# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISSION/MAP</td>
<td>2</td>
</tr>
<tr>
<td>EXECUTIVE DIRECTOR’S MESSAGE</td>
<td>3</td>
</tr>
<tr>
<td>COMMISSIONERS</td>
<td>4</td>
</tr>
<tr>
<td>STAFF</td>
<td>5</td>
</tr>
<tr>
<td>SCUDDER FALLS BRIDGE REPLACEMENT PROJECT UPDATE</td>
<td>6</td>
</tr>
<tr>
<td>OTHER CAPITAL PROJECTS</td>
<td>20</td>
</tr>
<tr>
<td>100TH ANNIVERSARY OF 1ST JOINT MEETING TO OPERATE DELAWARE RIVER BRIDGES LINKING PA &amp; NJ</td>
<td>30</td>
</tr>
<tr>
<td>ANNUAL HIGHLIGHTS &amp; ACCOMPLISHMENTS</td>
<td>56</td>
</tr>
<tr>
<td>TRAFFIC COUNTS</td>
<td>64</td>
</tr>
<tr>
<td>NET ASSETS</td>
<td>65</td>
</tr>
</tbody>
</table>

### PHOTOGRAPHY/GRAPHICS CREDITS

A variety of in-house, amateur, and contractor photographic/graphic resources were used to publish this annual report. The contributing firms and individuals include: Carole Mebus, Stokes Creative Group, Carol Feeley, Adam Mann, AECOM, Michael Baker International, Cie Stroud, McCormick Taylor, GPI, Ronald Mieszkowski, W. Michael Cane, Northampton County Historical and Genealogical Society, Trenton Public Library’s Trentoniana Room, Easton Area Public Library’s Henry F. Marx Local History Room, U.S. Library of Congress, Pennsylvania Historical and Museum Commission, STV, Pennsylvania General Assembly, WH Walters Free Public Library, Morrisville Public Library, Joe Donnelly, Spruance Library/Bucks County Historical Society, and Transcore.

Front Cover: Stokes Creative Group.
Inside Front Cover: Carol Mebus
Back Cover: Joe Donnelly
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 northward to the New Jersey/New York state line, the Commission’s jurisdiction encompasses a diverse geographic region featuring bustling cities, quaint river villages, and scenic portions of the Delaware River 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 the growing bi–state river region.
In 1916, New Jersey and Pennsylvania created a joint panel to bring a loose network of privately owned Delaware River bridges under public control. This fledgling organization — often referred to as the Joint Commission for Elimination of Toll Bridges — eventually helped the states purchase 16 of the 17 private bridges in business along the river at that time.

The states dissolved the old Joint Commission in late 1934. Rising motor vehicle volumes made it necessary to create a new bistate agency that could use tolls to build and operate larger, sounder highway bridges. Accordingly, the old Joint Commission’s operations were folded into the new entity: the Delaware River Joint Toll Bridge Commission.

The Joint Commission’s service mission of moving people and commerce between the states endures, as demonstrated by the Bridge Commission’s accomplishments, milestones and traffic volumes 100 years later.

Over 144.5 million vehicles used the Commission’s toll and non-toll bridges in 2016 — a new record. In the process, toll collections that allow the Commission to maintain and enhance its infrastructure and services reached new heights during the year.

The Commission also took significant steps toward constructing a new toll bridge — the dual-span Scudder Falls Replacement Bridge — that will replace an aging river crossing beset with severe traffic limitations and safety issues. Meanwhile, technological improvement projects that would have been unimaginable a century ago were started or completed at multiple Commission facilities.

Please take a few moments to look through our 2016 Annual Report to see how we continue to fulfill a public service mission established 100 years ago.
COMMISSIONERS

New Jersey

MICHAEL B. LAVERY
Chairman

YUKI MOORE LAURENTI
Secretary-Treasurer

GEOFFREY S. STANLEY

GARRETT LEONARD
VAN VLIET

LORI CIESLA

Pennsylvania

WADUD AHMAD
Vice Chairman

DANIEL GRACE

PAMELA JANVEY

JOHN SIPTROTH

VACANCY
About the Commission

The Delaware River Joint Toll Bridge Commission is a bistate agency that owns and operates seven toll bridges and 13 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 seven toll bridges. The Commission receives neither federal nor state tax subsidies.

The Commission’s bridges carried an average of 394,800 vehicles per day in 2016. Total operating revenue earned in 2016 was $130,076,080. The Commission’s 2016 operating budget was $61.74 million. The agency has roughly 350 full-time employees.

The Commission is one of the nation’s oldest tolling agencies. Established in December 1934, it is the successor to the former Joint Commission for the Acquisition of Various Bridges over the Delaware River between the Commonwealth of Pennsylvania and the State of New Jersey.

STAFF

JOSEPH J. RESTA
Executive Director

SEAN M. HILL
Deputy Executive Director of Operations

ROY W. LITTLE, P.E.
Chief Engineer

ARNOLD J. CONOLINE, JR.
Chief Administrative Officer

JOSEPH F. DONELLY
Deputy Executive Director of Communications

JAMES M. PETRINO
Chief Financial Officer

STEPHEN T. CATHCART
Comptroller

JODEE INSCHO
Director of Community Affairs

JULIO A. GURIDY
Director of Contract Compliance

MATTHEW M. HARTIGAN
Director of Electronic Security and Surveillance

YVONNE KUSHNER
Director of E-Z Pass

JOANNA M. CRUZ
Director of Human Resources

JOHN BENCI VENGO
Director of Information Technology (Acting)

LEND ELL JONES
Director of Plants and Facilities

DAVID K. BURD
Director of Purchasing

WILLIAM WRIGHT
Director of Security, Safety and Training

LEVAR TALLEY
District 1 Superintendent

JAMES SHELLY
District 2 Superintendent

JEANNE P. CLARK
District 3 Superintendent
Scudder Falls Bridge Replacement Project 2016 Project Milestones

**JANUARY 2016**
Phase 1 advance tree cutting begins along the Pennsylvania I-95 approach to the bridge

**FEBRUARY 2016**
Construction management and constructability review services contract awarded for the project

**MARCH 2016**
Open house on project design concepts, construction schedule and New Jersey tree cutting plan held in Ewing, NJ

**APRIL 2016**
Commission representatives and project team hold meeting with Lower Makefield residents to announce results of supplemental noise-data collection study
SCUDDER FALLS BRIDGE REPLACEMENT APPROACHES THRESHOLD OF CONSTRUCTION

The marquee undertaking of the Commission’s capital program – the Scudder Falls Bridge Replacement Project – is poised to start construction in 2017.

A series of actions in 2016 carved a path for the project’s construction contract to be put out to bid while simultaneously positioning the Commission to secure financing in the new year.

Unlike previous years when project preparations primarily took place in engineering offices or regulatory conference rooms, the progress in 2016 largely took place out in the field or at public forums.

Stage 1 tree cutting work was completed along the Pennsylvania I-95 approach to the current bridge between January and March. This cleared the way for noise wall installation work to get underway and progress along I-95 in Lower Makefield, PA. The first noise-abatement panels were put into place in September. These initial construction activities signaled to the public that the long-talked-about project was moving from concept to reality.

Scudder Falls Bridge Replacement Project 2016 Project Milestones

**MAY 2016**
- Construction contract and inspection services contract awarded for advance Pennsylvania noise-abatement walls installation work

**JUNE 2016**
- Pre-construction activities begin for installation of noise-abatement wall along I-95 approach in Pennsylvania

**JULY 2016**
- Intergovernmental agreement with Pennsylvania Department of Transportation authorized by vote of the Commission
- Bridge Commission unveils proposed toll schedule for Scudder Falls Replacement Bridge & holds hearings on new bridge's proposed toll schedule in Ewing, NJ and Lower Makefield, PA
In March, an Open House on the project’s design plans and anticipated construction schedule was held in Ewing, N.J. This event was coupled with a corresponding state-mandated hearing on the project’s New Jersey tree-cutting plans.

Finally – and perhaps most significantly – a series of hearings were conducted during the summer to gather public comment on the schedule of tolls to be charged on the new bridge once its first span opens to traffic in 2019. The toll schedule subsequently approved by the Commission’s board of directors in September.

Other pre-construction milestones achieved during the year included:

- NJ Department of Environmental Protection (DEP) conveyed easements to carry out elements of project construction in the vicinity of the Delaware & Raritan Canal
- Additional noise sampling was conducted along I-95 and the findings were publicly presented to interested property owners in Pennsylvania
• A contract for construction management services of the PA noise walls and constructibility review of the bridge project’s design plans was awarded

• Survey results showed a majority of Pennsylvania property owners expressed a preference for a grey fractured-rock residential-side noise wall design

• Construction and inspection services contracts were awarded for advanced noise wall construction in Pennsylvania

• An intergovernmental agreement was struck with the PA Department of Transportation

• Pre-construction agreements with utility companies were authorized and/or approved

• Commission rolled out video explaining new bridge’s all-electronic tolling system

• The bridge project construction management contract was awarded

• Project Labor Agreement and Owner-Controlled Insured Program documents were compiled and made available to prospective bridge construction contractors

• NJDEP Freshwater Wetlands and Flood Hazard Area approvals, and NJ Historic Preservation Office project authorization were issued

DECEMBER 2016

Commission appoints underwriting group for anticipated bond issue to finance the Scudder Falls Bridge Replacement Project

NJ Department of Environmental Protection Freshwater Wetlands and Flood Hazard Area approvals issued; New Jersey State Historic Preservation Office project authorization issued
ADVANCE TREE CLEARING PAVES WAY FOR PA NOISE WALLS, NEW BRIDGE & INTERCHANGES

It’s a changed landscape along the I-95 approaches to the Scudder Falls Bridge.

Two separate stages of tree cutting were conducted in 2016 to advance the installation of noise walls along the Pennsylvania I-95 approach to the Scudder Falls Bridge and the impending start of the far-reaching bridge replacement project in 2017.

The work entailed the clearing, removing and disposing of trees, logs, dead trees and other vegetation and debris in the 4.4-mile-long project area. Other associated tasks involved implementation of soil-erosion and sediment-control measures, storm-water inlet protection, and silt mitigation within the cleared areas. The work has been conducted by A.P Construction, Inc. of Blackwood, N.J. under a $1.8 million contract.

Stage-1 tree cutting was conducted along the Pennsylvania I-95 bridge approach between the Newtown-Yardley Road/Route 332 interchange (Exit 49) and the Taylorsville Road interchange (Exit 51). This work reached completion April 1, when a six-month moratorium on large-scale tree cutting activities took effect for the Indiana Bat foraging season (see sidebar). Stage-2 tree cutting commenced on October 1 and will continue into 2017 along I-95 from the Taylorsville Road interchange to the Route 579/Bear Tavern Road interchange (Exit 2) in New Jersey.

New Jersey tree cutting is being conducted in accordance with that state’s No Net Loss Reforestation Act. The law requires a plan to compensate for the loss of trees in large-scale construction projects followed by a corresponding public hearing and comment process. The plan was put forward with a hearing in Ewing, N.J. in March.
The New Jersey right-of-way tree cutting involves a little more than 14 acres. Of this, 10.36 wooded acres is classified as qualifying forest requiring mitigation by the Commission. The crux of the reforestation plan is as follows:

- Plant slightly more than 1,400 trees on 7.18 acres of the project’s New Jersey right-of-way after respective construction stages are completed;

- Plant another 650 trees in Ewing, N.J. to the maximum extent practicable; and

- If the Commission cannot meet its Ewing tree-planting quota, the agency would provide monetary compensation to the state Department of Environmental Protection at a rate of $300 per tree.

**FAST FACTS**

- The Indiana bat tree-cutting moratorium started April 1 and ended September 30

- The moratorium period is a standard restriction for large projects in the Northeast

- The Indiana bat has been classified as an endangered species since 1973

- Indiana bats are most active from mid-May through July

- Migrations to winter-hibernation locations begin in September

A series of environmental mitigation measures are integrated into the design of the Scudder Falls Bridge Replacement Project. One of those measures – a six-month-long moratorium on tree cutting activities within the 4.4 mile project area – took place between spring and fall in 2016.

The tree-cutting hiatus was implemented to protect potentially foraging and roosting Indiana bats. The mitigation effort was needed because the project’s wooded areas were a potential habitat for migrating Indiana bats during warm-weather months.

Indiana bats are listed as “endangered” migratory species under the federal Endangered Species Act. They hibernate in caves and mines during winter months. During warm-weather months, Indiana bats use a variety of forest habitats for foraging, roosting and raising their young. Forest habitat loss is a concern during spring and summer because of the possibility that roosting bats and their offspring could be killed or injured if trees are felled when brandishing leaves and hosting insects that are the bat’s primary food source.
Abatement of highway traffic noise was a significant consideration in the environmental documentation process and final design for the Scudder Falls Bridge Replacement Project. This sound mitigation planning became a reality in 2016 with the installation of noise-abatement walls along warranted portions of I-95 in Lower Makefield, PA.

The work was made possible after the first stage of a separate project for tree and brush removal for the Scudder Falls project reached completion during the winter. Both the tree cutting and the noise wall installation are advance construction projects for the Scudder Falls Bridge Replacement Project, which is scheduled to get underway in spring 2017.

Pre-construction activities for the noise abatement walls began during the summer. This consisted of construction layout/surveying, initial sign placements, establishment of curb access points, grubbing and stump removal, drainage installation, and placement of silt fencing. Fabrication of the concrete noise wall panels began in August. The installation of noise wall posts started after the Labor Day holiday weekend and placement of noise wall panels followed in the fall.

The noise walls conform to Pennsylvania Department of Transportation specifications. Much of the I-95 approach to the bridge is in PennDOT’s jurisdiction. Their grey color and their fractured rock texture on the residential sides were chosen based on responses the public gave in a Commission survey of potential architectural treatment options. The Commission announced the survey results in May.

The noise wall installation work will carry over into 2017 and is expected to reach completion in the spring. A total of six noise-wall sections with an approximate length of 12,500 feet are being installed along the Pennsylvania I-95 approach. The contractor is PKF-Mark III, Inc. of Newtown, PA. The engineering firm AECOM is providing program management services. Greenman-Pedersen, Inc. of Lebanon, N.J. is the construction manager. Jacobs Engineering Group is handling construction inspections.

Additional noise walls are to be installed in New Jersey and between Taylorsville Road and the bridge during the execution of the Scudder Falls Bridge Replacement Project. ✴
A bistate study of traffic conditions in the vicinity of the Scudder Falls Bridge was completed during the year and made available to the public.

Consisting of more than 2,500 pages, the largely statistical Pre-Construction Traffic Study for the Scudder Falls Bridge Replacement Project was compiled by Pennoni Associates, Inc., an engineering firm based in Philadelphia, PA. The study was undertaken to meet the terms of an Interagency Agreement the Commission forged with the Pennsylvania Department of Transportation (PennDOT) and New Jersey Department of Transportation (NJDOT) in April 2012.

This study assessed existing conditions at various intersections, roadway segments, interchanges and bridges in the vicinity of the Scudder Falls Bridge. Pennoni engineers analyzed a total of 145 different data-collection points comprising 25 intersections, five bridges, nine interchanges and 61 different roadway segments in and around the affected bridge area. The identified areas specifically serve as connection points between existing segments of I-95 and the four nearest alternative river crossings: Washington Crossing Toll–Supported Bridge; Calhoun Street Toll–Supported Bridge; Lower Trenton Toll–Supported Bridge; and Trenton–Morrisville Toll Bridge.

The study’s findings are compiled in an Executive Summary and appendices of collected data completed in October and made available on the project website: www.scudderfallsbridge.com

The findings provide baseline traffic volume levels that can be used to determine diversion impacts from tolling at the future Scudder Falls Replacement Bridge. Under the Interagency Agreement, a follow-up post-construction traffic study is to be conducted two years after toll collections begin on the replacement bridge.
More than 100 community members and other stakeholders attended a March 15 open house that provided a distinctly New Jersey perspective on the upcoming Scudder Falls Bridge Replacement Project.

The informational session at a Ewing, N.J. volunteer fire company banquet hall was paired with a public hearing on a proposed reforestation plan aimed at compensating for the hundreds of trees that would need to be removed on the project’s New Jersey side.

The combined forum was the latest in a series of outreach sessions the Commission has hosted to advance the project since it was first proposed in 2003.

The open house provided display boards on various aspects of the project, including an updated construction schedule, renderings of the new bridge and its adjacent I-95/Route 29 interchange, noise-abatement measures, and construction staging/traffic control. An updated explanatory video on the project was also viewed. Project representatives and Commission personnel were on hand to answer questions.

The New Jersey open-house mirrored a similar project outreach session that had been conducted in Lower Makefield, PA in late 2015. The materials and displays from both sessions have been added to the project’s website – www.scudderfallsbridge.com – for purposes of raising further public awareness of the project.

The project videos and some of the display boards also were used at a series of toll hearings the Commission hosted during the summer months. A prime objective of the subsequent toll hearings – two of which were held in Ewing and Lower Makefield – was to gather public comment on the toll schedule that will be charged on the new bridge once its first completed span opens to traffic – a juncture that is currently projected to be reached sometime in 2019.
PUBLIC MEETING PROVIDES UPDATED I-95 NOISE-LEVEL FINDINGS

Highway traffic noise levels were the focus of a meeting the Commission and its Scudder Falls Bridge Replacement Project consultants hosted for Lower Makefield Township residents in April. The meeting at the William Penn Middle School provided the findings of supplemental noise data collection and analysis conducted earlier in the year.

The supplemental studies were undertaken to address concerns raised by Lower Makefield residents in neighborhoods along I-95 where noise abatement walls had previously been determined to be unwarranted. Some of these residents also expressed their concerns directly to DRJTB C commissioners at their monthly meeting in December 2015.

To address these concerns and to comply with the project’s Environmental Assessment, supplemental noise readings were collected at three Pennsylvania study areas along I-95: two in the vicinity of the Quarry Road Overpass, and one near the PA Welcome Center. Prior sound readings at these locations showed they do not meet the required thresholds for noise abatement.

Meeting attendees were provided with a PowerPoint presentation consisting of detailed graphics explaining the updated noise measurement results and why further noise abatement measures are unwarranted in the Scudder Falls project area. Commission and project representatives were on hand to outline noise-mitigation efforts, to explain the study’s findings, and to answer questions.

Subsequently, the meeting presentation and copies of supplemental noise analysis reports in Pennsylvania and New Jersey were added to the project website: www.scudderfallsbridge.com.
INFORMATIONAL VIDEO EXPLAINS HOW ALL-ELECTRONIC TOLLING WILL WORK AT SCUDDER FALLS REPLACEMENT BRIDGE

All-Electronic Tolling (AET) systems are increasingly being used in the United States and around the world.

When the first span of the Scudder Falls Replacement Bridge reaches completion and opens to traffic (projected start date is sometime in 2019), it will become the first Commission river crossing to use cashless AET toll-collection technology. (As is the case at the Commission’s seven existing toll bridges, tolls at the new bridge will be collected in the New Jersey-to-Pennsylvania direction only).

Recognizing that there are some motorists who have yet to encounter an AET system in their travels, the Scudder Falls Bridge Replacement Project public involvement consultants produced an educational video to explain how the bridge’s toll-collection system will work. The three-minute recording consists of filmed footage, animation, graphics and narration with electronic background music.

The video explains how a gantry outfitted with E-ZPass transponder readers and high-resolution cameras will charge vehicles traveling at highway speeds on the new bridge from New Jersey to Pennsylvania.

In an AET system, owners of vehicles outfitted with E-ZPass transponders will be billed in the same manner as they currently are when passing through toll-collection points. A vehicle without an E-ZPass transponder will have its license plate image captured by one of the high-speed cameras mounted on the gantry. The vehicle owner can then be identified through
motor vehicle records and sent an invoice for all trips made through the Scudder Falls tolling point in a given billing period. Motorists without E-ZPass will pay a higher toll rate to cover the additional costs associated with identifying, assessing and collecting tolls from non-E-ZPass-equipped vehicles.

The video shows how the two AET toll-collection methodologies work and how payments can be made online, with a credit card, or by mail. The recording also emphasizes how E-ZPass users will pay lower toll rates and what steps motorists can take to establish an E-ZPass account with the back-office service provider that processes the Commission’s toll transactions – the New Jersey E-ZPass Group. The video further explains how frequent commuters with transponders issued by the Commission’s E-ZPass toll processor may qualify to receive a 40-percent discount on their tolls.

The informational video was unveiled at six public hearings the Commission conducted on the schedule of tolls that will be implemented at the new Scudder Falls Bridge. The video subsequently was uploaded to YouTube and may be viewed at https://youtu.be/iq_8BEokUrw. The video also may be accessed through the Scudder Falls Bridge Replacement Project’s website, www.scudderfallsbridge.com.
OTHER CAPITAL PROJECTS
A multi-year project to replace the Commission’s aging tolling infrastructure took significant steps forward in 2016.

The Electronic Toll Collections System Replacement Project will completely replace the DRJTBC’s electronic and manual toll collection systems. Much of this hardware and software was installed in 2002, when the agency first started handling E-ZPass toll transactions. The design of some of the system’s components dates back even farther – to the 1990s. The agency increasingly has had difficulty acquiring replacement parts for much of the old system, which is at the end of its service life.

The modernization project is touching virtually every aspect of the Commission’s toll system: manual cash collection, conventional toll lane E-ZPass transactions, highway-speed open-road tolling, and future all-electronic tolling at the soon-to-be-built Scudder Falls Replacement Bridge.

Design work on the new system ended during the spring. This allowed testing of the new toll-collection system’s components to get underway during the summer and reach completion by year’s end. Two lines of equipment and operation evaluation were conducted by the project contractor, TransCore: Factory Acceptance Testing (FAT) and Onsite First Installation Testing (OFIT).

Two Commission facilities were used to carry out these tests. Conventional mixed-mode (cash and E-ZPass) toll processing was tested at the New Hope–Lambertville (Route 202) Toll Bridge. Express E-ZPass (highway-speed) toll processing was tested at the Delaware Water Gap (I-80) Toll Bridge.

With testing completed, installation and integration of the replacement system is on track to be finished at each of the Commission’s seven current toll bridges by summer 2017. The system is expected to be extended to an eighth toll bridge – the Scudder Falls Replacement Bridge – when the upstream span of that new facility opens to traffic in 2019. As is the case at the Commission’s existing toll bridges, motorists will be charged in the New Jersey–to–Pennsylvania direction at that new location.
Tree removal, slope stabilization, and the installation of a high-capacity steel containment system were the key elements of a roughly three-month project aimed at enhancing the safety of motorists who use a Route 22 exit ramp in Phillipsburg.

The project took place along an approximately 1100-foot hillside tract that overlooks the Commission’s administration building and maintenance garages for the Easton-Phillipsburg (Route 22) Toll Bridge. The rocky and wooded slope has pockets of soil cover, trees, and some low-level vegetation sandwiched between rocky escarpments. In November 2013, a tree uprooted and partially slid down the slope, posing a risk to drivers and prompting a short-term ramp closure. Periodically, rocks of various sizes have also come loose and slid into roadway below.

The contractor – Merco, Inc. of Lebanon, N.J. -- began work in late February by removing fallen tree trunks, dying or precarious trees, loose rocks and debris, as well as an old, ineffective chain link fence along the hillside. Work then shifted to the largest component of the project, the installation of a two-tier rock-fall catchment system along the length of the rocky and wooded slope. The containment system employs two sets of high-capacity steel components and wire mesh fencing. One fence line was placed approximately half-way up the hill, with the other running directly adjacent to the roadway.

A series of off-peak ramp closures and detours were used to accommodate early land-clearing activities. The project reached final completion in May.
The 112-year-old Riverton-Belvidere Toll-Supported Bridge is one of the most remote river crossings in the Commission’s system. Linking the Town of Belvidere in Warren County, N.J. with the Riverton section of Lower Mount Bethel Township in Northampton County, PA., its traffic volumes rank in the bottom tier of the agency’s 18 vehicular bridges.

Despite these factors, it became necessary to strengthen and repair portions of the Riverton-Belvidere crossing in 2016, partly because of damage the bridge has sustained over the years due to illegal crossings of oversized trucks.

The three-month-long Riverton-Belvidere Toll-Supported Bridge Critical Member Strengthening Project was conducted during the summer and fall by Road-Con, Inc. of West Chester, PA. The primary focus of the work involved gusset plate repairs, end-post repairs and repairs to lower chord members. The project also included slope-stabilization improvements on both sides of the bridge and its approach roadways.

To carry out project tasks, the bridge was reduced to alternating single lanes of traffic during off-peak weekday hours. Motorist delays were minor and the project was completed within its prescribed August-to-November schedule.

The project advanced after a 2014 monitoring system study and analysis of the span provided the Commission with a better understanding of the bridge’s responses to overweight vehicles. Those findings further confirmed the need to strengthen critical structural components in the bridge.

Riverton-Belvidere’s steel-truss superstructure was constructed as privately owned toll bridge in 1904. It replaced a previous wooden bridge – the second timber structure at the location – that was washed away in the “Great Pumpkin Flood” of 1903. The bridge became publicly owned on June 14, 1929 and has been free of tolls ever since.

The current structure, which has one of the Commission’s narrowest roadway decks, predates the advent of mass-produced automobiles and was never intended to handle tractor-trailers and other large trucks that are in existence today. The bridge has an eight-ton posted weight limit. Uniformed bridge monitors are posted at the bridge on a 24/7 basis to protect it.
I-78 MAINTENANCE FACILITIES UNDERGO AN EXTENSIVE OVERHAUL

Work began in mid-July on a $10 million project to renovate and expand the maintenance facilities that service the Commission’s I-78 Toll Bridge jurisdiction.

The I-78 maintenance complex is adjacent to the toll plaza in Williams Township, PA. and was constructed under separate projects involving the toll bridge and the Pennsylvania and New Jersey highway segments leading to and from the bridge.

The Commission’s roughly 6.5-mile-long I-78 jurisdiction opened in November 1989. The toll bridge now ranks as the agency’s most heavily used river crossing. Recognizing its strategic importance to commuters and interstate commercial freight movements, the Commission has taken strides in recent years to improve its network of facilities and operations at I-78.

This project in particular will significantly enhance the agency’s roadway maintenance and winter-storm response capabilities.

Project elements completed in 2016 included the construction of the Commission’s first brine tank farm. This included the installation of a 1,500-gallon brine mixer along with two 5,000-gallon tanks for storing salt brine. An additional 1,500-gallon tank was installed for storing liquid magnesium chloride. Brine and magnesium chloride are chemical mixtures the Commission uses to melt snow and ice during winter months.

A series of modifications also were made during the year to I-78’s 3,000-ton salt dome. This improvement will enable Commission maintenance workers to fully utilize the salt dome’s maximum storage capacity.
Design Work Sets Stage for Future Rehabilitation of I-78 Bridges and Approach Slabs

The I-78 Toll Bridge and its accompanying Commission-owned approach roadways rank among the most heavily traveled trucking corridors in the United States. In 2016 alone, more than 2.9 million trucks traveled westbound across the toll bridge. Many of these trucks started their journeys from the New York-New Jersey ports region, carrying commercial shipments to Lehigh Valley warehouses and points farther west, south and north.

Recognizing this heavy usage, Commissioners awarded a design contract in February for a future project that would address a series of emerging deficiencies in the Commission’s nearly 7-mile-long I-78 segment in Warren County, N.J. and Northampton County, PA.

This endeavor is expected to involve approach slab replacements at eight bridge structures (six short-span overpasses/underpasses, and the two river bridges) cleaning and painting at the six short-span bridges, and an assortment of other tasks, including restriping the Commission’s entire I-78 roadway segment.

The design work wrapped up in late 2016 and a construction contract is expected to be awarded in spring 2017. Work activities are projected to begin in summer 2017 and continue into late 2018.

Like the current I-78 Welcome Center & Maintenance Garage Improvements, this new project stands to build upon the almost $80 million in capital improvements the Commission has made at its I-78 jurisdiction since 2007.

The project will continue into 2017, reaching completion later in the year. This work will involve construction of a 13,000-square-foot maintenance garage addition and renovation of the current 6,000-square-foot maintenance garage. Other tasks include installations of high-efficiency and fully automated lighting, heating, and ventilation systems across the facility, improvements to emergency access to I-78, and erection of a canopy between the nearby toll plaza and the Pennsylvania Welcome Center, which also houses some Commission administrative offices.

Finally, energy and motor-fuel management systems will be installed at the I-78 complex in 2017. The energy control system will manage lighting, heating, ventilation and air conditioning usage. A separate system will be installed for controlling motor fuel storage and usage at I-78. These management systems, once in place, will later be extended to remotely control energy and motor-fuel use at all Commission toll facilities.

The project will continue into 2017, reaching completion later in the year. This work will involve construction of a 13,000-square-foot maintenance garage addition and renovation of the current 6,000-square-foot maintenance garage. Other tasks include installations of high-efficiency and fully automated lighting, heating, and ventilation systems across the facility, improvements to emergency access to I-78, and erection of a canopy between the nearby toll plaza and the Pennsylvania Welcome Center, which also houses some Commission administrative offices.

Finally, energy and motor-fuel management systems will be installed at the I-78 complex in 2017. The energy control system will manage lighting, heating, ventilation and air conditioning usage. A separate system will be installed for controlling motor fuel storage and usage at I-78. These management systems, once in place, will later be extended to remotely control energy and motor-fuel use at all Commission toll facilities.
Larger, more heavily reinforced concrete protection blocks are now in place to protect the four toll booths at the Commission’s I-78 Toll Plaza.

These so-called “bumper blocks” serve to protect the plaza’s structural supports, tolling equipment, and – most importantly – toll collection personnel from vehicular accidents and errant drivers.

The toll plaza’s fortification measure was prompted by a February 9 accident. A tractor-trailer veered into and severed one of the former 26-year-old concrete pediments that separated two of the plaza’s toll collection lanes. The truck driver was later charged with reckless driving.

The accident necessitated the immediate shutdown of one toll lane. It also exposed the need for better protection measures in advance of the plaza’s toll lanes. I-78 is the Commission’s busiest toll-collection point. It also has the region’s highest tractor-trailers volumes -- and those numbers are rising.

Following the accident, the Commission examined the toll plaza and constructed a plan to repair the damaged toll lane and install larger, more heavily reinforced concrete protection blocks in front of each of the plaza’s toll booths. The safety-improvement plan was carried out over a two-week period and the plaza returned to full service on March 18. The adjacent two-lane Express E-ZPass facility was unaffected by the work.
NEW RADAR TECHNOLOGY REPLACES AGING TRAFFIC COUNTING SYSTEM

The Commission has a new technique for counting motor vehicles: radar.

For about the past 20 years or so, the Commission has used an Inductive Loop Detection System (ILDS) of wire loops embedded into saw-cut roadway grooves and covered with epoxy to count vehicles passing onto or off each of the Commission’s 18 vehicular bridges. The lone exceptions in this system were the westbound or southbound lanes at the seven toll bridges where E-ZPass electronic toll collection equipment has been used to provide traffic counts.

In May, the Commission initiated steps to replace these aging ILDS installations, which had become increasingly unreliable at some bridges. The software and methods of communications to interpret, share and store traffic data also were fraught with problems.

A prior engineering study confirmed that the ILDS was beyond its useful life and in need of upgrading. The study determined that a complete overhaul of the system could be achieved at a relatively low installation cost (Commission maintenance personnel installed the new counting equipment in-house) and the new system would be less costly to operate and maintain while offering a higher level of accuracy.

A new system of remote traffic microwave sensors, auxiliary equipment, servers, and software was subsequently purchased and installed to replace the ILDS network. The core components of the replacement system are non-intrusive microwave radar vehicle-counting devices. These were installed above and to the side of the roadway approaches to the Commission’s vehicular bridges.

Periodic maintenance of the devices can then be performed without lane closures.

Under the new system, traffic data is transmitted via cell towers to a new centralized server. The 2017 traffic counts will be the first to be collected under this new radar-based system.
“But automobiles have come. And almost all outward things are going to be different because of what they bring. They’re going to alter war and they’re going to alter peace. And I think men’s minds are going to be changed in subtle ways because of automobiles.”

– Eugene Morgan (Joseph Cotton), 
*The Magnificent Ambersons* (1942)
It’s ironic perhaps, but an agency called the Joint Commission for Elimination of Toll Bridges – Pennsylvania–New Jersey was the forerunner to today’s Delaware River Joint Toll Bridge Commission.

The Joint Commission, as it was sometimes referred to in the early part of the last century, existed for a little more than 18 years. The now largely forgotten agency was the capstone outcome of a grassroots free bridges movement that gained momentum in fits and starts throughout the Delaware River region during the early 1900s. The crusade for free bridges owed part of its genesis to the Good Roads Movement that swept across the country between 1880 and 1920. The success of the free-bridges proponents, however, was ultimately fueled by the ever-increasing availability of affordable mass-produced automobiles shortly after the dawn of the 20th Century. The movement also largely coincided with America’s Progressive Era of social activism and political reforms.

Formally established and holding its inaugural meetings in 1916, the Joint Commission was one of the first bistate agencies ever to be created in the United States. It fulfilled its stated mission over time by facilitating the purchase and “freeing” of 16 formerly private toll bridges that connected the states of New Jersey and Pennsylvania at that time. Many of these crossings remain in operation today as structures owned and maintained by the Delaware River Joint Toll Bridge Commission.

The Joint Commission’s accomplishments and public-service legacy are unremembered in the dozens of Delaware River communities that gave rise to yesteryear’s free bridges movement. The men, women and organizations that spearheaded the transportation crusade have long since passed away and the dynamics that spurred their advocacy are largely non-existent in today’s world. Motor vehicles are indispensable today. Likewise, the building and maintenance of roads and bridges are widely accepted governmental responsibilities, with private roads and bridges being exceptions to the rule.

It’s a changed world from that of a century ago, but that doesn’t mean the pre-auto-age era should be obliterated from the public record. So, in recognition of the 100th anniversary of the Joint Commission’s creation, the DRJTBC set out in 2016 to chronicle the rise of the Delaware River’s free bridges movement and the resulting unheralded Joint Commission that endeavored to ease travel between the two states. The following report is largely based on old newspaper clippings, archived meeting minutes of the Joint Commission for Elimination of Toll Bridges – Pennsylvania–New Jersey, legislative documents, and various excerpts from annual reports issued by the Delaware River Joint Toll Bridge Commission.
For more than a century, all of the bridges connecting New Jersey and Pennsylvania across the Delaware River were owned and operated by individual private companies. The first of these bridges opened for business in January 1806 between Trenton, N.J. and Morrisville, PA. Designed by Theodore Burr, a distant cousin of Vice President Aaron Burr, the bridge was regaled as “one of the finest specimens of wooden bridge architecture in the world.” It was the second covered bridge to be built in the young country and the first one to connect two states. Like the dozens of wooden vehicular bridges that would later be built across the river, it was operated as a tolled crossing.

Sixteen private, tolled bridges came into operation between the two states during the 1800s. These primarily served horse-drawn wagons and carriages, horseback riders, and pedestrians. Each bridge was owned and operated by a respective state-chartered bridge company established through joint legislative acts during the early-to-mid 1800s. Individual company charters were needed because the Delaware River’s waters were jointly owned by the two states and any obstruction in the waterway required approval from one state or both states.

Each Delaware River bridge had its own toll schedule, but the rates apparently didn’t vary much among the assorted franchises. Whether an individual traveled by wagon, rode by horseback, or walked across a bridge did not matter; there was a toll. Any differences in toll structures were nuanced. For example, many bridges waived tolls for funerals, wedding parties and individuals going to and from church on Sundays. Others were less accommodating. Some apparently charged by volume of grains carried in a wagon while others charged strictly by the number of axles and the number of horses pulling the wagon. Different rates were charged for cattle, sheep, swine and other livestock. Here are a few of the tolls charged at the Centre Bridge linking Solebury Township, PA. and Delaware Township, N.J. in 1842: foot-passengers, 2 cents; cattle, 3 cents each; sheep or swing, 1 cent each; cart and one horse, 15 cents; coach and four horses, 75 cents; wagon and four horses, 50 cents.

The federal government and the states had limited – if any – involvement in overland transportation. There were no gasoline taxes, no departments of transportation, and no highway departments. Privately owned toll roads and toll bridges were a generally accepted convention.
Early Free Bridge Agitation

It’s hard to say when the notion of free bridge crossings first manifested itself in earnest along the Delaware River. But the idea surely was tossed about periodically along the waterway, each time ignited with a flash of public interest that soon evolved into a protracted period of resignation. For at least the first half of the 19th century, the reality was that the private bridge companies would never become charitable, benevolent enterprises without sufficient compensation to pay their creditors and stockholders. Any opposition to these disconnected private operations was largely confined to a person or a small group of people questioning an individual bridge company’s annual financial report and shareholder dividends. Such instances were rare because few of the private bridge companies along the Delaware ever managed to turn a profit for their investors.

One of the first organized efforts to challenge a bridge company’s supremacy occurred in 1845 when a group of Easton, PA. residents mounted a petition drive for lower toll rates on the covered bridge that connected their community and Phillipsburg, N.J. The petition asked the Pennsylvania Legislature to compel the bridge’s owner – the Easton Delaware Bridge Company – to reduce its tolls “as with the income of its contingent fund.” What became of the petition effort is unclear. However, it may have been a contributing factor in the Easton Bridge Company’s decision to eliminate tolls for pedestrian crossings years later. The bridge’s toll schedule established on November 1, 1856 no longer included a charge for pedestrian crossings. This concession probably stemmed from the fact the Easton bridge was so heavily used and so financially viable that it often produced dividends for its rather limited pool of investors (297 shares at par value of $100 each).

According to the historical record, free bridge talk subsided for nearly 30 years along the river. But that reticence changed in the aftermath of the “spectacular” fire that destroyed the covered, wooden Trenton City
Bridge (the predecessor to today’s wrought-iron Calhoun Street Bridge) on June 22, 1884. Within days, a letter to the editor in the Trenton State Gazette newspaper authored anonymously by an individual identified only as “Enterprise” cited the fire as an opportunity to provide Trenton with a free bridge:

“I hope you will urge this matter upon your readers, as now seems the one grand opportunity to take a progressive step that would be of lasting value to our enterprising and growing city.”

The novel idea never gained traction, though, as the Trenton City Bridge Company’s directors met within days to contract for an iron replacement superstructure. Like its wooden predecessor, the new iron bridge operated as a tolled enterprise to pay back investors and loan costs. The anonymous letter from “Enterprise” may have been whimsical, but it portended the wave of public agitation that was to come.

Within five years, a more diverse and determined cadre of area residents from both sides of the river formed a voluntary association called the Bucks and Mercer Free Bridge Association. The participants of this effort sought to construct a free-bridge alternative to the two private toll bridges that connected Trenton with Morrisville, PA. The problem was there was much talk, but no financing. A January 6, 1889 Trenton Evening News article quoted a leading free bridge proponent, Trenton businessman A.L. Worthington, who unwittingly revealed the unrealistic expectations of these early free-bridge enthusiasts:

“The idea there is that men who have to spend $100 a year for toll, shall pay $500 (or what they would spend in five years) and then have a free bridge for all time. The city of Trenton ought to be willing to make a good appropriation as a free bridge would bring lots of trade that now goes to Bristol and elsewhere. Once the bridge was open, I think Bucks and Mercer counties would gladly undertake to keep it in repair.”

The joint, citizen-led effort gained further impetus when the Trenton Delaware Bridge Co. – which was by now controlled by the powerful Pennsylvania Railroad Co. – raised its annual toll rates for crossing the Lower Trenton Bridge. A year’s pedestrian pass was increased to $17 from $6 and allowed only three crossings per day instead of the previous unlimited crossings. Meanwhile, business sectors, such as nearby Pennsylvania dairy producers, were hit with increases. A commercial pass that previously cost $300 was raised by more than 700 percent. One company estimated the new annual rate and usage-limitation scheme amounted to a nearly $2,500 annual charge.

As free-bridge proponents galvanized, they soon learned that it would take real money and efforts to wrest control of the profitable Trenton bridges from their respective companies. The Trenton Evening Times capsulized the inescapable reality in a January 17, 1889 editorial:

“Our liberal and enterprising citizens see that the proposed improvement (a free bridge) would ‘boom’ both Trenton and Morrisville and vicinity. The only question is, are there enough liberal and enterprising people willing to spend both money and time to push it to a successful conclusion.”
The Good Roads Movement and the Wheelbarrow Man

A new and more pervasive national crusade for governmental involvement in roads and bridges was getting a toehold on the public’s consciousness around the time of Trenton’s first sustained wave of anti-toll agitation. Beginning in the late 1870s and continuing into the early 20th century, a bicycling craze swept across the country. In its wake, an organization called the League of American Wheelmen was formed to push for improved roads. This Good Roads Movement turned local agitation into a national crusade that included the publication of a regular periodical – Good Roads Magazine – beginning in 1882. Circulation reportedly reached one million subscribers in three years. Meanwhile, Good Roads enthusiasts held conventions and public demonstrations. They pushed the envelope politically, too, pressing elected officials, farmers, and engineers to take up the cause.

The primary endeavor of the Good Roads enthusiasts was to enlighten the overall public about the shared benefits of improved roads. But the crusaders also pursued other objectives such as separation of bicyclists from wagon traffic on roadways and publicly financed road systems that did not rely on tolls.

Amid this burgeoning movement in 1891, came the reported case of a Trenton man who sought to cross the Pennsylvania Railroad’s iron-truss Lower Trenton span with a wheelbarrow. Caught off-guard with insufficient money to pay a nickel toll – a two-cent pedestrian toll plus a three cent toll for a “small vehicle” – the patron decided to shoulder his wheelbarrow the length of the bridge’s roughly 1,029-foot walkway. It reportedly took the man a half hour – walking and resting – to cross, with the bridge’s toll taker tagging along and watching each step to ensure the wheelbarrow was carried and never pushed along the bridge’s walkway.

The wheelbarrow man’s ingenious effort spread by word of mouth, eventually generating a small article in the local newspaper. The news item was emblematic of how newspapers were beginning to embrace Good Roads doctrines like government involvement in transportation and eliminating private toll roads and bridges. By May 1900, The Trenton Evening Times was regularly invoking Good Roads Movement arguments in its editorials:

“Toll roads and toll bridges are relics of the past and should not be tolerated in these days of advanced civilization. Let the subject be agitated anew, and this time let action be taken that will result in a ‘free bridge across the Delaware at Trenton.’”
The preponderance of the bridges connecting New Jersey and Pennsylvania in 1900 were covered timber structures. The exceptions: an iron truss bridge built for vehicular/pedestrian traffic at the Lower Trenton location in 1775 (an additional iron truss and a steel truss handled Pennsylvania Railroad trains at this location in 1900); the iron truss Calhoun Street Bridge constructed in 1886; and the steel Northampton Street Bridge that opened between Easton, PA. and Phillipsburg, N.J. in 1895.

Traffic in 1900 consisted almost entirely of horse-drawn wagons and carriages. Motor vehicle sightings were rare. The Federal Highway Administration estimates there were 8,000 motorized vehicles in the entire United States, then consisting of 45 states. Only a fraction of these early cars were gasoline powered. Of the 4,192 vehicles accounted for having been produced in the United States in 1900, only 936 of them ran on gasoline, 1,575 had electric engines and 1,681 others ran on steam. The federal government and the states had limited – if any – involvement in overland transportation, but that dynamic was changing as increased numbers of people in New Jersey and Pennsylvania began advocating for public ownership of tolled turnpikes and other privately held transportation facilities.

The first notable elected official along the river to push for free bridges was New Jersey State Senator Elijah C. Hutchinson. A Mercer County merchant miller with an interest in fertilizer manufacturing, Hutchinson swiftly crafted a free bridges measure in the wake of the record-setting Great Pumpkin Flood of October 9–11, 1903. That catastrophe swept away or partially destroyed nine private toll bridges linking the two states. A tenth span, the Calhoun Street Bridge, was damaged and taken out of service briefly until repairs could be made. On October 15 – four days after the flood – Hutchinson tendered a concurrent resolution requesting New Jersey Governor Franklin Murphy to confer with Pennsylvania Governor Samuel W. Pennypacker about
having the two states replace the destroyed bridges and abolish toll collections. Hutchinson’s proposal made for front-page news and quickly garnered editorial support from The Trenton Evening Times, which cited the flood-induced bridge destruction as an opportunity:

“It will cost comparatively little to acquire the franchises and their piers that were left standing, and no great burden will be imposed upon the two States by replacing the old wooden sheds with modern steel bridges.”

The Hutchinson free bridge gambit garnered national exposure a few days later when Governor Murphy expressed support for a joint meeting with his Pennsylvania counterpart. It also attracted the attention of Warren County, N.J. freeholders, who formed a committee to meet with county commissioners in Pennsylvania and discuss a potential purchase of a former railroad bridge linking the two counties. But the flush of free bridge optimism could not mask the fact that Hutchinson lacked funding to make even a single bridge purchase possible. The omission of appropriations was not lost upon Governor Pennypacker, who dismissed meeting with Murphy on the grounds that the Pennsylvania legislature would not convene again until 1905 and the issue did not rise to the level of meriting a special legislative session.

Undaunted, Senator Hutchinson introduced a revised resolution in February 1904, calling upon the Governor to appoint a three-member commission to investigate possible acquisition of the river bridges. Hutchinson’s Joint Resolution No. 5 passed on March 28, 1904, but Governor Murphy effectively killed the project by refusing to name commissioners. Hutchinson’s effort at least established one precedent: the concept of using a commission to bring the river’s private toll bridges under public ownership. The setback certainly didn’t hurt Hutchinson’s career as a public official. He became the state’s Commissioner of Public Roads in 1905 and later served four terms in the U.S. House of Representatives.
Only six pedestrian/vehicular bridges were left standing along the river between Trenton and the New Jersey–New York state line after the Great Pumpkin Flood. By April 1904, the damaged timber bridges at Lumberville, PA., Frenchtown, N.J., and Milford, N.J. were brought back online with steel replacement spans. Many more months passed before the bridges at Yardley-Wilburtha, Washington Crossing, New Hope-Lambertville, Point Pleasant-Byram, Riegelsville, and Riverton-Belvidere were replaced. This caused considerable inconvenience for farmers and tradesmen seeking to transport merchandise or produce between the two states, as well as commuters seeking to access the Pennsylvania Railroad’s Belvidere Division trains which ran between Trenton and Belvidere on the river’s New Jersey side.

Agitation for toll-free crossings was growing on both sides of the Delaware River by 1905. In Pennsylvania, where there were a total of 54 toll bridges, calls for free bridges were reaching epidemic proportions. In Pittsburgh, a neighborhood Irish-American ward leader who had launched a spirited campaign 20 years earlier was now involved in a new effort. In Harrisburg, the city’s two daily newspapers regularly crusaded against two private toll bridges along the Susquehanna River. And in Beaver County, a local state representative introduced a bill to have the state and counties share the costs of purchasing private bridges. Free bridge sentiments were being expressed so widely in Pennsylvania that the issue was made part of the agenda at a convention of the state’s county commissioners in March 1905.

Free-bridge legislation was a hot quantity when the Pennsylvania Legislature’s 1905 session began. Senator Webster Grim of Bucks County sponsored one of the measures, a proposal to jointly (with New Jersey and New York) acquire and maintain the private Delaware River toll bridges.
Grim, a Doylestown lawyer born one year after the Civil War’s armistice, was the first lawmaker to pitch the idea of using the state’s Commission of Public Grounds and Buildings to facilitate acquisition of private Delaware River bridges. To gain support for his bill, Grim presented petitions signed by 1,323 Bucks County residents who sought free bridges. Grim managed to get the bill passed in his legislative chamber, but the momentum behind his bill lost steam in his legislature’s lower house. It was not a total loss for Grim, as his efforts generated publicity establishing him as the leading voice on free bridge efforts along the Delaware River. This caught the attention of legislators across the river in New Jersey. One of those Garden State lawmakers, a one-term Republican assemblyman from Mercer County named Ralph Hulse, introduced a bill in February 1905 that was based on Grim’s legislation. Sadly, Hulse’s experience with the bill was even more disappointing than Grim’s; the New Jersey version languished in committee from the outset.

Through it all, Grim remained upbeat about the prospects for free bridges one day becoming a reality along the Delaware. Speaking at the May 6, 1905 dedication ceremony for the steel–truss replacement bridge that was constructed to replace the wooden bridge destroyed in the 1903 flood at Washington Crossing, Grim struck an optimistic tone with news reporters who covered the event. He pointed out how all of the former private bridges in Vermont and New Hampshire were now free of tolls, along with most of the toll bridges along the Connecticut River. Citing his bill’s demise in the recent legislative session, Grim opined that free bridges were inevitable and the movement would ultimately succeed:

“Free bridges improve commerce the same as deepening the channels of rivers benefit the country at large. It is in the line of progress.”
## Joint State Acquisitions of Former Private Toll Bridges along the Delaware River – 1918-32

<table>
<thead>
<tr>
<th>Bridge &amp; Location</th>
<th>Date Purchased &amp; Freed of Tolls</th>
<th>Purchase Price</th>
<th>Private Bridge Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Trenton (Morrisville, PA-Trenton, NJ)</td>
<td>May 31, 1918&lt;sup&gt;1&lt;/sup&gt;</td>
<td>$240,000</td>
<td>Trenton Delaware Bridge Co.</td>
</tr>
<tr>
<td>Calhoun Street (Morrisville, PA-Trenton, NJ)</td>
<td>November 4, 1928</td>
<td>$250,000</td>
<td>Trenton City Bridge Co.</td>
</tr>
<tr>
<td>Yardley-Wilbertha&lt;sup&gt;2&lt;/sup&gt; (Yardley, PA-Ewing, NJ)</td>
<td>December 21, 1922</td>
<td>$67,500</td>
<td>Yardleyville Delaware Bridge Co.</td>
</tr>
<tr>
<td>Washington Crossing (Upper Makefield, PA-Hopewell Twp., NJ)</td>
<td>April 25, 1922</td>
<td>$40,000</td>
<td>Taylorsville Delaware Bridge Co. and Washington Crossing Delaware Bridge Co.</td>
</tr>
<tr>
<td>Centre Bridge-Stockton (Solebury, PA-Delaware Twp., NJ)</td>
<td>November 6, 1925</td>
<td>$10,000&lt;sup&gt;4&lt;/sup&gt;</td>
<td>The Centre Bridge Co.</td>
</tr>
<tr>
<td>Lumberville-Raven Rock&lt;sup&gt;5&lt;/sup&gt; (Solebury, PA-Delaware Twp., NJ)</td>
<td>July 21, 1932</td>
<td>$25,000</td>
<td>Lumberville Delaware Bridge Co.</td>
</tr>
<tr>
<td>Point Pleasant-Byram&lt;sup&gt;6&lt;/sup&gt; (Tinicum, PA-Kingwood Twp, NJ)</td>
<td>February 13, 1919</td>
<td>$30,000</td>
<td>Point Pleasant Delaware Bridge Co.</td>
</tr>
<tr>
<td>Uhlerstown-Frenchtown&lt;sup&gt;7&lt;/sup&gt; (Tinicum, PA-Frenchtown, NJ)</td>
<td>June 28, 1929</td>
<td>$45,000</td>
<td>Alexandria Delaware Bridge Co.</td>
</tr>
<tr>
<td>Bridge &amp; Location</td>
<td>Date Purchased &amp; Freed of Tolls</td>
<td>Purchase Price</td>
<td>Private Bridge Company Name</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------</td>
<td>----------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Upper Black Eddy-Milford&lt;sup&gt;6&lt;/sup&gt; (Bridgeton Twp. PA-Milford, NJ)</td>
<td>June 28, 1929</td>
<td>$45,000</td>
<td>Milford Delaware Bridge Co.</td>
</tr>
<tr>
<td>Riegelsville (Riegelsville, PA-Pohatcong, NJ)</td>
<td>January 4, 1923&lt;sup&gt;a&lt;/sup&gt;</td>
<td>$50,000</td>
<td>Riegelsville Delaware Bridge Co.</td>
</tr>
<tr>
<td>Northampton Street Bridge (Easton, PA-Phillipsburg, NJ)</td>
<td>August 3, 1921</td>
<td>$300,000</td>
<td>Easton Delaware Bridge Co.</td>
</tr>
<tr>
<td>Riverton-Belvidere (Lower Mt. Bethel, PA-Belvidere, NJ)</td>
<td>June 14, 1929</td>
<td>$60,000</td>
<td>Belvidere Delaware Bridge Co.</td>
</tr>
<tr>
<td>Upper Mount Bethel-Delaware&lt;sup&gt;10&lt;/sup&gt; (Upper Mt. Bethel, PA-Knowlton, NJ)</td>
<td>February 18, 1932</td>
<td>$275,000</td>
<td>Knowlton Turnpike &amp; Bridge Co.</td>
</tr>
<tr>
<td>Dingmans Toll Bridge (Pike County, PA-Sussex County, NJ)</td>
<td>Remains Privately Owned</td>
<td>N/A</td>
<td>Dingman’s Choice &amp; Delaware Bridge Co.</td>
</tr>
<tr>
<td>Milford-Montague&lt;sup&gt;12&lt;/sup&gt; (Milford Borough, PA-Montague, NJ)</td>
<td>April 25, 1922</td>
<td>$31,500</td>
<td>President, Managers &amp; Company for Erecting a Bridge over the Delaware River near Milford, PA</td>
</tr>
</tbody>
</table>

**TOTAL** $1,744,250

1. Purchase of properties completed; tolls eliminated at midnight; joint acquisition commemorated June 22, 1918
2. Partially destroyed by flood August 19-20, 1955; returned to service with three temporary Bailey spans; taken out of service May 3, 1961
3. Published reports indicate tolls ended January 3, 1920
4. Amount was for piers, abutments and bridge house; bridge superstructure destroyed by fire July 22, 1923; steel replacement bridge opened July 16, 1927
5. Vehicular bridge consisted of four wooden, covered spans and one steel truss; taken out of service for safety reasons in June 1944; replaced as steel-suspension pedestrian bridge span (completed November 1947)
6. Destroyed by flood August 19-20, 1955; remaining piers are property of the states
7. Bridge consisted of four wooden, covered spans and two steel truss spans; reconstructed as all steel-truss bridge that opened October 11, 1931
8. Bridge consisted of two wooden, covered spans and one steel truss span; completely rebuilt as three-span steel truss bridge that reopened January 13, 1934
9. In anticipation of sale, former private owner Riegelsville Delaware Bridge Co. ceased collection of tolls on Jan. 1, 1923
10. Former two-track railroad bridge; deteriorated structure removed from service April 9, 1964 and torn down
11. Three-span wooden-covered bridge destroyed by flood August 19-20, 1955; replaced as steel-girder pedestrian-only crossing October 22, 1958
12. Narrow three-span steel-truss bridge with wooden deck taken out of service December 30, 1953, later torn down
Senator Grim reintroduced a free bridge measure in his state’s 1907 legislative session. He also gained a new ally in the New Jersey Legislature: Assemblyman Oliver C. Holcombe, a Lambertville Democrat who made his living selling pianos and other musical instruments. Holcombe introduced Grim’s measure word-for-word in the New Jersey General Assembly. Regrettably, Holcombe’s failure to refine the language of Grim’s Pennsylvania-oriented bill turned out to be a major oversight because both state Legislatures succeeded in passing the free-bridge bill in 1907, only to have it vetoed by both states’ governors.

The first gubernatorial rejection occurred in New Jersey on April 10, 1907, when Governor E.C. Stokes assailed Holcombe’s bill (A–362) on the grounds “that the State Treasury is not in condition to warrant so heavy a draft upon it...” and because of its “unconstitutionality.” Stokes took particular issue with the fact that the bill’s title applied to action between the New Jersey and Pennsylvania, yet portions of the bill involved the State of New York. The inclusion of New York made sense in Grim’s bill, since the Delaware River serves as part of Pennsylvania’s eastern border with that state. But the inclusion of New York in Holcombe’s companion legislation had no applicability to New Jersey’s portion of the Delaware River, which was shared solely with Pennsylvania.

Grim once again encountered challenges in getting his bill passed in Pennsylvania, prompting New Jersey’s Flemington Democrat-Advertiser newspaper to opine in late April that “influence brought to bear by the owners of that gold mine in Easton – the Easton-Phillipsburg (Northampton Street) bridge” was stymieing further advancement. Grim ultimately steered his bill through the Pennsylvania Legislature, but that was as far as it progressed. On June 8, 1907, Pennsylvania Governor Edwin S. Stuart vetoed Grim’s bill on the grounds that its New Jersey companion legislation had already been vetoed by that state’s Governor.

As Grim discovered, many pockets of opposition had to be overcome. There was parochial pushback from lawmakers who did not wish to see state resources going to bridges their constituencies might never use. There were pressing issues of broader interest to all lawmakers that commanded attention first. There was opposition from many of the private bridge owners who feared potential condemnation or who were inherently skeptical of the states’ abilities to jointly make sufficient purchase offers. There were political hurdles, too. Meanwhile, the automobilists pushing for free bridges were a minority among the broader population as evidenced by the fact that few legislators – and probably the governors, as well – did not own automobiles in 1907.

Despite the continuous setbacks, the free bridge movement would not go away and was increasingly becoming a campaign issue, as evidenced by the New Jersey Democratic Party’s decision to make free bridges part of its state convention platform in September 1907. The free bridges pitch was far from a winning gambit, though; the Democrats lost control of the state Assembly and the party’s gubernatorial candidate lost to the Republican nominee in the November elections.
Seemingly irrepressible, Assemblyman Holcombe introduced a new free-bridges bill in January, 1908. He even succeeded in having the measure designated as Assembly Bill No. 1 to emphasize its importance. This bill provided for a commission of three persons appointed by New Jersey’s Governor to work with a similarly gubernatorial-appointed body in Pennsylvania in acquiring the private bridges along the Delaware so they could be free for public use. It appropriated $500,000 for this purpose, with $100,000 to be expended each year. This was quickly vetoed by the state’s new Governor, J. Franklin Fort. In his veto message, Fort characterized the bill’s aim of eliminating toll bridges as “a good one” before expressing difficulty with the measure’s “crude and incomplete character.” Fort continued:

“It is not shown what the cost of acquiring these bridges might be to the state, nor is any provision made in the bill as to how the fund for their maintenance is to be provided, after they are acquired.”

Holcombe’s second legislative failure showed more study was needed. Accordingly, he penned a new measure – Assembly Joint Resolution 7 – to address Fort’s concerns. The rewrite authorized the Governor to appoint a Commission that would act with a similar Pennsylvania panel in compiling a report on what it would cost to purchase the Delaware River bridges. Governor Fort signed the measure within days of its passage in April. Fort also quickly appointed the panel’s members: I. Snowdon Haines, the president of Burlington’s city council; George A. Angle, a well-respected attorney in Belvidere; and F. W. Roebling, Jr. of Trenton, a member of the bridge-building Roebling family. Roebling declined his appointment on the basis that he lacked sufficient time to serve. He initially was reported to be replaced by Watson H. Linburg, president of the United and Globe Rubber Manufacturing Co. in Trenton, whose appointment was recommended by state Senator Harry D. Leavitt, a Trenton Republican with significant business and banking credentials.

For reasons that are unclear, Oliver O. Bowman, president of the Broad Street National Bank in Trenton, took Linburg’s place when the fledgling three-man Commission met for the first time at Fort’s State House office in September 1908. At that meeting, Fort outlined the Commission’s investigatory mission and Haines was elected as the body’s chairman. Corresponding action on the part of Pennsylvania had to wait, however, as that state’s next legislative session would not take place until 1909.
Motorcars Change Everything

Automobiles were becoming a more frequent sight in communities up and down the Delaware River by this time. Steam and electric cars that dominated the novel automotive marketplace at the outset of the 1900s soon took a back seat to gasoline-powered vehicles as the new industry expanded to include 485 companies in the 20th century’s first decade. A pivotal year was 1908. That’s when Henry Ford, a former Edison Illuminating Company engineer, introduced his immensely successful Model T (initial sales price of $825) and William C. Durant, a high-school dropout, cobbled together a variety of fledgling auto producers into a single holding company called General Motors. Car ownership soared exponentially. The Ford Model T set a record in its first year of production, with more than 10,000 sold. Prior to 1909, car registrations rose annually in the tens of thousands. From 1909 onward, annual registrations increased by the hundreds of thousands and, eventually, in the millions.

Once dismissed as a plaything for the idle rich, automobile ownership was increasingly within reach of every middle-class family. The growing ranks of automobile owners became an economic and political force that could not be ignored.

Pennsylvania Governor Edwin S. Stuart apparently recognized society’s increasingly mobile ways when drafting his annual legislative address in January 1909. Stuart used the speech to recommended important changes in state road building. He also called upon the lawmakers to pass legislation authorizing a free bridge commission similar to the one New Jersey established the previous year. The Pennsylvania Legislature quickly obliged, passing a joint resolution with bipartisan support that authorized the governor to appoint a commission of state legislators – two from the House of Representatives and one from the Senate – to examine potential acquisition of the Delaware River’s private toll bridges. The panel was directed to act jointly or separately with like commissions in New Jersey and/or New York.

Governor Stuart signed the measure March 15, 1909, the 16th enactment of that year’s legislative session. However, it took him until April 1910 to appoint the panel’s three members: Representative Alfred Marvin of Matamoras, Pike County, who introduced the free bridges resolution in his house; Representative Clarence J. Buckman of Langhorne, Bucks County, a lawyer who became the Delaware River Joint Toll Bridge
Commission’s first chairman decades later; and Senator Miles C. Rowland of Lackawaxen Township, Pike County, a one-term Democrat legislator who made his living in the quarrying and lumber businesses.

How largely rural Pike County managed to secure two of the commission’s three seats is a mystery lost to time, but it is not entirely surprising. In the earliest years of the new century, two state legislators from Wayne County – Leopold Fuerth and Harvey N. Farley – called for free bridges along the Upper Delaware as public support for free crossings grew along that narrow stretch of the Delaware. Pennsylvania legislative records show that multiple communities along the Upper Delaware submitted petitions between 1900 and 1910 urging the state to take over the private toll bridges. Among the petitioners were 110 residents of Milford and 285 residents of Matamoras.

The Pennsylvania Commission held its organizational meeting in Philadelphia on June 24, 1910 and elected Representative Marvin as chairman. The panel quickly set about the work of inventorying and visiting the Delaware River’s private toll bridges that linked Pennsylvania with New York and New Jersey. It conducted a personal tour of the Pennsylvania–New York bridges with a New York State official on July 21. The Pennsylvania and New Jersey commissions teamed up in Trenton on August 30 to kick off a similar tour of the 16 toll bridges that linked their two states. The Delaware River Joint Toll Bridge Commission’s 1936 report gives the following account of that work:

“The Commissioners thus appointed met in Trenton, New Jersey, August 30, 1910, and made a personal tour of inspection of the bridges crossing the Delaware River between the State of Pennsylvania and New Jersey beginning with the lower bridge connecting the City of Trenton, New Jersey, with the Borough of Morrisville, Pennsylvania, and ending at Milford, Pike County, Pennsylvania. They also corresponded with the various corporations owning the said bridges and from information received and personal inspection recommended to the respective Legislatures, that they appropriate a sufficient sum of money for the express purpose of purchasing the toll bridges in the above territory, the cost to be divided equally between the two States.”

The resulting investigative reports were largely superficial accountings. Produced in early 1911, they provided an inventory of the private bridges along the river, along with each structure’s size, the number of people each bridge served, and a “probable value” of how much it would cost to purchase or condemn the bridges so they could operate as free publicly owned crossings.
When the New Jersey Legislature reconvened in 1912, a familiar face took on the free bridges cause: Oliver C. Holcombe, who won his old Assembly seat back in the November 1911 general election. Holcombe, however, soon found himself in a subordinate position to the more significant leadership role that Senator Leavitt had assumed in the free bridges movement. While Holcombe proposed another resolution to again study and calculate the value of the private Delaware River bridges, Leavitt sponsored a more substantial bill to actually purchase the bridges and make them toll-free facilities.

The New Jersey efforts were further bolstered by Pennsylvania lawmaker Clarence Buckman’s nearly fanatical free-bridge advocacy. Having ascended to the Pennsylvania Senate in the 1910 elections, Buckman repeatedly endeavored to rally the region’s growing number of automobile clubs to push for free bridges. In January 1912, Buckman even made a trip to the New Jersey Legislature, where he was accorded privileges of both legislative houses. Buckman used the rarely granted opportunity to relay his hopes for free bridges between the two states and to distribute copies of the 1911 free bridges report.

The free-bridges measures sponsored by Leavitt and Holcombe soon moved through the New Jersey Legislature to the desk of Governor Woodrow Wilson, a former academic and leading Progressive Era reformer who later became the country’s 28th President. But Wilson’s signature was not ensured, as he decided to hold his own hearing before taking any action on the measures. Wilson’s hearing took place April 1, 1912, with free-bridge proponents easily outnumbering toll-bridge defenders.

Among the individuals pushing for enactment of the free-bridges bill were Senator Leavitt; Trenton businessmen Newton A.K. Bugbee and C. Arthur Metzger; Lambertville attorney Walter F. Hayhurst; and a Stockton minister, Rev. M. H. Wolverton. The most ardent opponent at the hearing was W. H. Walters, a Phillipsburg attorney who argued the legislation was confiscatory of Easton Delaware Bridge Company property, would cause a $75,000 loss in company profits, and violated the constitution. Unpersuaded by Mr. Walters’ pleadings, Governor Wilson signed Leavitt’s bill and Holcombe’s resolution the very next day – April 2 – in Trenton.

Senator Leavitt’s law called for the creation of a three-member Commission to work jointly with a yet-to-be-established Pennsylvania panel in acquiring the private toll bridges between the two states and freeing them of tolls. The legislation spelled out that the costs of
acquisition and subsequent repair, maintenance, or replacement were to be equally shared by the two states. It also prescribed a methodology for acquisition by eminent domain. Finally, the measure allowed for up to $500,000 to be paid by New Jersey for bridge purchases, with $100,000 being the maximum amount to be provided in any single year. The measure, however, fell short of making an ironclad appropriation, stating “the aforesaid amount or so much thereof as may be necessary is hereby specifically appropriated in the proportions aforesaid cut of any moneys in the treasury not otherwise appropriated.” In other words, unless the state had uncommitted funds in its budget, money would not be immediately forthcoming to purchase any bridges.

On July 26, 1912, a day Governor Wilson spent in Sea Girt, N.J. working on his presidential nomination acceptance speech, his secretary in Trenton announced Wilson’s appointees to the state’s new Delaware River Free Bridge Commission: Reginald W. Darnell, a Phillipsburg manufacturing executive; Phineas K. Hazen, a Civil War veteran who owned and edited a Lambertville newspaper; and John A. Campbell, a leading figure in Trenton’s pottery industry. Campbell was later chosen as the New Jersey panel’s chairman.
Corresponding action in Pennsylvania had to wait until that state’s next legislative session in 1913, but the die was set by New Jersey’s action and Clarence Buckman’s reelection to the Pennsylvania Senate in the November 1912 elections. Buckman carefully crafted a bill similar – but not identical – to New Jersey’s law. Introducing the measure on February 4, 1913, Buckman shrewdly used his relationships on both sides of the Delaware to increase his odds of securing passage. He established contact with Chairman Campbell of the New Jersey commission and even set up a meeting for Campbell to discuss the status of New Jersey’s free-bridge efforts with Pennsylvania Governor John K. Tener.

Buckman’s measure (Senate Bill No. 162) wended through the legislative process over the course of the next four months, with final passage occurring on June 25, 1913. The bill authorized the state’s Board of Commissioners of Public Grounds and Buildings to act jointly with its New Jersey counterparts in acquiring the Delaware River’s private toll bridges. The measure provided purchases to be made through negotiation or condemnation, with the costs shared equally by the two states.

Buckman’s bill had widespread appeal, demonstrated by the measure’s 155–5 margin of approval in Pennsylvania’s lower legislative house. Governor Tener – a former professional baseball player and business executive who once was affiliated with a private bridge company in his hometown of Charleroi, Pa. – waited a month before signing the bill into law (Act No. 784), on July 25. But Tener made a significant modification. He trimmed the bill’s $500,000 appropriation to $100,000 with a terse explanation:

“I withhold my approval from the remainder of said appropriation because of insufficient State revenue.”

As modest as Pennsylvania’s appropriation was, it at least constituted tangible money. This suddenly made New Jersey the laggard in the free bridges movement. Lawmakers in both states and river-region newspapers soon pressed the case for New Jersey to budget a complementary sum to free the bridges. Public sentiment also mounted, as toll roads and bridges elsewhere became free facilities. In March 1914, The Boston Transcript newspaper cited the freeing of six miles of stone-paved highway in Vermont as marking the end of private tolled turnpikes in...
New England. Likewise, The Philadelphia Press reported the freeing of nine miles of turnpike in Pennsylvania’s Montgomery County. Finally, virtually all of the old private turnpikes in New Jersey had been brought under public ownership and freed of tolls by now.

The impasse of two states setting up commissions to free up the private river bridges, but only one of them providing money to actually do the job, soon became a curious development for people in government circles across the country. The Municipal Journal, a weekly publication produced out of New York City, summed up the continuing funding stalemate in a brief March 1914 news item:

“Trenton, N.J. – Citizens in the towns of this state along the Delaware River are petitioning the Appropriations Committee of the Legislature with requests that the committee include in the appropriation bill this year an item of $100,000 to be added to a similar sum appropriated last year by the State of Pennsylvania, to acquire the toll bridges spanning the Delaware and throwing them open to free traffic. Assemblyman O. C. Holcombe, of Lambertville, who has been working to free the toll bridges ever since he has been in the Legislature, is using his efforts to get the appropriation. In view of the present stringency in the State Treasury, it is not known what view the Appropriations Committee will take as to this appropriation.”
Toll Bridge, D. L. & W. R. R. Bridge and Delaware River, Delaware, N. J.
Another Private Toll Bridge Starts Business

The New Jersey funding quandary infuriated free-bridge proponents on both sides of the river. Their prospects for ultimate success were further clouded by two unrelated new vehicular bridge proposals along the river. The first of these was a grassroots campaign that Revolutionary War enthusiasts had been mounting to construct an ornate masonry bridge across the river as part of an envisioned national memorial park at Washington Crossing, about eight miles upstream of Trenton. (An abutment for the bridge was eventually built years later on the New Jersey side -- and it still stands today.) Neither the bridge nor the national park ever became a reality. Instead, separate state parks were later established on each riverbank.

A second anomaly in the free bridge movement was more ominous. On March 31, 1915, New Jersey Governor James F. Fielder, a lawyer and outdoorsman who was elected as Wilson’s successor in 1913, signed legislation permitting the Knowlton Turnpike and Bridge Company to open a 17th private toll bridge between the two states. The bridge -- a former two-track iron railroad trestle constructed for the Delaware, Lackawanna and Western Railroad in the late 1800s -- connected the Delaware section of Knowlton Township in Warren County, N.J. with Upper Mount Bethel Township in Northampton County, PA. The railroad sold the aging structure to the Rev. Henry V. B. Darlington for $5,000 on December 19, 1914. Darlington promptly set out to create the bridge company and turn it into a tolled crossing.

According to research compiled by Bucks County historian B. F. Fackenthal, Jr. of Riegelsville, PA., the bridge company was chartered in New Jersey on January 18, 1915. It’s unclear on what date that year the bridge’s toll operations began, but its opening certainly rattled the river region’s growing cadre of free-bridge advocates.

Citing the Knowlton Turnpike and Bridge Company’s impending opening, The Trenton Evening Times on March 17, 1915 struck a note of alarm in an editorial that, over time, would prove to be prescient with respect to the eventual public acquisition of Rev. Darlington’s bridge:

“It would seem that as the two States are committed to the free bridge policy, the building of any more toll bridges should be prohibited, except under agreement to dispose of them at actual cost when the time comes for taking them over for the free use of the public. Such a restriction would tend to prevent overbuilding by speculators who hope to sell at a profit to the State.”
Frustration over the impasse on a New Jersey appropriation for freeing the private Delaware River toll bridges seemed to mount with each passing month in 1915. Automobile ownership was growing exponentially by this time, with more than 2.5 million motor vehicle registrations nationwide. New vehicles were surpassing one million units a year. Organizations like the Trenton Chamber of Commerce, the Trenton Rotary Club, the Keystone Automobile Club, and many other civic groups called for action. In the fall, the Trenton newspapers and the city’s Chamber of Commerce went full-throttle in prodding New Jersey to let funds loose for purchasing the Delaware River bridges.

The Trenton Evening Times ran a rare front-page editorial in October that summed up the situation. Headlined “Re-Open Fight against Tolls to Help Trade; Vigorous Effort Will Be Made to Have Incoming Legislature Free Delaware River Bridges,” the editorial did not pull any punches. It sarcastically blamed the “solons” of the New Jersey Joint Legislative Committee on Appropriations for thwarting bridge funds on the basis that the state treasury could not afford such an outlay.

The concerted crusading apparently prompted a newly elected New Jersey legislator – Assemblyman A. Dayton Oliphant of Trenton – to seize the issue. Oliphant, the son of a Civil War general, was a lawyer who went on to become a leading judge and justice over the next four decades. In a matter of months, he secured the Assembly Republican leadership’s support to allocate money in the next state budget for the free bridges crusade. A February hearing by the New Jersey Joint Appropriations Committee attracted a who’s who of prominent free bridge enthusiasts, including Thomas B. Stockham, a prominent Morrisville, PA businessman; T. L. Murphy of the Phillipsburg (NJ) Board of Trade, and James Kerney of the Trenton Rotary Club. According to The Doylestown Intelligencer newspaper of Bucks County, PA., the speakers argued that New Jersey had a contractual responsibility to provide financial support:

“It was argued that New Jersey is morally obliged to join with Pennsylvania in the movement… Pennsylvania appropriated its first $100,000 in 1913 and that money is available when New Jersey fulfills its part of the contract.”

When the New Jersey Legislature’s appropriations bill was introduced on March 21, 1916, it earmarked an initial $100,000 installment – to be
made available in November – so the work of joint bridge acquisitions with Pennsylvania could finally begin. Despite the fact the measure still needed approval by both legislative houses and the signature of the state’s governor, Chairman Campbell of New Jersey’s free bridge panel considered passage and enactment a done deal. He quickly sought a meeting with Pennsylvania Governor Martin Grove Brumbaugh, a highly educated man with multiple college degrees who had won election in 1914 with a platform that included some pro-automobile planks. In reporting the 1916 appropriations bill’s inclusion of free bridge funds, The Trenton Evening Times ran a front page article so rife with optimism that it frequently strayed into unabashed cheerleading:

“Trenton business men are jubilant over the announcement of the appropriation. Assemblyman Oliphant, who is a member of the Appropriations Committee of the Legislature is being congratulated by many of the merchants for his success in getting the money. For more than five years a similar appropriation has been openly advocated, but no progress was made and the results of Mr. Oliphant’s activities are all the more appreciated.”

New Jersey’s appropriations bill was passed within weeks. Governor Fielder signed it into law on April 7, 1916. With the long legislative road finally cleared of obstacles for advancing actual bridge acquisitions, a joint organizational meeting of the Pennsylvania and New Jersey Commissions for the Elimination of Toll Bridges was held in Pennsylvania Governor Brumbaugh’s Harrisburg offices on June 13, 1916. New Jersey Commission members in attendance were John A. Campbell and R. W. Darnell. The Pennsylvania Commission consisted of Governor Brumbaugh and his fellow members on the state’s Board of Commissioners of Public Grounds and Buildings – the panel assigned to freeing Delaware River bridges under Senator Buckman’s 1913 law: Auditor General A.W. Powell; Treasurer R. K. Young; and Samuel B. Rambo, the state’s superintendent of public grounds and buildings. (The meeting minutes list a fifth attendee from Pennsylvania -- L.W. Mitchell, who served as Secretary of the Board of Commissioners of Public Grounds and Buildings -- but it’s unclear if Mitchell ever had a voting role. Indications are that this individual’s responsibilities were that of a clerk.)
A motion was carried appointing the joint body’s officers: Brumbaugh as president, Campbell as vice-president, and Darnell as secretary. According to the meeting’s handwritten minutes, the thrust of discussion involved the method of procedure for moving forward and the need to rectify differences and inconsistencies in the free bridge laws the two states had enacted. Published reports from that time indicate that the joint panel appointed Willis G. Whited, bridge engineer of the Pennsylvania state highway department, to work with an engineer from New Jersey in ascertaining updated values for the private toll bridges linking the two states. (The New Jersey engineer was later revealed to be Louis Focht, a civil engineer who formerly worked for a series of railroads and now served at the New Jersey Department of Taxes and Assessment’s chief engineer. Focht later served as both a Commissioner on the joint bridge panel and the Joint Commission’s top executive.)

The Joint Commission’s second meeting of 1916 – on November 24 at the Bellevue–Stratford Hotel in Philadelphia – was more substantial. With Brumbaugh, Young and Rambo representing Pennsylvania and Campbell, Darnell and Phineas K. Hazen of Lambertville (it would be the only meeting Hazen ever attended before passing away due to illness in 1917), the Joint Commission heard testimony from three Pennsylvania Railroad executives about their company’s willingness to sell its
ownership of the Trenton Delaware Bridge Company’s aging iron vehicular toll bridge at Lower Trenton. As part of their commitment for arranging a final purchase price, the railroad executives represented that their company would perform a complete cleanup of all piers, toll houses and bridge approaches as part of the transaction. Campbell then submitted a report that engineers Whited and Focht had compiled on the values of the two Trenton toll bridges. A committee of Campbell, Darnell, and PA Auditor General A.W. Powell was created to seek out potential purchase arrangements with the Trenton City Bridge Company, owner of the Calhoun Street Toll Bridge in Trenton, and the Easton Delaware Bridge Co., owner of the toll bridge (now colloquially referred to as “the free bridge”) linking Easton, PA and Phillipsburg, NJ.

Within the next two years, the two states ponied up the necessary funds to carry out their first joint purchase of a private crossing – the 1918 acquisition of the Lower Trenton Bridge, the oldest operating private bridge franchise along the river at that. The Joint Commission served as a facilitator in the transaction. All of the bridges that came to be purchased during the Joint Commission’s tenure were always owned jointly by the two states. (The two states did not cede ownership of any bridge until July 1987, when the deeds of the former private bridges still in operation were assigned to the Delaware River Joint Toll Bridge Commission.) In retrospect, the Joint Commission’s 1916 decision to prioritize the Lower Trenton Bridge as the first to be purchased and freed of tolls was a fortuitous masterstroke. The span was both strategically located and heavily travelled. When freed of tolls, this bridge siphoned away motorists from the less-traveled spans upriver that still operated as tolled crossings. The resulting threat of reduced traffic and diminished toll receipts eventually compelled other private companies to consider joint purchase offers from the two states. Thus began a domino effect that enabled the states of New Jersey and Pennsylvania to jointly acquire 16 former private toll bridges along the Delaware River between 1918 and 1932.
A multi-year project to replace the Commission’s aging tolling infrastructure took significant steps forward in 2016.

In 2013, the Commission approved a formal policy that requires the bistate agency to conduct public hearings and gather public comment before enacting rate changes at the agency’s toll bridges. The policy was crafted and adopted to help ensure enhanced transparency and openness in future Commission toll rate setting proposals.

In 2016, this policy was put into action for the first time with the release, review and approval of the toll schedule that is to be charged – in the southbound direction only – when the first span of the Scudder Falls Replacement Bridge goes into service in 2019.

The hearing/comment process also was used to gather public input on two proposed changes in the existing toll rate schedule for the Commission’s seven current toll bridge. One of these proposed toll actions – a clarification in the cash toll rates for recreational vehicles whenever they have a trailer or passenger vehicle in tow – was approved. However, another proposal that would have reclassified dual-wheel rear-axle pickup trucks in a higher rate class was discarded in the wake of public input.

The 2016 toll hearing, approval and publishing process took roughly four months. It began with the rollout, advertisement, and website posting of proposed toll adjustments in early July. Testimony subsequently was gathered at six public hearings – two in each of the Commission’s three operating districts (each district having a hearing on opposite sides of the river). Additional comments were received through email, the Commission’s website portal and the postal service.

The public input was compiled and presented to Commissioners in the form of a report before they voted on the tolling proposals at their September meeting. The report was made a permanent part of the Commission’s records with the approval of September meeting minutes in October.

The primary focus of the effort was a toll schedule to be charged at the bridge that will replace the current functionally obsolete Scudder Falls Bridge. Tolls at the new bridge will be collected via an all-electronic tolling (AET) system of E-ZPass tag readers and high-resolution cameras.

The current Scudder Falls Bridge is a non-tolled/toll-supported crossing. The Commission in December 2009 announced that the new bridge will be operated as a tolled crossing. That decision has been upheld on three occasions by the Federal Highway Administration (FHWA).

Under the approved toll schedule, tolls at the Scudder Falls Replacement Bridge will be charged once the new bridge’s upstream span opens to traffic and its corresponding AET collection system has been successfully implemented, tested, and made operational. That start date is currently projected for some time in 2019.
**Scudder Falls Replacement Bridge Toll Rates and Discounts**

<table>
<thead>
<tr>
<th>VEHICLE TYPE</th>
<th>VEHICLE DESCRIPTION</th>
<th>PROPOSED TOLL RATES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLASSIFICATION</strong></td>
<td><strong>VEHICLE DESCRIPTION</strong></td>
<td><strong>TOLL WITH E-ZPass Transponder</strong></td>
</tr>
<tr>
<td>Class 1</td>
<td>Includes passenger vehicles with up to two axles, less than 8 feet high. Vehicles or trailers with E-ZPass transponder.</td>
<td>$1.25</td>
</tr>
<tr>
<td>Class 2</td>
<td>Includes light trucks, buses, and other vehicles with two axles and eight feet or above in height. Eight axles with two axles or more, and Class 2 vehicles that have been assigned an E-ZPass transponder.</td>
<td>$3.25</td>
</tr>
<tr>
<td>Class 3</td>
<td>Includes heavy trucks, buses, and other vehicles with three or more axles and eight feet or above in height. Eight axles with more than two axles, and Class 2 vehicles that have been assigned an E-ZPass transponder.</td>
<td>$12.75</td>
</tr>
<tr>
<td>Class 4</td>
<td>Includes heavy trucks, buses, and other vehicles with three or more axles and eight feet or above in height. Eight axles with more than two axles, and Class 2 vehicles that have been assigned an E-ZPass transponder.</td>
<td>$17.00</td>
</tr>
<tr>
<td>Class 5</td>
<td>Includes heavy trucks, buses, and other vehicles with three or more axles and eight feet or above in height. Eight axles with more than two axles, and Class 2 vehicles that have been assigned an E-ZPass transponder.</td>
<td>$21.25</td>
</tr>
<tr>
<td>Class 6</td>
<td>Includes heavy trucks, buses, and other vehicles with three or more axles and eight feet or above in height. Eight axles with more than two axles, and Class 2 vehicles that have been assigned an E-ZPass transponder.</td>
<td>$25.50</td>
</tr>
<tr>
<td>Class 7</td>
<td>Includes heavy trucks, buses, and other vehicles with three or more axles and eight feet or above in height. Eight axles with more than two axles, and Class 2 vehicles that have been assigned an E-ZPass transponder.</td>
<td>$29.75</td>
</tr>
</tbody>
</table>

E-ZPass and trucks with trailers - light and heavy vehicles with trailers to be charged heavy truck per axle rates. 10% off-peak discount 9:01 p.m. – 5:59 a.m. with any commercial E-ZPass transponder. Commuter discounts - 40% savings – minimum 16 tolled trips per month with an E-ZPass transponder issued by the DelDOT or NJ DOP customer service provider. New Jersey E-ZPass Group.
The members of the Delaware River Joint Toll Bridge Commission hosted a special presentation at their March meeting to recognize the tenure and contributions of former Chairman David R. DeGerolamo, who retired from his post in December 2015.

Former and current commissioners and agency executives attended the event and provided stories and insights about DeGerolamo’s years of service and stewardship at the helm of the agency’s board of directors.

DeGerolamo, a long-time Phillipsburg, N.J. resident, was presented with a resolution honoring his 10 years of service at the Commission. It cited his appointment as a Commissioner on January 30, 2006 and his election as Chairman the following November – “a position he maintained with distinction, aplomb and vigor until his retirement.”

DeGerolamo guided the Commission for nine years, one of the longest leadership tenures in the Commission’s 81-year history. He will be remembered for his advocacy role in support of the most expansive capital improvement program in the Commission’s history.

“He fostered cooperation and communication among Commissioners and stakeholder communities,” the resolution said. “His even-handed manner, collegial demeanor and perseverance earned him the admiration and respect of all those he worked with in Commission affairs and ... he leaves the Commission with a vastly improved network of transportation assets, an enhanced organizational structure, and a strengthened array of financial metrics.”
Speakers at the event included former Vice Chairman Gaetan Alfano, former Commissioner William Hodas, and former Executive Director Frank G. McCartney. The Commission’s current members expressed their appreciation in personal remarks and in their resolution:

“This Commission hereby recognizes and congratulates the Honorable David R. DeGerolamo … and expresses its profound appreciation for his unflagging devotion, keen understanding, and sound decisions on behalf of the travelling public.”

Chairman DeGerolamo’s Accomplishments

More than 160 individuals have served as Commissioners since the agency’s establishment in 1934. Of these, none ever presided over as much tangible progress as David R. DeGerolamo during his nine years in the chairman’s post. His record of accomplishments follows:

- Design and implementation of Express E-ZPass/Open Road Tolling facilities at I-78 and Delaware Water Gap Toll Bridges
- Removal of toll gates at all seven toll plazas
- Approval of a $285 million bond transaction in 2007
- Adoption of a uniform toll adjustment public hearing/comment policy in 2013
- Rehabilitation and resurfacing of the I-78 Toll Bridge’s New Jersey and Pennsylvania approach roadways
- Completion of the environmental documentation process for the Scudder Falls Bridge Replacement Project, a process that culminated with the issuance of a pivotal Finding of No Significant Impact from the Federal Highway Administration
- Scour remediation and substructure repairs at 15 of the Commission’s 20 bridges under a single 2-1/2 year initiative
- The execution of comprehensive rehabilitation projects at 10 separate bridges:
  - Riverton-Belvidere
  - Trenton-Morrisville (Route 1)
  - Milford-Montague (Route 206)
  - Centre Bridge-Stockton
  - Calhoun Street
  - Riegelsville
  - Upper Black Eddy-Milford
  - Delaware Water Gap (I-80)
  - Lumberville-Raven Rock
  - Easton-Phillipsburg (Route 22)
10-ACRE PROPERTY PURCHASE PAVES WAY FOR NEW HEADQUARTERS BUILDING

Saddled with a 65-year-old administration building dating from the Truman administration and seizing an opportunity to better consolidate its professional staff at a single location, the Commission is moving to establish a new administrative headquarters.

The envisioned office building is to be built on a portion of a 10-acre parcel the agency purchased from Lower Makefield Township, PA. during 2016. The property is easily accessible via the I-95/Taylorsville Road interchange (exit 51) and is close to the Commission’s Scudder Falls Bridge, which is about to undergo a comprehensive replacement project over the next 4-1/2-years. The office building project is a separate undertaking, not part of the much broader bridge project.

The new facility will serve as the Commission’s administrative headquarters, replacing the agency's multi-use facility adjacent to Route 1 in Morrisville, PA. That four-story building has reached the end of its functional lifespan. The roof leaks. Heating and air conditioning is inefficient and prone to service disruptions. Working quarters are cramped with poor lighting and substandard ventilation. The list of deficiencies goes on.

The plan is to make the new Lower Makefield location the central hub of the Commission’s administration and executive operations. This would then allow the Commission to convert its Morrisville location into a regional maintenance center for the agency's southerly crossings.

The Commission closed on its Lower Makefield property purchase in October. The property consists of woodlands, wetlands and an underutilized park-and-ride lot.

As part of the purchase, the Commission committed to rehabilitating and right-sizing the current park-and-ride lot at the corner of Woodside and Taylorsville roads. The Commission already has assumed ownership of the lot, taking full responsibility for the operation, maintenance, landscaping, snow plowing and trash removal in perpetuity.

Overall, the Commission’s plans for the 10-acre site to include the new administration building; the reconstructed park-and-ride; approximately two acres of preserved wetlands and drainage swales; and a path that will extend from the park-and-ride lot toward the Delaware Canal towpath and the access ramp for the pedestrian/bicycle walkway that is to be constructed as part of the Scudder Falls Bridge Replacement Project. Like the park-and-ride lot, the connector path will be constructed and maintained at the Commission’s expense.

A design contract is expected to be awarded in early 2017. Barring setbacks, construction would begin in spring 2018 and reach completion during the latter half of 2019.
# Traffic Counts

## Annual Average Daily Traffic*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trenton-Morrisville Route 1</td>
<td>51,700</td>
<td>55,400</td>
<td>55,300</td>
<td>56,200</td>
<td>58,600</td>
</tr>
<tr>
<td>New Hope-Lambertville Route 202</td>
<td>10,200</td>
<td>10,600</td>
<td>12,000</td>
<td>12,100</td>
<td>12,200</td>
</tr>
<tr>
<td>Interstate 78</td>
<td>61,900</td>
<td>62,300</td>
<td>64,400</td>
<td>66,300</td>
<td>68,100</td>
</tr>
<tr>
<td>Easton-Phillipsburg Route 22</td>
<td>34,500</td>
<td>33,600</td>
<td>30,600</td>
<td>33,300</td>
<td>34,400</td>
</tr>
<tr>
<td>Portland-Columbia</td>
<td>7,300</td>
<td>6,900</td>
<td>7,100</td>
<td>7,700</td>
<td>8,000</td>
</tr>
<tr>
<td>Delaware Water Gap Interstate 80</td>
<td>49,900</td>
<td>50,500</td>
<td>50,300</td>
<td>52,100</td>
<td>53,500</td>
</tr>
<tr>
<td>Milford-Montague</td>
<td>6,000</td>
<td>6,200</td>
<td>6,200</td>
<td>6,600</td>
<td>6,700</td>
</tr>
<tr>
<td><strong>Total - Toll Bridges</strong></td>
<td>221,500</td>
<td>225,500</td>
<td>225,900</td>
<td>234,300</td>
<td>241,500</td>
</tr>
</tbody>
</table>

## Annual Average Daily Traffic*

<table>
<thead>
<tr>
<th>Toll-Supported Bridges</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Trenton</td>
<td>16,000</td>
<td>16,100</td>
<td>15,700</td>
<td>16,000</td>
<td>14,900</td>
</tr>
<tr>
<td>Calhoun Street</td>
<td>16,700</td>
<td>16,900</td>
<td>16,900</td>
<td>17,600</td>
<td>17,400</td>
</tr>
<tr>
<td>Scudder Falls Interstate 95</td>
<td>58,800</td>
<td>58,200</td>
<td>58,400</td>
<td>59,200</td>
<td>60,300</td>
</tr>
<tr>
<td>Washington Crossing</td>
<td>7,100</td>
<td>7,500</td>
<td>7,400</td>
<td>7,300</td>
<td>7,500</td>
</tr>
<tr>
<td>New Hope-Lambertville</td>
<td>14,300</td>
<td>14,100</td>
<td>13,800</td>
<td>13,700</td>
<td>13,400</td>
</tr>
<tr>
<td>Centre Bridge-Stockton</td>
<td>4,800</td>
<td>4,800</td>
<td>4,700</td>
<td>4,700</td>
<td>4,600</td>
</tr>
<tr>
<td>Uhlerstown-Frenchtown</td>
<td>4,100</td>
<td>4,100</td>
<td>4,000</td>
<td>4,000</td>
<td>4,400</td>
</tr>
<tr>
<td>Upper Black Eddy-Milford</td>
<td>3,500</td>
<td>3,400</td>
<td>3,700</td>
<td>3,700</td>
<td>3,700</td>
</tr>
<tr>
<td>Riegelsville</td>
<td>3,300</td>
<td>3,300</td>
<td>3,200</td>
<td>3,400</td>
<td>3,400</td>
</tr>
<tr>
<td>Northampton Street</td>
<td>20,200</td>
<td>20,900</td>
<td>20,600</td>
<td>19,900</td>
<td>19,300</td>
</tr>
<tr>
<td>Riverton-Belvidere</td>
<td>4,300</td>
<td>4,500</td>
<td>4,400</td>
<td>4,400</td>
<td>4,400</td>
</tr>
<tr>
<td><strong>Total - Toll Bridges</strong></td>
<td>221,500</td>
<td>225,500</td>
<td>225,900</td>
<td>234,300</td>
<td>241,500</td>
</tr>
</tbody>
</table>

## Total Commission-Wide Annual Average Daily Traffic

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Commission-Wide</strong></td>
<td>374,600</td>
<td>379,300</td>
<td>378,700</td>
<td>388,200</td>
<td>394,800</td>
</tr>
</tbody>
</table>

## Total Commission-Wide Yearly Traffic

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Commission-Wide</strong></td>
<td>137.1M</td>
<td>138.4M</td>
<td>138.2M</td>
<td>141.7M</td>
<td>144.5M</td>
</tr>
</tbody>
</table>

*Incidences where there are lower traffic counts may be a result of construction, bridge closures, or data-collection issues. Data reflects traffic in both directions.*
### Statement of Net Positions 2016

#### Assets

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and Cash Equivalents</td>
<td>$17,995,152</td>
<td>$61,593,263</td>
</tr>
<tr>
<td>EZPass and Violations Receivable (net of allowance for uncollectibles)</td>
<td>6,525,464</td>
<td>6,468,576</td>
</tr>
<tr>
<td>Other Receivables</td>
<td>251,613</td>
<td>224,082</td>
</tr>
<tr>
<td>Fiduciary Fund Receivable</td>
<td>1,567,095</td>
<td>622,791</td>
</tr>
<tr>
<td>Prepaid Expenses</td>
<td>201,205</td>
<td>881,986</td>
</tr>
<tr>
<td>Total Unrestricted Assets</td>
<td>26,540,529</td>
<td>69,790,698</td>
</tr>
</tbody>
</table>

| Restricted Assets | | |
| Cash and Cash Equivalents | 13,496,247 | 16,500,872 |
| Investment Income Receivable | 335,269 | 281,610 |
| Total Restricted Assets | 13,831,516 | 16,782,482 |
| Total Current Assets | 40,372,045 | 86,573,180 |

| Non-Current Assets | | |
| Unrestricted Assets | | |
| Investments | 194,677,154 | 148,750,269 |

| Restricted Assets Restricted Assets | | |
| Investments | 9,992,074 | 6,140,087 |
| Prepaid Bond Insurance | 546,500 | 593,145 |
| Total Restricted Assets | 10,538,574 | 6,733,232 |
| Net Other Post-Employment Benefits | 12,278,831 | 18,288,466 |

| Capital Assets | | |
| Completed (Net of Accumulated Depreciation) | 473,590,206 | 492,005,113 |
| Improvements in Progress | 75,713,036 | 38,176,547 |
| Total Capital Assets | 549,303,242 | 530,181,660 |
| Total Non-Current Assets | 766,797,801 | 703,953,627 |
| Total Assets | $807,169,846 | $790,526,807 |

#### Liabilities

| Current Liabilities Payable from Unrestricted Assets | | |
| Accounts Payable and Accrued Expenses | 17,355,428 | 11,015,477 |
| E-ZPass Customer Liability | 79,875 | 79,976 |
| Compensated Absences - Current Portion | 125,125 | 120,107 |
| Retainage Payable | 861,864 | 498,030 |
| Total Current Liabilities from Unrestricted Assets | 18,422,292 | 11,713,590 |

| Current Liabilities Payable from Restricted Assets | | |
| Accrued Interest Payable on Bonds | 4,063,755 | 4,211,434 |
| Bridge System Revenue Bonds Payable - Current Portion | 15,855,000 | 15,155,000 |
| Total Current Liabilities Payable from Restricted Assets | 19,918,755 | 19,366,434 |

| Non-Current Liabilities | | |
| Compensated Absences Payable | 1,960,297 | 1,881,672 |
| Bridge System Revenue Bonds Payable - Non Current Portion | 294,477,143 | 312,162,418 |
| Premium Payment Payable - Derivative Companion Instrument | 353,639 | 387,421 |
| Derivative Instrument - Interest Rate Swaps | 21,242,012 | 26,388,000 |
| Net Pension Liability | 57,167,774 | 46,534,536 |
| Total Non-Current Liabilities | 375,200,865 | 387,354,047 |
| Total Liabilities | 413,541,912 | 418,434,071 |

#### Deferred Outflow of Resources

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated Decrease in Fair Value Hedging Derivatives</td>
<td>$21,242,012</td>
</tr>
<tr>
<td>Deferred Loss on Refunding Debt</td>
<td>9,962,037</td>
</tr>
<tr>
<td>Change in Pension Assumptions</td>
<td>14,097,160</td>
</tr>
<tr>
<td>Total Deferred Outflow of Resources</td>
<td>45,301,209</td>
</tr>
</tbody>
</table>

#### Net Position

| Invested in Capital Assets | 266,823,221 | 236,020,416 |
| Restricted | 15,630,456 | 13,318,120 |
| Unrestricted | 155,873,166 | 165,292,454 |
| Total Net Position | $438,326,843 | $414,630,990 |