Reliable funding for Pennsylvania's transportation system.

Because of the eroding value of gas tax revenue and unreliable federal funding, we're looking for alternative sources of funding to take care of Pennsylvania's transportation system.
Despite rising traffic and freight travel in our state, the funds available to maintain our transportation system have not kept pace with our needs due to the eroding value of gas tax and uncertainty in future funding. Our investment needs are outgrowing our current funding, and this gap gets worse every year. That’s why we’ve launched a new program – PennDOT Pathways. Through this program, we are analyzing new future-focused sources of funding for our transportation system that could better serve our communities and all Pennsylvanians for the next generation.

In the current phase of the Pathways program, we are focusing on our highway and bridge funding needs. Many of Pennsylvania’s highways and bridges are in need of replacement or rehabilitation. We own, operate and maintain 25,400 bridges across the state. Of those bridges, more than 2,500 have been rated in poor condition. The average bridge age is 50 years, and with a typical life span of approximately 75 years, this need is not going away anytime soon. Repairs are critical to maintain safety, and making these repairs on our interstate bridges has required diverting funds from regional projects.
We are heading to zero gas tax revenue

The auto industry has committed $225B to electric vehicles

- **Chrysler**: 12 models by 2022
- **Ford**: 40 models by 2022
- **Volkswagen**: 50 percent of models by 2030
- **Volvo**: All models by 2030
- **GM**: All models by 2035
- **Honda**: All models by 2040
- **BMW**: 15-25 percent of sales by 2025
- **Toyota**: 50 percent of sales by 2025

*Sources: AlixPartners, Business Insider, The New York Times, BNN Bloomberg*
About PennDOT’s 25,400 bridges

**$6.9B**
Highway and Bridge Budget

**$15B**
Highway and Bridge Needs

**$8.1B**
Limited funds results in lost time and money for Pennsylvania travelers and freight operators

### Basic Needs

**Critical Maintenance**
Basic needs of our highways and bridges must be covered first to maintain safety and meet federal requirements.

**Pavement Repairs**
Fixing rough roads

**Traffic**
Reducing traffic congestion

**Reliability**
Keeping Bridges and Highways Open

### Impacts of Budget Shortfall

#### Impacts to PA

- **Delayed maintenance**
  - Delayed maintenance leads to expensive fixes later, and a risk of closures and detours.

- **Lost time**
  - $5.8 B in lost time and fuel costs

- **Bridge closure**
  - One bridge closure can cost Pennsylvania drivers approximately $70K per day

#### Impacts to the Traveling Public

- **More fuel & maintenance costs**
  - $550 per commuter lost

- **Lost time**
  - $1,100 in lost time and fuel costs per commuter

- **Unpredictable detours**
  - $10 of fuel and vehicle costs per detour

#### Impacts to Freight Mobility

- **Weight Restrictions**
  - NHS bridges may need to be posted with weight restrictions requiring detours that increase truck travel time and costs.

- **Truck Bottlenecks**
  - Pennsylvania has six of the top 100 “truck bottlenecks” in the United States – raising costs of goods and services.

- **Additional Costs**
  - Costs truck drivers an additional 14.2 million hours per year.

The budget shortfall impacts everyone - individuals like you, businesses across Pennsylvania and the goods and services on which we rely.

These reduced funds, combined with federal performance requirements, mean we’ve had to shift funding from other regional projects to maintain safety, overall pavement and bridge conditions on the Interstates.

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1. Based on the difference in vehicle maintenance costs for commuter driving an average distance of 30 miles per day to work (roundtrip) on smooth versus on poor quality pavement.
2. Based on congestion in PA urban areas, and monetized using national value of time rates, and average state fuel prices.
3. Calculated based on average detour length of 9.8 miles, average speed of 55 mph, and AADT for PA bridges.
We’ve worked hard to make the most of our available funding and have found some ways to secure additional funding. For example, with the help of Act 44 and Act 89, we were able to generate revenue from the Pennsylvania Turnpike and gas taxes, allowing us to complete nearly 4,000 projects worth more than $10 billion since its passage in 2013. We have more than 500 projects underway worth more than $4.5 billion, and roughly 1,700 projects on our four or 12-year plans. While Act 89 was a significant achievement, it did not meet the needs identified at the time and those needs have grown over time.

See active and planned construction projects at www.projects.penndot.gov.
Now that we have identified some of the potential funding options, how do we figure out what works best for Pennsylvania?

The PennDOT Pathways Program began with a Planning and Environmental Linkages, or PEL, Study, which was released for public comment in Spring of 2021. The PEL study evaluated potential funding options and analyzed which options likely work best for various situations, as well as which options would provide the best near- and long-term solutions.

The PEL Study is broken down into the following sections which cover:

1. Background about the transportation funding gap
2. Discussion of alternative funding options and which might be candidates for near-term versus long-term solutions
3. Identification of methodology for addressing environmental effects of the solutions including effects on low-income and minority populations
4. Public and agency outreach conducted as part of the PEL study

What questions do we ask when analyzing a potential funding solution?

- What are the benefits of this funding solution?
- Are there any negative impacts of this funding solution?
- What are the effects of this funding solution on low-income and minority populations?
- Does the funding solution consider our infrastructure requirements?

When assessing long-term solutions, we also ask:

- What approvals or authorizations will the funding solution require?
- How long will it take to put the funding solution into practice?

Learn more at: penndot.gov/about-us/funding/Pages/PEL-VM.aspx
The Major Bridge P3 Initiative is the first alternative funding initiative of the PennDOT Pathways program, a program to secure sustainable funding for our transportation system. The Major Bridge P3 Initiative is designed to raise revenue through tolling to address the state’s growing backlog of major bridge replacement and rehabilitation needs. These bridges would use a Public-Private Partnership (P3) contracting and delivery method.

Through the P3 model, PennDOT can leverage private investment to rebuild critical bridges during a period with historically low interest rates and a labor market in which people are looking for work. This initiative can provide a dedicated source of revenue for these infrastructure improvements and could create significant savings over the life of the program while ensuring the vitality of the state’s transportation system and economy.

Bridge tolling can provide the funds to replace or rehabilitate these costly bridges without using PennDOT’s current funding, which in turn allows those funds to be used for other roadway maintenance, operations and improvements. Tolling would be all electronic and collected by using E-ZPass or license plate billing. The funds received from the toll would go back to the bridge where the toll is collected to pay for the construction, maintenance and operation of that bridge.
In PA, every $1.0 billion invested in bridge replacement or rehabilitation creates 10,493 jobs and generates $2.2 billion in business sales within our state's economy.

10,493 job-years is equivalent to a total of 10,493 years of individual employment over the life of the project.

Top Job Categories

- Construction: 3,628 jobs
- Professional, scientific, and technical services: 714 jobs
- Health care and social assistance: 715 jobs
- Retail trade: 1,047 jobs
- Durable goods manufacturing: 650 jobs

These represent the top 5 job categories. It is estimated that another 3,739 jobs would be created in other sectors.

Calculations based on U.S. Bureau of Economic Analysis RIMS II multiplier data.
To support PennDOT Pathways, an alternative funding Planning and Environmental Linkages (PEL) study was conducted to identify near- and long-term funding solutions and establish a methodology for their evaluation. One of the early findings of the PEL study is that bridge tolling of major bridges in need of replacement or rehabilitation could be a viable near-term solution. To advance this funding alternative, PennDOT is simultaneously pursuing the first initiative of the PennDOT Pathways Program: The Major Bridge P3 Initiative.

**PennDOT Pathways**

A long-term program to analyze and implement new future-focused sources of funding for our transportation system that could better serve our communities and all Pennsylvanians for the next generation.

**Planning and Environmental Linkages Study**

A study evaluating potential funding solutions to support the PennDOT Pathways program and identifying which ones could be used in the near- and long-term to help build stable and dedicated transportation funding for Pennsylvania.

**Potential Mid/Long Term Solutions**

- Congestion Pricing
- Corridor Tolling
- Mileage-Based User Fees
- Fee & Tax Increases

**Future Initiatives**

Future initiatives will include alternative funding approaches identified for implementation as recommended in the Planning and Environmental Linkages Study.

**Potential Near Term Solutions**

- Managed Lanes
- Bridge Tolling

**Major Bridge Public-Private Partnership Initiative**

Initiative to toll major bridges in need of replacement or rehabilitation. Major bridge tolling can be implemented in the next 2 to 4 years to address today’s funding gap. The ability to toll requires the use of a Public-Private Partnership (P3) contracting method, authorized by the P3 Board to make this a viable alternative funding option - a tool in our toolbox. Each bridge project advances on its own schedule through:

- National Environmental Policy Act*
- Public Involvement**
- Engineering
- Right of Way Acquisition
- Permits
- Utilities
- Geotech
- Gantry design
- Diversion Route Analysis
- Mitigation

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*National Environmental Policy Act required public involvement

**Required Planning Study Public Involvement
Our Proposed Immediate Solution

Bridge Tolling

Tolling is proven successful in the US:

- **129** tolling operators (agencies)
- **$22B** in revenue generated in the US from toll facilities each year (2019)
- **346** toll facilities nationwide
  - 195 roads
  - 137 bridges
  - 15 tunnels

This is a solution that can be implemented quickly. Why...

- E-ZPass and toll collection systems already exist
- We are authorized under current federal and state laws
- We can implement within 2-4 years
- Public-Private Partnerships can accelerate project delivery
Bridge Tolling: A Closer Look

How it works

1. Tolling equipment installed over the roadway, recording tolls electronically without a driver having to slow down.

2. Tolls are collected through E-ZPass and Toll by Plate, by the Pennsylvania Turnpike Commission, and sent to PennDOT.

3. PennDOT uses the revenue to pay for the bridge replacement or rehabilitation and continued maintenance of the facility. This also means more funding will be available for other projects statewide.

Benefits

- Creates a dedicated funding source for that bridge, including costs of construction, regular maintenance and operations
- Avoids the reallocation of traditional funding away from other local/regional projects
- Only those that use the bridge pay for it, including out-of-state travelers that may not have purchased gas in the state and don’t pay license and registration fees
- The interstate system in Pennsylvania carries 25 percent of our traffic and serves as the economic backbone for many communities as well as the Northeastern portion of the US. By investing in our infrastructure, we will enable Pennsylvania to remain economically viable into the future
- For every $1 billion of investment in our highways and bridges, we generate 10,493 jobs and additional economic output of $2.2 billion for our economy

Challenges

- Drivers may avoid tolls
- Potential for impacts to local communities
- Perception of unfairness by users living/working near toll bridges
### Candidate Bridge Projects

<table>
<thead>
<tr>
<th>PennDOT District</th>
<th>Bridge Project</th>
<th>Year(s) Built</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>I-81 Susquehanna Project</td>
<td>1961</td>
</tr>
<tr>
<td>B</td>
<td>I-80 Nescopeck Creek Bridges</td>
<td>1965</td>
</tr>
<tr>
<td>C</td>
<td>I-78 Lenhartsville Bridge Replacement Project</td>
<td>1955</td>
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<tr>
<td>D</td>
<td>I-80 Over Lehigh River Bridge Project</td>
<td>1965</td>
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<tr>
<td>E</td>
<td>I-95 Girard Point Bridge Improvement Project</td>
<td>Late 1960s-1970s</td>
</tr>
<tr>
<td>F</td>
<td>I-83 South Bridge Project</td>
<td>1960</td>
</tr>
<tr>
<td>G</td>
<td>I-80 Canoe Creek Bridges</td>
<td>1966</td>
</tr>
<tr>
<td>H</td>
<td>I-80 North Fork Bridges Project</td>
<td>1962</td>
</tr>
<tr>
<td>I</td>
<td>I-79 Widening, Bridges and Bridgeville Interchange Reconfiguration</td>
<td>1965</td>
</tr>
</tbody>
</table>
How the Bridges Were Chosen

The candidate bridges being considered for tolling through the Major Bridge P3 Initiative were selected based on the following criteria:

- Located on the interstate or expressway
- Structures of significance based on size, location and cost to replace or rehabilitate
- Structural conditions that warrant timely attention to enhance safety and avoid disruption and community impacts if closure or weight restrictions were imposed
- Geographic balance throughout the state
- Can begin construction in two to four years for near-term benefit
- Revenue potential of the bridge location based on general traffic levels

Next Steps for the Major Bridge P3 Initiative

PennDOT will evaluate these candidate bridges through individual environmental documents being prepared or re-evaluated for each bridge. Each project will advance with an evaluation on the impacts of tolling in the community to include:

- Impacts to minority and low-income populations
- Traffic diversion impacts from drivers avoiding the toll

Visit the candidate bridge website for more information on how to engage on a specific bridge project.
Visit [penndot.gov/funding](penndot.gov/funding) for up-to-date information about the PennDOT Pathways Program.
Why do we need to fix these bridges?

Existing Bridge Statistics

User Profile: Primarily commuters
Built: 1965
Last Rehabilitated: 1998

Average Daily Traffic
87,000 vehicles per day

Truck Traffic
12% of total vehicles

Current and increasing traffic volumes

I-79 Dual Bridges Over SR 50, Chartiers Creek and W&LE Railroad
Prestley Road Overpass
Bridgeville Interchange Improvements
I-79 Third Lane Widening

www.penndot.gov/i79Bridgeville
Why these bridges?

Overview

The I-79 Widening, Bridge and Bridgeville Interchange Reconfiguration is a three-mile interstate widening and rehabilitation project from Alpine Road to just before the Collier interchange and Prestley Road.

In addition to replacing the dual I-79 bridges over SR-50, the project will rehabilitate the existing structures over the W&LE Railroad and Chartiers Creek, make improvements to the I-79/SR-50 interchange and bring the roadway up to date in order to improve safety along the corridor.

Why

- The corridor is a major connection in the interstate system through western PA that links travelers, deliveries and more to the Pittsburgh area.
- Adding lanes in both directions will help manage traffic congestion in the corridor.
- Replacing and rehabilitating the bridges will increase their longevity and reduces the cost and frequency of future repairs.
- Improvements will improve safety in the corridor.

How will this benefit your region?

- Accommodate future growth in traffic volumes
- Benefits to freight travel
- Reliable transportation — less frequent repairs and maintenance

Revenue generated from bridge toll goes back into this project.

Estimated Construction Cost: $100 million – $150 million

The I-79 Widening, Bridges and Bridgeville Interchange Reconfiguration is critical and needs to be completed. If the project is funded by bridge tolling, funds would be freed up to allow other critical projects to continue to move forward in the region.

PennDOT’s Major Bridge P3 Initiative is anticipated to invest $2.2 billion in the replacement and rehabilitation of major bridges across the state. Funding these bridges with tolls could free up enough funds to either:

- Repave ~1,900 miles of highways
- Build ~730 miles of new highway lanes
- Replace ~6,600 miles of guiderail
Average Daily Traffic

30,119 vehicles per day (2025-projected)

Truck Traffic

50% of total vehicles

Why do we need to fix these bridges?

Aging, fracture-critical bridge structures

Need for design improvements

Increased frequency of inspections
**Why these bridges?**

**Overview**

The purpose of the I-80 Canoe Creek Bridges project is to provide a safe and reliable crossing of I-80 over Tippecanoe Road and Canoe Creek. While both bridges have been repaired several times throughout their lifespan, recent inspections show the westbound bridge is in poor condition, and the eastbound bridge is in fair condition. The project is intended to replace the existing structures and update the roadway within the project limits to meet current design criteria and improve safety along the corridor.

**Why**

- The corridor is a major trucking route and part of a vital thoroughfare in rural western Pennsylvania.
- Replacing the bridges will greatly increase their longevity and reduce the cost and frequency of future repairs.
- Improvements will enhance safety and bring the corridor up to current design standards.

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**How will this benefit your region?**

- Accommodate future growth in traffic volumes
- Benefits to freight travel
- Reliable transportation — less frequent repairs and maintenance

---

**Revenue generated from bridge toll goes back into this project.**

**Estimated Construction Cost:** $90 million – $105 million

---

The I-80 Canoe Creek Bridges project is critical and needs to be completed. If the Canoe Creek Bridges are funded by bridge tolling, funds would be freed up to allow other critical projects to continue to move forward in the region.

PennDOT’s Major Bridge P3 Initiative is anticipated to invest $2.2 billion in the replacement and rehabilitation of major bridges across the state. Funding these bridges with tolls could free up enough funds to either:

- Repave ~1,900 miles of highways
- Build ~730 miles of new highway lanes
- Replace ~6,600 miles of guiderail
**Average Daily Traffic**

148,500 vehicles per day

**Truck Traffic**

6% of total vehicles

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**Why do we need to fix this bridge?**

[Map of the area showing Girard Point Bridge and the major interstate connection along the eastern seaboard.]

Existing Bridge Statistics

**User Profile:**
Primarily commuters

**Built:**
Late 1960s/Early 1970s

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I-95 Girard Point Bridge Improvement Project

www.penndot.gov/i95GirardPoint
Overview

The purpose of the I-95 Girard Point Bridge Improvement Project is to ensure that this bridge, which is an essential transportation facility for the Philadelphia metropolitan region, continues to provide a safe and reliable crossing over the Schuylkill River, and to improve the adjacent approach structures and pavement between Island Avenue and the Philadelphia Navy Yard.

The project is intended to provide a smoother driving experience, enhanced safety, improved access to the adjacent Philadelphia International Airport and Navy Yard and to keep the bridge in sound structural condition.

Why

- Major connection in the interstate system that links the Philadelphia International Airport and Navy Yard as well as Delaware County and Philadelphia.
- Connects travelers, deliveries and more throughout the eastern seaboard.
- Rehabilitation will increase the remaining service life of the structures and will improve the overall bridge condition rating.

Revenue generated from bridge toll goes back into the Girard Point Bridge.

Estimated Construction Cost: $500 million – $600 million

The I-95 Girard Point Bridge Improvement Project is critical and needs to be completed. If the Girard Point Bridge is funded by bridge tolling, funds would be freed up to allow other critical projects to continue to move forward in the region.

PennDOT’s Major Bridge P3 Initiative is anticipated to invest $2.2 billion in the replacement and rehabilitation of major bridges across the state. Funding these bridges with tolls could free up enough funds to either:

- Repave ~1,900 miles of highways
- Build ~730 miles of new highway lanes
- Replace ~6,600 miles of guiderail
Average Daily Traffic

44,228 vehicles per day (2021)

Truck Traffic

31% of total vehicles

Why do we need to fix this bridges?

- Bridge width inconsistent with the rest of I-78 corridor
- Aging bridge structure nearing the end of its serviceable lifespan
- Substandard acceleration/deceleration lane lengths

Existing Bridge Statistics

User Profile:
Mix of commuters and interstate traffic, including trucks

Built:
1955

Last Major Rehabilitation:
1985

I-78 Lenhartsville Bridge Replacement Project

www.penndot.gov/i78Lenhartsville
Why this bridge?

Overview

The purpose of the project is to replace the existing bridge on I-78 over Maiden Creek and PA-143 and to widen it to accommodate the addition of auxiliary lanes and full inside and outside shoulders on I-78 in each direction.

The project is intended to address the substandard I-78 westbound deceleration and I-78 eastbound acceleration lane lengths to and from the PA-143 interchange.

Why

- This portion of the I-78 corridor is a vital east/west trucking route through Pennsylvania.
- Replacing the bridge will greatly increase its longevity and reduce the cost and frequency of future repairs.
- Improvements to the bridge and acceleration and deceleration lanes will improve safety along the corridor.

How will this benefit your region?

- Accommodates current and future traffic volumes
- Supports freight travel
- Reliable transportation — less frequent repairs and maintenance

Revenue generated from bridge toll goes back into this project.

Estimated Construction Cost: $40 million – $50 million

The I-78 Lenhartsville Bridge Replacement Project is critical and needs to be completed. If the Lenhartsville Bridge is funded by bridge tolling, funds would be freed up to allow other critical projects to continue to move forward in the region.

PennDOT’s Major Bridge P3 Initiative is anticipated to invest $2.2 billion in the replacement and rehabilitation of major bridges across the state. Funding these bridges could free up enough funds to either:

- Repave ~1,900 miles of highways
- Build ~730 miles of new highway lanes
- Replace ~6,600 miles of guiderail
I-80 Nescopeck Creek Bridges

www.penndot.gov/i80Nescopeck

Existing Bridge Statistics

User Profile:
Mix of commuters and interstate traffic, including trucks

Built:
1965

Last Repaired:
2005

Average Daily Traffic
33,000 vehicles per day (2019)

Truck Traffic
36% of total vehicles

Why do we need to fix these bridges?

Aging bridge structures nearing the end of their serviceable lifespan

Substandard bridge width
Why these bridges?

Overview

The purpose of the I-80 Nescopeck Creek Bridges project is to provide a safe and reliable crossing over Nescopeck Creek. The project will replace and widen the bridges to provide wider shoulders that meet current standards and accommodate and facilitate future maintenance activities on the bridge.

Once complete, the new bridges will improve traffic flow, extend the life of existing infrastructure and enhance traffic safety.

Why

- The corridor is part of a major trucking route through eastern Pennsylvania.
- Replacing the bridges will greatly increase their longevity and reduce the cost and frequency of future repairs.
- Widening the bridges will allow future inspections to take place in the shoulders, reducing short-term traffic impacts.

How will this benefit your region?

- Accommodate future growth in traffic volumes
- Benefits to freight travel
- Reliable transportation — less frequent repairs and maintenance

Revenue generated from bridge toll goes back into the I-80 Nescopeck Creek Bridges.

Estimated Construction Cost: $30 million – $40 million

The I-80 Nescopeck Creek Bridges are critical and needs to be completed. If the Nescopeck Creek Bridges are funded by bridge tolling, funds would be freed up to allow other critical projects to continue to move forward in the region.

PennDOT’s Major Bridge P3 Initiative is anticipated to invest $2.2 billion in the replacement and rehabilitation of major bridges across the state. Funding these bridges with tolls could free up enough funds to either:

- Repave ~1,900 miles of highways
- Build ~730 miles of new highway lanes
- Replace ~6,600 miles of guideway
Average Daily Traffic
30,897 vehicles per day (2026-projected)

Truck Traffic
44% of total vehicles

Why do we need to fix these bridges?

Need for design improvements

Aging, fracture-critical bridge structures

Twice as many crashes as statewide average due to substandard design

Existing Bridge Statistics

User Profile:
Mix of commuters and interstate traffic, including a high percentage of trucks

Built:
1962

Last Rehabilitated:
2013

I-80 North Fork Bridges Project

www.penndot.gov/i80NorthFork

Existing Westbound Bridge

Existing Bridge Statistics

CE Evaluation: XXXX
Potential Tolling Starts: TBD
Construction: TBD

I-80 North Fork Bridges Project

www.penndot.gov/i80NorthFork

Twice as many crashes as statewide average due to substandard design

Need for design improvements

Aging, fracture-critical bridge structures

I-80 WB North Fork Bridge

I-80 EB and WB Bridges over SR 4003

North Fork Park Culvert Extension

SR 4005 Bridges over I-80

I-80 EB North Fork Bridge

SR 0028 / Main Street

SR 0028 / Allegheny Blvd.
## Why these bridges?

### Overview

The purpose of the project is to provide safe, efficient and effective crossings of I-80 over North Fork Redbank Creek and Water Plant Road. Both bridges have problematic fatigue details which have received multiple retrofits during the service lives of the structures. Both bridges are reaching the end of their serviceable lifespan. This section of I-80 has a posted speed limit of 70 mph, and many crashes – twice the statewide average – occur on the eastbound bridge due to a substandard curve on its western approach.

### Why

- The corridor is a major trucking route and part of a vital thoroughfare in rural western Pennsylvania.
- Replacing the bridges will greatly increase their longevity and reduce the cost and frequency of future repairs.
- Realigning the bridges will improve safety by bringing the bridge design up to current design standards, reducing the number of crashes in the corridor.

## How will this benefit your region?

- **Accommodate future growth in traffic volumes**
- **Benefits to freight travel**
- **Reliable transportation — less frequent repairs and maintenance**

### Revenue generated from bridge toll goes back into this project.

**Estimated Construction Cost:** $165 million – $185 million

The I-80 North Fork Bridges Project is critical and needs to be completed. If the North Fork Bridges are funded by bridge tolling, funds would be freed up to allow other critical projects to continue to move forward in the region.

**PennDOT’s Major Bridge P3 Initiative is anticipated to invest $2.2 billion in the replacement and rehabilitation of major bridges across the state. Funding these bridges with tolls could free up enough funds to either:**

- Repave ~1,900 miles of highways
- Build ~730 miles of new highway lanes
- Replace ~6,600 miles of guiderail
Average Daily Traffic

27,000 vehicles per day (2017)

Truck Traffic

41% of total vehicles

Why do we need to fix these bridges?

- Aging infrastructure
- Outdated interchange designs
- Outdated construction methods
- Drainage concerns
The purpose of the I-81 Susquehanna Project is to address aging pavement and infrastructure along I-81 including the bridge over the Susquehanna River, and to lengthen on and off ramps to meet current interstate design standards and improve safety. The project involves a number of construction activities, including repaving all roadway in the corridor; replacing five dual bridge structures, including the bridges over the Susquehanna River and one overpass structure; replacing the drainage system; replacing all guide rails, barriers and signage in the corridor; and construction work on Susquehanna Street, PA-171 and PA-1029 (Randolph Road).

Why these bridges?

**Overview**

This portion of the I-81 corridor is a crucial trucking route in eastern Pennsylvania, connecting the state with much of the eastern seaboard.

Replacing the Susquehanna River Bridges will greatly reduce the cost and frequency of future repairs.

Updating the roadway and interchange design will enhance safety throughout the corridor.

---

**How will this benefit your region?**

- Accommodates current and future traffic volumes
- Supports freight travel
- Reliable transportation — less frequent repairs and maintenance

---

**Revenue generated from bridge toll goes back into the Susquehanna Project.**

**Estimated Construction Cost:** $175 million – $200 million

---

The I-81 Susquehanna Project is critical and needs to be completed. If the Susquehanna Project is funded by bridge tolling, funds would be freed up to allow other critical projects to continue to move forward in the region.

**PennDOT’s Major Bridge P3 Initiative is anticipated to invest $2.2 billion in the replacement and rehabilitation of major bridges across the state. Funding these bridges could free up enough funds to either:**

- Repave ~1,900 miles of highways
- Build ~730 miles of new highway lanes
- Replace ~6,600 miles of guiderail
Why do we need to fix these bridges?

The purpose of the I-80 over Lehigh River Bridge Project is to address the deterioration of the aging bridge structures and thereby provide safe and structurally sufficient bridges that will provide connectivity for interstate travelers, commuters, commercial users, emergency services, tourists and local residents. The project will replace the aging bridges with wider structures; increase the length of the eastbound on-ramp auxiliary lane, the height of the bridges’ barriers and the width of the shoulders to meet current interstate design standards; and improve safety in the corridor.

Existing Bridge Statistics

User Profile:
Mix of commuters and interstate traffic, including a high percentage of trucks

Built:
1965

Average Daily Traffic
27,000 vehicles per day

Truck Traffic
44% of total vehicles

Vital to movement of goods and people; deterioration of the bridges could result in restrictions on freight movement

Aging bridge structures approaching end of service life
### Why replace the I-80 over Lehigh River Bridges?

<table>
<thead>
<tr>
<th>Rehabilitate</th>
<th>Replace</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Addresses some structural deficiencies</td>
<td>✓ Meets the project’s Purpose and Need</td>
</tr>
<tr>
<td>✖ Does not significantly extend service life of the bridges as they will remain fracture critical</td>
<td>✓ Brings bridge design up to current design standards</td>
</tr>
<tr>
<td>✖ Does not improve the substandard shoulder widths and acceleration lane length</td>
<td>✓ Provides shoulder widths and on-ramp acceleration length that meet current design criteria</td>
</tr>
<tr>
<td>✖ Requires long-term lane closures on I-80 during construction</td>
<td>✓ Minimizes durations of lane closures during construction</td>
</tr>
<tr>
<td>✖ Has shorter life span and higher life-cycle costs compared to Replacement alternative</td>
<td>✓ Provides the longest anticipated life span (100 years) compared to Rehabilitation alternatives (10-25 years)</td>
</tr>
</tbody>
</table>

### How will this benefit your region?

- Accommodate future growth in traffic volumes
- Benefits to freight travel
- Reliable transportation — less frequent repairs and maintenance

### Revenue generated from bridge toll goes back into this project.

**Estimated Construction Cost:** $47 million - $52 million

The I-80 over Lehigh River Bridge Project is critical and needs to be completed. If the bridges over the Lehigh River are funded by bridge tolling, funds would be freed up to allow other critical projects to continue to move forward in the region.

**PennDOT’s Major Bridge P3 Initiative is anticipated to invest $2.2 billion in the replacement and rehabilitation of major bridges across the state.** Funding these bridges with tolls could free up enough funds to either:

- Repave ~1,900 miles of highways
- Build ~730 miles of new highway lanes
- Replace ~6,600 miles of guiderail
I-83 John Harris Memorial (South) Bridge

www.penndot.gov/i83SouthBridge

Conceptual Construction Cost Estimate

$500 – $650 million

Why do we need to replace this bridge?

Increasing annual maintenance needs and more frequent short-term lane closures

Bridge is approaching the end of its serviceable lifespan.

Traffic delays during peak travel hours

Existing Bridge Statistics

Average Daily Traffic (ADT):
125,000 vehicles per day (2019)
16,000 freight traffic per day (2016)

User Profile:
Vital interstate link across the Susquehanna river. Combination of Harrisburg commuter traffic and through interstate traffic.

Built: 1960  Last Widened: 1982

Bridge Structure:
Two girder steel bridge supporting a ~3,300-foot long section of Interstate 83. Approaching the end of its serviceable lifespan.
I-83 John Harris Memorial (South) Bridge

Why replace South Bridge?

**Replace**
- Low impact to traffic during construction by constructing replacement structure adjacent to current bridge.
- Meets future traffic demands by adding lanes.
- 100-year lifespan.

**Rehabilitation**
- Several multi-year, multiple lane closures for rehabilitation and repairs.
- Does not meet future traffic demands. No additional lanes would be added.
- Additional lifespan is uncertain, but would be substantially less than a replacement option and would eventually require a full replacement.
- Partial replacement of only deck and beams is not feasible. Would cause unacceptable traffic impacts with half of all lanes closed for 4+ years.

**Do Nothing**
- Impacts to traffic during frequent needed maintenance repairs.
- Does not meet future traffic demands.
- Bridge is approaching the end of its serviceable lifespan. Will need frequent and costly repairs. Potential to restrict freight traffic and implement lane closures or detours.

How will this benefit your region?

- **Accommodate Future Growth in Traffic Volumes**
- **Benefits to freight travel**
- **Reliable Transportation — less frequent bridge repairs and maintenance**

Revenue generated from bridge toll goes back into South Bridge.

**South Bridge Estimated Construction Cost:** $500 million – $650 million

**Bottom line:** The I-83 South Bridge Project is critical and needs to be completed. If the South Bridge is funded by bridge tolling, funds would be freed up to allow other critical transportation projects to continue to move forward in the region.

PennDOT's Major Bridge P3 Initiative is anticipated to invest $1.6 billion to $2.2 billion in the replacement and rehabilitation of major bridges across the state. Funding these bridges with tolls could free up enough funds to either:

- Repave ~1,900 miles of highways
- Build ~730 miles of new interstate lanes
- Replace ~6,600 miles of guiderail