Delaware River Joint Toll Bridge Commission


# 2024 ANNUAL REPORT

*Lumberville-Raven Rock Toll-Supported Pedestrian Bridge (Infrared)*

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## PHOTOGRAPHY/GRAPHICS CREDITS

A variety of photographic/graphic resources were used to publish this annual report. Contributors to this report included: Kristie Bull; Andrew Wilkinson/Wilkinson Media; Volcanodiscovery.com; Carol Feeley; Vicki Dodson; Justin Bowers; DRJTBC archives; Matt Meeker; Joe Donnelly; Ed Savaria; Jim Gower; Alex Styer; RK&K; Mark Stehle; Jodee Inscho; Greenman-Pederson, Inc. (GPI); Anselmi & DeCicco, Inc.; Urban Engineers, Inc.; AECOM; United States Geological Survey (USGS); *Genealogical Record of the Descendants of Henry Stauffer and Other Stauffer Pioneers*, by Rev. A.J. Fretz, 1899.

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# Executive Director's Message

The Delaware River Joint Toll Bridge Commission held its inaugural organization meeting on December 28, 1934. Much has happened in the ensuing 90 years.

The Commission opened its first toll bridge in 1936 between Easton, PA., and Phillipsburg, N.J. Seven additional highway toll bridges have since been constructed and opened, each responding to increased traffic demands by commuters, freight carriers, and travelers.

The Commission's service jurisdiction and responsibilities have expanded, too. The agency's original federal Compact — approved by the U.S. Congress on August 30, 1935 — has been modified three times. The most recent update on April 2, 1987 compelled the Commission to assume ownership of 12 aging non-toll bridges previously jointly owned by New Jersey and Pennsylvania. This Compact change further directed the Commission to use a share of its toll revenues to operate those old river crossings as "toll-supported" bridges.

The agency continues to evolve. In accordance with its Compact, the Commission replaced one of its non-tolled bridges with a new toll bridge in 2019 – outfitting the structure with a cashless all-electronic tolling (AET) system to handle E-ZPass and TOLL BY PLATE transactions. In 2024, the Commission started transitioning its seven legacy cash-collection tolling points to AET. Cash collections ended at three bridges in June. Another four bridges will see similar change in January 2025. Eventually, each of these locations will have open-road AET facilities.

Regrettably, one of the individuals who understood and appreciated the efficiency, safety, and cost-saving dividends of this evolving operational change will never see its fruition. Garrett L. Van Vliet, who distinguished himself as a policy-setting Commissioner from New Jersey for 10 years, passed away July 13, 2024. He worked for 40 years at the New Jersey Department of Transportation and enthusiastically advocated for traffic improvements at the Commission. This annual report is dedicated in his honor.

Jos. J. Resta

**Joe Resta**
Executive Director
Yardley, PA.

# Commissioners

A board of 10 commissioners – five from each state – governs the Commission. The New Jersey members are nominated by the Governor and confirmed by the state senate for three-year terms. The Pennsylvania members are appointed by the Governor and serve at his pleasure. The Commissioners are not compensated for their service.

## About The Commission

The Delaware River Joint Toll Bridge Commission is a bistate agency that owns and operates eight toll bridges and twelve toll-supported bridges – two of which are pedestrian-only crossings. The agency's assigned jurisdiction includes portions of five counties in New Jersey and four counties in Pennsylvania.

The service region has a population of more than 2 million people.

Funding for the operation, upkeep and maintenance of the Commission's bridges and related facilities is derived solely from revenues collected at the agency's toll bridges. The Commission receives neither federal nor state funds.

A 10-member board of Commissioners — five from each state — governs the Commission. New Jersey members are nominated by the governor and confirmed by that state's Senate for three-year terms. The Pennsylvania members are appointed by the governor and serve at his/her pleasure. Commissioners meet monthly to review reports, provide oversight, and set policies carried out by the Executive Director and professional staff.

The Commission's bridges carried an average of 365,100 vehicles per day in 2024. Total revenue in 2024 was $197,971,102. The Commission's 2024 operating budget was $96.2 million. The agency has roughly 370 full-time employees.

### New Jersey

**ALADAR G. KOMJATHY**
Chairman

**LORI CIESLA**

**YUKI MOORE LAURENTI**
Treasurer

**MICHAEL B. LAVERY**

### Pennsylvania

**PAMELA JANVEY**
Vice Chairwoman

**JOHN D. CHRISTY**

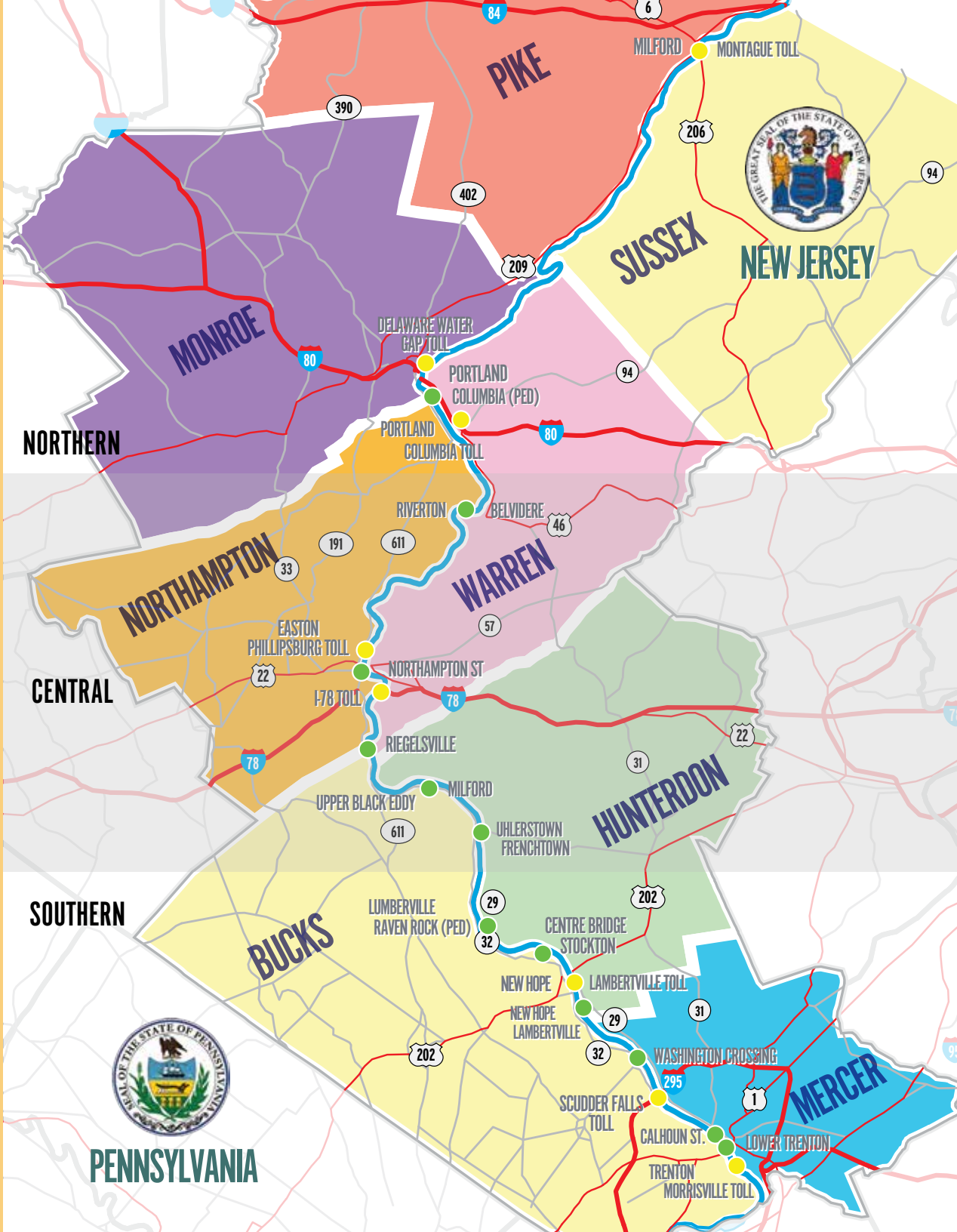
**DANIEL H. GRACE**
Secretary

**ISMAIL A. SHAHID**

**DANIELLA YOUNG**

# Mission Statement

The Delaware River Joint Toll Bridge Commission provides safe and efficient river crossings between Pennsylvania and New Jersey. Stretching roughly 140 miles from the Philadelphia/Bucks County, PA. boundary to the New Jersey/ New York state line, the Commission's jurisdiction encompasses a diverse region featuring bustling cities, quaint river towns, and scenic areas where nature's beauty abounds. Committed to moving job commuters, commercial freight carriers, pedestrians and recreationists, the Commission strives to deliver quality customer service, sound fiscal management, and dependable ground-transportation facilities for its economically robust bi-state river region.



# Staff

**Joseph J. Resta**
Executive Director

**Mark J. Murranko**
Deputy Executive Director of Operations

**Kevin M. Skeels, P.E.**
Chief Engineer

**Arnold J. Conoline, Jr.**
Chief Administrative Officer

**Joseph F. Donnelly, Jr.**
Deputy Executive Director of Communications

**Qiyan (Tracy) Zhao**
Chief Financial Officer

**Charmaine Kent-Graves**
Comptroller

**Steven Burke, P.E.**
Assistant Chief Engineer

**Jodee Inscho**
Director of Community Affairs

**Christine Baker**
Director of Contract Compliance

**Phillip Calabro**
Director of E-Z Pass

**Joanna M. Cruz**
Senior Director of Human Resources

**John Bencivengo**
Senior Director of Information Technology

**LeVar Talley**
Director of Maintenance & Fleet Operations

**Lendell Jones**
Senior Director of Maintenance & Fleet Operations

**Matthew M. Hartigan**
Senior Director of Public Safety & Bridge Security

**J. Eric Freeman**
Director of Toll-Supported Bridge, Control Center, and Electronic Security & Surveillance Operations

**Philip Abate**
Director of Purchasing

**Michele Gara**
Director of Toll Operations

**John Mills**
Senior Director of Training & Employee Safety

**Jack Baum**
Director of Training

**William Hauck**
Director of Workplace Safety


# Cashless Tolling


# System-Wide Transition to Cashless Toll Collections Advances in 2024

## TOLL BY PLATE Service Comes Online; Cash Collections End at Three Low-Volume Toll Bridges

The Commission moved closer to abolishing cash toll collections system-wide in 2024.

In January, the Commission added a TOLL BY PLATE payment option for non-E-ZPass-equipped motorists travelling through the agency's seven legacy cash/E-ZPass toll plazas.

In June, the Commission ended cash service entirely at its three low-volume toll bridges – New Hope-Lambertville (Route 202), Portland-Columbia (Routes 611, 46 and 94) and Milford-Montague (Route 206). The elimination of cash tolls at these locations left motorists with two electronic options – paying their tolls through an E-ZPass account or paying a mailed toll bill through the Commission's expanded TOLL BY PLATE process. (Note: The Commission's first foray into cashless tolling occurred in July 2019 with the opening of the Scudder Falls Toll Bridge's first completed span, which was outfitted with an all-electronic toll collection facility.)

The Commission finished 2024 preparing to terminate cash service at its four high-volume toll bridges – Trenton-Morrisville (Route 1), I-78, Easton-Phillipsburg (Route 22), and Delaware Water Gap (I-80) – in early 2025.

The anticipated complete phase-out of cash toll collections at all Commission tolling points is part of a long-term system-wide transition to open-road cashless all-electronic tolling (AET) by the early part of the next decade.

The Commission will be assisted in this conversion effort by crews from TransCore under a multi-year Commission agreement stemming from a 2024 South Jersey Transportation Authority AET system procurement. TransCore will support the Commission's transition by deploying next generation Infinity Digital Lane System, including VCATS™, an AI-powered tolling solution that uses machine-vision cameras, neural network processing, and image recognition to classify vehicles accurately.

AET has significant benefits. It promotes operational efficiency, reduces accidents and congestion at tolling points, improves safety, and mitigates environmental impacts such as exhaust and pollution from queuing cars and trucks in toll-booth lanes.

The Pennsylvania Turnpike, New York Thruway, South Jersey Transportation Authority (Atlantic City Expressway), Cape May County Bridge Commission, and the Port Authority of New York and New Jersey (George Washington Bridge and Lincoln Tunnel) are among agencies that have made – or are making – the switch. The Commission is now joining the expanding list of toll agencies nationally and globally that have eliminated — or are in the process of eliminating — cash collections.

The Commission's long-term goal is to remove old toll booth structures at its seven legacy toll bridges and replace them with open-road all-electronic toll gantries. A first step toward that objective got underway in 2024 when the Commission hired an engineering firm – RK&K – to design an open-road cashless AET gantry slated to undergo construction at the low-volume New Hope-Lambertville (Route 202) Toll Bridge in 2025.

## Cash Service Ends at Three Low-Volume Toll Bridges

**Cash is passé at the New Hope-Lambertville (Route 202), Portland-Columbia (Routes 611, 46, 94), and Milford-Montague (Route 206) Toll Bridges.**

**At approximately 11 p.m. June 16, cash service ended at the Commission three low-traffic-volume toll bridges, leaving motorists with E-ZPass and TOLL BY PLATE as the only payment options at those locations.**

**Cash toll transactions had been waning at the three bridges in recent years as more motorists gravitated toward the cost and convenience advantages of E-ZPass electronic toll paying. Prior to the implementation of cashless tolling, the E-ZPass penetration rates for the three bridges were computed as follows: New Hope-Lambertville – 93 percent; Portland-Columbia – 86 percent; and Milford-Montague – 84 percent. (Note – The Commission has since modified its calculation method for E-ZPass penetration rates, yielding slightly different percentages.)**

**With only 15 percent of toll payers being affected by the elimination of cash service, the Commission communications department eschewed use of a broad-based advertising campaign to alert motorists to the cashless tolling conversion. Instead, targeted outreach efforts were employed: handouts to cash- paying motorists at toll booths; variable message signs at toll plaza approaches, and temporary signage in toll booth windows. A series of press releases also were issued to help get the word out beyond the Commission's service jurisdiction.**

**E-ZPass's clear cost advantages were a core message in outreach efforts. The Commission's toll rates for E-ZPass-equipped motorists are up to 50 percent less than rates for TOLL BY PLATE customers.**

**Moreover, non-E-ZPass-equipped motorists risk additional fees if they fail to pay TOLL BY PLATE bills on time.**

**The removal of toll collectors at the three low-volume toll bridges ended decades of cash service at those locations. With only a relatively brief interruption due to the COVID-19 pandemic of 2020, the respective bridges have handled in-lane cash transactions since opening to traffic (with tolls then collected in both directions) on the following dates: Portland-Columbia on Dec. 1, 1953; Milford-Montague on Dec. 30, 1953; and New Hope-Lambertville on July 22, 1971.**

**Eventually, each toll plaza at these bridges will be removed and replaced with an overhead gantry outfitted with cameras and other electronic toll collection equipment.**

## Final Set of Cashless Conversions on Track for January 2025

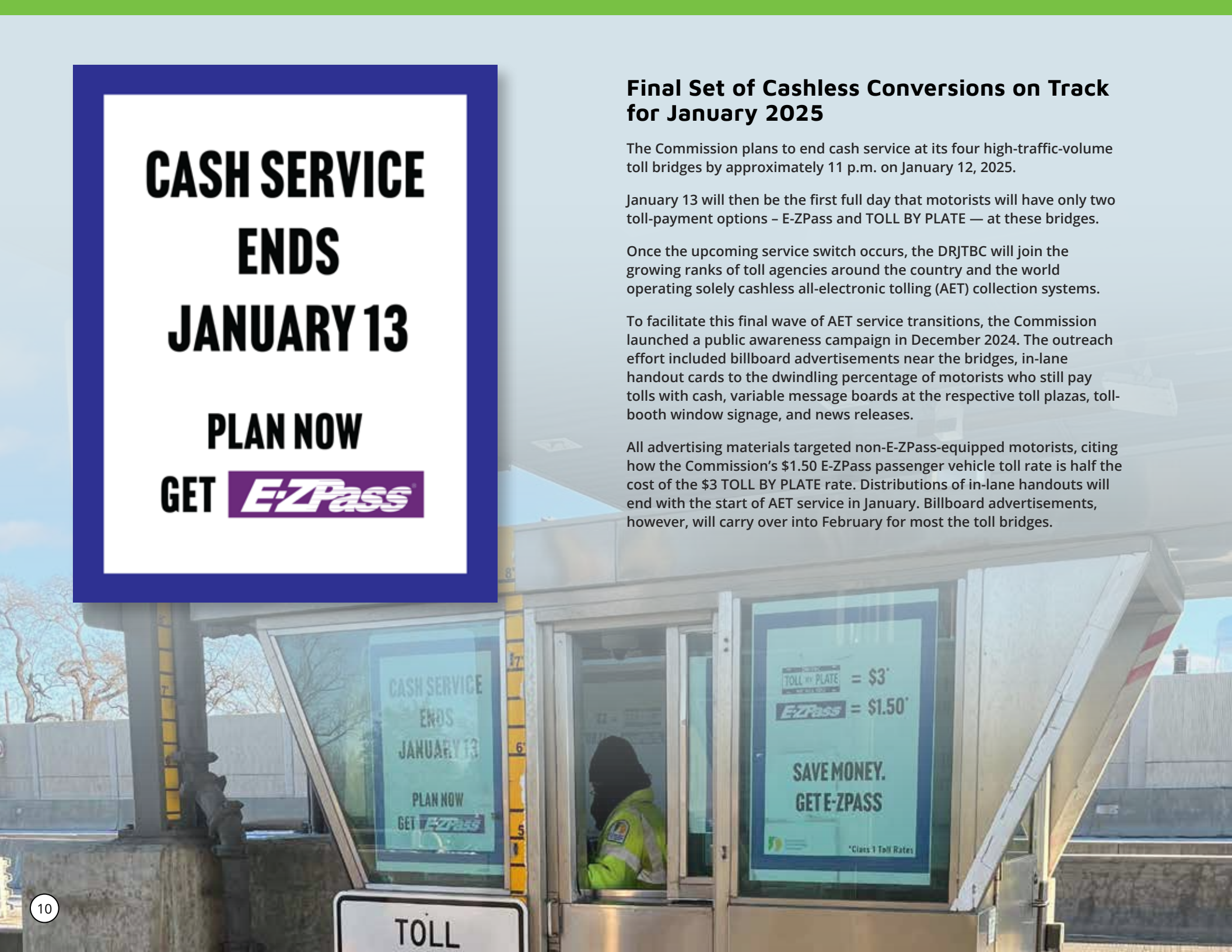
The Commission plans to end cash service at its four high-traffic-volume toll bridges by approximately 11 p.m. on January 12, 2025.

January 13 will then be the first full day that motorists will have only two toll-payment options – E-ZPass and TOLL BY PLATE — at these bridges.

Once the upcoming service switch occurs, the DRJTBC will join the growing ranks of toll agencies around the country and the world operating solely cashless all-electronic tolling (AET) collection systems.

To facilitate this final wave of AET service transitions, the Commission launched a public awareness campaign in December 2024. The outreach effort included billboard advertisements near the bridges, in-lane handout cards to the dwindling percentage of motorists who still pay tolls with cash, variable message boards at the respective toll plazas, toll-booth window signage, and news releases.

All advertising materials targeted non-E-ZPass-equipped motorists, citing how the Commission's $1.50 E-ZPass passenger vehicle toll rate is half the cost of the $3 TOLL BY PLATE rate. Distributions of in-lane handouts will end with the start of AET service in January. Billboard advertisements, however, will carry over into February for most the toll bridges.



# Design Contract Paves Way for Highway-Speed Toll Gantry at New Hope-Lambertville (Route 202) Toll Bridge

Toll collections at the New Hope-Lambertville (Route 202) Toll Bridge are about to be transformed.

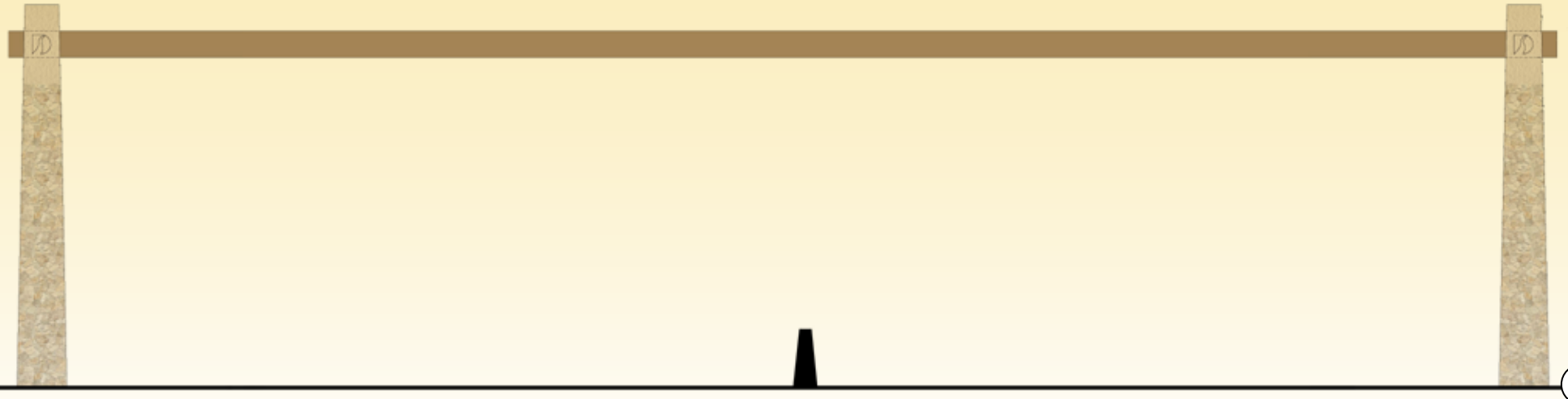
Under a professional services contract approved in June, the engineering firm Rummel, Klepper & Kahl LLP (RK&K) of King of Prussia, PA. is drawing up plans to demolish the bridge's old cash-collection toll booth plaza and replace it with as overhead gantry outfitted with electronic toll-collection equipment.

The design process is expected to serve as a test case for converting six other legacy Commission toll bridges to open-road cashless collections over the next seven years.

The following tasks are to be performed by RK&K under its contract:

- Develop a toll-gantry white paper providing respective gantry information for low-traffic-volume toll bridges like New Hope-Lambertville (Route 202) and for high-traffic-volume bridges like I-78;
- Use the low-volume protype as the basis for final design of the cashless all-electronic gantry to be constructed next year at New Hope-Lambertville (Route 202);
- Design the gantry so it will have two traffic lanes and flanking shoulders with its location immediately after the existing four-lane toll plaza;
- Sequence anticipated construction in a manner that will have minimal traffic impacts;
- Consider inclusion of stone facing in the gantry's design so it can closely match the location's existing administration building on the Pennsylvania side of the toll bridge;
- Develop plans for removing the location's existing barrier toll plaza;
- Repurpose an existing tunnel area to house electronic tolling equipment and related infrastructure; and
- Provide post-design services for evaluation of construction bids and execution of a resulting construction contract.

RK&K is expected to complete its design work by the winter, enabling the Commission to advertise the construction project for competitive bids in early 2025 and a potential contract award in the spring.



# 90th Anniversary

# Commission Reaches 90th Anniversary of Service To Middle Delaware River Region

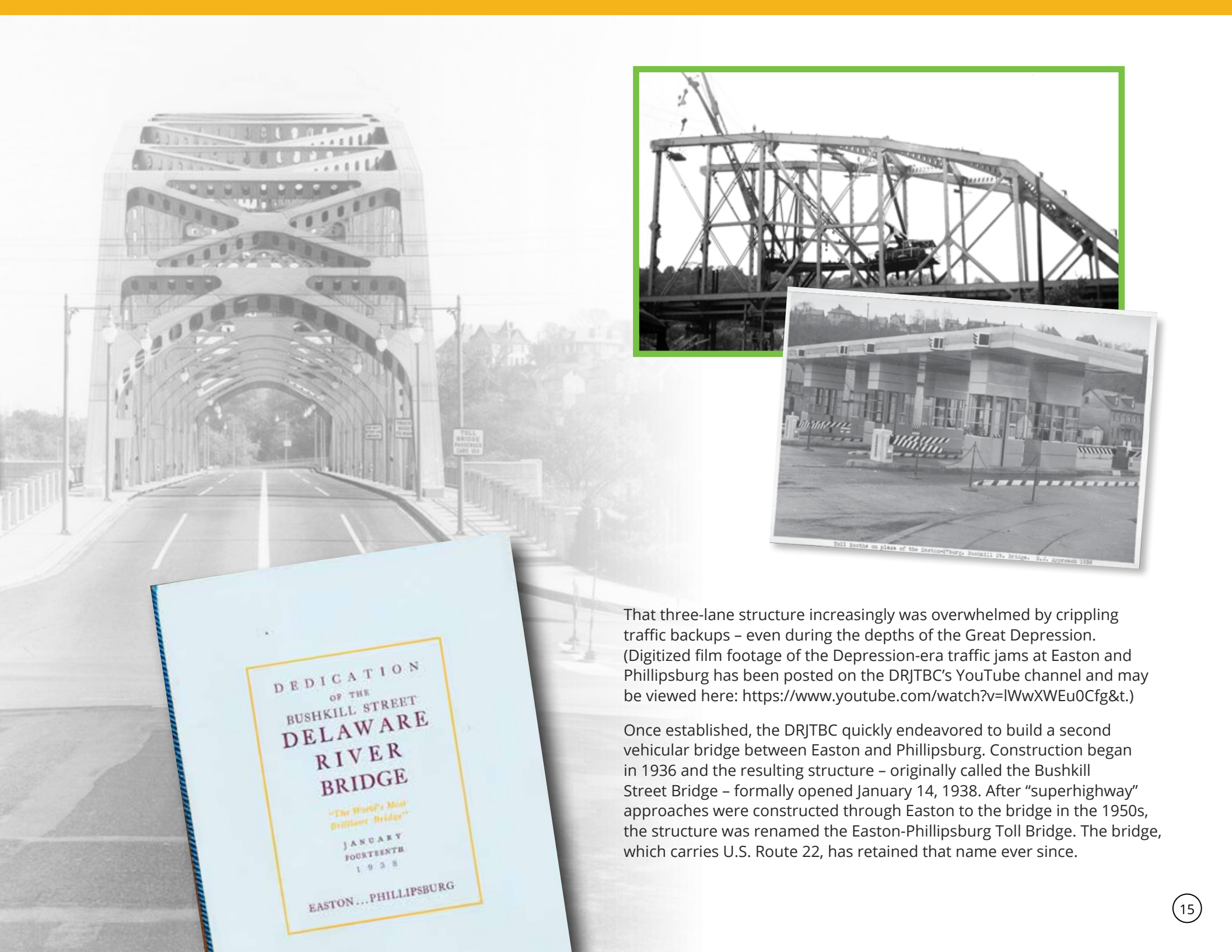
Without pomp or ceremony, the Delaware River Joint Toll Bridge Commission (DRJTBC) entered its 90th year of operations mere days before the calendar flipped to 2025.

The surface-transportation agency was formally organized by representatives from New Jersey and Pennsylvania meeting at the former Bellevue-Stratford Hotel in Philadelphia, PA. on December 28, 1934. The Commission's formation was the final agenda item for a predecessor body — the former Joint Commission for Elimination of Toll Bridges – Pennsylvania-New Jersey – that the two states established in 1916 to facilitate the acquisition and freeing of private toll bridges along the river.

The former "Joint Commission" was immediately disbanded upon the creation of the new "Bridge Commission," which was bestowed powers that exceeded its predecessor agency's narrow service mission. The most notable changes included authorization for issuing bonds to construct new highway bridges and collecting tolls to retire bonding debts and offset operating costs. Indeed, the newly constituted Bridge Commission had a broader and more future-oriented purpose: maintaining 19th century and early-20th century river crossings while constructing new high-volume bridges to handle rising levels of motor-vehicle traffic between the two states.

Respective identical state agreements establishing the new Commission were signed by Governor A. Harry Moore of New Jersey on December 18, 1934 and Governor Gifford Pinchot of Pennsylvania on December 19, 1934. The Commission later became fully empowered on August 30, 1935 when the U.S. Congress ratified a federal Compact codifying the state agreements.

The driving force behind the Commission's creation was the pressing need for a modern-highway bridge between Easton, PA. and Phillipsburg, N.J. The Northampton Street Bridge – nearing 40 years old at that time — was the lone vehicular crossing linking those two Industrial Age communities.











That three-lane structure increasingly was overwhelmed by crippling traffic backups – even during the depths of the Great Depression. (Digitized film footage of the Depression-era traffic jams at Easton and Phillipsburg has been posted on the DRJTBC's YouTube channel and may be viewed here: https://www.youtube.com/watch?v=lWwXWEu0Cfg&t.)

Once established, the DRJTBC quickly endeavored to build a second vehicular bridge between Easton and Phillipsburg. Construction began in 1936 and the resulting structure – originally called the Bushkill Street Bridge – formally opened January 14, 1938. After "superhighway" approaches were constructed through Easton to the bridge in the 1950s, the structure was renamed the Easton-Phillipsburg Toll Bridge. The bridge, which carries U.S. Route 22, has retained that name ever since.

The Commission later constructed six additional highway-speed river toll bridges. Like Easton-Phillipsburg, all of these bridges had accompanying facilities where cash tolls could be collected in both directions. They are with their respective opening year:

- Trenton-Morrisville (Route 1) in 1952
- Portland-Columbia (Routes 611, 46, 94) in 1953
- Delaware Water Gap (I-80) in 1953
- Milford-Montague (Route 206) in 1953
- New Hope-Lambertville (Route 202) in 1971

Although it was constructed through the Pennsylvania Department of Transportation, the Commission also has operated and maintained the I-78 Toll Bridge between Williams Township, PA. and Phillipsburg, N.J. since November 1989. The Commission also is responsible for the bridge's approaches in Pennsylvania (2.25 miles) and New Jersey (4.2 miles).

Unlike the prior toll bridges, tolls were collected only in the PA-bound direction at I-78. The Commission had initiated a multi-year process of converting its toll bridges to PA-bound collections only in June 1989 – at Easton-Phillipsburg, Portland-Columbia, and Delaware Water Gap. Another toll-collection advancement occurred 13 years later – in late 2002 – when the Commission augmented its cash toll collections with E-ZPass electronic toll paying at all tolling points.

Under a series of changes made to its Compact between 1984 and 1987, the Commission also owns, operates, and maintains 12 non-toll bridges that were once jointly owned by the states of New Jersey and Pennsylvania. The two states purchased each of those river crossings from respective former local shareholder-owned companies with the assistance of the former Joint Commission for Elimination of (Private) Toll Bridges. The acquisition of these former private toll bridges occurred between 1918 and 1932. Under the Compact changes of the 1980s, the states conveyed ownership of these bridges outright to the Commission and directed that the Commission operate and maintain them by using a portion of the revenue it collects at its toll bridges.

Prior to the Commission's ownership, the costs of operating and maintaining the non-toll bridges were financed by appropriations from the two states. Since toll revenues currently provide the sole source of support, the Commission now refers to these non-toll bridges as "toll-supported bridges." (Note: There is no such thing as a "free bridge;" someone is paying for the bridge somewhere.)

These legacy bridges are (from south to north): Lower Trenton ("Trenton Makes"), Calhoun Street, Washington Crossing, New Hope-Lambertville, Centre Bridge-Stockton, Lumberville-Raven Rock (pedestrian), Uhlerstown-Frenchtown, Upper Black Eddy-Milford, Riegelsville, Northampton Street, Riverton-Belvidere, and Portland-Columbia (pedestrian).

During its nine decades of operations, the Commission also cared for – but never owned – the following bridges (listed south to north):

- Yardley-Wilburtha – decimated by 1955 flood, shut down in May 1961
- Lumberville-Raven Rock covered bridge with one steel span – closed for safety reasons June 1945
- Point Pleasant-Byram – destroyed by 1955 flood
- Upper Mount Bethel-Delaware – removed from service April 9, 1954
- Portland-Columbia covered wooden bridge – closed to vehicular traffic in 1953; destroyed by 1955 flood
- Milford-Montague through-truss bridge (13-feet-11-inch-wide road deck) – closed 1953

The Commission also controlled and maintained the former highway bridge at Scudder Falls (I-95) from June 22, 1961 to June 30, 1987. Ownership of this bridge was assumed by the Commission on July 1, 1987 through its Compact change. This bridge was removed from service shortly after the Commission completed construction of the first span of its eighth toll bridge – the Scudder Falls (I-295) Toll Bridge – in July 2019.

Unlike its prior seven toll bridges, the one at Scudder Falls was outfitted with a cashless highway-speed all-electronic (AET) toll-collection facility – an open-road overhead gantry outfitted with cameras and other toll-assessment equipment to collect tolls through E-ZPass and TOLL BY PLATE license plate billing through the U.S. Mail.

The Commission enters its 90th year of operations in the midst of a multi-staged transitional process to convert all of its former cash-collection tolling points to highway-speed cashless AET facilities like Scudder Falls by the early part of the next decade.

# Pivotal Figure in Commission's Formation Died 80 Years Ago

*During the first half of the 20th century, Louis Focht of Trenton, N.J. was the go-to authority on Delaware River bridges connecting New Jersey and Pennsylvania. A civil engineer with a unique understanding of legislative politics and government finance, Focht helped lead the acquisition and freeing of 16 former private toll bridges along the river between 1918 and 1932. He oversaw the construction of five bridges that remain in service to this day. Finally, he was a key figure in the Commission's formation and its first 10 years of operation – the only individual in the agency's history to lawfully serve simultaneously as a commissioner and a top executive. Owing to the fact that the Commission inexplicably gave short shrift to Focht and his achievements when he died in 1944, an effort was undertaken to commemorate Focht's legacy in this annual report for 2024 – the 80th anniversary year of his passing:*

Born on Sept. 5, 1863 in Elizabeth, N.J., Louis Focht studied civil engineering at Lehigh University upon completion of his early schooling. He attained his job in 1883 with the Lehigh Valley Railroad Company's engineering department. He ascended through the company ranks over the ensuing 15 years, eventually overseeing a litany of LVRR projects that included tunnel building, reconstruction of about 75 bridges, and construction of passenger and freight stations, turntables, water tanks, and a coal-storage facility.

In 1897, Focht left the LVRR to examine the potential extension of the Táchira Railway in Venezuela's coffee-growing region. He returned to the United States and took a new job as chief engineer for the former Lehigh Construction Company.

Focht's long public service career began in 1898, when he became chief engineer at the New Jersey State Board of Assessors (later renamed the State Board of Taxes and Assessment). His primary duty involved assessing New Jersey's railroad properties for taxation. He retained that position until he died.

Effectively the state's top property assessor, Focht occasionally was called upon for special projects. One notable undertaking was a detailed 1912-14 study of the former Morris Canal, an inland waterway that once connected the Delaware River at Phillipsburg, N.J. with the Hudson River waterfront at Jersey City, N.J. Focht later served on a state panel – the Morris Canal Commission – that guided settlements on railroad company purchases of moribund canal properties.

Another significant endeavor arose in 1916, when Pennsylvania and New Jersey empaneled a joint commission to help facilitate publicly funded purchases of the various private toll bridges along the Delaware River at that time. The novel bridge-acquisition panel – the so-called Joint Commission for Elimination of Toll Bridges – requested Focht and a leading Pennsylvania state engineer to examine the river bridges and determine each bridge's fair-market value.

Focht soon became a fixture at Joint Commission meetings, as the bistate panel guided the two states in purchasing and freeing 16 tolled river crossings. The first bridge acquisition occurred in 1918 and the last in 1932. Focht became the body's first chief engineer and, subsequently, the agency's superintendent — its top executive position. In 1921, New Jersey took an additional step and appointed Focht as one of the joint body's unpaid commissioners.

Working out of the State Office Building office on West Hanover Street in Trenton, Superintendent Focht cobbled together a loose-knit organization of bridge guards, maintenance crews, and engineers with a small administrative staff. The operation was financed with equal tax subsidies from the two states.

On several occasions, the tiny operation secured additional funding from the two states to build replacement bridges along the river. The first, a steel truss bridge between Centre Bridge, PA. and Stockton, N.J., was completed in July 1927 — replacing a former covered wooden bridge destroyed in a 1923 lightning-ignited fire. Other Focht-led vehicular bridge projects followed at Lower Trenton (partially opened late November 1928/completed January 1929), Uhlerstown-Frenchtown (completed/opened October 1931) and Upper Black Eddy-Milford (completed/opened January 1935).

In 1933, New Jersey Governor A. Harry Moore appointed Focht to a commission examining the feasibility of adding an electrified rail line to the Delaware River Bridge – since renamed the Ben Franklin Bridge – between Camden and Philadelphia. It was around this time that frustration over constant traffic jams between Easton, PA. and Phillipsburg, N.J. led to calls for a second bridge to link the two municipalities. Facing Great Depression revenue declines, New Jersey's elected officials balked at the notion of providing additional funds for a second bridge. This led Pennsylvania and New Jersey to dissolve the old Joint Commission for Elimination of Toll Bridges and create a new Delaware River Joint Toll Bridge Commission that could float bonds to build new highway bridges and then charge tolls to pay back bond investors.

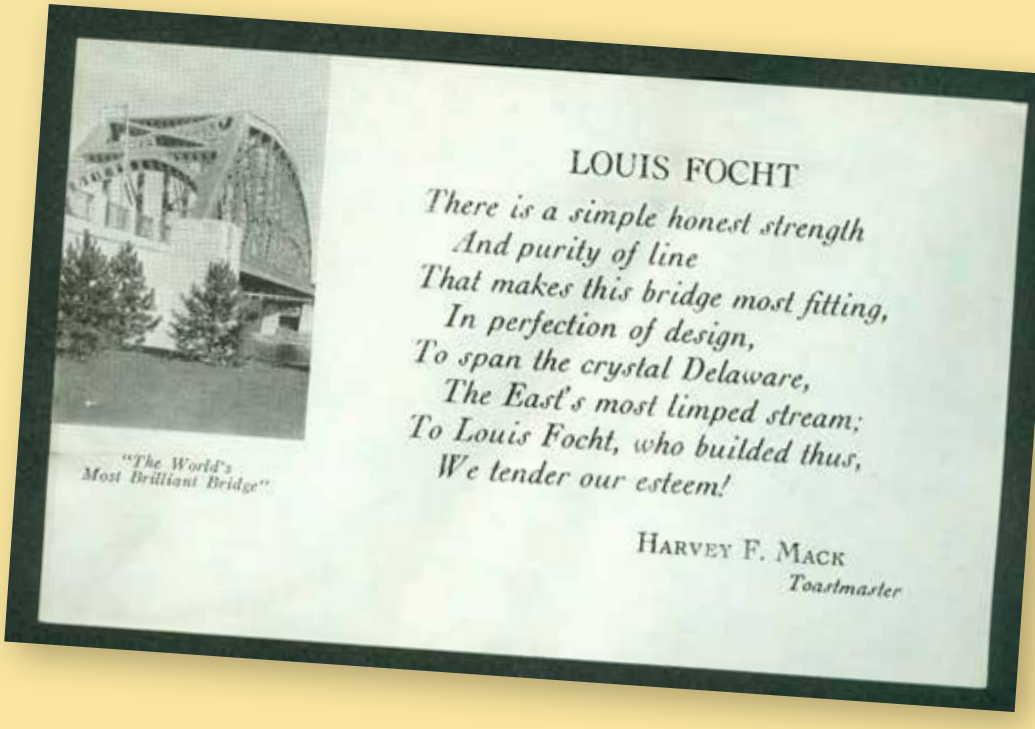
With Focht at the administrative helm, the new bistate agency moved swiftly to build a toll bridge at Easton and Phillipsburg. The structure opened in 1938.

Despite his advancing years, Focht continued in his bridge and tax assessor posts through the Depression years and the United States' entry into World War II. In the spring of 1944, a sudden illness befell Focht. He died in Trenton, June 4, 1944 at the age of 80. His final resting spot is Nisky Hill Cemetery in Bethlehem, PA.

A lengthy biography in William Starr Myers's *Prominent Families of New Jersey* extolled Focht's far-reaching achievements, honors, and distinctions, stating:

> *"Probably no one knew more about bridge building and removal, or concerning other problems of bridge maintenance, whether from the cost or the technical point of view, than he. The death of Louis Focht... was an occasion of deep sorrow in the wide circle of his acquaintances, removing from New Jersey and American life one whose accomplishments were solid and substantial and will long endure."*

Focht's name endures on plaques attached to or near three bridges that were constructed during his lifetime: the Easton-Phillipsburg Toll Bridge (formerly the Bushkill Street Bridge), in Morrisville, PA. near the Lower Trenton Toll-Supported Bridge, and near both ends of the Centre Bridge-Stockton Toll Supported Bridge.



# Projects

# New Trenton-Morrisville Campus Takes Shape in 2024

Demolition activities gave way to construction on a large scale at the Commission's Morrisville operations/maintenance campus in 2024.

The site dates back to the construction of the Trenton-Morrisville (Route 1) Toll Bridge in the early 1950s. It previously consisted of a four-story administration building and a separate garage/maintenance building. Equipment storage, salt storage, a fueling area, and parking lots were located at the site.

A first step in transforming the location occurred in 2020 when a modern salt-storage facility and fueling island were constructed on a portion of the property. This was followed by construction of a one-story demarcation building that is designed to serve as the nerve center for the site's electrical power, natural gas, sewer, water, and computer lines to maintain electronic toll systems and bridge operations without interruptions or public impacts.

In 2023, the bridge's toll personnel were moved into temporary trailers outfitted with utilities, security devices, and furniture. This allowed for demolition of the old administration building over the course of that year. Meanwhile, Commission maintenance forces began removing the contents of the nearby garage so that it could be demolished.

These preparations were undertaken to allow for construction of a 16,000-square-foot two-story operations building and a new 8,900-square-foot vehicle-storage/maintenance building. The new office building will house Trenton-Morrisville Toll Bridge staff and various security and traffic-incident management personnel. The new vehicle-storage/maintenance building will service the toll bridge and other Trenton-area bridges.

During 2024, the following work was carried out to make these two new buildings a future reality:

### *Operations Building*

- Completed installations of stormwater, potable-water-supply, natural gas, and sewer-utility lines.
- Removed five underground heating oil, diesel, and gasoline tanks.
- Waterproofed the toll plaza retaining wall that was exposed after the old administration building's demolition.

- Prepared a new entryway to a service tunnel beneath the toll plaza.
- Established concrete frost walls and pour a retaining wall for the new operations building.
- Constructed an elevator pit, a stair tower, and elevator shaft.
- Erected structural steel for the building's framework.
- Installed a new generator to power the location's various buildings and operations when electric utility power is disrupted.
- Completed installation of the building's outside walls and roof.
- Installed interior partition walls and rough-in of mechanical, electrical, and plumbing throughout the building.
- Laid building's brick façade.
- Waterproofed the exterior walls.
- Installed primary and secondary communication services for a continuous site-wide area network.

### *Vehicle-Storage/Maintenance Building*

- Completed the old garage's demolition and graded the site for construction of the replacement structure.
- Installed rebar-reinforced footings, under-slab utilities, and storm-water measures.
- Erected steel framework and metal roof deck.
- Installed radiant floor piping and rough-in of mechanical, electrical, and plumbing throughout the building.
- Poured concrete floor.
- Installed perimeter walls.
- Began roofing and overhead door installations.

At year's end, construction activities remained underway at both buildings. Estimated completions are summer 2025 for the operations building and fall 2025 for the garage.


## New Hope-Lambertville Toll Supported Bridge Undergoes Extensive Rehabilitation

The 120-year-old New Hope-Lambertville Toll-Supported Bridge was extensively rehabilitated during 2024, but a series of project tasks had to be extended into 2025 due to the fortuitous discovery of a severely deteriorated structural connection during the summer months.

The bridge's six-span pin-connected Pratt-truss superstructure opened in July 1904, connecting Lambertville, N.J. with New Hope, PA. Its previous rehabilitation occurred in 2004.

After 20 years, the time had come to again repaint the bridge and make related repairs. Under a low-bid contract award approved in late 2023, the prime contractor – Anselmi & DeCicco of Maplewood, N.J. – and its various subcontractors performed the lion's share of the bridge rehabilitation's primary tasks by the end of 2024. These included:

- Repaired or replaced various pieces of the bridge's steel superstructure;
- Cleaned and painted the bridge's steel superstructure and underlying bearings;
- Removed aging bridge roadway lighting system and installed a new light-emitting diode (LED) system;
- Replaced former slip-prone fiberglass walkway panels with an improved system of quieter grit-enhanced fiber-reinforced-polymer panels;
- Installed new walkway railings with lighting capability;
- Replaced approach sidewalks;
- Installed a programmable LED lighting system to highlight the bridge's architectural profile at night.

To carry out the work, the contractor scrapped original project traffic-control plans prescribing a nearly four-month-long suspension of pedestrian crossings. The contractor also changed the way the project was staged for crossings of vehicular traffic in the Pennsylvania-bound direction. The maintenance of PA-bound travel was crucial for the Commission because the agency did not want motorists forced into using the New Hope-Lambertville (Route 202) Toll Bridge, which is tolled in the Pennsylvania-bound direction.

New Jersey-bound vehicular travel at the free bridge, however, was detoured for the entire year to the nearby toll bridge, which is un-tolled in the Route 202-northbound direction for travel into New Jersey.

The Commission considered the Anselmi & DeCicco plan to be an improved project-execution approach because it mitigated potential risks – notably supply-chain and winter-weather impacts. The contractor's plan also minimized impacts to the popular tourist destinations of New Hope and Lambertville by maintaining continuous pedestrian access across the bridge throughout the contracted project tasks.

A key selling point for the Anselmi & DeCicco alternative project staging and scheduling plan was the company's prior experience carrying out projects with pedestrian impacts in the New York City-North Jersey metropolitan area.

Maintaining traffic in one direction for a two-lane truss bridge rehabilitation was a novel approach for the Commission. Since the start of the Commission's capital improvement program in 2001, two-lane truss bridge rehabilitations involved either uninterrupted bridge shutdowns or shutdowns during at least four days of each week.

To carry out the rehabilitation, containment/work platforms were installed below the bridge and along the upper truss. Sections of the bridge's steel trusses were enshrouded with tarps for removal of old paint surfaces and the application of a new three-coat paint system. Steel repairs were made where needed.

Replacement of the bridge's aging electrical supply system and the installation of new lighting fixtures followed as painting progressed along the bridge.

The bridge's aging walkway remained in service into July, when it was shutdown. Pedestrians were moved onto a temporary walkway surface pieced together along a portion of the bridge's roadway deck. A steel partition wall separated the pedestrian facility from motor vehicle traffic in the bridge's upstream lane. Because the temporary walkway width was narrower than the bridge's permanent walkway, a complimentary shuttle service was provided to handle pedestrian overflow during peak travel periods. This originally was provided seven days a week, but was reduced to weekends-only due to low ridership.

Work crews enshrouded downstream truss sections and began removing old paint and the old walkway. In late July, paint-removal work revealed a severely deteriorated critical structural connection along the lower chord of the bridge's second span from the Pennsylvania side — a 4-inch-diameter by 17-inch-long steel pin that linked 13 structural steel members. The pin had deteriorated to a point where it posed a potential risk for failure under heavy load.

The unforeseen issue forced a series of changes for the project and the bridge itself (see accompanying article). Among other things, the discovery

forced postponement of the bridge walkway's reopening and extended the project's New Jersey-bound traffic detour into 2025.

The Commission stepped up enforcement of the structure's 4-ton gross vehicle weight restriction in the late summer and fall while the project team and Commission engineers devised plans to address the situation and ultimately get the bridge fully back online.

A pivotal element of the plan involved the construction of a specially designed stabilizing device called a friction collar. This was delivered in November and installed by month's end, thus allowing the bridge's new permanent walkway to open in time for Thanksgiving Day weekend. The new pedestrian facility features a quieter slip-resistant system of foam-core fiber-reinforced-polymer panels and railings outfitted with LEDs that cast light directly onto the walkway surface.

A variety of other critical tasks to complete the project and get the bridge fully reopened had to be postponed. Chief among these was the unanticipated replacement of the deteriorated pin and surrounding steel connections. Since this work will necessitate an uninterrupted two-week-long bridge shutdown to all vehicular and pedestrian traffic, it was decided to postpone the repairs to mid-January 2025. This averted potential untoward local economy impacts during the winter holidays.

# Paint Removal Fortuitously Bares Unforeseen Structural Issue on 120-Year-Old New Hope-Lambertville Bridge

The discovery of a severely deteriorated structural connection at the New Hope-Lambertville Toll-Supported Bridge in late July was simultaneously disappointing and fortuitous.

The disappointment was that a planned year-long rehabilitation project at the 120-year-old bridge had to be extended into 2025. The good fortune was that a future catastrophic bridge collapse may have been averted.

The rehabilitation project's previously revised schedule had anticipated the bridge reopening to two-way traffic and pedestrian crossings in fall 2024. But that timeline was abandoned after late-July blast cleaning and priming work revealed a compromised structural connection along the bridge's second downstream truss from the Pennsylvania side.

Engineers quickly determined that the hitherto concealed connection – a four-inch-diameter by 17-inch-long steel pin that linked 13 structural members near the center of its respective downstream truss — might fail under heavy load. The pin, which controlled its respective truss's load rating, had lost 40 percent of its cross-sectional area.

The compromised pin had gone undetected in prior inspections because it was shielded by spacers. These had rusted so severely since the bridge's last rehabilitation that they disintegrated during the paint blasting process. Indeed, were it not for the sandblasting, the pin's compromised condition might not have been discovered. Engineers conducting follow-up sight inspections confirmed the pin's deterioration. Ultrasonic testing later revealed "anomalies" in the pin's structural integrity. (Note: As a precautionary measure, the bridge's other lower- and upper-chord pins were ultrasonically tested and all were determined to be sound.)

Based on inspections and calculations, engineers determined the bridge could stay partially open so long as Pennsylvania-bound vehicular traffic stayed on the bridge's upstream side and pedestrians remained on a temporary walkway near the center of the bridge. Structural-monitoring equipment (strain gauges) were installed in the area of the pin connection to constantly measure structural stresses in real time. As an additional safety measure, the Commission stationed security personnel 24/7 at the bridge's New Jersey approach to strictly enforce the structure's 4-ton gross vehicle weight restriction. Timber blocking was installed to maintain separation between affected eyebars along the pin connection.

With these contingencies in place, the project team consisting of Commission engineers, consulting engineers, and the contractor devised a multi-step plan to remedy the situation. There was a significant challenge, however; the Commission had never attempted a truss bridge pin replacement before and established industry protocols for such a procedure were nonexistent.

A variety of alternatives were examined:

- Install temporary shoring towers in the river to jack up the weakened truss — rejected due to requisite environmental-permit acquisitions and procurement and execution time considerations.
- Install supplemental steelwork to temporarily stabilize the compromised truss section — rejected due to time considerations for designing and fabricating various steel components, space limitations at the bridge, and need for an extended bridge shutdown.
- Install temporary truss systems along the affected bridge span — rejected due to weight, erection, and time considerations, including a protracted full bridge closure potentially lasting more than a month with significant parking and travel impacts in Lambertville.

To surmount the repair challenge, the project team refined a novel approach once considered – but not employed – for a pin-connected Upstate New York bridge owned by the Niagara Falls Bridge Commission. This fourth alternative was flagged by an engineer with EIC Group, LLC — the engineering consultant to project contractor Anselmi & DeCicco. This approach involved the fabrication and installation of a temporary stabilizing device called a "friction collar."

The Niagara Falls Bridge Commission graciously provided detailed shop drawings of the friction collar device it once considered using. Working with project designer John Schroettner of GPI and the Commission's project manager Michael McCandless, Michael Marks, P.E. – EIC's founder and principal – utilized the drawings to design a friction collar specific for the New Hope-Lambertville situation.

The various pieces of the custom-made device – shaped like a large upside-down U with horizontal hydraulic jacks at each side – was fabricated in October. Upon delivery in early November, crews assembled it for installation around the bridge's damaged pin assembly. Initial engagement of the installed device occurred on November 27, providing sufficient stability to open the bridge's new permanent walkway for the Thanksgiving Holiday weekend. Work crews later removed the temporary walkway on the bridge's roadway surface so some remaining project tasks could be completed before the winter holidays.

Engineers estimate that a two-week shutdown of the bridge to all vehicular and pedestrian crossings will be needed to replace the deteriorated pin and corresponding damaged bridge supports. Rather than impose such a bridge closure during the winter holiday season, the permanent repair was scheduled to occur during the last half of January 2025 – usually the coldest portion of any year. If all goes according to plan, the bridge could be reopened to two-way traffic and uninterrupted pedestrian crossings by mid-February.

## Commission Commits to Including Ultrasonic Testing in Bridge Inspections Program

Future inspections of Commission bridges with structurally significant pin connections will soon be getting the ultrasonic treatment. The summertime discovery of a deteriorated pin connection on the New Hope-Lambertville Toll-Supported Bridge is the reason why.

Ultrasonic testing involves the use of a transducer to transmit high-frequency sound waves to evaluate the internal composition of steel components for damage, deterioration, or other factors that could compromise a bridge's structural safety.

The Commission authorized ultrasonic technology to be used at its New Hope-Lambertville location after painting-preparation work in July revealed significant section loss on a previously concealed portion of a 120-year-old steel pin that connected a series of bridge structural members. Ultrasonic testing of the compromised pin yielded anomalous readings suggesting initiation of a possible fracture.

## Trenton-Morrisville Toll Bridge Project Improves Customer Experience

Roadway paving, deck sealing, and other improvements were carried out during the second half of the year at the Trenton-Morrisville (Route 1) Toll Bridge and its network of accompanying approach ramps and roadways in Trenton, N.J. and Morrisville, PA.

The contract for the Trenton-Morrisville Toll Bridge Roadway Paving and Deck Sealing Improvements Project was awarded to Road-Con, Inc. of West Chester, PA., in late June. The primary task was to address heavily worn pavements showing signs of deterioration since last being rehabilitated in 2014.

Work ramped up quickly in July with construction-related preparations and crews addressing a passel of non-paving tasks and repairs stipulated in the project contract. Milling and paving activities soon followed, upgrading travel lanes and shoulders of the bridge, 1,100 feet of approach roadways, and 11 ramps owned and maintained by the Commission.

Besides paving, the other project tasks were as follows:

- Providing pavement-reinforcement mats to inhibit cracking of driving surfaces;
- Replacing missing traffic signs;
- Sawcutting and sealing joints in the asphalt overlays of concrete slabs, matching joints with the underlying concrete roadway;
- Restriping pavement lines and markings along Route 1 and all ramps in the project area;

After that finding, the Commission decided to ultrasonically test the bridge's entire array of pin connections – all 216 of them. The additional testing determined that the bridge's other pins were sound.

Now the Commission is going one step further. It is planning to conduct similar ultrasonic testing on six other river bridges that have significant pin connections. The Commission is planning to add this ultrasonic technology to its bridge inspection program in 2025, even though such testing is not a National Bridge Inspections Standards requirement.

The Commission's bridges get inspected every two years – toll-supported bridges in even-numbered years and toll bridges in odd-numbered years. The biennial inspections also extend to related facilities, such as Commission-owned or -controlled approach bridges and support facilities. The resulting inspection reports are annually posted to the Commission's website: www.drjtbc.org/inspections/.

- Revamping the exit ramp from Route 1 north (first New Jersey exit) to Route 29 in Trenton with new curbing, a concrete apron, reconstructed drainage inlet, and full-depth replacement of the exit ramp's underlying concrete roadway;
- Constructing a solar-powered dynamic curve-warning device at the first New Jersey exit from Route 1 north;
- Repairing concrete roadway spalls within the project limits;
- Modifying drainage inlets to comply with respective state standards;
- Seal-coating all bridge and elevated-ramp decks within the project limits;
- Patching spalling concrete on four elevated vehicular-traffic structures and a sidewalk;
- Repairing median barriers; and
- Vacuuming out debris-filled bridge joints, inlets, and pipes as needed.

The preponderance of work was performed with overnight or off-peak travel restrictions. The project reached "Substantial completion" in December. However, some punch-list work — including remaining landscaping and the configuration of the solar-powered "Curve-Warning" sign atop the Route 1 north exit ramp to N.J. Route 29 — will carry over into 2025.

The Trenton-Morrisville Toll Bridge is the Commission's second-oldest highway river crossing. It is a 12-span, simply supported composite-steel-girder and concrete-deck structure with an overall length of 1,324 feet. It had the third-highest traffic volumes on any bridge in the Commission's 20-bridge network in 2024, carrying an average of 52,900 vehicles per day.

## Road-Surface Rehabilitation/ Security System Improvement Project Benefitting Motorists in Commission's I-78 Service Jurisdiction

Motorists are the ultimate beneficiaries of a two-prong project conducted throughout much of the year along the Commission's sprawling I-78 service jurisdiction.

The aptly named I-78 New Jersey Roadway Rehabilitation and Power & Communication Infrastructure Improvements Project largely took place along the 4.2-mile-long approach roadway segment the Commission controls between the I-78 Toll Bridge and the highway interchange for Routes 22, 122, and 173 (Exit 3) in New Jersey. But some work also extended to the toll bridge, portions of the bridge's 2.25-mile-long approach segment in Pennsylvania, and approach bridges in both states.

To carry out the project, the Commission awarded a $23.5 million construction contract in February with the Crisdel Group, Inc. of South Plainfield, N.J.

Work on the installation of new Electronic Surveillance/ Detection and Intelligent Transportation systems along the Commission's I-78 jurisdiction began in the early spring and continued throughout the year. This facet of the project involved considerable trenching along the Commission's I-78 right-of-way for sub-surface conduit to carry electrical-power and fiber-optic cable lines. Twelve new camera poles were installed with accompanying lightning-suppression measures. Eventually, 34 cameras were installed atop the poles to provide Commission security personnel with unimpeded views of the agency's entire I-78 jurisdiction in both states.

The changes replaced a prior security camera system that had considerable gaps in viewing capability and relied on solar power installations that had become obsolete and unreliable. The new system relies on electric-utility power. Backup generators were installed to facilitate uninterrupted operation of the new system in the event of a power outage.

The new system promises to enhance the Commission's response capabilities to accidents, vehicular breakdowns, and other emergencies. Installation activities are expected to be completed in the early part of 2025, with testing beginning in early February, and full activation and integration by the summer.

The other major project prong involved milling and repaving the 4.2-mile-long I-78 roadway surface the Commission controls and maintains on the New Jersey side of the I-78 Toll Bridge. Much of this work took place during off-peak and overnight hours with varying travel-lane restrictions. The project's repaving activities reached completion in the fall.

The affected roadway segment traverses a geologically unstable landscape and annually carries the most traffic of any location in the Commission's bridge network. The highway section is impacted by heavy tractor-trailer volumes and was last rehabilitated between 2007 and 2009. The roadway surfaces began showing advance signs of deterioration five years ago, when the Commission initiated a series of annual stop-gap asphalt-joint-replacement and pothole repair projects to buy time until 2024's full rehabilitation could be undertaken.

Other project tasks included:

- Repaving of exit and entry ramps at the I-78 interchange with Routes 22, 122, and 173 (Exit 3) in Pohatcong, N.J.;
- Repaving highway shoulders and outfitting with rumble strips;
- Restriping and installing delineators along repaved I-78 jurisdiction segments;
- Installing guiderails at seven camera pole locations for safety;
- Improving drainage in the vicinity of the Morgan Hill Road interchange (Exit 75) in Pennsylvania;
- Replacing the concrete pavement at the bridge's Express E-ZPass toll collection facility in Pennsylvania;
- Installing gabion walls at four locations along I-78 eastbound to stabilize slopes and improve safety;
- Resealing of the toll bridge's road decks and the road decks of the overhead and overpass bridges within the Commission's I-78 jurisdiction in New Jersey and Pennsylvania;
- Upgrading the wireless communications network within the Commission's I-78 jurisdiction.

The I-78 Toll Bridge crosses the Delaware River between Williams Township in Northampton County, PA. and the Town of Phillipsburg in Warren County, N.J., about two miles south of the confluence of the Lehigh and Delaware rivers at Easton, PA. The bridge carried an average of 64,900 vehicles per day in 2024.

# Multi-Year Environmental Review Process Begins for Narrow, Accident-Prone Washington Crossing Bridge

The Washington Crossing Toll-Supported Bridge is going under a regulatory microscope.

The Commission initiated a multi-year-environmental review process in 2024 to help determine whether the 119-year-old weight-restricted operationally challenged bridge should be replaced.

To get the ball rolling, the Commission issued a mid-January request for proposals (RFP) to procure an engineering firm that is now carrying out an environmental review process for the aging bridge in accordance with the National Environmental Policy Act (NEPA). The Commission subsequently hosted a pre-proposal meeting with interested firms at a Sheraton Bucks County Hotel ballroom in Langhorne a week later. More than 40 individuals attended that session.

Before the submittal of proposals from interested firms in late February, an online blog posted a news item erroneously reporting that the Commission was replacing the current Washington Crossing Bridge and that the procurement authorized design and construction of a replacement bridge. The individual responsible for the online item egregiously failed to verify her reporting or obtain comment from the Commission prior to publication. The fallacious representations in that article unfortunately tainted the public's understanding of the environmental review process, which never involved the design or construction of a new bridge.

The Commission nonetheless moved forward with its procurement efforts, culminating with a late-June contract award to an international firm, HDR Engineering, Inc. The environmental review has since been officially dubbed the Washington Crossing Bridge Alternatives Analysis.

The undertaking is to thoroughly examine the current Washington Crossing Bridge and develop a preferred alternative aimed at improving mobility and providing a safe and reliable river crossing for vehicles and pedestrians while ensuring the continued viability of businesses near the current bridge. DRJTBC Executive Director Joe Resta said the NEPA-guided process

ultimately would help the Commission determine what course of action it should take with its "aging, limited-capacity, safety-challenged Washington Crossing Bridge and its inherently poor customer-experience profile."

The current Washington Crossing Bridge has been a headache for generations of motorists. It is the narrowest of the Commission's 18 vehicular bridges, with a 15-foot-wide roadway that can force motorists to a crawl in 7.5-foot-wide lanes — one in each direction. Motorists frequently report instances of breaking sideview mirrors while crossing the bridge.

In recent years, Commission public-safety personnel have experienced an uptick of confrontational incidents with drivers of oversized vehicles attempting to cross the narrow, weight-restricted structure. The oversized-vehicle problem has been an issue in both directions at the bridge – not just the Pennsylvania-bound direction, which is the toll direction at the Scudder Falls Toll Bridge 2-1/2 miles downstream.

One notable New Jersey-bound incident occurred in March 2023, when an Amazon tractor-trailer smashed into the sign gantry before the bridge's Pennsylvania portal. The collision forced an emergency morning-rush closure and caused considerable damage to the gantry and the adjacent Pennsylvania approach sidewalk.

## Deficiencies Abound at Washington Crossing Bridge

**Under the revolving capital improvement program the Commission established in 2002, the agency makes it a practice to rehabilitate or improve its older non-highway bridges every 15 to 25 years. These bridge projects are now regularly exceeding $20 million in cost. A variety of construction-industry factors are likely to further inflate the price of these projects in coming years.**

**Enter the Washington Crossing Toll-Supported Bridge. Its turn in the Commission's bridge rehabilitation cycle is approaching within 10 years. The Commission, which is funded strictly by the revenue it collects at its eight toll bridges, must decide whether it would be a prudent use of toll payer money to rehabilitate its deficiency-riddled 119-year-old Washington Crossing Bridge, replace it, repurpose it, or just retire the river crossing.**

**At the root of this quandary is the bridge's ever lengthening list of shortcomings. Here are just a few of them:**

- **Current conditions**
  - **Does not meet current design standards, exacerbating reliability and safety concerns**
  - **3-ton weight limit**
    - Note: National Bridge Inspection Standards state: "Bridges must be closed when the gross live capacity is less than 3 tons."
  - **Open-grid steel deck shows areas of broken transverse bars and corrosion**
  - **Lower chord exhibits impact damage (from high-water events) in five of the bridge's six spans**

- Thickness loss in lower-chord gusset plates, with several exhibiting small holes and vertical bending/bowing
- Localized moderate rust noted in floor beams and stringers
- Pitting up to 1/8-inch in some stringers
- Areas of deteriorated pointing and stone masonry at piers and abutments (to be repaired by outside contractor in 2025 – when river levels allow)

- Commission's narrowest vehicular bridge
  - 15-foot total clear roadway width
  - Single travel lanes in each direction – 7.5-foot lane widths; as a comparative reference, interstate highway travel lanes are 12-feet wide
    - Note: The Commission's other narrow bridges are at Riverton-Belvidere (1904) [16'4" clear roadway width, constructed by same company a Washington Crossing]; and Uhlerstown-Frenchtown (1931) [16'6" clear roadway width, to be widened to 17'1" with new modified guide rails in 2025]. Like Washington Crossing, both of these post-1903 "Pumpkin Flood" steel-replacement-truss superstructures were erected at prior short-length substructure locations.

- Substructures
  - Bridge's stone-masonry abutments date to the 1833-34 construction of the first wooden bridge at the location; height modifications likely made after floods in 1841 and 1903.
  - Five piers support the bridge across the river — four piers date to the 1833-34 original construction (probably height modifications after 1841 and 1903 floods); one pier is poured-reinforce concrete installed to replace former stone pier destroyed in 1903 flood (this pier has faux-stone facing installed as part of 2010 improvement project)
  - Piers rest on original rock-filled timber cribs likely embedded in the river bottom in 1833 – construction method is a scour risk

- New Jersey bridge approach roadway
  - Has sharp S-curve (two sharp turns) making it difficult for motor-vehicle drivers to enter onto the bridge and exit off the bridge without veering into the oncoming travel lane
  - This approach ranks among the highest percentile crash location in the Commission's service jurisdiction
  - Traffic backups are a frequent occurrence at this location due to oversized vehicles that cannot navigate the S-turn and/or are denied entry to the bridge on the basis of exceeding the bridge's 3-ton weight restriction

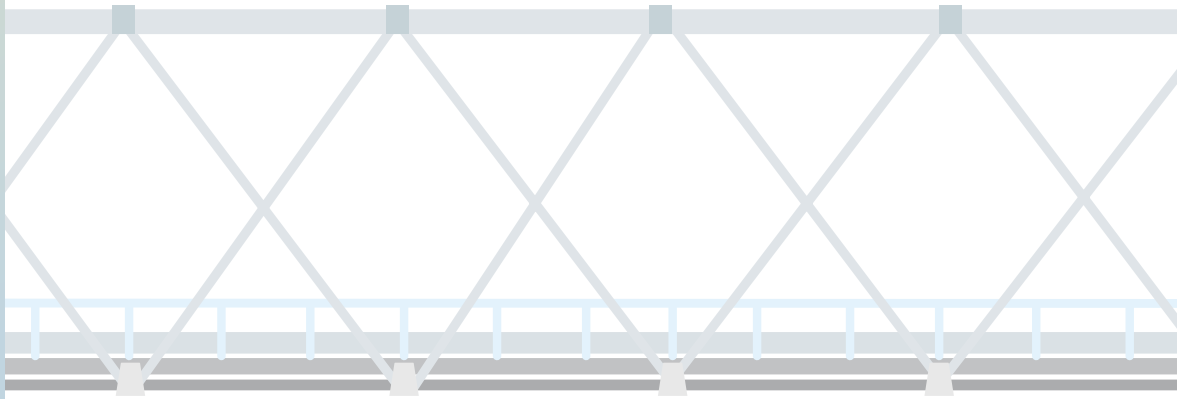


The bridge pre-dates the mass-production of automobiles. It was built in 1904-05 for two closely affiliated cash-strapped private local companies that charged tolls to cross it in either direction by horse, vehicle, or on foot.

The bridge's steel work predates later 20th century metallurgic advances and the thinness of the metal – notably its gusset plates – has prompted a progression of load-rating reductions over the past 60 years. A 1968 inspection report by the engineering firm Michael Baker, Jr. was particularly blunt: "The general appearance of the bridge is good, however, the material used in the original construction was very thin. Much of the main chord material, including gusset plates, was only ¼-inch thick when installed."

(Note: The bridge's load rating has since decreased to three tons. National Bridge Inspection Standards state: "Bridges must be closed when the gross live load capacity is less than 3 tons.")

The Commission's NEPA-process RFP stated that the bridge's steel through-truss superstructure "has experienced structural deterioration and does not meet current design standards, which creates reliability and safety concerns." (Note: The reference to safety concerns applies to the bridge's operation, not its state of condition. The bridge's last federally required biennial inspection – in 2022 – determined the bridge is "capable or safely supporting the posted



load," which is limited to vehicles of three tons or less. That inspection listed the bridge's overall condition as "fair." [2024 inspections have been completed, but the resulting report will not be posted until early 2025.])

The Commission has now reached the point where it believes a potential replacement of the bridge should be considered in addition to another rehabilitation or other possible alternatives that are "technically and economically feasible." This examination of a possible new bridge and approach-roadway improvements will be the crux of the NEPA-guided study and evaluation process of the next few years.

The environmental services portion of this process is tasked with land use, socioeconomic and environmental justice impacts; wetland, watercourse, and floodplain impacts; hazardous and residual waste impacts; terrestrial and aquatic habitat impacts; threatened and endangered species impacts; cultural resources impacts; air quality impacts; noise receptors impacts; and community and facilities and services impacts. The environmental review also will examine park and recreation lands, wildlife and waterfowl refuges, and historic sites as mandated under Section 4(f) of the U.S. Department of Transportation Act of 1966.

- **Security**
  - **The Commission must post bridge monitors at the bridge 24/7 to protect the structure from overweight/oversized vehicles – a substantial cost**
  - **However, weight-enforcement (bridge protection) efforts are inherently difficult:**
    - The Commission only owns property adjacent to the bridge on its New Jersey side; there is a single-story shelter adjacent to the S-curve approach
    - Due to state parkland at the bridge's Pennsylvania side, the Commission is unable to regularly provide security at that side of the bridge; mobile bridge security personnel only have an intermittent presence at a small state park parking lot about 50 yards to the west
    - Owing to this predicament, the bridge has been outfitted with traffic lights at each end to stop overweight/oversized vehicles and to stop traffic when accidents and emergencies occur on the bridge.
- **Pennsylvania bridge approach**
  - **The Commission owns little property at the bridge's Pennsylvania end**
  - **The property line is limited to the roadway and adjoining approach walkway, extending a few feet west of the river wall; a buttress to an upstream wingwall lies on what is now state park property**
  - **Adjoining property is state parkland and PA Route 532/George Washington Memorial Boulevard**
  - **Commission does not own space for installation of a bridge monitor shelter at the bridge's Pennsylvania approach; this puts the bridge at risk to oversized and overweight vehicles attempting to cross from Pennsylvania to New Jersey**
- **Walkway**
  - **Only 3-foot, 6 inches wide, making opposing movements of walkers and dismounted bicyclists difficult**
    - Note: Bicyclists are prohibited from riding across the bridge; according to FHWA regulations, bridge walkways must be at least 10-feet wide to safely handle integrated opposing movements of pedestrians and peddling bicyclists


The scope of research under the environmental review includes – among other things — travel-demand forecasting; crash analysis; geotechnical analysis; hydrology and hydraulic analysis; roadway and intersection capacity; traffic impacts/mitigations; right-of-way impacts:, and drainage, stormwater management and water quality.

The bridge's historically significant location — between two state parks and where George Washington led a war-changing military crossing during harsh early-winter conditions on December 25, 1776 – also will be weighed. The NEPA-process consultant is required to evaluate and develop context-sensitive solutions in consideration of "the existing bridge site, surrounding towns, historical parks, and other impacted resources."

A public involvement program will be integral to the NEPA process. A specific website for the alternatives analysis went live in December with a limited content. The expectation is that more materials will be added to the website as information gathering advances in the coming years. It's anticipated that later public-involvement activities will include meetings with stakeholder groups, open houses, and hearings where the public at large would be afforded an opportunity to ask questions and relay comments and concerns.

A key objective in the NEPA process will be the compilation and issuance of an environmental document identifying a "preferred alternative" for the Washington Crossing Bridge location. Alternative approaches to a new bridge are expected to include – but not be limited to – rehabilitation, repurposing the current bridge, improving the bridge's New Jersey approach roadway alignment, or doing nothing at all.

If the environmental review process were to identify a complete bridge replacement as the "preferred alternative" and that designation were to result in an affirming decision document from the lead reviewing federal agency, then – and only then – could the Commission proceed with additional steps, which might include final design, securing necessary permits, and construction.

The RFP for the NEPA-process consultant estimated a 30-month timeframe to carry out the process for receipt of a ruling from the lead reviewing federal agency. So, the earliest estimate for a federal decision would be by early 2027. But the process could take longer. When the Commission initiated an environmental review process for its former Scudder Falls Bridge in 2003, the initial estimated timeframe for completing the process was three years. It ended up taking nearly 10 years.

## Website Kicks off Washington Crossing Environmental Review

The public can access a new website to learn about the environmental review process now underway for the Washington Crossing Toll-Supported Bridge.

The website – www.washingtoncrossingbridge.com – went live in December as the public-facing vehicle for a multi-year effort dubbed the Washington Crossing Bridge Alternative Analysis.

Initial website content includes:

- An overview of the alternatives analysis process
- A list of frequently asked questions about the NEPA process
- A link to the federal Council on Environmental Quality's *A Citizens Guide to NEPA*
- The current schedule of the analysis process's major activities and milestones
- A contact page where visitors can fill out a form to submit questions and comments online

The website features a specific logo that is expected to be used in future public-facing materials for the alternatives analysis. The logo features a six-point star that was used on a blue flag to mark General George Washington's presence on Revolutionary War battlefields.

# Mid-19th Century Stone Piers Supporting Four Bridges Undergo Reconstruction

A stone-masonry repair program was rapidly initiated during the latter part of 2024 after failing mortar joints and loose or missing stones were discovered at a series of mid-19th-century substructures that support some of the Commission's oldest bridges.

The work came in the wake of biennial inspections that were conducted during the spring and summer months at the Commission's 12 toll-supported bridges. (Note: The Commission inspects its toll-supported bridges in even-numbered years and its eight toll bridges in odd-numbered years.)

Based on those inspections and follow-up examinations by Commission engineers, stone-masonry piers and abutments at four bridges were identified as needing repairs. The four bridges were prioritized based on the severity of issues warranting attention at each respective location. A contractor was subsequently arranged to carry out the work.

The Lumberville-Raven Rock Toll-Supported Pedestrian Bridge between Solebury, PA. and Delaware Township, N.J. was determined to need attention the soonest. Repairs began there in late July and reached completion in October. Attention then shifted to the 140-year-old Calhoun Street Toll-Supported Bridge between Trenton, N.J. and Morrisville, PA. The work at that location, however, had to be suspended with the onset of freezing conditions in December.

The repair program is expected to resume with the onset of warmer temperatures in late-winter/early-spring 2025. After work gets completed at the Calhoun Street Bridge, the repair effort is expected to shift to the Washington Crossing Toll-Supported Bridge between Upper Makefield, PA. and Hopewell Township, N.J., and then the Riverton-Belvidere Toll-Supported Bridge between Lower Mount Bethel, PA. and Belvidere, N.J.

Except for a single concrete pier at Washington Crossing, the piers at all four bridges date back to the mid-19th century. Washington Crossing's were constructed in 1833-34, Riverton-Belvidere's in 1835-36, Lumberville-Raven Rock's in 1853-55, and Calhoun Street's in 1859-60. The piers are rubble-filled and rest on stone-filled timber-crib foundations submerged below the river bottom.


## American Society of Highway Engineers Chapter Honors Northampton Street Bridge Rehabilitation Project

The Commission's Northampton Street Bridge Rehabilitation Project received significant recognition from a regional engineering organization in spring 2024.

The American Society of Highway Engineers' Eastern Pennsylvania chapter (ASHE-East Penn) gave its "Project of the Year" award to the extensive rehabilitation conducted at the iconic cantilever truss bridge between late 2021 and late 2023.

Despite a delayed start and lingering supply chain issues triggered by the COVID-19 pandemic of 2020, the project extended the bridge's operating life and enhanced its appearance between the commercial centers of Easton, PA. and Phillipsburg, N.J. A significant achievement involved the installation of a color-programmable LED architectural lighting system that has greatly enhanced the unique structure's profile along the river.

The project award was announced at ASHE East Penn's May 7 meeting in Bethlehem, PA. Award plaques were given to Michael McCandless, the DRJTBC's program manager for structures; John Schroettner, project design engineer from Greenman-Pedersen, Inc. (GPI); and Timothy Penrose, an associate vice president at Johnson, Mirmiran & Thompson (JMT), which provided construction management and inspections services for the project.

This was the project's second professional society award. In 2023, the project received a Distinguished Award from the New Jersey Chapter of the American Council of Engineering Companies (ACEC-NJ).

# Design, Outreach & Procurements Pave Way for 2025 Uhlerstown-Frenchtown Bridge Rehabilitation

The next rehabilitation of a weight-restricted two-lane truss bridge is in the on-deck circle.

The Commission carried out a series of preparatory steps during 2024 for a comprehensive rehabilitation of its 93-year-old Uhlerstown-Frenchtown Toll-Supported Bridge in 2025.

A project design contract was awarded in January to WSP USA, Inc. of Exton, PA. The engineering consulting firm soon initiated a detailed inspection of the bridge structure to confirm and/or identify conditions in need of attention under a rehabilitation project. The firm used the findings to plan major project tasks and identify possible travel restrictions and construction timelines.

In coordination with the preparation of preliminary designs, an informational webpage was established on the Commission's website in late April to provide accurate project information to the public. Two open houses and a roughly two-week-long public comment period were held between mid-June and early July. WSP's public-involvement consultants were instrumental in this process.

The public outreach effort generated dozens of comments from residents, motorists, public officials, business owners, and other individuals. Concerns largely centered on the Commission's plans to outfit the bridge with a color-programmable LED architectural lighting system and initial plans to leave the bridge's detested guiderail system intact. The Commission subsequently posted response documents to comments/questions submitted by 62 individuals and three government entities.


The input prompted a variety of changes to project plans, including – but not limited to – the following:

- Warmer lighting that is more environmentally friendly;
- Shifting up-lighting to a downward orientation;
- Replacing more-intense direct-view luminaries with a warmer, broadcasted lighting system;
- Reorienting lighting beneath the walkway;
- Removing the bridge roadway's current guiderails and installing new, narrower truss-protecting railings. Steel curbing also will be added to mitigate vehicular sideswipes with the new railings. These two design changes are expected to increase the bridge's fender-height roadway width by 7 inches — to 17-feet, 1-inch from the current 16-feet, 6-inches.

Final design began in early July. The project was put out to bid in the fall. At their December meeting, Commissioners awarded the project's construction contract to low-bidder Anselmi & DeCicco, Inc. of Maplewood, N.J. for a not-to-exceed amount of $22,216,237. A separate contract for construction-management/inspections services was awarded to Urban Engineers Incorporated of Cherry Hill, N.J. for a not-to-exceed amount of $1,587,138.62.

The contractor is expected to begin mobilizing equipment and materials in late January 2025. Construction activities should begin shortly after that. The project is estimated to take 10 months.

# Administration & Year in Review

# Public Safety/Security Personnel, Host-Municipality Responders Lauded for Life-Saving Actions at Commission Bridges

The Delaware River Joint Toll Bridge Commission issued a series of proclamations this year to bridge-security personnel and several municipal public safety employees for responding to emergency situations at various bridges in late 2023 and early 2024.

In February, the Commissioners commended Corporal Cameron Huffman for his situational awareness in preventing a possible suicide at the Delaware Water Gap (I-80) Toll Bridge in October 2023. His astute actions while on routine patrol of the bridge were instrumental in enabling New Jersey State Police to find a distraught woman who had earlier contacted a suicide-prevention hotline. The woman subsequently was located near the bridge and taken by ambulance for observation at a hospital. Commissioners praised Huffman's initiative, intuitiveness, and timely action in helping a woman in crisis and averting a potential tragedy.

(Note: Commission security forces are trained to serve as first responders to a wide range of incidents that might occur at the agency's bridges. These individuals regularly work in a cooperative manner with host-municipality public safety personnel when warranted. Meanwhile, the Commission annually pays for New Jersey and Pennsylvania State Police to provide law-enforcement coverage at the Commission's bridges and related transportation facilities.)

Also at their February meeting, Commissioners handed out multiple proclamations for emergency incidents that occurred at two separate bridges in January.

One proclamation honored officers from two Pennsylvania municipal police departments that responded to a reported suicide attempt at



the Lumberville-Raven Rock Toll-Supported Pedestrian Bridge during the early morning hours of January 1. Commissioners commended Solebury Township patrolmen Brendan Murphy and Patrick Dorsey and Plumstead Township Corporal Michael Johnson for restraining a woman who threatened to jump from the bridge and giving her initial medical attention. A local first aid squad subsequently transported her to a hospital for observation and care. The proclamation praised the officer for their teamwork in averting a tragedy and helping a woman in crisis.

The other proclamation pertained to a January 8 incident involving a man who jumped into the frigid river from the Calhoun Street Toll-Supported Bridge's walkway. Alerted by a passing motorist, Bridge Monitor Frank Cannon found the man in the river downstream of the bridge and radioed the Commission's control center. After seizing a life-saving ring from the bridge's shelter, Cannon went to the riverbank and tossed it with an attached rope to the man in the river. Morrisville Patrolman Lew Halas arrived at the scene and teamed with Cannon to guide the man along the river to a location where he could be pulled from the water by Cannon, Halas, and Commission Sergeant Robert Capaldi, who also arrived at the scene. Morrisville Fire Rescue 98 provided blankets to keep the man warm while he was carried up the rocky embankment. The man was then taken to an area hospital by Capital Health Emergency Medical Services (EMS). Commissioners cited the rescuers for their timely actions, dedication to public service, and selflessness.

The ongoing training provided to Commission security and public safety personnel was cited in a set of proclamations that Commissioners bestowed at their July meeting to three employees who handled a challenging May 16 cardiac arrest case at the Calhoun Street Bridge.

The incident began when a car crossed from Pennsylvania to the New Jersey side and stopped near the shelter occupied by Bridge Monitor Haden Fitzpatrick. Noticing the stopped car, Fitzpatrick went to assess the issue and learned that a female passenger in the vehicle needed medical attention. Fitzpatrick radioed the situation into the Control Center, where Electronic Security and Surveillance Monitor Dennis Stites received the communication and then proceeded to walk Fitzpatrick through the steps of removing the passenger from the car so she could be provided cardiopulmonary resuscitation (CPR) as traffic continued flowing close by. Meanwhile, other Control Center personnel radioed the bridge's Pennsylvania shelter and directed Bridge Monitor Robert Bird to respond with his shelter's automated external defibrillator (AED). With Stites providing instructions, Fitzpatrick and Bird attended to the unconscious woman until medical services personnel from Trenton arrived and assumed the administration of CPR and AED. The Commission commended the three employees for their teamwork, commitment to duty, and courage amid moving traffic.


## Prompt Inspections Affirm Structural Integrity of Bridges After Strongest New Jersey Earthquake in 240 Years

Accompanied by a thunderous bang and shaking, a rare earthquake rocked the Commission's service region on the morning of April 5, 2024.

The earthquake registered a 4.8 magnitude on seismometers and dozens of aftershocks were recorded for more than a week. Later analysis determined Tewksbury, N.J. as the seismic event's epicenter. It was the strongest earthquake to strike New Jersey since 1783.

Property damage was recorded in New Jersey, New York City, Long Island, and even Philadelphia. Flights were halted at several airports and both the Holland and Lincoln tunnels were closed briefly between New Jersey and Manhattan.

On a global scale, the seismic event was far short of a major quake. The extent of shaking, however, was spread across a wide area – as far south as Virginia and as far north as Maine. The United States Geological Survey estimated that about 42 million people in the Northeast felt the earthquake.

## Commission Facebook Post Counteracts Irresponsible Viral Video

The Commission used its Facebook page in 2024 to counteract a malevolently manipulated viral video that fueled rumors, hysteria, and concerns about the agency's Delaware Water Gap (I-80) Toll Bridge.

The misleading video about the bridge had been posted on various social media sites in 2023. It showed a small section of superfluous steel plates beneath the bridge without context or professional explanation. The viral footage unfortunately stoked alarm after the March 26, 2024 collapse of the Francis Scott Key (I-695) Bridge near Baltimore, MD.

Although that bridge's collapse clearly resulted from a container ship collision (not a structural deficiency), public concern about bridges rose in the wake of the disaster. The individual who fashioned the misleading 2023 Delaware Water Gap Toll Bridge video displayed his hysteria-stoking motives by again posting and distributing it. Several concerned drivers who saw the video brought it to the attention of Commission employees working at the bridge. Other motorists called public officials or contacted the Commission via its website.

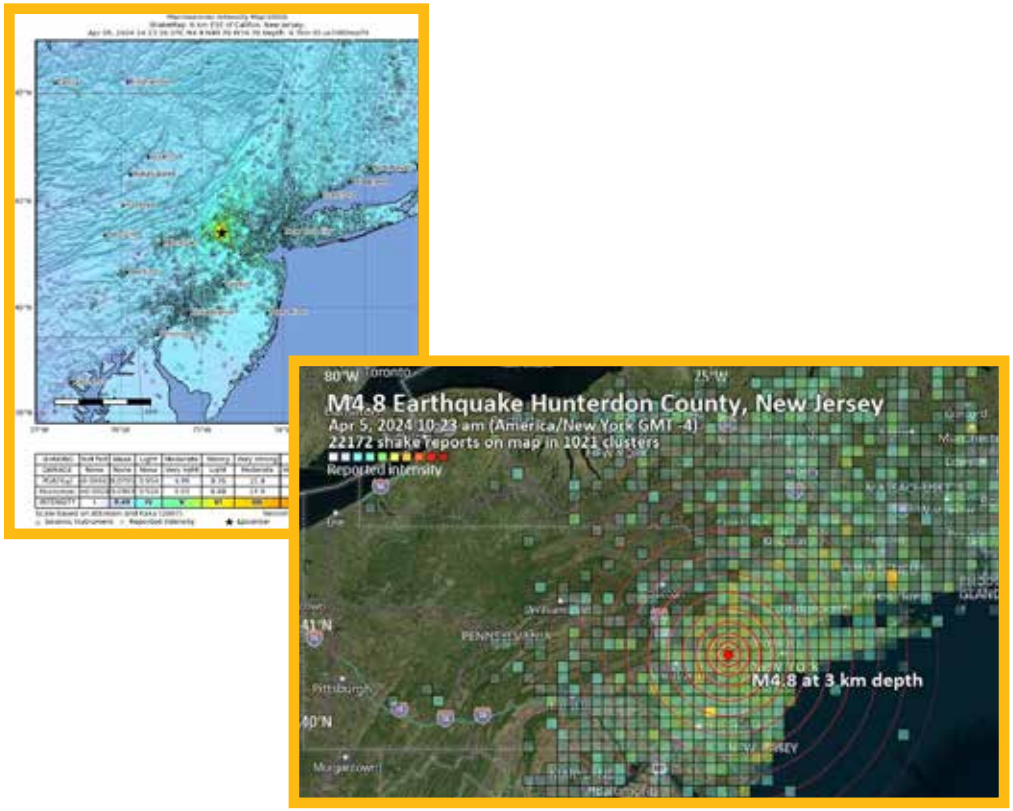
The Commission responded by posting a rare missive on its Facebook page. The post, with an accompanying photograph, explained how the rusted steel pieces were inconsequential non-structural "blast plates" installed 70 years ago to shield the bridge's girders from steam railroad engine exhaust.

Out of an abundance of caution, the Commission moved to inspect its river bridges that might have sustained damage from the tremors.

The bridges were examined on a high-to-low-priority scale determined by their structural makeup and condition. High-priority bridges had stone-masonry substructures and non-redundant steel-tension-member superstructures. Medium-priority bridges had reinforced-concrete substructures and non-redundant steel-tension-member superstructures. Low-priority bridges had reinforced concrete substructures and redundant superstructures. One bridge – the Scudder Falls (I-295) Toll Bridge was not inspected because of its recent construction, anchorage to bedrock, and redundancy.

The safety inspections were carried out within a month by personnel from the Commission's Engineering Department and Pickering, Corts & Summerson, the Commission's general engineering consulting firm. In several instances, inspections were conducted with drones.

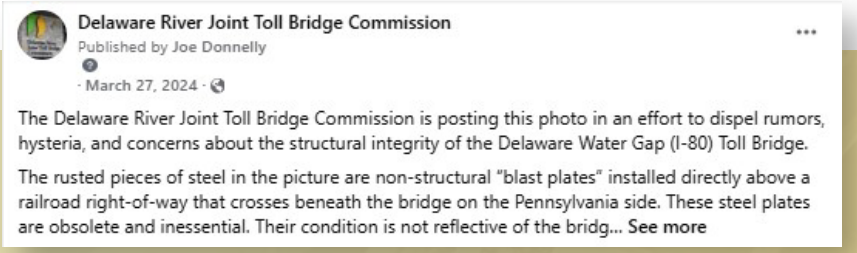
The process ultimately found no changes in the conditions of the examined bridges.




**The plates are installed directly above railroad tracks that pass beneath the bridge on the Pennsylvania side. Removal of the plates would be challenging because at least one set of tracks remains in service to this day.**

**Additional text explained how the bridge is inspected in accordance with federal law every two years and had passed its most recent inspection "with flying colors."**

**The Commission's countermeasure clearly had its desired effect. It was shared over 300 times, including by police agencies, municipalities, and various organizations in Pennsylvania's Pocono Mountains region. Public inquiries about the blast plates tailed off in a matter of days.**





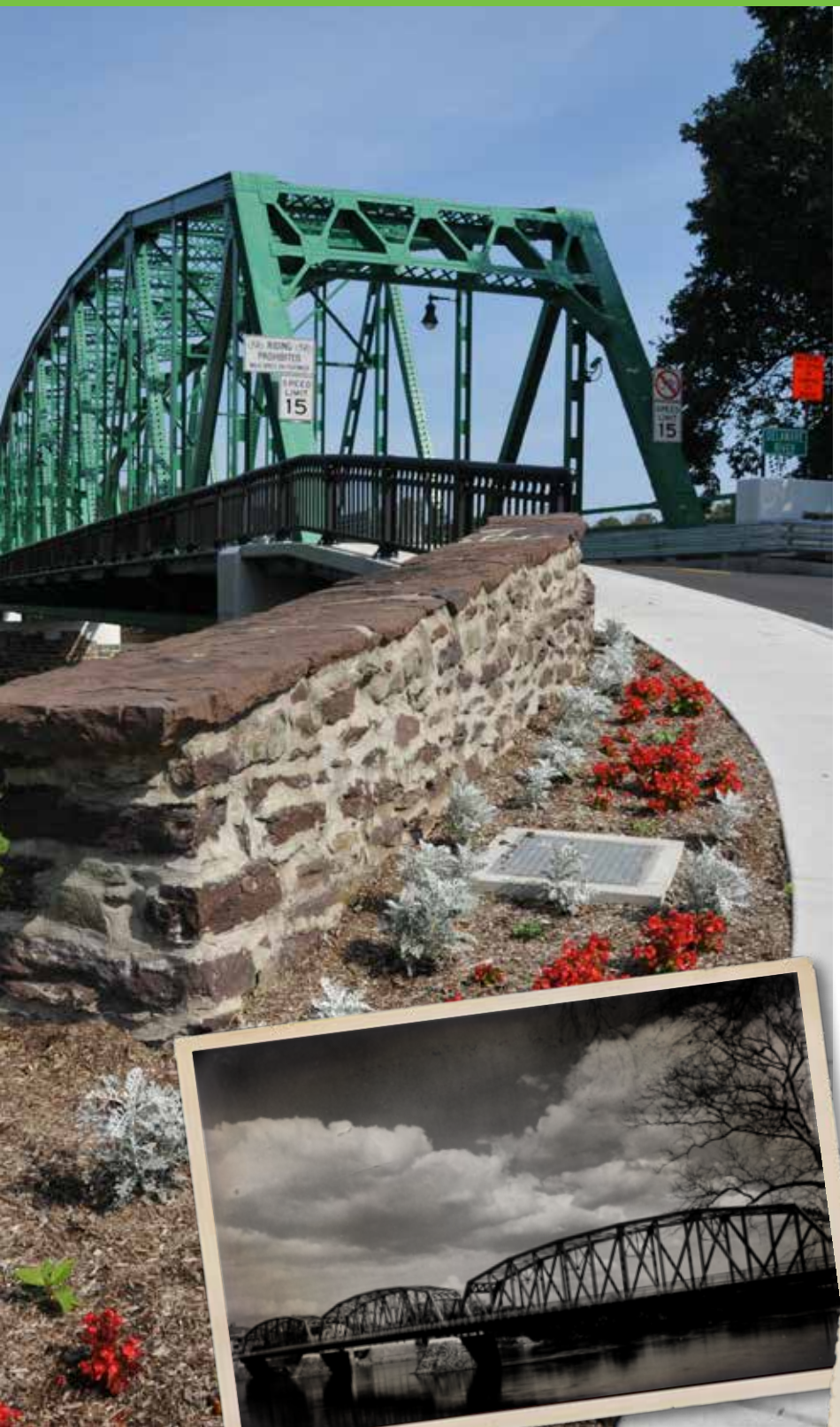
## Commission Initiates E-ZPass Customer Service Training For Cash Toll Collectors And Back-Office Staff

The Commission launched an additional employee training initiative in 2024 to further advance the agency's transition to system-wide cashless all-electronic tolling in early 2025.

The new training effort involved five former toll collectors and two back-office generalists who worked at either the Delaware Water Gap (I-80) Toll Bridge or the I-78 Toll Bridge. With their respective toll-related duties slated to expire with the onset of cashless tolling, these individuals were offered training to serve as future E-ZPass customer service representatives at the two bridge locations.

The training was provided by the Commission's E-ZPass Department and Conduent Inc., the DRJTBC's toll-processing service provider. Beginning in the fall, the employees attended classes and other training sessions where they learned how to help motorists with issues ranging from invoices, toll violations, and toll transponder problems.

As part of this behind-the-scenes restructuring, the Commission plans to station the newly trained E-ZPass customer service representatives at kiosks being installed at the Commission's Delaware Water Gap and I-78 administration buildings. A similar kiosk setup also is being planned for the administration building near the Scudder Falls (I-295) Toll Bridge, the Commission's first cashless tolling location. The walk-up customer-service kiosks are expected to be operational during weekday business hours at some point in 2025.




## Upper Black Eddy-Milford Toll-Supported Bridge Reaches 90th Year of Service

The Commission marked the Upper Black Eddy-Milford Toll-Supported Bridge's 90th anniversary in early 2024 by compiling a detailed historical account about the steel-truss structure and its covered-wooden-bridge predecessor.

The three-span superstructure unceremoniously opened to traffic during a driving rain at noon on Saturday, January 13, 1934. The bridge was constructed by the McClintic-Marshall Co. of Bethlehem, PA. under an $89,970 low-bid contract approved in March 1933 by the former Joint Commission for Elimination of Toll Bridges – Pennsylvania-New Jersey ("the Joint Commission"). The Joint Commission was the forerunner to the Delaware River Joint Toll Bridge Commission.

The bridge replaced a covered wooden bridge that had been at the location for 91 years. New Jersey and Pennsylvania jointly purchased the wooden bridge from a privately owned local company in 1929. The purchase had been arranged by the former Joint Commission, which the states then paid to operate and maintain the bridge. Joint Commission engineers later determined that the aging wooden bridge should be replaced with a new steel-truss superstructure.

The new bridge's construction began roughly 3-1/2 years after the October 1929 stock market crash that triggered the Great Depression. The project was funded 50-50 by the two states. Construction was carried out over a 222-day period between June 1933 and January 1934. The result: a three-span steel Warren through-truss with polygonal top chords superstructure that remains in service to this day. The structure, which also had a concrete-filled-steel-grid road surface, was constructed atop the recapped stone piers and abutments that previously supported a wooden covered bridge originally built in the mid-19th century.



The riveted steel-truss replacement bridge was designed by Joint Commission engineer Edwin W. Denzler, a World War I veteran who later became the Bridge Commission's chief engineer. It is one of five Denzler-designed river bridges. The others are at Centre Bridge-Stockton (1927), Lower Trenton (1928-29), Uhlerstown-Frenchtown (1931), and Easton-Phillipsburg (1938).

Two unfortunate incidents occurred during the bridge's erection:

- On August 25, 1933, continuous drenching rains throughout the Delaware River watershed caused the river to rise to its highest level since the destructive "Pumpkin Flood" of 1903. The 1933 flooding carried away falseworks that had been installed for constructing the new Upper Black Eddy-Milford bridge's center span. The flooding set back the project schedule by a month.
- On Sept. 21, 1933, a construction worker drowned. Joint Commission meeting minutes state the worker "either slipped, was blown off, or possibly knocked off the steel work and fell into the river." The body of the worker, Alphonse "Little Frenchy" Bucher of Cohoes, N.Y., was found floating downstream five days later by John A. Stocker, a Frenchtown fisherman.

The construction of the current-day Upper Black Eddy-Milford bridge was the last major project to be carried out by the former Joint Commission. The bridge's travel configuration upon completion in 1934 was the same as it is today: single travel lanes in each direction and a walkway on the upstream side.

### *Timeline of DRJTBC Control of Steel Bridge*

The former Joint Commission for Elimination of Toll Bridges was disbanded in late 1934 and replaced by a newly constituted Delaware River Joint Toll Bridge Commission ("DRJTBC"). The DRJTBC immediately assumed the old Joint Commission's role of operating and maintaining the bridge with annual equal shares of tax funds from New Jersey and Pennsylvania. This service arrangement continued for more than 52 years.

On July 1, 1987, the two states conveyed the bridge's ownership outright to the DRJTBC. The DRJTBC has since operated and maintained the bridge with a share of the proceeds annually collected at the agency's toll bridges. This is the reason why the Commission now officially refers to this river crossing as the Upper Black Eddy-Milford Toll-Supported Bridge.

### *Other Factoids*

Outside of minor damage to bridge railings, approach sidewalks and a section of the New Jersey abutment's wingwall, the bridge fared well in the historic 1955 river flood. The bridge was closed only three days – from August 19 to 22 of that year. The river crested at a point slightly below the bridge's roadway surface on August 20, 1955 – the highest recorded river level at the bridge to this day.

The bridge's original concrete-filled steel-grid roadway lasted 77 years. It was replaced during a comprehensive 2011 rehabilitation project involving a

four-month-long shutdown of the bridge to vehicular and pedestrian traffic. The rehabilitation also involved the installation of new steel beams and stringers, a new pedestrian walkway and railings, substructure repairs, new roadway and walkway lighting, removal of lead-based paint, and the application of cold-cured epoxy paint.

The bridge now ranks as the ninth oldest structure in the Bridge Commission's 20-bridge system. The bridge carried 313,342 vehicles in its first full year of operation in 1935. Total traffic in 2024 was 1,413,657 vehicles. The bridge remains one of the strongest truss structures in the Commission's system; it does not have a posted weight restriction.

### *Prior Wooden Structure Removed for New Steel Bridge*

The covered wooden bridge that previously stood at the location was targeted for removal in June 1932, when engineers with the former Joint Commission determined the structure's condition was deteriorating to such a degree that it should be replaced by a steel structure. The two states subsequently provided funds to the Joint Commission to replace the bridge.

The aging wooden structure was taken out of service on June 5, 1933, allowing for it to be dismantled and the steel bridge to be constructed in its place. Only two other wooden-covered bridges remained in operation along the river at that time. One was upriver between Portland, PA. and the Columbia section of Knowlton Twp., N.J. The other was downstream between the Lumberville section of Solebury Twp., PA. and the Raven Rock section of Delaware Twp., N.J. (Note: the bridge at Lumberville-Raven Rock had a single steel-truss span that was installed after one of the bridge's wooden spans was destroyed in the 1903 Pumpkin Flood.)

## Upper Black Eddy Man Died In Line of Duty at Covered Bridge in 1931


On August 24, 1931, a hit-and-run driver ran over and crushed a bridge guard employed by the former Joint Commission for Elimination of Toll Bridges – Pennsylvania-New Jersey while on duty at the covered wooden bridge that once connected Upper Black Eddy, PA. with Milford, N.J.

The victim was Levi Headman, an Upper Black Eddy resident who worked as a barber in nearby Frenchtown during the day and as a bridge guard during the night. He was 60 years old.

An August 26 article in the Morning Call of Allentown, PA. stated Headman was walking across the bridge around 8 p.m. when he observed a truck crossing the bridge and failing to comply with posted regulations. Headman apparently attempted to stop the truck, but the driver failed to heed Headman's warnings and drove the vehicle over the length of Headman's body. The truck struck a section of the bridge's structural timbers, prompting the driver to dislodge the vehicle by backing up.

According to Joint Commission meeting minutes, Headman's injuries were so serious that he died the same night. Headman was declared dead at an Easton hospital. The Morning Call said Headman "was crushed from head to foot. His face was battered, his collar bone and shoulder blade were fractured, 10 ribs on the right side were fractured, his left arm was broken, and he was a mass of cuts and bruises."

A Milford man witnessed the incident and relayed the truck's license plate to police. Within a few hours, police tracked down the truck's owner, who said he had loaned the vehicle to Alvin McEntee, a Bridgeton Township lumberjack. Police proceeded to McEntee's home – a shack in a swampy section of Erwinna – where he reportedly attempted to evade capture before being arrested and charged with involuntary manslaughter and failure to stop and render assistance.

The Morning Call reported that State Police determined McEntee consumed alcohol during the evening, but they couldn't firmly establish if he was intoxicated while driving the truck. Police later revealed McEntee had been charged in May 1931 with driving while intoxicated and involuntary manslaughter after McEntee drove a vehicle into a utility pole near Pipersville, PA., killing a passenger.

In late September 1931, a Bucks County jury convicted McEntee of manslaughter for causing Headman's death.

Levi Mitman Headman's final resting place is Upper Tinicum Cemetery in Bucks County. His widow – Emma May Sigafoos Headman – died in 1943 and is buried nearby.

Headman was the second Joint Commission bridge guard to be killed in the line of duty at a bridge. The first was William Masten of Lambertville, N.J., who died after being struck by a passing car while directing traffic at the New Hope-Lambertville Bridge in August 1921.

# Covered Wooden Bridge Preceded Today's Steel Structure at Upper Black Eddy-Milford

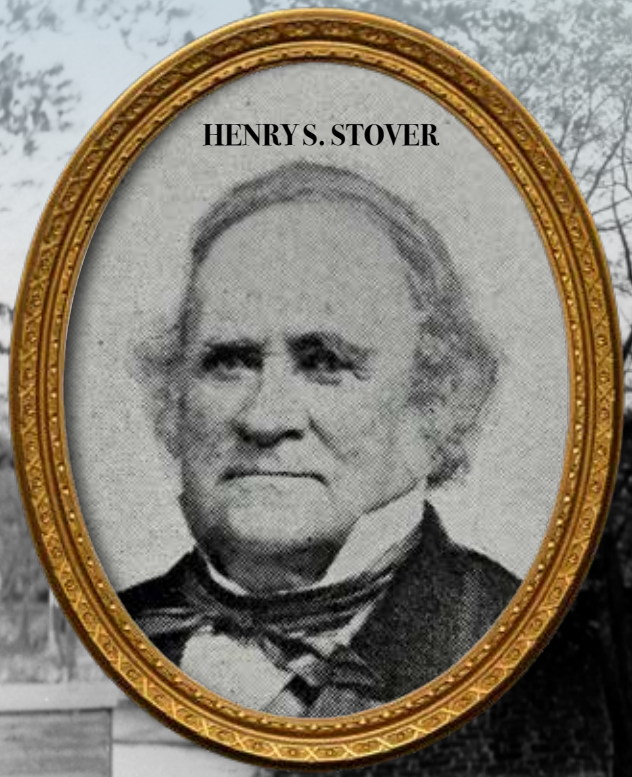
Prior to the construction of a steel bridge in 1934, a covered wooden bridge connected Upper Black Eddy, PA. and Milford, N.J. for just shy of 95 years.

The wooden structure had been constructed for the former Milford Delaware Bridge Company, a shareholder-owned concern chartered under legislation enacted by New Jersey on March 8, 1836 and by Pennsylvania on June 24, 1839.

The state laws creating the bridge company named 20 individuals – 10 from each state – to sell stock shares and empanel a president and managers to build a bridge and operate it. Among the most prominent men the states appointed to create the company was a Bucks County, PA. miller named Henry S. Stover. This was the first of three 19th century bridge companies in which Stover was legislatively named as a founding stock-selling official.

Stover also figured in the 1841 creation of the Alexandria Delaware Bridge Company, which constructed a wooden covered toll bridge that opened in late 1843 between what is now called Uhlerstown, PA. and Frenchtown, N.J. Stover later played a role in the 1853 establishment of the Point Pleasant Delaware Bridge Company, which constructed a wooden covered toll bridge that opened between the Point Pleasant section of Tinicum Township, PA. and the Byram section of Kingwood Twp., N.J. in 1855.

The Milford Delaware Bridge Company completed and opened its three-span covered wooden Burr-arch bridge as a privately tolled crossing on January 29, 1842. The wooden bridge had separated cartways in each direction, giving the structure a double-barreled-shotgun appearance. It did not have a walkway.

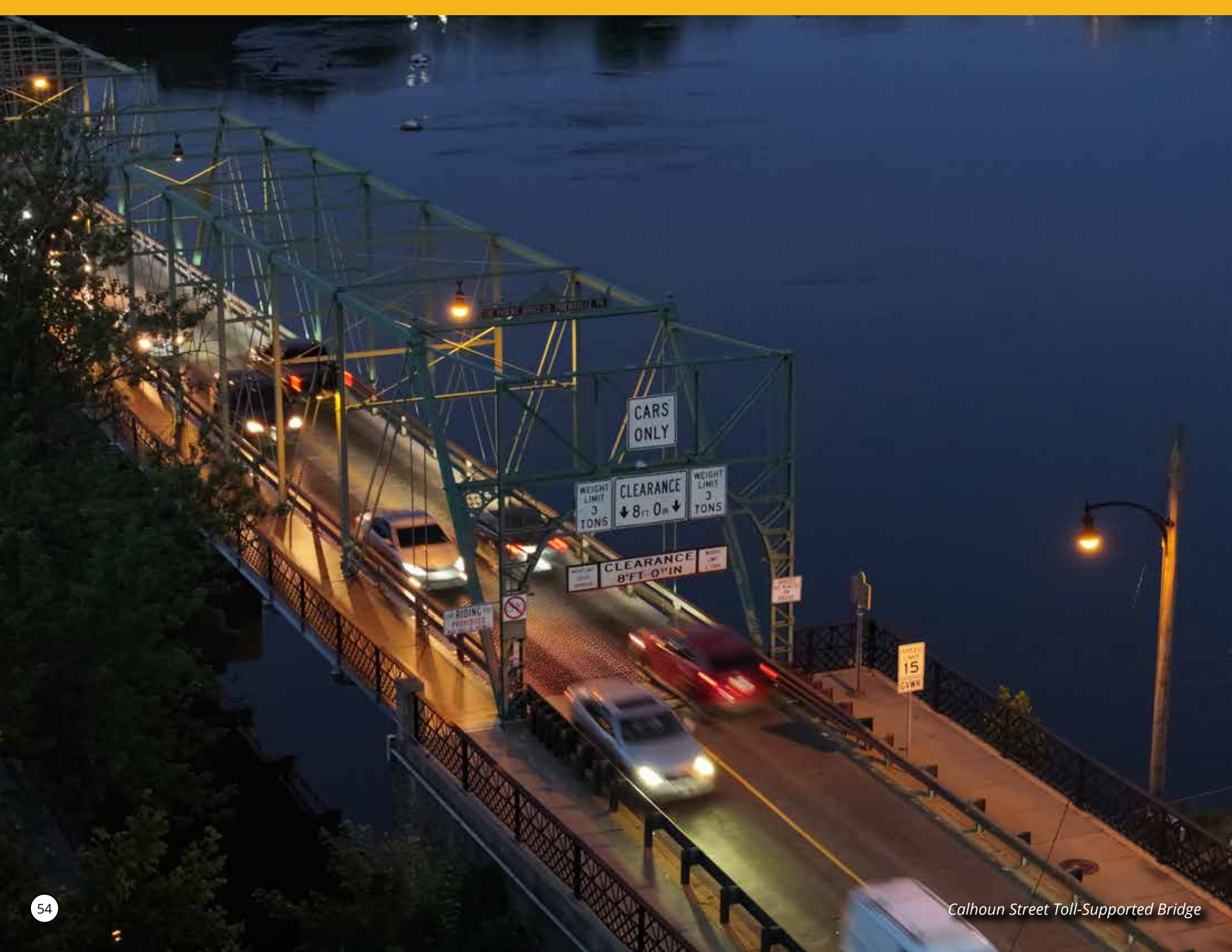


Tolls were charged for crossings in either direction and were applied to everything that moved, including animal-powered carts and buggies, pedestrians, and livestock. The state laws establishing the bridge company provided toll exemptions for "all persons going to or from meeting or church, and children going to or returning from school."

The span on the bridge's New Jersey side was destroyed during the Pumpkin Flood of October 1903. The Milford Delaware Bridge Co. replaced the missing span using timbers salvaged from the former wooden Riegelsville Bridge, which was destroyed by the 1903 flood.

The post-flood-repaired wooden Milford Bridge remained in service as a private toll bridge until June 28, 1929, when New Jersey and Pennsylvania jointly acquired the crossing. The purchase by the two states was arranged by the Joint Commission for Elimination of (Private) Toll Bridges – Pennsylvania-New Jersey, the predecessor agency to today's Delaware River Joint Toll Bridge Commission. The bridge crossing has been toll-free ever since.








*Calhoun Street Toll-Supported Bridge*

# Traffic Counts

| Annual Average Daily Traffic* | | | | | |
|---|---|---|---|---|---|
| **Toll Bridges** | **2020** | **2021** | **2022** | **2023** | **2024** |
| Trenton-Morrisville Route 1 | 47,400 | 52,600 | 53,000 | 53,300 | 52,900 |
| Scudder Falls Toll I-295 † | 30,300 | 34,300† | 40,100‡ | 43,500 | 45,900 |
| New Hope-Lambertville Route 202 ** | 8,800 | 10,000 | 10,700 | 11,100 | 13,800** |
| I-78 | 53,400 | 62,800 | 63,500 | 63,700 | 64,900 |
| Easton-Phillipsburg Route 22 | 30,300 | 33,300 | 34,700 | 34,200 | 34,100 |
| Portland-Columbia | 6,400 | 6,800 | 7,100 | 7,900 | 7,600 |
| Delaware Water Gap I-80 | 44,100 | 49,300 | 49,800 | 53,300 | 53,300 |
| Milford-Montague Route 206 | 7,000 | 7,300 | 7,000 | 7,000 | 6,900 |
| **Total - Toll Bridges** | **227,700** | **256,400** | **265,900** | **273,900** | **279,400** |

| Annual Average Daily Traffic* | | | | | |
|---|---|---|---|---|---|
| **Toll-Supported Bridges** | **2020** | **2021** | **2022** | **2023** | **2024** |
| Lower Trenton | 14,200 | 16,100 | 16,600 | 17,800 | 18,000 |
| Calhoun Street | 13,200 | 15,200 | 15,500 | 13,600 | 16,900 |
| Washington Crossing | 5,600 | 6,400 | 7,000 | 7,200 | 6,600 |
| New Hope-Lambertville** | 10,300 | 12,200 | 12,400 | 12,200 | 6,000** |
| Centre Bridge-Stockton | 4,500 | 4,300 | 3,900 | 4,100 | 4,600 |
| Uhlerstown-Frenchtown | 3,900 | 4,500 | 4,500 | 4,200 | 4,800 |
| Upper Black Eddy-Milford | 3,200 | 3,400 | 3,400 | 3,500 | 3,900 |
| Riegelsville | 2,800 | 3,100 | 3,100 | 3,100 | 2,900 |
| Northampton Street | 15,100 | 16,500 | 14,600§ | 16,600§ | 17,800 |
| Riverton-Belvidere | 4,500 | 4,800 | 4,100 | 4,100 | 4,100 |
| **Total - Toll Supported Bridges** | **77,300** | **86,500** | **85,100** | **86,400** | **85,600** |

| | | | | | |
|---|---|---|---|---|---|
| **Total Commission-Wide Annual Average Daily Traffic** | **305,000** | **342,900** | **351,000** | **360,300** | **365,000** |
| **Total Commission-Wide Yearly Traffic** | **111.6M¶** | **125.2M** | **128.1M** | **131.5M** | **133.6M** |

*Data reflects traffic in both directions. Incidences where there are lower traffic counts may be a result of construction, bridge closures, or data-collection issues.
**New Hope-Lambertville Toll-Supported Bridge one mile south closed to New Jersey bound-detour traffic late January through December for 2024 bridge rehabilitation project. Uninterrupted signed detour via northbound direction at New Hope-Lambertville (Route 202) Toll Bridge.
† Scudder Falls Toll Bridge's downstream span opened to traffic evening of August 17, 2021.
‡ Scudder Falls Bridge Replacement Project "final completion — October 31, 2022
§ Uninterrupted single-lane travel restrictions for Northampton Street Bridge Rehabilitation Project April 2022-June 2023
¶ COVID-19 pandemic caused 19.6-percent traffic reduction; comparison of 2019-2020 data.

U-F Bridge: Traffic counter reconfigured Dec. 2023
UBE-M: Traffic sensor reconfigured Dec. 2023
Calhoun St: Traffic counter recalibrated June 2023. Trenton-Morrisville Toll Bridge Roadway Paving & Deck Sealing Improvements Project also might have affected 2024 counts.
I-78: Various daytime and overnight lane closures April to December 2024

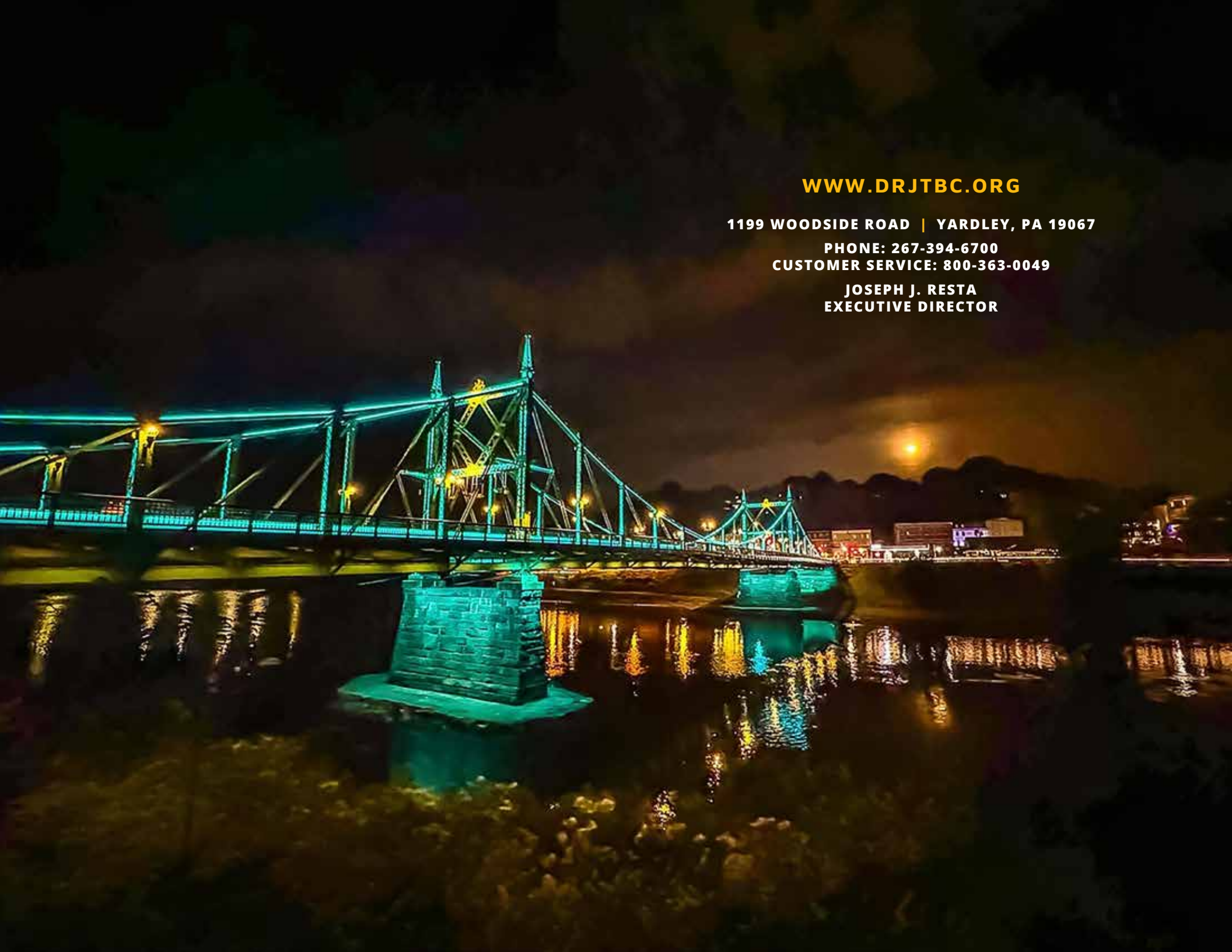
# Statements of Net Position

| | Dec. 31, 2024 | Dec. 31, 2023 |
|---|---|---|
| **ASSETS** | | |
| **Current Assets** | | |
| **Unrestricted Assets** | | |
| Cash and Cash Equivalents | $38,162,312 | $35,392,283 |
| Investments | 84,079,744 | 113,950,390 |
| E-ZPass, Pay by Plate and Violations (net of allowance for uncollectible of $172,200,082 for 2024 and $131,865,411 for 2023) | 25,850,623 | 26,522,101 |
| Other Receivables | 42,703 | 77,966 |
| Interfund Accounts Receivable - Fiduciary Fund | 1,346,569 | 1,136,948 |
| Prepaid Expenses | 538,181 | 453,888 |
| **Total Unrestricted Assets** | **150,020,132** | **177,533,576** |
| **Restricted Assets:** | | |
| Cash and Cash Equivalents | 18,616,475 | 32,232,698 |
| Investments | 62,201,045 | 65,966,206 |
| Accrued Interest Receivable | 2,126,339 | 1,484,495 |
| **Total Restricted Assets** | **82,943,859** | **99,683,399** |
| **Total Current Assets** | **232,963,991** | **277,216,975** |
| **Non-Current Assets** | | |
| **Unrestricted Assets:** | | |
| Investments | 127,185,027 | 82,566,683 |
| Right-to-use Subscription Asset (net of accumulated amortization of $386,996 for 2024 and $294,118 for 2023) | 170,279 | 263,158 |
| **Total Unrestricted Assets** | **127,355,306** | **82,829,841** |
| **Restricted Assets** | | |
| Prepaid Bond Insurance | 54,087 | 60,118 |
| **Total Restricted Assets** | **54,087** | **60,118** |
| **Capital Assets:** | | |
| Capital Assets Not Being Depreciated | 248,364,427 | 175,204,176 |
| Capital Assets Being Depreciated (Net of Accumulated Depreciation) | 852,573,916 | 883,646,685 |
| **Total Capital Assets** | **1,100,938,343** | **1,058,850,861** |
| **Total Non-Current Assets** | **1,228,347,736** | **1,141,740,820** |
| **Total Assets** | **$1,461,311,727** | **$1,418,957,795** |

| | Dec. 31, 2024 | Dec. 31, 2023 |
|---|---|---|
| **DEFERRED OUTFLOWS OF RESOURCES** | | |
| Deferred Loss on Refunding of Debt | $9,933,411 | $12,092,403 |
| Deferred Outflows - OPEB | 15,607,469 | 22,160,537 |
| Deferred Outflows - Pension | 19,472,924 | 25,585,794 |
| **Total Deferred Outflow of Resources** | **$45,013,804** | **$59,838,734** |
| **LIABILITIES** | | |
| **Current Liabilities Payable from Unrestricted Assets** | | |
| Accounts Payable and Accrued Expenses | $20,815,848 | $18,684,449 |
| Compensated Absences Payable | 169,929 | 158,665 |
| Subscription Liability - Short-term | 109,624 | 104,635 |
| Retainage Payable | 4,354,980 | 2,962,126 |
| **Total Current Liabilities from Unrestricted Assets** | **25,450,381** | **21,909,875** |
| **Current Liabilities Payable from Restricted Assets** | | |
| Accrued Interest Payable on Bonds | 14,572,234 | 15,412,140 |
| Bridge System Revenue Bonds Payable | 19,450,000 | 19,750,000 |
| **Total Current Liabilities Payable from Restricted Assets** | **34,022,234** | **35,162,140** |
| **Non-Current Liabilities** | | |
| Compensated Absences Payable | 3,228,649 | 3,014,626 |
| Subscription Liability - Long-term | - | 107,919 |
| Bridge System Revenue Bonds Payable | 634,625,960 | 659,925,207 |
| Net OPEB Liability | 7,399,566 | 15,932,707 |
| Net Pension Liability | 71,578,649 | 76,944,140 |
| **Total Non-Current Liabilities** | **716,832,824** | **755,924,599** |
| **Total Liabilities** | **$776,305,439** | **$812,996,614** |
| **Deferred Inflows of Resources** | | |
| Deferred Inflows-OPEB | **$17,793,716** | **$17,121,656** |
| Deferred Inflows-Pension | **2,544,062** | **3,670,346** |
| **Total Deferred Inflows of Resources** | **$20,337,778** | **$20,792,002** |
| **NET POSITION** | | |
| Net Invested in Capital Assets | $459,406,738 | $408,821,028 |
| Restricted | 78,206,576 | 80,645,934 |
| Unrestricted | 172,069,000 | 155,540,951 |
| **Total Net Position** | **$709,682,314** | **$645,007,913** |

*Certain account balances have been restated to conform with current-year presentation

*Riegelsville Toll-Supported Bridge*

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