Transportation is the backbone of our society and is central to our quality of life. The PennDOT team is making improvements, enhancing equity in our organization and in transportation systems for all people, and – as always – aiming at a safer, more connected Pennsylvania.

Pennsylvania’s transportation network is vast. In the state-maintained system alone this is roughly 40,000 miles of state-owned roads and roughly 25,000 state-owned bridges, 35 fixed route transit systems, 121 public use airports, 259 private use airports, 277 private-use heliports, three ports and the privately-owned network of more than 5,600 miles of freight railroad lines. Our fuel taxes and various transportation fees support construction and maintenance on another 78,000 miles of municipal and county roads, along with 6,400 local bridges.

Additionally, our Driver and Vehicle Services operation provides online tools and operates 103 facilities for face-to-face customer service, ensuring commercial and personal driver licensing and testing, photo services and vehicle registration and inspection remain current and safe. We provide over-the-counter REAL ID services at 13 facilities, with further expansion planned.

Across our modes and assets, our long-standing needs have come to a head with recent events. We cannot deny the need for and consensus to act on transportation funding solutions.

Last fall, President Biden signed the historic Bipartisan Infrastructure Law, which will bring $4 billion in new federal funds to Pennsylvania over five years. This is the largest infrastructure investment in decades, and we will put these dollars to good use in important projects around the state.

To assess potential solutions at the state level and move away from the state’s dependence on the unreliable gas tax, Governor Wolf established the Transportation Revenue Options Commission, which reviewed several potential revenue strategies. Additionally, the PennDOT Pathways program launched in November 2020 will study and recommend near- and long-term strategies to find reliable options. Find more on these initiatives at www.penndot.pa.gov/funding.

Now is the time for bold, decisive action to address our systemic funding challenges and move toward the future. We will continue to work closely with the General Assembly, our many stakeholders and the public as we work to find funding solutions that will benefit all Pennsylvanians.

Transportation needs to work for everyone, no matter who you are or how you travel, and PennDOT is committed to exploring solutions that will reduce inequities in our system, build resilience against future disruptions, improve safety, and support both environmental and financial sustainability.
OUR VISION
An enhanced quality of life built on transportation excellence.

OUR MISSION
Enhance, connect and add value to our communities by providing a sustainable, equitable transportation system and quality services for all.

OUR VALUES
Safety: We value the safety of our employees, customers and partners in all that we do.
Innovation and Evolution: We pursue and incorporate evolving technologies and innovative practices to improve transportation.
Equity in Mobility: We enhance quality of life through investments in equitable, efficient and safe movement of people and goods.
Customer Experience: We are committed to providing a positive customer experience for all.
Communication: We are committed to effective, transparent, timely communication with our employees, customers and stakeholders.
Inclusive Workforce Investment: We build a strong team by respecting one another, promoting teamwork and seeking to recruit and empower our diverse workforce.
Sustainable Transportation: We connect Pennsylvania to the world’s economy through environmentally and fiscally sustainable, resilient transportation systems.
SAFETY AT ALL LEVELS
Ensure safety is engrained in the culture of PennDOT to protect our employees, customers, partners and the traveling public as well as our assets.

COMMUNICATION THAT FOSTERS RELATIONSHIPS AND ENCOURAGES NEW IDEAS
Strengthen internal and external relationships, cultivate employee ideas and engage customers equitably using collaborative, transparent communication tools and services.

MOBILITY AND CONNECTIVITY
Provide access to equitable, affordable, reliable and sustainable transportation options that support quality of life and economic prosperity.

INNOVATION
Provide access to equitable, affordable, reliable and sustainable transportation options that support quality of life and economic prosperity.

RECRUITING, RETAINING AND DEVELOPING A DIVERSE AND INCLUSIVE WORKFORCE
Ensure a flexible work environment that inspires employee development, is strengthened by team diversity, values employee insight and empowers employees to pursue rewarding careers at PennDOT.

CUSTOMER SERVICE
Equitably serve all customers and communities by working to understand and empathetically respond to their unique needs.

EFFECTIVELY LEVERAGING AVAILABLE RESOURCES BY MODERNIZING TECHNOLOGY AND ASSETS
Assure excellence in productivity, efficiency, sustainability, service quality and resiliency in asset stewardship by leveraging technology and innovation to improve Pennsylvania’s multimodal transportation infrastructure and processes, while maintaining the integrity, confidentiality and protection of customer records and personally identifying information.
2021 PennDOT Highlights

- **465 State-Owned Bridges** Preserved or Improved
- **$55 Million** For Roadway Patching
- **150,066 Tons** of Ashpalt Used
- **5,600 Miles** of Improved Roadway
With PennDOT directly responsible for approximately 40,000 roadway miles and 25,400 bridges in Pennsylvania, maintaining our transportation network takes strong partnership among the department, federal and local governments, planning partners, the construction industry and our communities.

In addition to the state’s highways and bridges, a robust menu of travel and commerce options such as aviation, transit and rail facilities are also essential to keeping people and goods moving.
This is a multi-year statistical review of reportable motor vehicle crashes in Pennsylvania. A reportable crash is one in which the incident occurs on a highway or traffic way that is open to the public and an injury or a fatality occurs, or at least one of the vehicles involved requires towing from the scene.

<table>
<thead>
<tr>
<th>Period</th>
<th>Crashes</th>
<th>Fatalities</th>
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<tr>
<td>2013-2017</td>
<td>126,019</td>
<td>1,186</td>
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<td>1,141</td>
</tr>
<tr>
<td>2017-2021</td>
<td>120,849</td>
<td>1,149</td>
</tr>
</tbody>
</table>

As the five-year crash fatality average has begun to level out, PennDOT is more committed than ever to making Pennsylvania’s roadways safer for travelers of all modes. PennDOT’s 2022 Strategic Highway Safety Plan, found online at [PennDOT.pa.gov/Safety](http://PennDOT.pa.gov/Safety), outlines our strategy to decrease, and eventually eliminate, crash fatalities in Pennsylvania. Additionally, the public can access commonly requested crash and fatality information, as well as create their own custom searches with the Pennsylvania Crash Information Tool online at [CrashInfo.PennDOT.gov](http://CrashInfo.PennDOT.gov).
PennDOT resolved 36,210 public submissions to its Customer Care Center.
In November 2021, Governor Tom Wolf, the state secretaries for the departments of Transportation and Environmental Protection, and local and stakeholder representatives released the state’s first-ever Litter Action Plan – which reflects the work of more than 100 stakeholders from state and local government, businesses, the legislature, and more–and includes both current initiatives and recommendations to clean up the more than 500 million pieces of litter scattered throughout the commonwealth.

PennDOT Secretary Yassmin Gramian noted that the agency’s annual $14 million cost to clean up litter makes litter prevention especially important. In addition to examples and suggestions for the General Assembly, local governments, businesses, and the public, the report outlines 16 recommendations for the commonwealth.

Examples of actions state agencies are taking to support the higher-level recommendations in the plan include:

• PennDOT, the Department of Community and Economic Development, and DEP collaboration on an anti-litter campaign anticipated for spring 2022.
• PennDOT analysis of where and how to ensure it has the right litter-reducing tools in place in its public-facing facilities.
• DEP work underway on a new rulemaking to provide convenient and affordable access to waste disposal and recycling services in rural areas of Pennsylvania where trash collection and recycling services are currently not economically feasible.
• The Department of Conservation and Natural Resources (DCNR) is complementing their “Leave No Trace” program with working to update their concessionaire agreements to include language aimed at combatting litter, such as requiring food providers to minimize paper straw and disposable utensil use. And when onsite composting is available at a state park, concessionaires will be required to work with DCNR to convert as many of their food service products to compostable, paper-based forest product alternatives and then compost them with the food waste.
• State Police continuing Operation Clean Sweep, which launched in summer 2021 and reinforces a zero-tolerance mindset with litter enforcement, while sharing anti-litter messages year-round. This complements their assistance with enforcing Litter Enforcement Corridors that – under a 2018 law – can be designated by the department and local governments to combat litter.
• The Department of Education’s review of opportunities to further incorporate anti-litter curriculum into their environmental programming standards.
• Fish and Boat Commission pilot projects, in coordination with DCNR, to properly dispose of fishing line.

PennDOT provides litter information and many additional litter cleanup volunteer opportunities, including Adopt-A-Highway, Litter Brigades, and more on its Roadside Beautification page.
In 2021, PennDOT’s Driver and Vehicle Services licensed Pennsylvania’s nearly 9 million drivers and 810,858 motorcyclists, while registering nearly 12 million vehicles and close to 377,000 motorcycles.
New Driver License Program Expands Eligibility to Improve Independence for Visually Impaired

Visually impaired Pennsylvania residents can now use bioptic telescope lenses to obtain a learner’s permit and ultimately earn a driver’s license. Act 131, which was signed into law by Governor Wolf in November 2020, took effect September 27, 2021 and allows eligible individuals to use bioptic telescope lenses that can help them meet visual acuity standards to qualify for and obtain a driver’s license. PennDOT has developed the program’s training and licensing process and has now implemented the program.

This law makes significant changes that will ultimately increase many of our residents’ independence and enhance their quality of life. The law allows drivers with a visual acuity less than 20/100 combined but at least 20/200 visual acuity in the best corrected eye, to be eligible to apply for a Bioptic Telescope Learner’s Permit.

In order to be eligible, the individual must:

- Pass a complete vision examination completed by an optometrist or ophthalmologist;
- Have possessed a Bioptic Telescope Lens for at least three months;
- Undergo a minimum of ten hours of front seat passenger-in-car instruction with a Low-Vision Rehabilitation Professional; and
- Provide the Department a letter of enrollment with a PennDOT approved Certified Driving Instructor (CDI) or Certified Driver Rehabilitation Specialist (CDRS).

Once all requirements have been met, the applicant may apply for a Bioptic Telescope Learner’s Permit. Upon successful completion of PennDOT’s knowledge test, the applicant must complete a minimum of 20 hours behind-the-wheel driver training using the Bioptic Telescope with a PennDOT approved (CDI) or (CDRS), plus 45 hours of observed driving hours with a licensed person who is age 21 or older in order to complete the 65 hours of accompanied driving required and reassessed by a PennDOT approved CDI or CDRS before taking the skills exam. Bioptic telescope drivers may only drive during daylight hours, are limited to roads other than freeways and may only drive passenger vehicles weighing no more than 10,000 pounds.

Partnering with PA Agencies to address School Bus Driver Shortage

PennDOT partnered with Department of Health, Department of Education and the PA School Bus Association to do its part to encourage those looking for employment or supplemental employment to consider obtaining a school bus endorsement to help get Pennsylvania’s children to school.

PennDOT mailed a letter from Pennsylvania Department of Education reaching out to approximately 376,000 individuals with Commercial Driver’s Licenses (CDL) to help connect interested drivers with school entities. The letter included information for a survey for individuals who had an interest in exploring employment opportunities. Over 1,600 individuals expressed an interest in serving as a school bus driver through the survey. PennDOT also temporarily opened CDL skills testing on Mondays, for four weeks, as the Commonwealth faced a shortage of school bus drivers. This began on Monday, October 18, 2021. These additional testing appointments were intended to allow an increased opportunity to schedule time for a CDL skills test for those who were interested.

Commercial Driver Licensing Updates

As a result of state law, Act 131 of 2020, PennDOT extended the validity period of a commercial learner’s permit from 180 days to one year. The Federal Motor Carrier Safety Administration recently changed regulations to allow a jurisdiction the choice of the 180-day commercial learner’s permit with an additional 180-day extension or a one-year commercial learner’s permit. A one-year permit is more convenient for customers, giving them more time to prepare for their skills test. Additionally, a longer validity period means that fewer customers will need to extend their permit, which will help decrease customer traffic in driver license centers. This section of the law became effective May 23, 2021.

Act 131 also updated the requirements and restrictions for commercial driver's license holders, including reporting requirements for convictions and violations. One of these changes disqualifies an individual from operating a commercial motor vehicle for life if they are convicted of using a commercial motor vehicle to commit certain forms of severe human trafficking. This section of the law became effective May 25, 2021.

Elimination of Registration Class Stickers

Historically, trucks with a registered weight of 5,001 pounds or greater were required to display a registration class sticker on their windshield. This is an antiquated and unreliable indicator for law enforcement and inconvenient for the industry/vehicle owners. The Department published its intent to eliminate registration class stickers.
Many Pennsylvanians have answered the call to become organ donors, helping the Pennsylvania organ donation organizations reach a major milestone this year. Nearly 50 percent of current driver’s license and identification card holders are registered organ donors – that’s more than five million Pennsylvanians. Currently, more than 7,000 Pennsylvanians await organ transplants.
PennDOT Driver License Centers are operated by PennDOT employees and offer driver license services. PennDOT’s stand-alone Photo Centers are located throughout Pennsylvania. When you receive a camera card, which is an invitation to our photo license, identification card process, you must appear at a photo center to obtain a photo for a driver’s license or an identification card.

PennDOT partners with private businesses to provide customers with face-to-face, over-the-counter services. Online indicates that these business partners have a secure, electronic connection to PennDOT and can issue a variety of products on-the-spot. These businesses charge a market-driven fee for their services in addition to applicable PennDOT fees.

**DRIVER AND VEHICLE SERVICES STATISTICS**

- **9.1 Million** Licensed Drivers
- **12.1 Million** Registered Vehicles
- **3,370** Special Fund License Plates Sold Raising $71,800
- **5+ Million** People Assisted by the DVS Call Center
- **10.3 Million** Online Transactions
- **26,144** Personal License Plates Sold
- **25,506** PA Motorcycle License App Downloads
- **807,444** Licensed Motorcyclists
- **375,462** Registered Motorcycles
- **10,193** Participants in the Safety Course
- **242,503** PA Driver License App Downloads
2021 PennDOT Highlights

141 Million Fixed Route Bus Trips

65 Operating Railroads

5,600 Miles of Railroad Tracks

121 Licensed Public Airports
HELPING SENIORS ON A DAILY BASIS (FY 20-21)

17.7 MILLION FIXED ROUTE BUS TRIPS FOR SENIORS

1.6 MILLION SENIOR SHARED-RIDE PROGRAM TRIPS
In 2021, PennDOT advanced several Active Transportation Plan priorities to improve opportunities for walking and biking through coordination efforts with planning regions across the state.

The department completed a rewrite of the Bicycle Design Chapter of Pub 13 (Design Manual 2). The chapter broadly modernizes and expands design guidance for on-road bicycle facilities.

PennDOT released a new policy on Trails in Limited Access Right-of-Way that allows local governments to propose potential trail alignments within PennDOT’s limited access right-of-way.

Department staff continue outreach to all partners on the Active Transportation Plan as part of educational awareness and to emphasize the importance of the PennDOT Connects process to identify and support local planning needs.

PennDOT continues to coordinate with other state agencies to fund local planning efforts, improve trail facilities, and educate local communities on the value of active transportation.
As of January 2022 there are 567 transit vehicles powered by alternative fuels in operation at Pennsylvania transit agencies. In 2021, 330 transit vehicles were replaced throughout Pennsylvania with the help of state funding.

Container lifts and containers at the Port of Philadelphia due to PA Intermodal Cargo Growth Incentive Program:
• 37,030 Added Container Lifts (FY 20-21)
• 215,828 Total Lifts increased since 2015 (FY 20-21)

Keystone corridor passenger trips:
• Keystone: 295,467 (FY 20-21)
• Pennsylvanian: 107,271 (FY 20-21)
• TOTAL: 402,738 (FY 20-21)

Number of aviation projects and funding – Bureau Of Aviation awarded 110 grants totaling $34.6 million in FY 2020-21
Licensed public airports:
• 121 public airports/heliports licensed in PA
• 15 Scheduled service airports
• 15 commercial airports
• 63 federally sponsored airports

• 25 Rail Freight Projects (RFAP/RTAP) approved (FY 20-21)
• 7 Rail Transportation Assistance Program (RTAP) projects completed in CY 2021 totaling approximately 23 miles of track improved/added
• 21 Rail Freight Assistance Program (RFAP) projects completed in CY 2021 totaling 149 miles of track improved/added
• 65 operating railroads
• More than 5,600 miles of track

Due to the Bipartisan Infrastructure Law (BIL) passenger-rail investments, PennDOT and Norfolk Southern (NS) will now collaborate on the operating agreement and finalize the improvements required to increase passenger-rail service on the NS-owned corridor west of Harrisburg. The engineering and construction will stem from a NS operational feasibility study identifying improvements required to eliminate eight chokepoints and to allow freight and passenger trains to operate without conflicting with each other.

The improvements can begin when PennDOT and NS finalize an operating agreement including the project scope, how freight and passenger operations will both safely use the corridor, compensation for the use of NS’s assets, and adequate liability protection. PennDOT will fund the agreement by redirecting state Multimodal Transportation Fund dollars because part of the BIL’s 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 which would have required approximately $350 million from Pennsylvania toward train set costs.
Delivering transportation innovations is part of PennDOT’s DNA, and we remain committed by developing smart approaches to doing business through catalysts, like the State Transportation Innovation Council, to exploring transformational technology like automated vehicles, safety, and continuous quality improvement through employee engagement.
The Pennsylvania State Transportation Innovation Council (STIC) continues to be a vital and collaborative entity that remains focused on advancing proven innovations to improve transportation for the people of Pennsylvania.

Despite another challenging year due to the COVID-19 pandemic, 2021 saw the selection of five Federal Highway Administration (FHWA) Every Day Counts Round 6 (EDC-6) innovations that Pennsylvania is pursuing, including Crowdsourcing for Advancing Operations; e-Ticketing and Digital As-Builts; Next Generation Traffic Incident Management (TIM): Integrating Technology, Data and Training; Targeted Pavement Overlay Solutions (TOPS); and Ultra-High Performance Concrete (UHPC) for Bridge Preservation and Repair. Additionally, significant progress was made on innovations from previous EDC rounds, including Unmanned Aerial Systems and Collaborative Hydraulics: Advancing to the Next Generation of Engineering (CHANGE).

Four new STIC innovations were introduced in 2021, including Slotted Median Barriers, Standardizing Concrete Color on Bridges, the Environmental Monitor Role for Large Construction Projects and LED Lighted Plow Wings. This brought the total number of STIC innovations currently in development to 11. Two additional innovations – Certified Concrete Finishers Course and Sequential Dynamic Lighting Curve Warning Systems – moved to the Advancement Phase of the STIC Innovation Development Process, and three innovations were fully deployed – Hot Pour Mastics, Stormwater Training and Field Guidebook and Predictive Work Zone Analysis.

A project, coordinated through PennDOT’s Strategic Recycling Program which is funded through DEP, includes two quarter-mile roadway stretches surfaced with an asphalt/recycled-plastic mix. The material is intended to strengthen the roadway surface without leaching plastic material into the surrounding environment. Potential benefits include:

- Extended useful life of asphalt pavements;
- Diverting waste plastics from landfills and helping to establish a viable market for these plastics; and
- Continued ability to reuse asphalt millings in future recycled-asphalt pavement applications.
Significant progress was made on several technology focused EDC and STIC innovations as well as FHWA STIC Incentive Program funding projects in 2021.

As part of the EDC-6 e-Ticketing and Digital As-Builts innovation, PennDOT piloted an e-Ticketing mobile construction app in each of PennDOT’s 11 engineering districts during the 2021 construction season. While the traditional construction practice called for the issuance of a paper ticket detailing information regarding materials delivered onsite, the e-Ticketing solution provides consistency in the data being captured across the state, as well as limits interaction with the delivery truck, providing a safer work environment for construction inspection staff. More pilots will be conducted this year as PennDOT continues to update the app to improve functionality based on feedback from users, with full implementation targeted for 2024.

Collaborative Hydraulics: Advancing to the Next Generation of Engineering (CHANGE), an EDC-4/EDC-5 innovation, involves switching from one-dimensional (1D) to two-dimensional (2D) representations to produce varied and specific projected stream flows around bridge structures and evaluate the potential impacts on surrounding areas. The use of 2D hydraulic modeling tools helps to evaluate risk, mitigate the effects of bridge projects and ensure that proposed improvements will not increase flooding risk to private houses and property within the project limits. In 2021, four PennDOT engineering districts – Districts 1, 2, 3 and 11 – selected bridge projects in which the new 2D hydraulic modeling tools are being used. The remaining districts will select projects in 2022 to help further advance the 2D modeling effort.

In addition to the EDC innovation advancements, several STIC Incentive Program funding projects also made great strides forward in 2021.

In June 2021, the Commonwealth’s UAS Task Force held its initial meeting. The task force is working on a multi-year strategic plan to establish a framework for identifying, integrating and managing UAS technologies. Additionally, PennDOT hosted a three-day virtual UAS Workshop with FHWA in July 2021, in which various state DOTs as well as experts from academia and the federal government shared their insights and experience with UAS technology. PennDOT representatives also shared information about the department’s ongoing and developing UAS program efforts.

The Pennsylvania Turnpike Commission also used $50,000 in STIC Incentive Program funding to assist in the purchase of four UAS vehicles that were transferred to the Pennsylvania State Police for crash reconstruction work.

The use of Augmented Reality in Transportation, another STIC Incentive Program funding project, continued through 2021 with PennDOT District 11, based in the Pittsburgh region. The district piloted Virtual Asphalt Acceptance Testing, which uses High-Definition Cameras within the asphalt plant. The pilot was very well received, and District 11 is now testing the option of AR usage in the plants in lieu of cameras as a part of their Augmented Reality pilots.

A STIC innovation deployed in 2021, Predictive Work Zone Analysis (FREEVAL-PA), is an innovative analysis tool based on the Highway Capacity Manual that can be used to analyze work zones’ effect on traffic flow. It guides PennDOT’s decision-making process for implementing lane closures, crossovers, or other traffic control measures and helps minimize congestion and delays during construction or maintenance projects. PennDOT and its partners can use the tool for work zone staging changes, work zone delay and user cost analysis, lane reservation analysis, diversion sensitivity analysis, freeway alternative analysis and scenario planning. FREEVAL-PA can also be used to evaluate incident management and response strategies.
Personal Delivery Devices

On January 30, 2021, Act 106 of 2020 went into effect, permitting the operation of Personal Delivery Devices (PDDs) — ground based delivery devices manufactured for transporting cargo or goods and is operated by a driving system that allows for autonomous and/or remote operation.

Prior to operating, an applicant must receive a PDD Authorization from the PennDOT. Per Act 106, PennDOT was charged with establishing policies and guidelines to administer the authorization of PDDs. When developing the policy, PennDOT solicited feedback from over 2,600 organizations/stakeholders including local, state, and federal officials, members of law enforcement, advocacy organizations, and PDD developers. On January 29, PennDOT published the Personal Delivery Device Operations Policy. Six months later, Kiwibot became the first authorized PDD company, delivery food in the Bloomfield neighborhood of Pittsburgh.

Highly Automated Vehicle Incident

To aid first responders, PennDOT created the first-of-its-kind AV incident response mobile application to ensure field personnel have all of the information they need to safely address an incident. By simply entering the license plate of the AV, responders can have access to information on extraction, firefighting, towing, data preservation, and more. In addition, responders can alert PennDOT of an incident through the touch of a button.

AV Public Survey

In 2021, the Highly Automated Vehicle Advisory Committee conducted a public survey to identify the public’s perception of automated vehicles including expectation, and concerns related to automated vehicles. Over 5,000 individuals responded, resulting in a 2% margin of error. In general, areas exposed to AV testing had a more favorable viewpoint on the technology. One area of overwhelmingly consensus was that state government involved with evaluating safety of automated vehicle testing and deployment.

Platooning Transit Vehicle Feasibility Study

With the passage of Act 117 of 2018, transit vehicles are permitted to platoon on highways in Pennsylvania. PennDOT performed a study to determine if platooning transit vehicles can supplement existing intercity passenger rail in western Pennsylvania. As part of the study, PennDOT determined the level of investment, documented potential impacts to the region and existing services, evaluated ridership demand, and determined a return on investment.
PennDOT Implements, Advances Strategic Plan SMART Goals

With the finalization of the PennDOT Strategic Plan and the identification of seven new strategic themes that focus on building safe, equitable and sustainable transportation systems, PennDOT organizations identified 39 deputate-level, Specific, Measurable, Actionable, Realistic and Timely (SMART) goals in 2021 that demonstrate how the department’s programs and operations align with and work toward achieving the goals outlined in the updated PennDOT Strategic Plan. As of the end of 2021, two of the 39 SMART Goals were implemented, both focusing on enhancing employee and customer safety, and marked progress was made on each of the other goals with many having a planned implementation date of early 2022.

PennDOT Rolls Out Travel and Tourism Certification Program

PennDOT implemented a comprehensive Travel and Tourism Certification Program in 2021 for its Tourist Information Counselors located at PennDOT’s 14 Keystone Welcome Centers. The program was designed to promote high-quality travel and tourism information services provided by the counselors who, on average, assist more than 3 million travelers per year. Through a combination of 20 hours of virtual and self-guided, web-based training modules, the program enhances the knowledge and skills sets of the Tourist Information Counselors that are needed to deliver more customized information and enhanced experiences for travelers. The program includes information on the geography of Pennsylvania, National Register of Historic Places in Pennsylvania, Pennsylvania Byways Program, planning and developing travel itineraries, map reading, historic trails and heritage areas. Nearly 3,300 Agility Agreements with approximately 2,000 Agility partners have been executed across the commonwealth over the past 25 years.

PennDOT Celebrates 25 Years of Agility

PennDOT’s Agility Program celebrated its 25th Anniversary in 2021. Launched in 1996, with a pilot in PennDOT’s District 1, and implemented in every PennDOT district by 1997, the program enables service-for-service exchanges with eligible partners, such as state and federal agencies, local governments, universities, and eligible non-profit organizations. Through Agility, PennDOT and its eligible partners are able to exchange services, equipment and staff without monetary payments, helping to make the most of limited resources, while developing strong and rewarding relationships. Examples of more common exchanges include: a partner receiving painted road lines in exchange for mowing; a partner receiving inlet cleaning in exchange for street sweeping; and a partner paving local roads in exchange for litter pick up and meeting space, to name a few; though, many unconventional Agility exchanges have been executed since the program’s inception as well.
In support of Governor Wolf’s LeanPA initiative, PennDOT continued to provide updates to the Governor’s Office of Performance through Excellence (OPE) in 2021 on Lean and process improvement initiatives being advanced across the department through the coordinated efforts of PennDOT’s Bureau of Innovations (BOI) and its District Lean Leaders. Lean is a set of tools and strategies aimed at improving performance by making processes simpler, better, faster, and cheaper. Lean focuses on the customer by maximizing customer value and minimizing waste.

PennDOT hosted a first-of-its-kind virtual “Innovating Innovation” event in 2021. Attended by nearly 600 PennDOT employees, this event showcased three innovation councils, committees, or competitions and provided attendees with an overview of each program’s structure, participation, and leadership support. These programs provide employees at all levels of the organization with the opportunity to suggest, discuss, and assist in implementing appropriate ideas to make PennDOT better, safer, and more efficient.

Further, in the spring of 2021, BOI hosted Lean conversations across each deputate, resulting in 19 Lean process improvement projects that were completed by PennDOT organizations by the end of the year. In addition, several communications initiatives to help increase Lean awareness across the department were also implemented in 2021, including a Lean Dashboard, fact sheets and videos that highlighted Lean resources and successful Lean projects, and a Lean Resources page on an internal employee portal.

Through these efforts, PennDOT organizations reported 10 projects with 18,409 hours in time savings, nine projects with $651,835 in annual cost savings and 20 projects with a 72 percent improvement in quality or throughput in 2021 alone. Since PennDOT began reporting Lean metrics in 2018, there have been 57 Lean projects that have reported a total of 27,583 hours in time savings annually, 11 projects that showed $973,779 in annual cost savings, and 151 projects that improved operations by an average of 32 percent. Read more about many of these projects in the PennDOT Efficiencies Report.

At PennDOT, we are paying special attention to exploring solutions that will reduce inequities in our system, build resilience against future disruptions, improve safety, and support both environmental and financial sustainability.

In 2020, PennDOT convened the Dismantling Systemic Racism and Inequities (DSRI) Working Group, which includes staff from across PennDOT. The DSRI Working Group was charged with assessing PennDOT’s diversity and inclusion efforts, better understanding structural racism in transportation generally, and evaluating programs and initiatives that could help with these issues.

The DSRI Working Group’s efforts culminated in the Dismantling Systemic Racism and Inequities 2021 report, which discussed how PennDOT can achieve greater equity in the areas of contracting, public involvement, community investment, our boards and commissions, and of course, our own internal culture at the department.

But truly cultivating transportation equity isn’t about compiling a report or checking a box. These principles must be engrained into PennDOT’s work. Creating and supporting a quality transportation system that works for everyone is at the center of the department’s mission, and PennDOT is committed to the ongoing work that this requires.
PennDOT Hosts Virtual Innovation Days

With its continued focus on using innovative approaches to run organizations at peak efficiency, PennDOT hosted the PennDOT Virtual Innovation Days event in November 2021. The three-day event included 12 sessions with presentations focused on making roadways and bridges last, technology and project delivery, maintenance equipment, techniques and materials, enhanced design and construction approaches, multimodal transportation planning, and tools to reduce traffic congestion and enhance safety.

Nearly 850 individuals participated in the virtual event, representing diverse audiences from PennDOT, the Pennsylvania Turnpike Commission, FHWA Pennsylvania Division Office, municipal governments, local planning partners, public transportation agencies, bicycle and pedestrian advocacy organizations, and consultants/contractors.

The event also included a Virtual Exhibit Hall that showcased nearly 100 exhibits about innovative equipment, materials, applications, and technologies that can help in performing work safer, better, faster, and save money.

PennDOT Celebrates Employees at Annual Awards Ceremony

PennDOT Secretary Yassmin Gramian, P.E., hosted the annual PennDOT Virtual Innovations Award Ceremony in 2021, recognizing the groundbreaking work of 48 PennDOT employees during the past year. Twenty-two employees were recognized for their innovative idea and smart practice submissions into PennDOT’s IdeaLink and WorkSmart online employee engagement systems. Twenty-six permanent members of PennDOT District 12’s Safety, Quality and Innovation Council received the first-ever George W. McAuley, Jr., P.E. Innovation Award, for developing a plan that brought new vigor and direction along with an added focus of promoting and celebrating innovation across the district. The award, named for PennDOT’s late executive deputy secretary who passed away in 2021, recognizes an employee-driven team that promotes and fosters innovation at all levels of the organization.

PennDOT Hosts Fourth Annual Innovations Challenge in 2021

The challenge asked students, in ninth through 12th grades, to develop an innovative and implementable solution to help address Pennsylvania’s transportation revenue shortfall by identifying potential new funding streams, aside from additional gas taxes, tolls or mileage-based user fees, to help ensure adequate transportation funding for the future.

PennDOT received more than 30 innovative solutions from schools across the state. In April 2021, nine regional winners participated in a virtual statewide judging event with the Secretary and a panel of judges in lieu of an in-person judging event due to the COVID-19 pandemic.

The 2021 PennDOT Innovations Challenge winning team from Lower Moreland High School in Montgomery County developed the concept of installing power generating plates across Pennsylvania’s road network, creating a new and innovative funding stream for Pennsylvania’s transportation system.
The Route 8 Reconstruction involved more than 10 miles (most of which is four lanes), was reconstructed in Irwin, Victory, and Sandycreek townships, Venango County. The project also included the preservation of seven bridges, and upgrades and repairs to drainage, guiderail, and signs. Work in the 2020 construction season focused on the northbound lanes as well as repairs to the detour route - Old Route 8 (SR 3013). In 2021, work included the southbound lanes as well as the two-lane section of roadway near the intersection with Georgetown Road.

Venango County: $32.6 million
State Route 153/Section 269 featured the reconstruction of Front Street in Clearfield Borough. This betterment project was bid in July 2020. The project featured water line replacements, reconstruction of Front Street, drainage improvements, new sidewalk, and traffic signal upgrades. This was a PennDOT Connects project with Clearfield Borough and Borough Operations Manager Leslie Stott involved through the design of the project, as well as assisting with coordination and cooperation throughout the construction of the project. The project completed in late November of 2021.

Clearfield County: $3.7 million
Route 180, Mill and Resurface and Bridge Replacement - Mill and resurface with stone matrix asphalt (SMA) of over five miles of the eastbound and westbound lanes of I-180 in Delaware and Turbot townships, Northumberland County. The project included the replacement of the Route 1006 (Eighth Street) bridge spanning I-180 with a new two-span bridge. Each span is 100-foot long with a single pier in the median. The new bridge has two 12-foot lanes with 6-foot shoulders for a total width of 36-feet. Additional work included rehabilitation of the bridges spanning Route 44 and Route 1007.

Northumberland County: $8.9 million
This project includes construction of 3 improvements along US Route 6 between Milford and Matamoras boroughs, Pike County, Pennsylvania. Improvements include widening a portion of U.S. Route 6 to accommodate a consistent four-lane cross section for the entire corridor. The proposed roadway section will include two travel lanes in each direction with a center turning lane. Traffic signal improvements will also be incorporated into the design. The section of 3R improvements will be divided into three segments, a widening section from east of Delaware Valley High School to Station 259+00 (west of Hulst Road) where full-depth construction is proposed, mill and overlay section from Station 259+00 to the I-84 EB ramp intersection, and signal upgrades for four signals I-84 EB Ramps, Mountain Avenue, I-84 WB ramps and Price Chopper Driveway all contained within an overall project length of 1.813 miles.

Pike County: $5.2 million
This project replaced the PA 29 Bridge over Norfolk Southern Railroad in Upper Milford Township. Work included replacing the existing single span steel girder bridge with a new single span pre-stressed concrete bulb-tee beam bridge on a new roadway alignment adjacent to the existing structure.

The new bridge is taller to accommodate larger freight trains and wider to allow more shoulder area for pedestrian activity. Work began in September 2019 and the new bridge was complete in October 2021.

The original PA 29 Bridge was constructed in 1927. It was 173 feet long and 34 feet wide and was weight restricted for 30 tons, 40 tons combinations. The new bridge is 109 feet long and 40 feet wide and has no weight restriction. This section of PA 29 has an average daily traffic volume of 17,785 vehicles.

Lehigh County: $8.6 million
I-95 Section BS4/H04 - This project improved traffic flow and surface street access to Interstate 95 and the Betsy Ross Bridge Interchange in Philadelphia by widening a section of Aramingo Avenue, building several new or replacement ramps, constructing the half-mile long Adams Avenue Connector, and building the first segment of the Frankford Creek Greenway multi-use trail.

Philadelphia County: $80.9 million
I-83 Exit 4 Diverging Diamond Interchange, York County. While not the largest project completed by District 8 in 2021, its innovative design significantly improved safety and efficiency at an interchange previously struggling with congestion and high crash rates. Additionally, its appealing aesthetics creates a beautiful gateway along the state’s southern border with Maryland. Only the third interchange of its kind to open in Pennsylvania, this project included replacement of the northbound and southbound bridges that carry I-83 over Route 851 with two-span structures that allowed enough clearance for Route 851 to be widened to four lanes and realigned into the DDI configuration. The on and off ramps within the interchange were lengthened and reconstructed and the culvert that carries Deer Creek beneath the interchange was replaced.

York County: $29.9 million
Route 219 Carrolltown Improvements - The project improved 2.1 miles of Route 219 in East Carroll Township and Carrolltown Borough, Cambria County. The project is located from T-484 (20 Mine Road) to Route 4013 (Sunset Road).

Overall work on the 2.1-mile Route 219 improvement project included realignment of a curve in the roadway, full-depth reconstruction, milling and resurfacing, along with drainage, guide rail, signal upgrades, parking improvements, and traffic calming features.

The project was completed by Grannas Brothers Stone and Asphalt Co., Inc., of Hollidaysburg.

Cambria County: $6 million
The Freedom Road Turnpike Bridge project replaced the existing structure carrying Freedom Road (SR 3020) over I-76, Pennsylvania Turnpike in Butler County. Work included a new steel beam six-lane bridge, widening, paving, drainage, signal upgrade/replacement, and lighting work. As part of the accelerated bridge construction program, the structure was constructed in sections off-site and moved into final position requiring only short term closures on the PA Turnpike and Freedom Road. Work began in the Spring of 2019 and was completed in the Fall of 2021. It has been awarded a 2022 Transportation Quality Initiative (TQI) Community Connection Award along with PA Turnpike for the positive impact on quality of life in communities.

Butler County: $13.1 million
The I-579 project has constructed a “CAP” structure spanning I-579 recreating a link between downtown Pittsburgh and the Hill District. The project is an excellent example of multi-organizational collaboration with sponsorship from the Sports and Exhibition Authority, funding from the Federal Highway Administration, construction oversight by PennDOT and the City of Pittsburgh owning and maintaining the park and recreation area that was created.

Allegheny County: $29.7 million
The Interstate 70-K10 Project, located in South Huntingdon Township, Westmoreland County was the complete reconstruction of Exit 51, which is the I-70 & Route 31 Interchange. In addition to the interchange, a little over three miles of the interstate was reconstructed with concrete pavement and a widened roadway template consisting of a 10 ft. median and 12 ft. lanes and shoulders. Route 31 was also reconstructed to accommodate a center turn lane. Overlays were completed on side roads leading into the project. Two structures were completed with this project, one carrying I-70 over Route 31 and one carrying Smithton Pike over I-70.

Westmoreland County: $67.5 million
State Funding
Motor License Fund: Non-Restricted ................................. $2,710,492
Motor License Fund: Restricted ..................................... $1,735,643
Motor License Fund: Restricted Aviation ......................... $10,564
Multimodal Fund ....................................................... $151,900
Act 44 Public Transportation Trust Fund ......................... $2,045,440
Act 26 Public Transportation Assistance Fund .................. $241,741
Pennsylvania Infrastructure Bank ................................. $42,500
Lottery Fund .......................................................... $170,907
General Fund ......................................................... $111,367
General Fund Bonds ............................................... $175,000
Unconventional Gas Well Fund .................................. $1,000
Organ & Tissue Donation Awareness Fund ..................... $100
Total State Funding ................................................ $7,396,654

Federal & Other Funding
Federal Funds: Highways ............................................. $1,771,570
Federal Funds: Pass Through .................................... $177,790
Federal Funds: Public Transportation and Other ............. $301,685
Federal & Other: Aviation ........................................ $109,047
Other Funds: Highways ............................................. $191,222
Federal & Other Funds – Rail Freight ......................... $0
Total Federal & Other ............................................. $2,552,314

Total Funding ........................................................ $9,947,968
## REVENUE USES 2020-21 (IN THOUSANDS)

### Highway Related
- Highway & Bridge Maintenance: $1,640,005
- Highway & Bridge Improvement: $2,639,255
- Driver & Vehicle Services: $273,175
- Payments to Local Government: $844,267
- PennDOT Facilities: $5,000
- General Government Operations: $65,082
- Pennsylvania Infrastructure Bank: $42,500
- Refunds & Other: $2,550
- Welcome Centers: $3,815

**Total Highway Related Uses**: $5,515,649

### Multimodal Related
- Aviation: $129,611
- Rail Freight: $41,000
- Mass Transit: $2,412,181
- Rural & Intercity Transit: $303,585
- Free & Shared Ride Transit: $170,907
- Aviation Grants: $6,466
- Rail Freight Grants (EA): $10,775
- Passenger Rail Grants (EA): $2,155
- Ports & Waterways Grants (EA): $10,775
- Bicycle & Ped. Facilities Grants Statewide (EA): $4,317
- Statewide Program Grants (EA): $40,000
- Multimodal Administration & Oversight (EA): $4,336
- Transfer to Commonwealth Financial Auth. (EA): $64,164
- PennPorts Regional Port Auth. Debt Service: $4,608

**Total Multimodal Uses**: $1,223,135

### Debt Service & Other Agencies
- Pennsylvania State Police: $703,430
- General Fund Capital Debt: $102,585
- Pennsylvania Turnpike: $159,993
- Motor License Fund Capital Debt: Hwy & Bridges: $108,623
- Other Agencies: $139,504
- Tort Payments: $9,000

**Total Debt Service & Other Agencies**: $1,223,135

**Total Revenue Uses**: $9,947,968
All states struggle with how to pay for transportation infrastructure and services. Pennsylvania is especially challenged in this area for two reasons: the age and size of our transportation network, and our outsized reliance on the unsustainable gas tax to pay for it. Due to inflation and fuel efficiency, it is increasingly clear that the gas tax is not sustainable and other options must be explored to provide reliable transportation funding.

**Transportation Revenue Options Commission**

On March 12, 2021, Governor Wolf signed an executive order establishing the Transportation Revenue Options Commission (TROC), which was tasked with developing comprehensive funding recommendations for Pennsylvania’s vast transportation network. TROC was comprised of transportation, economic, and community stakeholders from the public and private sectors, including majority and minority leaders from the House and Senate Transportation and Appropriations committees.

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

PennDOT looks forward to continued collaboration with the General Assembly and transportation stakeholders to find sustainable funding solutions for Pennsylvania’s transportation network.

**PennDOT Pathways Planning and Environmental Linkages Study**

In October 2021, PennDOT completed a Planning and Environmental Linkages (PEL) study to identify possible near-term and long-term solutions to the funding gap our transportation system faces. The PEL Study evaluated the feasibility of various funding options for near- and long-term implementation and established a methodology for evaluating environmental justice effects associated with each.

The study will serve as a guide as PennDOT pursues and implements alternative funding strategies to help support our entire transportation system. The most near-term funding needs are in PennDOT’s highway and bridge programs, but there are significant needs across all transportation modes. The findings of the PEL Study will help guide the implementation of future funding strategies and can be modified as needs evolve.

The department established the PennDOT Pathways program to analyze new future-focused sources of funding for our transportation system that could better serve our communities and all Pennsylvanians for the next generation.
# 2020-21 PENNDOT INCOME & EXPENDITURES

## 2020-21 MOTOR LICENSE FUND INCOME

<table>
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<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Liquid Fuels Tax</td>
<td>$3,228,468</td>
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<tr>
<td>License &amp; Fees</td>
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<td>Other</td>
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## 2020-21 MOTOR LICENSE FUND EXPENDITURES

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<th>Description</th>
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<td>Highway Maintenance</td>
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<td>Turnpike</td>
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<td>Other PennDOT</td>
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Total State Revenue Utilized - $4,410,512 (Dollars in Thousands)

Total State Expenditures - $4,410,512 (Dollars in Thousands)
PennDOT’s 11 Engineering Districts throughout the state maintain, restore and expand the state’s highway systems. Each office does its part to deliver a safe and efficient transportation system on the nearly 40,000 miles of highway and roughly 25,400 bridges that PennDOT is responsible for.

See or sign up for PennDOT news near you at www.penndot.pa.gov under “Regional Offices.

More information about PennDOT’s operations and the state highway system is available in PennDOT’s Fact Book at www.penndot.pa.gov under “About Us.”

**District 1** - 814-678-7085  
**District 2** - 814-765-0400  
**District 3** - 570-368-8686  
**District 4** - 570-963-4061

**District 5** - 610-871-4100  
**District 6** - 610-205-6700  
**District 8** - 717-787-6653  
**District 9** - 814-696-7250

**District 10** - 724-357-2800  
**District 11** - 412-429-5000  
**District 12** - 724-439-7315

**Driver Licensing and Vehicle Registration** - 717-412-5300

**Regional Twitter Handles**  
Allentown .................................................................@511PAAllentown  
Altoona .................................................................@511PAAltoona  
Erie .................................................................@511PAErie  
Harrisburg .................................................................@511PAHarrisburg  
Philadelphia .................................................................@511PAPhilly  
Pittsburgh .................................................................@511PAPittsburgh  
Scranton .................................................................@511PANortheast  
State College .................................................................@511PASTateColl  
Statewide .................................................................@511PASTatewide

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www.facebook.com/groups/pittsburghpenndot/  
www.facebook.com/groups/northeastregionpenndot/
Learn about our executive team at www.penndot.pa.gov under "About Us."

**Secretary**

Secretary of Transportation **Yassmin Gramian, P.E.** oversees programs and policies affecting highways, urban and rural public transportation, airports, railroads, ports, and waterways. She manages PennDOT’s annual budget, which is invested in Pennsylvania’s approximately 120,000 miles of state and local highways and 32,000 state and local bridges. Under her leadership, the department is directly responsible for nearly 40,000 miles of highway and roughly 25,400 bridges.

She also has oversight of the state’s 12.1 million vehicle registrations and 9 million driver’s licenses and IDs.

**Acting Executive Deputy Secretary**

**Melissa J. Batula, P.E.,** was appointed PennDOT’s Acting Executive Deputy Secretary in March 2021, after serving as the first female Deputy Secretary for Highway Administration since January 2020. She is adept at building strong relationships with industry and government partners and is committed to helping to guide the department in successfully carrying out its mission.

**Highway Administration**

**Michael Keiser,** was appointed Acting Deputy Secretary for Highway Administration in March 2021. He leads PennDOT’s largest deputate which includes employees in “design, construction, maintenance, materials testing, environmental review, safety, and traffic engineering.”

**Driver And Vehicle Services**

As deputy secretary of Driver & Vehicle Services, **Kurt J. Myers** and his team oversee the issuances of driver’s licenses, ID cards, motor vehicle registrations, driver license centers and standalone photo license centers, regulatory oversight of statewide driver safety programs, vehicle safety inspection and the enhanced auto emissions program.

**Planning**

Deputy Secretary for Planning **Larry S. Shifflet** and his group work with the federal government and local planning organizations to develop the 12-Year Transportation Program, which serves as the blueprint for highway, bridge, aviation, rail freight and mass transit improvements.

**Multimodal Transportation**

**Jennie Louwerse,** deputy secretary for Multimodal Transportation, oversees aviation, rail freight, public transportation, ports, pedestrian and bike programs.

**Acting Deputy Secretary for Administration**

**Michelle Jennings** was appointed acting deputy secretary for administration in July 2021. She heads the Administration deputate which includes the bureaus that oversee fiscal management, computer systems, mobile applications, telecommunications, equal opportunity/equal employment opportunity in contract compliance, training, employee safety programs, human resources, office services, and facilities management.