding to do his best for a customer and realizing he or his staff have truly helped them. In an effort to provide good customer service, Mike likes to stress the importance of teamwork among his staff. Although there is a variety of roles to play, success cannot happen if the team does not pull together to meet the common goal.

Feeling strongly that PennDOT is a great place for growth opportunity, Mike has had great guidance as he has progressed in his career. He first gained his interest in the department from his father, who was a foreman in Lawrence County for 15 years. His father gave his all to his work and taught Mike so much about being a good foreman who can positively interact with the crews and create a mutual respect between management and crews. He also taught Mike to have a strong work ethic and continue to strive for advancements through PennDOT. In addition to his father, Mike had a great mentor in his predecessor, Dave Harding. Dave supported Mike's growth and took the time to show him the ropes in becoming a strong Assistant Manager in the county. Mike is



very grateful for the mentorship provided by his dad and Dave and believes their support made all the difference in his gained experience and confidence to excel.

When Mike is not managing Lawrence County, his first love, is being a dad to his wonderful daughters Jorgia, 5 and Charlee, 3. When he's not chasing after his little ones, he enjoys visiting the hunting camp his grandfather built in the 1960's in McKean County, being an Ohio State Buckeyes football fan and fishing.

Mike has enjoyed fishing with his dad and uncles since he was young. He spent ten years as a charter fishing captain on Lake Erie in Ohio. He really enjoyed it and gained plenty of fascinating experiences. Mike retired the business once he became an Assistant Manager and found out he was going to be a dad for the first time. He wanted to prioritize his family and be there for major milestones in his children's lives. Even though he is no longer a captain, Mike is holding on to his US Coast Guard Captains license in case his daughters find a love for fishing, or his retirement plan, whichever comes first!

District 11 is so happy to have Mike as part of the team. His great dedication to his work and his family are just two of the many factors that contribute to his fantastic personality.

PENNSYLVANIA WORK ZONES:

WHAT'S UP WITH ALL THE CONSTRUCTION?

Roadwork can be an inconvenience, especially when you're already running late or headed to a fun picnic or vacation. But think about it — either we fix the roads and motorists deal with some work zones, or we do nothing, and the roads remain unsafe and in disrepair. It's a classic case of not being able to have your cake and eat it too.

There are some common questions and complaints about how PennDOT handles its construction projects and work zones. Usually, there's a good reason for the way we do things. Keep reading to find out more.



WHY IS CONSTRUCTION DONE WHILE PEOPLE ARE COMING FROM OR GOING TO WORK, ESPECIALLY IN THE SUMMER? WHY CAN'T MORE WORK BE DONE AT NIGHT?

Every project is prepared with a Maintenance and Protection of Traffic Plan (MPT) signed by the District Traffic Engineer and the Assistant District Executive for Construction. The MPT gives direction to the contractor about when it can work on the roadway, take out lanes of traffic, detour traffic, etc. This direction is based on analysis of traffic flow and is sensitive to peak traffic volumes. We do our best to accommodate traffic through a work zone but there are instances where we must restrict travel lanes to properly construct a facility.

Because warmer temperatures ensure pavement quality, our primary construction season is from April through October. We try to complete projects during this timeframe and not during peak travelling times, but sometimes an extenuating circumstance intervenes.

As for nighttime work, some of our contractors are required to work during these hours — especially on expressway projects and other high-speed, high-volume highways — but many have the option to work any schedule they choose based on the MPT. However, working at night on our busy highways is more dangerous for both the workers and drivers. Plus, working at night is more expensive, as the work area is required to be illuminated for reasons of safety and quality control, not to mention overtime for workers. We are responsible stewards of our funds and aim to get the most for every transportation dollar.

WHY DO ROAD PROJECTS TAKE SO LONG SOMETIMES?

Some projects appear to take long because of the type of work being completed. Some direct factors are material availability, utility work, subcontractor work, and type of structure involved. Indirect factors may be traffic volume, contractor staffing, and contractor equipment.

For example, two-lane bridges can be replaced under a full detour or in multiple stages that allow one lane of traffic to continue using the bridge during construction. During the design process, factors such as the length of proposed detour and number of motorists impacted must be weighed against the shorter construction timeframe a full closure could potentially allow.

WHY DO WE USE OIL AND CHIP INSTEAD OF REPAVING ROADS?

Seal coating, more commonly known as oil and chip or tar and chip, is used to extend the life of lower-volume roads for another three to five years. The cost to reconstruct one of these roads is \$910,000 per mile. To resurface, it costs \$101,400 per mile. And to seal coat, it's "only" \$24,700 per mile. Ideally, roads are seal coated every four to seven years and given a complete structural resurfacing every 15-20 years. PennDOT recently launched its Road Maintenance and Preservation, or Road MaP program, which will help us use multiple rehabilitation strategies to address nearly 6,900 miles of low-volume roads that are out of cycle.

WHY IS A STRETCH OF 5 MILES CLOSED TO ONE LANE FOR 100 FEET OF CONSTRUCTION? WHY ARE LANES CLOSED WHEN NO ONE IS WORKING?

Work zones are always set up with safety — for the crew and for motorists — as our primary focus. There are a few reasons why a road could be closed for a longer stretch than might seem to make sense. First, the closure needs to begin at a location that has good sight distance so cars aren't coming around a corner and crashing into stopped traffic. Also, it needs to be back far enough from the workers so that nobody runs through and ends up hitting someone.

In cases where the lane restrictions are long term, lanes must close at the start of the project and remain so until its completion. On some large projects, these work zones are extensive, and crews are moving around within the work area or simply working out of view of motorists. On high-speed highways, the work area includes a lengthy transition or a

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buffer zone to protect the highway workers. Since the cost to set up and maintain these long-term work areas is extremely expensive, it is often far more cost-effective to close off the entire project area and complete the project. Restrictions also must be maintained while concrete cures. Much of the material we use is weather and temperature dependent.

Work zones can be dangerous; preliminary PennDOT data shows there were over 1,600 work zone crashes in Pennsylvania last year. While construction may seem like an inconvenience, it's important to always slow down, pay attention, and obey any signs and flaggers. More work zone safety tips can be found on our website.

WHY IS IT WHEN I'M STUCK IN TRAFFIC THERE'S ONE MAYBE TWO GUYS WORKING AND FIVE STANDING AROUND WATCHING?

In many instances, each worker has their own specialty(s) on a project. Each has their assignment and construction work is done sequentially. Also, a person may be a safety inspector whose sole job is to ensure safety. Or a person may be an inspector who does not work for the contractor but is inspecting and validating the work. Others may be trainees or a foreman or management.

Also keep in mind that when you're driving through a work zone, you're seeing a snapshot in time from an hours-long operation. The crew may simply be working on a task that requires fewer workers during that brief time. And since roadway workers are out in all conditions, including sweltering heat, it's important for their health and safety to take breaks when needed.

HOW CAN I FIND CONSTRUCTION HAPPENING AROUND WHERE I LIVE/WORK?

The best place to start is 511pa.com, where you can see road conditions, incidents, construction, and more on an interactive map of the state. Zoom in to your location for a detailed view on what's happening on your roads. You can also sign up for alerts from your regional PennDOT office or visit www.projects.penndot.gov.

WHY ARE YOU INSTALLING ROUNDABOUTS? DIDN'T NEW JERSEY GET RID OF THEIRS?

Roundabouts have been proven to be safer than traditional stop-sign or signal-controlled intersections — with national studies showing that modern roundabouts reduce fatal crashes by up to 90 percent. Modern roundabouts also improve pedestrian safety by allowing people to cross shorter distances with slower-moving one-way traffic.

Modern roundabouts in Pennsylvania are NOT the same as New Jersey traffic circles, which operate on a different set of principles. For instance, motorists entering traffic circles tend to have the right of way (not as safe), whereas traffic entering a roundabout must yield to motorists already in the circle (much safer). Traffic circles also tend to be much larger, but are inefficient for handling the increased traffic volumes we face today.

Check out our page on roundabouts, https://bit.ly/3svDwea to learn more and view a video on how to navigate Pennsylvania's roundabouts.

HOW DO I GET A POTHOLE FIXED?

Please report potholes by calling 1-800-FIX-ROAD or visiting customercare.penndot.gov. Unfortunately, due to Pennsylvania's severe freeze/thaw cycle, potholes tend to be more prevalent in our state. They can form overnight and are naturally occurring.

WHEN PENNDOT PERFORMS MAINTENANCE ON YOUR ROAD AND LEAVES PILES OF DEBRIS IN YOUR YARD (YES, THEIR RIGHT OF WAY) DO YOU HAVE ANY RECOURSE?

PennDOT normally tries to remove large piles of debris, especially if they are in a yard, even if it is technically in our right-of-way. If you have a concern about debris left on your property, please call 1-800-FIX-ROAD or visit customercare.penndot.gov.

WHAT DO I DO IF MY VEHICLE WAS DAMAGED BY ROADWORK?

If your vehicle or property has been damaged by work being performed by PennDOT, contact your PennDOT county office

WHY DOES PENNDOT START SO MANY PROJECTS ON THE SAME ROAD? WOULDN'T IT MAKE MORE SENSE TO FINISH ONE SECTION THEN MOVE TO THE NEXT?

There is a lot of work that needs to be done, so if we waited until one project got done before we started another one,

we'd end up too far behind. Also, if we are working in an area, it is economically wise to do additional needed work while we are there and avoid re-mobilizing a work zone at a later time. This ends up being a cost savings to the taxpayer. We do our best to have a corridor approach, but not all roads and bridges in the same general area act in the same manner.

WHAT IS THE BIDDING PROCESS FOR PROJECTS?

PennDOT uses a variety of consultant firms when the demand for services exceeds our ability to provide those services in a timely manner. The Engineering and Construction Management System (ECMS) can give businesses background on the types of work planned and advertised. When a business is interested in a project, it registers as a PennDOT partner and submits a qualifications package. Then, through ECMS, partners can pursue work and be selected for projects.

PENNSYLVANIANS ENCOURAGED TO PARTICIPATE IN ITS SAFETY CITIZENS PROGRAM

PennDOT Safety Citizens program encourages community members to answer traffic safety questions in original and creative ways.

Traffic safety topics are introduced bi-monthly posing a question for the public to answer. Participants can answer by submitting an original piece of artwork, such as a short video, a poem, or a drawing. Selected submissions are displayed on

PennDOT's statewide social media platforms including Twitter, Facebook, and Instagram.

The program was recently updated to include new topics for 2022 and the addition of links to coloring pages and kids' activities to encourage young Pennsylvanians to participate.

According to PennDOT data, in 2021 there were 1,230 fatalities on Pennsylvania roadways.

Individuals, classes, families, clubs, or other groups are encouraged to participate in this safety initiative as a program challenge.

The topic for June/July 2022 is commercial vehicle safety. Not all vehicles on the road are the same size, so it is up to drivers to be aware of the challenges this presents. Participants are asked to submit a response to the question "What are some dangerous behaviors you look out for while driving passenger vehicles, large trucks or buses?" The kids' challenge for the topic is to draw a picture of a car and a large truck sharing the road.

The remaining 2022 Safety Citizens topics include seat belt and child passenger safety and impaired driving.

Safety is everyone's responsibility. Being a Safety Citizen is being a leader by inspiring your family, friends, and community to practice safe behaviors on the road. Whether traveling by vehicle, motorcycle, bicycle or on foot, everyone has the opportunity to be safer on the road.

Additional information on the program, including the details and guidelines for participation, can be found online at www.PennDOT.pa.gov/SafetyCitizens or questions can be emailed to SafetyCitizens@pa.gov. Interested participants are encouraged to check the website frequently for updates about future topics.

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PSP, as well as more than 300 municipal agencies from across the state, will concentrate efforts on roadways that are known to have a high number of aggressive-driving crashes using traffic enforcement zones, saturation patrols, speed enforcement details, work zone enforcement, and multijurisdictional enforcement details to identify and cite aggressive drivers.

"Aggressive driving involves heightened feelings of stress, anger, or frustration that can lead to dangerous behaviors on our highways," said Robert Schaeffer, executive director of the Highway Safety Network. "These behaviors can have devastating consequences. Drive patiently and be part of the solution, not the problem."

You or a passenger may call the police. But, if you use a cell phone, pull over to a safe location. If you can, note the license plate and a description of the car.

Aggressive-driving factors include:

- Making illegal u-turn;
- Improper/careless turning;
- Turning from wrong lane;
- Proceeding w/o clearance after stop;
- Running stop sign;
- Running red light;
- Failure to respond to other traffic control device;
- Tailgating;
- Sudden slowing/stopping;
- Careless passing or lane change;
- Passing in no passing zone;
- Making improper entrance to highway;
- Making improper exit from highway;
- Speeding;
- Driving too fast for conditions; and
- Driver fleeing police.

If you encounter an aggressive driver, put your own safety first:

- Get out of their way and stay as far away as possible.
- Do not engage or challenge the driver in any way.
- Stay relaxed, avoid eye contact, and ignore rude gestures.
- Don't block the passing lane if you are driving slower than most of the traffic.
- Do not attempt to follow or pursue the vehicle.

While many people associate aggressive driving with road rage, they are two different behaviors. Road rage is a criminal offense and is often the result of aggressive driving behavior that escalates into an assault with a vehicle or other dangerous weapon.

The enforcement is part of Pennsylvania's Highway Safety Program and is funded by part of PennDOT's investment of federal funds from the National Highway Traffic Safety Administration (NHTSA).

For more information on aggressive driving, visit PennDOT.pa.gov/Safety.

MEET YOUR OPERATOR, MICHELLE KOPPENHAVER

DAUPHIN COUNTY MAINTENANCE



Michelle Koppenhaver, an equipment operator and instructor for PennDOT's Dauphin County maintenance office, never imagined she would find herself in this kind of career.

Koppenhaver was raised on a family farm where she was constantly surrounded by hard work. Her grandfathers owned their own coal mines, and her dad was a coal bucket truck driver.

"My dad didn't want me to work around heavy equipment," she said. "But I was comfortable around it, especially knowing that I got to see different places, and didn't have to do the same thing all the time."

Twelve years ago, Koppenhaver started with the department as a temporary employee, knowing there was a possibility to move up. She was certain the work would eventually be steady, secure, and have the standard 9-to-5 hours.

After two winters as a temporary employee, Koppenhaver became an operator in the Harrisburg region, where she was mentored by a group of male employees at the PennDOT eastern training facility in Fort Indiantown Gap.

These co-workers helped Koppenhaver establish a steady foundation by teaching patience, and emphasizing the importance of taking people for what they are, and working with them from that point on.

She also learned how to use equipment such as a grader truck and loader, while discovering the true value of accomplishment and continuously improving along the way.

In her 12 years at PennDOT, Koppenhaver has done everything from operating graders or belt loaders, to completing crack

sealing, doing road maintenance or snow removal, helping with disaster and crisis management, as well as maintaining driver safety during crashes.

Currently, one of her favorite things about working with the department is being an operator instructor because she has come full circle. In this role, Koppenhaver teaches people how to operate pieces of equipment including driving tandem trucks teaching students how to shift and do minor maintenance.

She also continues her work as an operator by doing maintenance on the roads, crack sealing, snowplow driving, grading, pothole filling, and pipe replacements.

"Being outdoors at work is wonderful, there is so much to see and do," Koppenhaver notes. "I enjoy not doing the same thing daily because the job doesn't get monotonous, like being attached to a machine that does the same thing over and over.

Koppenhaver's husband, Keith, and son, Dustin, are supportive of her career path as well. Although her family worries about her being in a dangerous job, they are also incredibly proud.

When she is not at work, Koppenhaver likes to travel, garden, do landscaping, and go to her family camp in Cameron County. She also enjoys side-by-side motorcycling and trout fishing.

Since starting with PennDOT, Koppenhaver has seen the percentage of female employees increase, and she hopes that will continue. If you're interested in our equipment operator positions or other PennDOT careers, find opportunities available near you at employment.pa.gov.