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Sign shop employees show Secretary Schoch a new weight-restriction sign at the Aug. 22 event in the facility.

## New, Increased Weight Restrictions in Progress for Nearly 1,000 Bridges

On Aug. 22, Secretary Barry J. Schoch authorized the department to add or increase weight restrictions to about 1,000 structurally deficient (SD) bridges statewide to ensure bridge safety and preserve our aging bridge system.

PennDOT must take this step because of legislative inaction this past June on transportation funding, leaving the department's future resources in question. Reducing the weight traveling on these bridges will slow down their deterioration and preserve safety while funding for their repairs remains uncertain.

As PennDOT has regulatory oversight over all bridges in the state, Schoch's authorization applies weight restrictions to 530 state-owned and about 470 locally owned bridges. In an effort to maintain safety for all motorists, a change in PennDOT's weight-restriction criteria must be implemented for all bridges, regardless of owner. Pennsylvania currently has 567 state bridges and 1,685 local bridges posted with weight restrictions.

To this point, the department has waited longer to place weight restrictions on

bridges because of anticipated funding that allowed bridge repairs to be scheduled. With declining revenues and a well-documented funding need, the department is changing how it applies the national standard to weight restrict bridges earlier in their deterioration stages.

National bridge weight-limit posting criteria allow restrictions to be applied anywhere from when a bridge's ability to handle more than 80,000 pounds begins to decline, down to when a bridge has lost half of this ability.

Pennsylvania currently leads the nation in the number of SD bridges with 4,479. Pennsylvania ranks 35th in the nation with the percent of SD bridges that are posted or closed – after these new restrictions are put in place, Pennsylvania will rank 27th in the nation.

Even if the legislature passes a transportation funding plan this fall, the earliest the weight restrictions could be removed would be when their repairs can be programmed for funding within two years. If conditions warrant, the restrictions could remain in place until repairs are made.

"For months I've been explaining to Pennsylvanians and to lawmakers that there are very real consequences to not enacting a transportation funding plan," Schoch said. "Without additional revenues anticipated in the future, I have to make the safe and responsible decision to reduce how much weight is crossing these deteriorating bridges."

Posting bridges with weight restrictions began in late August and will likely occur over four to five months. Notifications to school-bus operators, emergency-service providers and other local officials are following normal weight posting procedures. Posting on local bridges will take place at a later date after PennDOT discusses these changes with local bridge owners.

To see Secretary Schoch's press conference in which he explains the increased weight restrictions, visit <http://pacast.com/a.asp?11221>.

To view the bridges with new or lowered weight restrictions or to learn more about bridge weight restrictions and PennDOT's bridge-inspection program, visit the PennDOT homepage at [www.dot.state.pa.us](http://www.dot.state.pa.us) and click on "Bridge Information."

# PennDOT Wins Governor's Innovator of the Year Award

By Nolan Ritchie, Innovation Officer, Transportation Innovations Office

In 2012, Governor Tom Corbett created an Innovation Initiative to improve government operations to enhance the way we conduct business, create cost savings and improve efficiency. The Innovation Initiative utilizes talented staff to implement change within each agency to foster a culture of innovation in state government.

This year, the Governor's Innovation Office orchestrated the first Innovation Exposition on July 31 in the Keystone Building Atrium. Each state agency promoted the establishment and implementation of their innovations that are creating a better state government for businesses and citizens.

PennDOT received third-place in the Governor's Innovator of the Year Award with the implementation of our Innovative Mobile Environment, which featured two mobile applications that collect data on local roads and bridges as well as roadway condition surveys. The Local Roads and Bridges App collects data points from Pennsylvania's locally-owned roads and bridges to create a comprehensive inventory of roads and bridges in the commonwealth. The Roadway Condition Surveys App, developed in-house, eliminates data entry duplication by field inspectors who monitor roadway conditions. These mobile applications enhance public safety and mobility, create an efficient workforce, empower in-house experts, recognize PennDOT's leadership and deliver an excellent public service.

The Local Roads and Bridges App also received an international achievement award for its innovative use of geographic information system technology. The Special Achievement in GIS (SAG) Award was presented at the Esri International User Conference in San Diego, Calif. The award recognizes vision, leadership, hard work and innovative use of technology.

The development and implementation of mobile applications is a primary project example of the PennDOT Next Generation Initiative. This modernization initiative is a department-wide effort to review and enhance operations to create improved efficiencies and make the agency both a better business partner and a better employer. An evaluation of PennDOT's current practices is producing effective results from reducing permit review time to enhancing driver safety with new pavement techniques. Altogether, the PennDOT Next Generation Initiative is expected to create \$50-\$75 million in cost savings.

Visit [www.innovation.pa.gov](http://www.innovation.pa.gov) for more information on the Governor's Innovation Initiative and [www.ModernDOT.pa.gov](http://www.ModernDOT.pa.gov) for more details on the PennDOT Next Generation Initiative.



PennDOT staff accepted the Governor's Innovator of the Year Award from Governor Corbett and Administration Secretary Kelly Logan.

# Governor Corbett Announces Investment for Safety Enhancements, Improvements at 15 Airports

Governor Tom Corbett recently announced that a \$5.4 million state and federal investment will enhance safety and operations at 15 airports in 14 Pennsylvania counties.

The state portion of funding – \$286,016 from PennDOT's aviation development program – comes from the state's jet fuel tax. The state and federal investments also leverage \$286,016 in local matching funds.

The Federal Aviation Administration is providing \$5.4 million in grants through its Block Grant program, which is funded through taxes collected nationally on airline tickets, freight waybills, international departure fees and the sale of aviation fuel. Under the federal program, airports receive up to 95 percent of eligible project costs for projects included in Pennsylvania's 12-year transportation program.

Public-use airports in the state are eligible for the aviation development program. Airports eligible for the federal block grant program include: general aviation airports, designated reliever airports, and non-primary commercial airline airports (those with fewer than 10,000 annual passengers) that are part of the National Plan of Integrated Airport Systems.

The state has 133 public-use airports and heliports and 15 airports have scheduled commercial service.

For more information, visit [www.dot.state.pa.us](http://www.dot.state.pa.us) and then click on the "2013-2016 Transportation Improvement Program" button, or call 717-783-8800.

## Following is a by-county list of airport improvement grant recipients, the amount of funding, and a brief description of the projects:

### Beaver County:

- Beaver County Airport -- \$300,833 to remove obstructions to improve safety.
- Zelienople Municipal Airport -- \$1.6 million for two phases of a project to construct an airpark development.

### Bradford County:

- Bradford County Airport -- \$158,333 to acquire land for airport development.

### Bucks County:

- Doylestown Airport -- \$50,139 to remove airport obstructions.

### Butler County:

- Butler County Airport -- \$1 million to widen a taxiway and acquire land in a runway protection zone.

### Carbon County:

- Jake Arner Memorial Airport -- \$125,347 to study obstructions.

### Chester County:

- Chester County/G.O. Carlson Airport -- \$150,417 to study and complete preliminary design for obstruction removal.

### Clarion County:

- Clarion County Airport -- \$765,873 to repave the runway.

### Clinton County:

- William T. Piper Memorial Airport -- \$38,000 to rehabilitate taxiways and an apron.

### Fayette County:

- Joseph A. Hardy Connellsville Airport -- \$158,333 to conduct wetland monitoring for post-construction environmental requirements.

### Indiana County:

- Indiana County/Jimmy Stewart Airport -- \$196,333 to remove runway obstructions.

### Luzerne County:

- Hazleton Municipal Airport -- \$50,139 to complete design work for obstruction removal.

### Monroe County:

- Pocono Mountains Municipal Airport -- \$381,056 to update the airport's master plan.

### Venango County:

- Venango Regional Airport -- \$300,833 to install an emergency generator.

### Washington County:

- Washington County Airport -- \$158,333 to remove obstructions and acquire land.



# Pa. Innovation Initiative Receives National Recognition for Collaboration

The State Transportation Innovation Council (STIC) has been getting attention for its unique member structure and successes in deploying proven technologies in Pennsylvania.

Pennsylvania's STIC is a cross section of various stakeholders, state and federal agencies, local governments and industry partners and is a component of the PennDOT Next Generation initiative that will save the department more than \$50 million a year.

The Federal Highway Administration (FHWA) has written an article highlighting Pa.'s STIC in the national newsletter *Public Roads*. The article "Implementing Innovations" is available on PennDOT's website at [www.ModernDOT.pa.gov](http://www.ModernDOT.pa.gov), select "State Transportation Innovation Council" and then click "Resources."

In addition, department Secretary Barry Schoch spoke during FHWA's nationally broadcasted meeting on Sept. 10 to provide an overview of the STIC and answer questions from other states looking to create a similar council to promote innovation through collaboration. You can view the conference at <https://connectdot.connectsolutions.com/p285cja7x9/>.

For more information on Pa.'s STIC or to learn about some of the innovative initiatives being promoted in Pennsylvania, visit [www.ModernDOT.pa.gov](http://www.ModernDOT.pa.gov), select "State Transportation Innovation Council."

# Public Input on Transportation Priorities Sought for State Transportation Program

As part of the update to the commonwealth's 12-Year Transportation Program, Pennsylvanians are invited to visit [www.TalkPATransportation.com](http://www.TalkPATransportation.com) to provide input on their transportation priorities.

The program, which serves as a blueprint of prioritized transportation projects, is updated every two years through a cooperative effort among the State Transportation Commission (STC), PennDOT and its 23 regional planning partners.

The public can offer feedback by clicking "Tell Us What You Think" on the website and filling out the online survey or requesting the survey in paper form. The site also includes information on how to participate in regional public meetings throughout the state.

As part of the STC's efforts to engage the public in the process, the initiative's first-ever online public meeting was held from 6 p.m. to 7 p.m. on Thursday, Sept. 26. During the webcast, PennDOT Secretary Barry J. Schoch provided an update on state transportation issues and answered questions from registered participants.

The STC evaluates and assesses the resources needed to maintain and expand the state's transportation system. The 15-member commission includes Schoch, 10 private citizens appointed by the governor and the majority and minority chairs of the state Senate and House Transportation Committees.





Vendors set up their displays to educate PennDOT and business partners on new technologies and innovations to enhance project delivery and efficiency.

## PennDOT Enjoys Success of First-ever Innovations & New Technology Day

By Marla Fannin, Community Relation Coordinator, District 2

PennDOT held its annual training conference, Maintenance Executive Development Program (MEDP), to provide and update best practices and strategies for maintenance operations in early June. For the first time ever, the program included innovations and new technology. This very special day was months in the making and came to fruition through the hard work of the Maintenance Managers Training Committee's separate Innovations Day Committee.

This first-ever MEDP Innovations Day featured approximately 50 vendors that showcased products that could benefit maintenance activities and roadway construction, along with product demonstrations and product study results.

Along with vendors, representatives from the Pennsylvania Turnpike Commission (PTC) attended and demonstrated new equipment including a new cone-setting safety truck, a tow plow and a new shop truck. As a PennDOT partner, PTC staff also attended the MEDP Innovations Day to learn about innovations and new technology that can enhance business practices and improve efficiency.

The planning committee coordinated with the regional office for media coverage of the event to update the public on innovation efforts. Those efforts paid off, with one of the local television stations visiting the display area and speaking with vendors and attendees throughout the morning, broadcasting a story later that day.

PennDOT maintenance management staff, bridge maintenance coordinators, pavement engineers, municipal services specialists, local governments and others involved in delivering the state's transportation projects were in attendance to learn about the new technologies and their potential benefits.

Feedback was garnered from the attendees and along with the positive feedback, comments made it clear that a day such as this one is something attendees would like to see every three to five years, allowing them to keep up-to-date with the latest ideas and innovations.

The event underscores PennDOT's modernization efforts through its Next Generation initiative that involves modernizing operations, expanding interagency efficiencies and becoming a better business partner.

For more information on PennDOT's Next Generation initiative, visit [www.ModernDOT.pa.gov](http://www.ModernDOT.pa.gov).

To subscribe to this newsletter or offer questions or suggestions, email [RA-penndotpress@pa.gov](mailto:RA-penndotpress@pa.gov).



# New Videos Aimed at Improving Pedestrian Safety

PennDOT has produced four new videos aimed at educating children, motorists and parents about pedestrian safety. The videos can be viewed on the department's YouTube channel at [www.youtube.com/pennsylvaniaDOT](http://www.youtube.com/pennsylvaniaDOT).

Each video targets different audiences at various stages of learning pedestrian safety or driving near pedestrians. The videos are intended primarily for parents of elementary school students, elementary-school students, middle-school students and young or first-time drivers.

With the new school year recently underway, these videos are a great resource for young students walking to school, as well as the new

young drivers on the roadway. The videos for elementary- and middle-school students explain walking signals and scenarios, stress safe walking behaviors and reinforce who should accompany them. Younger drivers are shown that with their driving freedom comes the responsibility of watching for travelers of all types, especially in school zones.

For more information on pedestrian and young driver safety in Pennsylvania, visit [www.JustDrivePA.com](http://www.JustDrivePA.com).



## Child Passenger Safety is Important Year-round



The National Highway Traffic Safety Administration reports that car crashes are a leading cause of death for children 1 to 13 years old in the United States. Although National Child Passenger Safety week was celebrated last month, it is essential for parents and guardians to ensure that child passengers are always traveling safely.

Proper installation of a car seat is a very serious issue. In fact, an estimated 75 percent of car seats are not installed correctly. Videos are available to ensure proper installation of child seats at <http://www.trafficsafetymarketing.gov/CAMPAIGNS/Child+Safety/Child+Car+Seat+Installation+Videos>.

Pennsylvania law requires that children under the age of 4 ride in a federally-approved car seat that is appropriate for the child's age, height and weight. Children between the ages of 4 and 8 must use a height-and-weight-appropriate booster seat if they are no longer in a car seat.

The state's seat-belt law mandates that children ages 8 to 17 must use a seat belt, and violating this law is a primary offense. It is a secondary offense for drivers and front-seat passengers age 18 and older to travel unbuckled.

Because of the potential dangers associated with air bag deployment, children ages 12 and under should always ride in a vehicle's back seat.

To view a list of PennDOT-supported car seat checks and see how PennDOT promotes child passenger safety, visit [www.JustDrivePA.com](http://www.JustDrivePA.com), then "Traffic Safety Information Center" and "Child Passenger Safety."

# PennDOT Recognizes Employees for Innovative Ideas

Twenty-three PennDOT employees were presented with the agency's IdeaLink Award during a ceremony in Harrisburg on September 19, honoring them for their ideas to improve safety or efficiency in the department.

The employee suggestions were submitted through IdeaLink, an online PennDOT system that empowers all department employees to share innovative ideas to improve workplace safety and enhance operations.

The IdeaLink Awards Program focuses on new ideas that improve the department in the areas of efficiency, safety, customer service, cost savings and revenue generation.

One example of an award-winning idea was submitted by Rodney Young in the department's Oil City-based region, who suggested warehousing engine oil filters at PennDOT's Fleet Management Division rather than purchasing them from separate contracts. Implementing this idea will save the department an estimated \$17,800 annually.

Another idea, submitted by Shawn McFarland in the department's Clearfield-based region, suggested skips in edge-line rumble strips on roadways to allow bicyclists to cross over these portions of roadway more safely. After

consultation with bicycle advocates and the Federal Highway Administration, the department's publications were updated to include these separated strips for roadways with substantial bicycle traffic.

Eight ideas submitted anonymously were also recognized during the ceremony.

IdeaLink is part of PennDOT's Next Generation, a combination of five distinct initiatives to review and enhance PennDOT's operations to create improved efficiencies and make the agency a better business partner and a better employer. To date, Next Generation initiatives will save the department more than \$50 million annually.

For more information, visit [www.ModernDOT.pa.gov](http://www.ModernDOT.pa.gov).



## Cost Savings

- Rodney Young in PennDOT's Oil City-based engineering district submitted an idea to store engine oil filters at the Fleet Management Division warehouse rather than purchasing them from separate contracts, saving the department \$17,800 annually.
- An employee anonymously submitted an idea to install E-ZPass transponders in state-issued vehicles which will save the department an estimated 25 percent of the normal cash fees.

## Customer Service

- Thomas Yocum in PennDOT's Hollidaysburg-based engineering district submitted an idea to enhance internal communications with pictures or graphics.
- Ann Goodman in PennDOT's Allentown-based engineering district submitted an idea to create a comprehensive illustration of travel-process requirements to assist employees in reserving hotels and transportation.
- Peggy Trevenen in PennDOT's Business Leadership and Administrative Services Office identified a variety of locations where employee training was housed, and inspired an intranet redesign to hold all training events and offers in one location.

- Rick Levan in PennDOT's Harrisburg-based engineering district suggested adding a light to crosswalk buttons to alert pedestrians that the button is activated, resulting in the department updating its standards to encourage incorporating a light in new or updated button installations.
- Louis Ruzzi in PennDOT's Bridgeville-based engineering district suggested adding the department's customer call center's contact information to the motor vehicle registration renewal application so that customers could reach the department easily if they had questions when filling out the form.
- Robert Pento in PennDOT's Bureau of Maintenance and Operations suggested that the photo center at the Riverfront Office Center install an audible queuing system to improve customer notification.
- Matthew West in PennDOT's Tourism Services Office submitted an idea to install binocular viewers on the Welcome Center patio in Tioga County to promote tourism and enhance customer experience.
- Lisa Zell in PennDOT's Bureau of Office Services suggested adding floor-plan maps on each PennDOT floor of the Keystone Building in Harrisburg and

- posted on the department employee intranet to help identify meeting room locations.
- Joan Titus in PennDOT's King of Prussia-based engineering district submitted an idea after they recognized that asphaltic sealant applied to curbs could create discomfort for customers, including guide dogs, when the material becomes sticky from exposure to direct sunlight. The department incorporated applying sand at the curb line to provide a better product.
- Vincent Komacko in PennDOT's Uniontown-based engineering district suggested adding a link to the Department of General Services' (DGS) online auction program on PennDOT's website to further promote the property and materials auctioned via the DGS program.
- An employee anonymously submitted an idea to install hand-sanitizing stations at the Riverfront Office Center's customer-service area for customer and employee use to promote a healthier environment.
- An employee anonymously suggested that employees be notified of vehicle reservation cancellations due to required maintenance, which will allow employees to more quickly make alternate travel arrangements.





**“These employees are dedicated to creating a more efficient, safer and more cost effective agency; this makes us a better employer and a better agency for our customers,”**

**PennDOT Secretary  
Barry J. Schoch said.**

## Efficiency

- Kevin Boehm in PennDOT’s Bridgeville-based engineering office submitted a best practice for using a heat exchanger cleaner to improve equipment cleaning.
- John Fraundorfer in PennDOT’s Hollidaysburg-based engineering office suggested improving language in various PennDOT publications to ensure sufficient, consistent legal reference for traffic signs.
- Charles Tatton in PennDOT’s Indiana-based engineering office suggested eliminating weekly stockpile inspections to dedicate more time to field operations. While some weekly inspections continue, the department changed the inspection requirements to monthly or quarterly schedules.
- Dennis Deiley in PennDOT’s Bureau of Driver Licensing suggested scanning and emailing fuel-card receipts to enable electronic filing for faster document processing and increased accountability.
- Steven Wagner in PennDOT’s Bureau of Driver Licensing suggested creating an electronic process rather than relying on the faxing procedure when processing documents for transfers of French or German licenses.
- To minimize paper waste an employee anonymously suggested using internet fax options available in Microsoft Office rather than printing and faxing deer log sheets.
- An employee anonymously submitted an idea to adjust driver skills test schedules at the Punxsutawney Driver License Center to better correspond with customer workflow so applicants are not being tested at peak traffic times.

## Safety

- Shawn McFarland in PennDOT’s Clearfield-based engineering district suggested providing small skips in edge-line rumble strips for bicyclists to cross over more safely.
- Steven Wagner in PennDOT’s Bureau of Driver Licensing requested the addition of speed bumps on the entrance driveway leading to the Norristown Driver License Center parking lot to mitigate accidents.
- Charles Brewer in PennDOT’s Bureau of Aviation suggested the addition of his own driver’s mental checklist known as S.M.A.R.T. to [www.justdrivepa.com](http://www.justdrivepa.com), the department’s highway safety website. S.M.A.R.T stands for, S=Seatbelt on and seat adjusted, M=Mirrors adjusted and clear, A=Air conditioning, heating and defrost controls set, R=Radio and audio panel set and T=Thoroughly check the area for traffic, people or objects.
- Kathleen Kehley in PennDOT’s Tourism Services Office considered a safety slogan called “Take Care, Slow Down, for Safety’s Sake,” which was added to [www.justdrivepa.com](http://www.justdrivepa.com).
- Tina Chubb in PennDOT’s Bureau of Public Transportation suggested the installation of a stop sign by a state-government employee parking garage exit to increase pedestrian safety.
- Michael Rishel in PennDOT’s Hollidaysburg-based engineering district submitted an idea to update the department’s workplace violence training to incorporate modern threats of gun violence.

- Andrew Moyer in PennDOT’s Bureau of Driver Licensing proposed adding an enhancement to a driver licensing form for when the department gives tests to Class M operators on two- or three-wheelers to ensure the operator has proper restrictions on their license.
- An employee anonymously submitted an idea to modify a PennDOT publication to include additional requirements for safely lifting and placing concrete pipes in trenches.
- An employee anonymously submitted an idea to install center-left turn lane rumble strips following a fatal accident in Duncannon. As a result of the employee’s idea, the department is updating publications and standards to establish proper rumble-strip specifications for center-left turn lanes.

## Revenue Generating

- Michelle Moore in PennDOT’s Bureau of Motor Vehicles identified the need to further verify retired statuses for vehicle registrations. The department will initiate sequential system improvements to ensure employees are prompted with appropriate notifications when working with retirees.
- An employee submitted an idea anonymously suggesting the use of high priority grants from the Federal Motor Carrier Safety Administration, if awarded the State Police would use the funds to enhance motor carrier vehicle enforcement on PennDOT-identified high-crash corridors.

## Get to Know PennDOT's District 6...

Each issue will spotlight some of the interesting projects and events that are held throughout PennDOT's 11 district offices throughout the state! District 6 includes Chester, Montgomery, Bucks, Delaware and Philadelphia counties.

# District 6 Goes Underground to Restore Bridges at 30th Street Station

By Gene Blaum, Community Relations Coordinator, District 6

Back in the spring of 2011, District 6 went underground – literally – as it embarked on a unique, multi-million dollar rehabilitation of six structurally deficient bridges located in the heart of Amtrak's 30th Street Station in Philadelphia.

Crews worked two and a half years beneath this transportation hub – Amtrak's third busiest in the nation -- to perform major structural surgery on the severely deteriorated steel bridges supporting Arch Street, 30th Street, Market Street, Little Market Street and Chestnut Street, all while going unseen by thousands of drivers, pedestrians and rail passengers each day.

These bridges form a network of raised streets surrounding 30th Street Station and Philadelphia's former main Post Office building, which is now the Internal Revenue Service's (IRS) regional headquarters.

While vehicular traffic on the busy streets didn't pose an issue for crews working below to rehabilitate scores of rusted steel beams and columns, the presence of Amtrak's Northeast Corridor rail lines complicated matters as dozens of trains moved daily through the subterranean structures.

"There are 13 electrified tracks in the area under 30th Street Station and we worked very closely with Amtrak to obtain the track outages that were necessary to repair the structures in a safe and timely fashion," said Harold Windisch, P.E., a senior assistant construction engineer in District 6.

"We built the project in four stages as Amtrak shut down two or three tracks at a time so our contractor could work safely on the columns and overhead beams. This wasn't your typical bridge project, but it certainly was challenging and interesting."

Each underground bridge carries 17,000 to 21,000 vehicles a day. Built in the late 1920s and early 1930s, the bridges were badly in need of attention due to heavy rust and steel section loss. Their poor condition had impacted their load carrying capacity, evidenced by the 15-ton weight restriction on the Chestnut Street span when construction began.

"The poor condition of these critical bridges, coupled with their importance and location, made this \$60 million investment essential so we could provide safe, unrestricted travel in the area of 30th Street Station for many decades to come," said Chuck Davies, P.E., District 6's assistant district executive for design.

Crews repaired and replaced deteriorated structural steel, repaired concrete, and painted the steel bridges, which ranged in length from 201 feet to 744 feet and in

width from 75 feet to 98 feet. The structures were comprised of steel, multi-column piers with steel cross girders and steel stringers. Many of the stringers were partially or fully encased in concrete.

The underground repair plan consisted of a very detailed process to identify the extent of steel decay and section loss.

"We started each stage by blasting the steel to remove the rust and get down to clean, solid metal," Windisch said. "Then we primed the steel to obtain a clear view of the extent of the damage. Our structural engineer then reviewed each area to confirm the contract-required repairs and identify additional damage uncovered during the blasting and priming process. The amount of steel damage was extensive."

Compounding the complexity of the operation was the presence of SEPTA's Market-Frankford subway line that ran beneath Amtrak's rail lines at 30th Street.

The subway's location under the bridges supporting Market Street and Little Market Street forced crews to exercise extreme care when addressing the steel columns just above the subway.

"The contractor had to carefully dig into the fill around the bottom of the column to expose the steel, and then we added steel reinforcement if needed and encased the base in concrete. We were very mindful of



Beams prior to repair.

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the subway and encountered no problems,” Windisch said.

The underground rehabilitation work, which removed the six bridges from the structurally deficient category, was complimented by road and pedestrian upgrades above on Market and Chestnut streets.

New water-tight joints were installed on both streets between the intersections of 30th Street and Schuylkill Avenue and a membrane waterproofing material was laid on the streets prior to final paving. “These special precautions were taken to keep water from seeping beneath the streets and onto the structural steel,” Windisch added. “Our aim was to make the streets as water tight as possible.”

New, expansive sidewalks were also created as part of the Philadelphia Planning Commission and University City District’s “Station Square” concept that was envisioned to enhance the pedestrian experience at this bustling local.

A 55-foot-wide, decorative sidewalk with exposed aggregate was built on the 30th Street Station side of Market Street and a 33-foot-wide extension of decorative sidewalk was constructed on the opposite side alongside the IRS building to create a 49-foot-wide sidewalk. Center City District style post top lights were installed along with granite benches and bollards in select locations.

The University City District adorned the sidewalk next to 30th Street Station with enclosed planters, bright furniture and umbrellas to create “The Porch at 30th Street.” Brandywine Realty Trust will add planters and seating areas on the sidewalk next to the IRS building.

“We were excited to incorporate high-quality pedestrian treatments into the project because of the safety and aesthetic benefits they would bring to the city and due to our positive working relationships with the University City District and Schuylkill River Development Corporation,” Davies said.

New sidewalks also were constructed on Chestnut Street, which is located a block south of Market Street.

In addition, automated voice pedestrian crossing signals were installed at the intersections of 30th Street and Market Street and 30th Street and Chestnut Street to aid the visually impaired. The special signals were added at the request of the Philadelphia Streets Department.

Ammann & Whitney of Philadelphia was the project’s prime design firm. Alfred Benesch and Company of Allentown was the design firm for Chestnut Street. The joint venture of Buckley and Company, Inc. of Philadelphia, Pa. and Cornell and Company, Inc. of

Westville, N.J. was the general contractor. Construction management was performed by Urban Engineers, Inc. of Philadelphia and construction inspection by JBC Associates of King of Prussia.

The improvement project was financed with 80 percent federal and 20 percent state funds. With all major work completed, final clean-up is slated to finish this October.



Beams after restoration.



The tireless efforts below the streets supports this beautiful streetscape above.



# Delaware County Maintenance Crews Very 'Welcoming'

By Brad Rudolph, Safety Press Officer, District 6



If children are our future, then you may be looking at the next generation of PennDOT.

On Aug. 26, all the equipment kids could dream of climbing on was on display during "PennDOT Day" at the I-95 Welcome Center near the Pennsylvania-Delaware border in Delaware County.

PennDOT Delaware County maintenance crews, led by their skipper, Mike Murphy, rolled out for the public the department's newest and best tools to build, rehabilitate, repair, clear and improve our state highways in southeastern Pennsylvania. The equipment on display included a new road grader, front-end loader, tandem dump truck with plow, six-wheel dump truck, a trailer, blacktop heater box, skid steer with milling attachment and a tractor and trailer.

While the importance and intricacies behind all this equipment may have been lost on the kids, mesmerized by lots of shiny yellow objects, the buttons and horns were not. All day long, children could not resist the urge to jump into the equipment to sound the horn or fiddle with the steering wheel. Getting an up close look and feel of the equipment also gave children and their parents some perspective on the sheer size

and power of the PennDOT fleet and why it takes a well trained and experienced operator to safely use every piece of equipment and perform every job.

The crew also took time to talk with PennDOT customers about the equipment as well as the importance of safety, not only for the motorist, but for themselves and their colleagues.

"It is always a good time to bring attention to work-zone safety. The men and women working to improve our state's highways and bridges deserve to do their work safely," said Murphy.

In a typical five-day work week across the United States, an average of seven motorists and one worker are killed. Generally, crashes occur when drivers speed through a work zone or do not pay attention to the changing road conditions and run into other vehicles, highway equipment safety barriers or drive off the road completely.

"There needs to be more awareness of the fact that PennDOT workers are nice guys, not just an inconvenience when doing road work," said Karen Berckman, tourist information counselor for the Pennsylvania Welcome Center along I-95 in Delaware County. Berckman is one of the staff members at the Welcome Center who help travelers every day with tourism information, highway and weather conditions, rest area facilities for travelers and pets, outdoor picnic area pavilions, customer parking, and reservation services for Pennsylvania hotels, motels, bed and breakfasts and campgrounds.

The I-95 Welcome Center is one of 14 Welcome Centers across the state managed by PennDOT. The center opened less than two years ago, but while it is still relatively new, it is very well visited, serving nearly 15,000 customers each month. In many cases, it is the Welcome Center that provides the first impression of Pennsylvania to out-of-state visitors. If that's the case, "PennDOT Day" went a long way in providing travelers with important traffic safety information and a little insight into what is needed to continually improve Pennsylvania's roadways.



# Virtual Reference System Technology Producing Positive Results for District 6 Surveyors

By Charles Metzger, Community Relations Coordinator, District 6

As one of the first engineering districts to use Virtual Reference System (VRS) technology for surveying, District 6 continues to save taxpayer funds by using this advanced technology that makes it quicker and easier for survey teams to collect data.

VRS creates a virtual connection between known control point coordinates and the unknown point coordinates the surveyor is attempting to establish. This link is accomplished by an internet connection provided by a wireless device. A portable computer is simultaneously connected via Bluetooth with the GPS receiver and wireless device. The portable computer then uses the data collected from this link to instantaneously calculate a very accurate coordinate, usually under one centimeter, for the surveyor in the field.

District 6's survey unit began utilizing VRS technology nearly five years ago. Survey crews use the Global Positioning System (GPS) device for all types of projects, including right of way stakeouts, topographic surveying and control surveying.

According to District 6 Chief Surveyor Kris Phillips, VRS enables his small unit to meet the increasing requests for service without compromising quality and safety. He credits VRS for allowing District 6 to perform the majority of its surveys in house, thus saving considerable state dollars.

"Being able to use this technology has better enabled us to reduce costs by spending less man hours in the field gathering information and produce more accurate reports," said Scott Fletcher, P.E., assistant district executive for services in District 6. "Instead of sending a survey team of three into the field, we use two-person teams and this enables us to have extra teams to cover more ground."

Prior to using VRS technology, PennDOT relied on a traditional survey that required long occupations of control points and post-processing data to create accurate points for subsequent project requirements. A typical right of way stakeout required a minimum of two-days to place the final markers in the ground.

Today, the use of VRS immediately eliminates the second day to post-process a right of way stakeout. This saves not only hours at the job site but also travel and office time, freeing the survey team to move on to its next project.

District 6 also is using VRS to take full advantage of the department's photogrammetry capabilities by mapping projects prior to design, which also results in cost savings. VRS allows for the collection of remote points automatically and therefore the points no longer need to be collected by an individual.

Phillips is serving on the department's statewide PennDOT Next Generation team that is assessing engineering districts' surveying tools and examining if the tools are being used efficiently and effectively. The team's evaluation and quantification of VRS in District 6 revealed that it saved 768 man hours in just the past six months.

"Kris and his dedicated staff have embraced the use of the VRS system which provides quicker report times and increases productivity," Fletcher said. "The VRS system has proven to be a real asset."



# Three Public-Private Partnerships will Deliver Better, More Efficient Transportation Projects

On Sept. 27, Pennsylvania's Public Private Partnership (P3) Board approved three projects that will help provide transportation services and infrastructure more efficiently through partnerships with the private sector.

The board approved two proposals from the private sector and one project through which PennDOT and a third party would quickly replace hundreds of bridges.

Through one partnership agreement, hundreds of structurally deficient bridges of similar design would be replaced under one contract to streamline design and construction. The successful low-bidder would manage the bridges' design, construction and maintenance. Cost savings are anticipated since the same basic design and construction standards could be used for multiple bridges. The state also looks to save money by not paying for maintenance of those bridges for a yet to be determined number of years.



The P3 board also approved two projects based on proposals that were submitted by private industry. In the coming months, the department will proceed with advertising a Request for Proposals (RFP) based on each concept. The RFP process will ensure any products or services are competitively purchased and achieve maximum value for the state and its taxpayers.

A project will be developed based on a proposal submitted by Paoli-based Site Acquisition Services, Inc. This project would allow the department to receive a fair-market "rental fee" for the use of its facilities such as bridges, signs, buildings and maintenance facilities where wireless antennas and related equipment can be attached. A contract would be awarded to a company that would market those opportunities to wireless service providers that may find those locations desirable to improve signals in the surrounding areas.

The other proposal was submitted by Bentley Systems, Inc., in Exton, and recommended that PennDOT replace its aging Automated Permit Routing Analysis System (APRAS), used to issue special hauling permits, with the company's commercially available turn-key system already deployed in neighboring states. Based on their proposal, the department will pursue proposals for a new system.

In September 2012, Governor Corbett signed into law the Public and Private Partnerships for Transportation Act, which authorized P3 projects in Pennsylvania. This law allows PennDOT and other transportation authorities and commissions to partner with private companies to participate in delivering, maintaining and financing transportation-related projects.

As part of the P3 law, the seven-member Public Private Transportation Partnership Board was appointed to examine and approve potential public-private transportation projects. If the board determines a state operation or project would be more cost-effectively administered or delivered by a private company, the department or appropriate transportation agency can advertise a competitive RFP and enter into a contract with a company to completely or partially deliver the transportation-related service or project.

To learn more about P3 in Pennsylvania, visit [www.P3forPA.pa.gov](http://www.P3forPA.pa.gov).

## New Online Service for Duplicate Licenses, ID Cards

As part of PennDOT's commitment to enhanced customer service, customers can now order a duplicate non-commercial driver's license or photo identification card online if theirs is lost or stolen.

No additional fees are charged for online transactions. Customers applying for a duplicate license or photo ID card online must provide their driver's license or ID card number, last four digits of their Social Security number and date of birth in order to complete the transaction. A \$13.50 fee for the duplicate driver's license or photo ID card will be charged to the customer's credit card for the new product. The fee for a duplicate driver's license with a class M (motorcycle) is \$18.50.

Customers applying for a duplicate driver's license online can print a temporary Internet copy of their license to use until their new photo license arrives in the mail. The temporary license is valid for 15 days.

Driver and vehicle online services are available 24 hours a day, seven days a week and include driver's license, photo ID and vehicle registration renewals, driver-history services, changes of address, driver license and vehicle registration restoration letters, ability to pay driver license or vehicle insurance restoration fee, and driver exam scheduling.

To access all online driver and vehicle transactions, visit [www.dmv.state.pa.us](http://www.dmv.state.pa.us) and click on "Online Driver and Vehicle Services."



# Motorists Reminded to Inform PennDOT of Insurance Changes

PennDOT and the state Insurance Department remind motorists to respond if they are contacted by PennDOT after they change their vehicle insurance provider. Vehicle owners – not insurance providers – are responsible for providing new policy information to the department.

Drivers must purchase auto insurance – or maintain "financial responsibility" – in order to legally drive in Pennsylvania. Auto insurance protects owners against financial loss in the event of an accident by paying for damages to their own car or to another person's property.

When PennDOT receives notification from an insurance company that an individual's insurance has been cancelled, PennDOT sends a letter to the individual requesting verification that a new insurance policy is in place. By law, if an individual does not respond to the letter providing current insurance information, PennDOT is required to administer a three-month vehicle-registration suspension.

If a suspension occurs, the vehicle owner must surrender the vehicle's registration plate to PennDOT in order to begin the suspension. The owner will be required to provide current proof of insurance to the department and pay a \$50 fee in order to have the vehicle registration restored once the suspension has been served. It is vital that vehicle owners respond to the PennDOT letter.

For more information on insurance requirements, visit [www.dmv.state.pa.us](http://www.dmv.state.pa.us) and visit the "Vehicle Insurance Information" section in the motor vehicle information center.

To learn more about auto insurance, go to [www.insurance.pa.gov](http://www.insurance.pa.gov) and click on "Types of Coverage" on the left-hand navigation.



## Keystone Marker Trust

By Samantha Antosh, Press Office Summer Intern, District 4

Many may not know just how significant Pennsylvania roads are. They not only provide a way to travel, but they also have important roots in history.

Historically, Pennsylvania was a pioneer in road construction and the promotion of highways. In fact, the Keystone Marker Trust (KMT), which is dedicated to preserving, interpreting and re-creating historical markers, recently contacted PennDOT in hopes of restoring many of the historical markers throughout the state. The markers were once in many places around the state and provided a sense of pride in our towns and roads. The signs themselves were designed to represent Pennsylvania with the shape of the Keystone and the state colors blue and gold. They were also manufactured right here by Pennsylvania's iron industry. PennDOT's predecessor, the Pennsylvania Department of Highways, created these markers just after the First World War. The markers were part of the "good roads" movement and were placed at entrances to towns and other places of interest. They usually include the next town and distance, the current town, how the town got its name, and when it was founded. Other historical signs included speed limit signs, parking restrictions, dangers, waterways, and school zones.

Today, many of these markers have gone missing or are in need of repair. KMT has asked PennDOT's 11 engineering districts to help identify the markers, but anyone can get involved. By visiting their website, [keystonemarkertrust.org](http://keystonemarkertrust.org), local municipalities, organizations and interested members of the public will find information on marker adoption, restoration and replacement.

There are many known signs throughout PennDOT's Dunmore-based District 4. Some interesting examples of these signs include: Forty Fort, founded in 1780, so named because of the fort built by the first 40 settlers; Shohola, founded in 1772, named for Shohola Creek, an Indian Tribe; Prompton, named for the Promptness Expected of natives in paying bills; and Starrucca, founded in 1818, named for the Indian word meaning "Junction of waters."

For a complete list of known markers visit the KMT website [www.keystonemarkertrust.org](http://www.keystonemarkertrust.org). The KMT still has many more markers to locate, and welcomes assistance in that process by submitting markers through a form on their website. Help PennDOT and the KMT bring back the historical pride of Pennsylvania roadways and learn a little bit about your community today!

# Innovative Bridge Replacement Saves Time, Resources

By Tara Callahan-Henry, Community Relations Coordinator, District 9

PennDOT's Hollidaysburg-based Engineering District 9 has taken a different approach to bridge replacement projects. Using a department-developed design, the region is looking to expand use of prefabricated concrete bridge components for a total precast bridge replacement process. Through this process, all bridge components are completed before being brought to the site, saving time and allowing more bridges to be addressed through the construction season.

During the 2012 construction season, the district used the process to replace the bridge on Route 1020 over Sherman Valley Run in Bedford County. The project illustrated the tactic's benefits, with the bridge replaced within 21 days and the majority of work occurring within 12 days with two crews working 12-hour shifts.

This project's efficiency results aren't unique to this bridge, according to district Bridge Engineer Ralph DeStefano, since some precast structures can be built in fewer than two weeks. Conventional bridge construction methods can take three to seven months to complete.

DeStefano also noted that the process uses a durable material and is produced in the winter months when construction employees aren't engaged in winter activities.

"By using precast concrete components, they can be manufactured off-site under plant-controlled conditions during times of the year not normally associated with bridge construction," DeStefano said. "The pre-fabricated components can then be quickly and efficiently assembled at the bridge site."

Use for total precast structures isn't limited to very short spans – they could potentially be used on bridges up to 100 feet long. In the six-county Hollidaysburg-based district, roughly 80 percent of structures on the local and state highway network are shorter than that length. However, there are some limitations to how the system can be used.

"If there are extensive underground utilities or if the bridge is located very close to roadway intersections that must be kept open, then this approach may not be the best solution," DeStefano said. "Also, poor foundation conditions could result in more complicated and costly construction details that require further investigation as to cost effective techniques and approaches for handling."

While total precast bridge replacement is still developing in the state, it is an approach that could be adopted by many contractors who have the capabilities to build the components in-house. The uniform system ensures that the majority of contractors that build bridges should be able to build this total precast structure. DeStefano also advised that the precast concrete industry is developing a set of standard bridge component details for department approvals, with the aim of accelerating on-site construction.

Along with setting up standards, there are other concepts being investigated that could further improve this process and speed up delivery.

"We are looking at using some newer geosynthetic materials that could reduce the time necessary to backfill behind the bridge support walls. We also believe some components can be eliminated, which will further reduce cost and construction time," DeStefano said.

While there are more lessons to learn as total precast bridge replacement projects develop, transportation partners in Pennsylvania could soon bring this method into projects across the state. The initiative is one more example of efforts to deliver the best value for taxpayers while meeting customers infrastructure needs.

## Get More Information about PennDOT Through Social Media



PennDOT's Facebook account provides resources and information on highway safety, driver's license and motor vehicle operations, PennDOT's many services available to the public, and featured job opportunities. To visit and "like" the PennDOT Facebook page, visit [www.facebook.com/PennsylvaniaDepartmentofTransportation](http://www.facebook.com/PennsylvaniaDepartmentofTransportation).



In addition to the main "@PennDOTNews" Twitter feed, the department also maintains eight regional Twitter accounts allowing followers to get updated traffic alerts from the 511PA system and local PennDOT news. You can find @PennDOTNews at [www.twitter.com/PennDOTNews](http://www.twitter.com/PennDOTNews).

PennDOT does not report traffic or road conditions on its Facebook page, but travelers should visit [www.511PA.com](http://www.511PA.com) or call 5-1-1 for current traffic conditions. The regional travel information accounts are accessible by clicking "Follow us on Twitter" on the 511 website.