

Pennsylvania Asphalt Pavement Association Pennsylvania Rides on US.



JULY 26, 2023

MIKE REBERT, P.E.
DEPUTY SECRETARY FOR HIGHWAY ADMINISTRATION



FOCUS AREAS: ABOUT PEOPLE

- **≻**Safety
- ➤ Program Delivery
 - **≻**Relationships
 - ➤ Asset Management
 - ➤ Pavement Updates
 - >Innovation
 - ➤ Program
- **≻**Funding
- ➤ 2023 Program Outlook





SAFETY:

- WORKFORCE
- WORK ZONES
- FAMILIES
- PUBLIC



INDUSTRY-WIDE SAFETY STAND-DOWN



#StandDown2SaveLives





MENTAL HEALTH STATISTICS

1 in 5 U.S. adults experience mental illness

Approximately 1 suicide every 11 minutes

Stigma prevents 40% of people with anxiety or depression from seeking help

Construction suicides are 5x greater than all fatal construction injuries (2018)

The suicide rate among men in construction is about 4x higher than the general population

From 2000-2016, the working age adult suicide rate increased 34%

If you or someone you know is in crisis, please contact the

National Suicide Prevention Lifeline

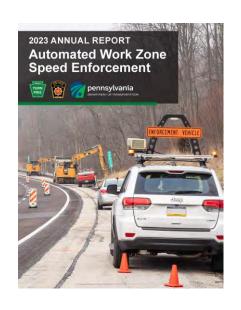
- Call 1-800-273-TALK (8255)
- Use the online Lifeline Crisis Chat
- www.suicidepreventionlifeline.org

Text HOME to 741741

or free, 24/7 crisis support in the US.



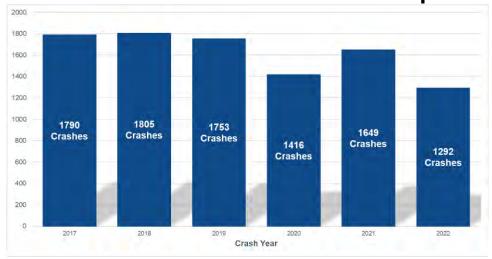
AUTOMATED WORK ZONE SPEED ENFORCEMENT



- ➤ Annual report published April 2023
- ➤ Covers from start of program to end of 2022
- ➤ Program is fulfilling its stated goals
- ➤ Program is focused on **SAFETY**, not revenue
 - ➤ Operated at a loss through end of 2022

>69% of deployments have been to short-term patterns





All Work Zone Crashes - 2017-2022





FATALITIES





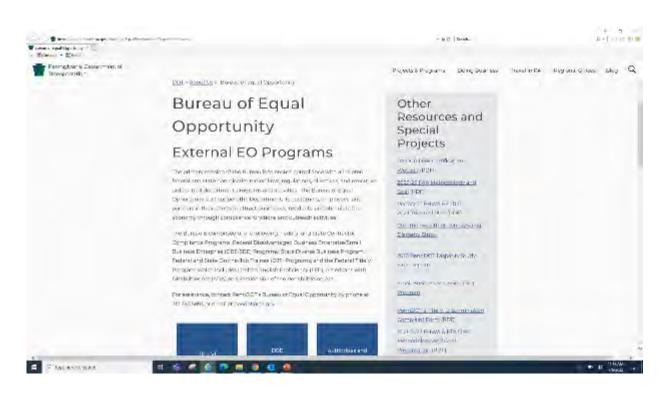
PROJECT DELIVERY:

- RELATIONSHIPS
- ASSET MANAGEMENT
- QUALITY
- GREEN INITIATIVES



DIVERSITY, EQUITY AND INCLUSION

- ✓ Mentor-Protégé Program
- ✓ Major Bridge P3 DBE Program
- ✓ On the Job Training Program



https://www.penndot.gov/about-us/EqualEmployment/Pages/default.aspx



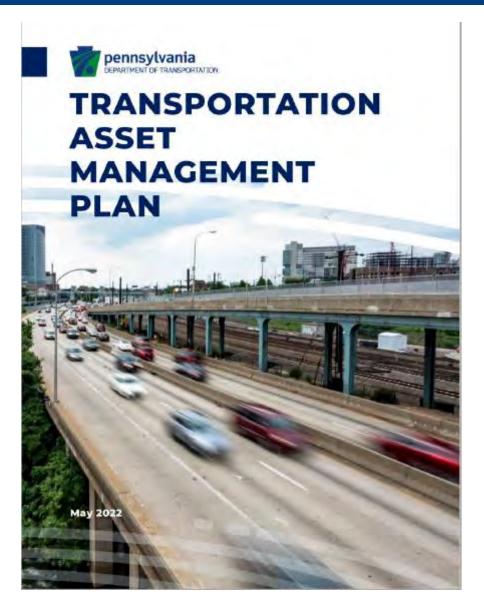
ASSET MANAGEMENT

2022 Transportation Asset Management Plan

- Draft submitted to FHWA in May 2022
- BIL compliant version submitted in December of 2022
- FHWA final approval March 31, 2023
- Available to view at:

Asset Management (pa.gov)

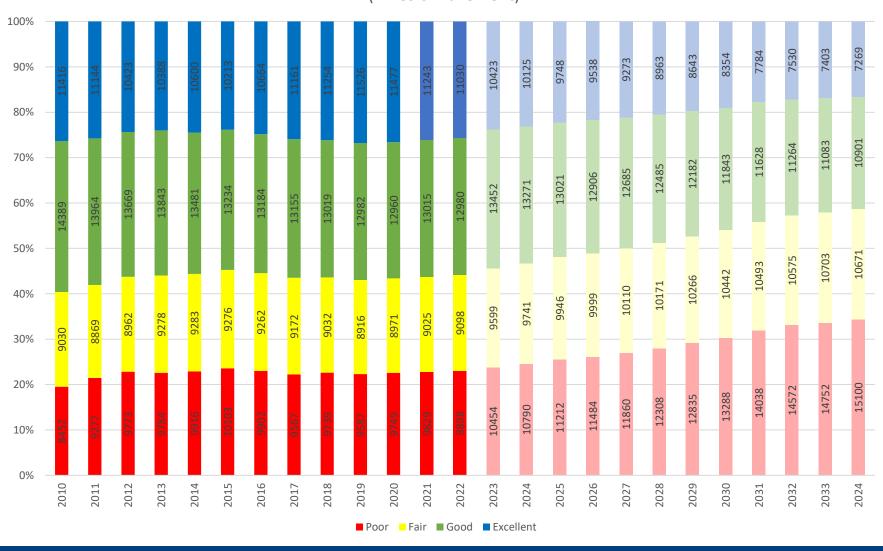
(google "PennDOT Tamp")





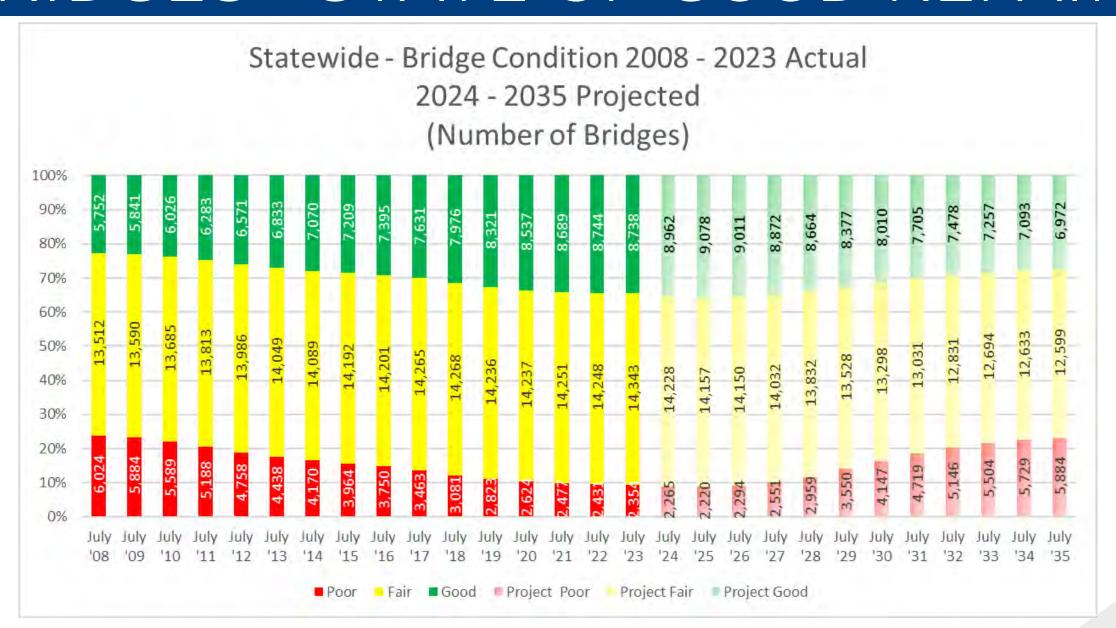
ROADWAYS - STATE OF GOOD REPAIR

Statewide - Pavement Condition 2010-2022 Actual 2023-2034 Projected (Miles of Pavement)





BRIDGES - STATE OF GOOD REPAIR





INDUSTRY INTERACTION

Quarterly Industry Forum

Meeting with Deputy Secretary and Industry Association Executives

Quality Improvement Committees

- Asphalt Paving Quality Improvement Committee (APQIC)
- Concrete Paving Quality Improvement Committee (CPQIC)
- Aggregate Quality Improvement Committee (AQIC)
- Concrete Quality Improvement Committee (CQIC)
- Pennsylvania Association of Asphalt Material Applicators Quality Improvement Committee (PAAMA-QIC)
- Cement Quality Improvement Committee (CEMQIC)
- Slag Quality Improvement Committee (SlagQIC)





ASPHALT PAVING QIC (APQIC)

Activities and Accomplishments

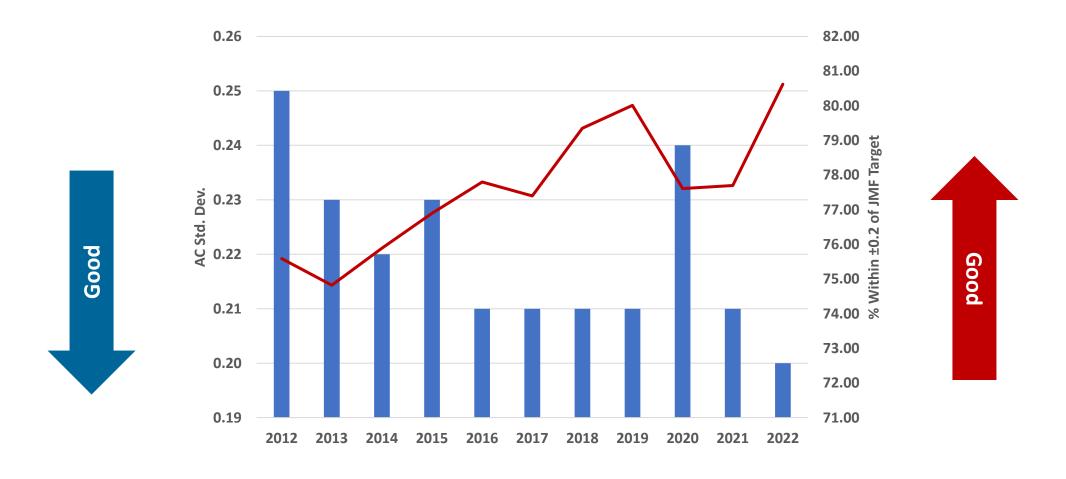
- e-Ticketing 2022 Pilots & Revised Special Provision for 2023
- Implementation of Performance Related Testing into PA's Asphalt Mix Design Approval Process
- Mixture Performance Testing PSU Research/Data Collection
- Plastics in Asphalt Binder
- Revisions to typical Paving Notch Detail and implementation in RC-20M and RC28M

- Hi-Polymerized Asphalt Binder
- Virtual Asphalt Acceptance Testing (VAAT)
- Long-Life Pavement Life Cycle Cost Analysis Development.
- Post-Consumer Recycled Asphalt Shingles
- SMA with 10% RAP Pilot Projects
- Fiberless SMA Pilots
- Subcommittees



QUALITY - TRENDS & TARGETS

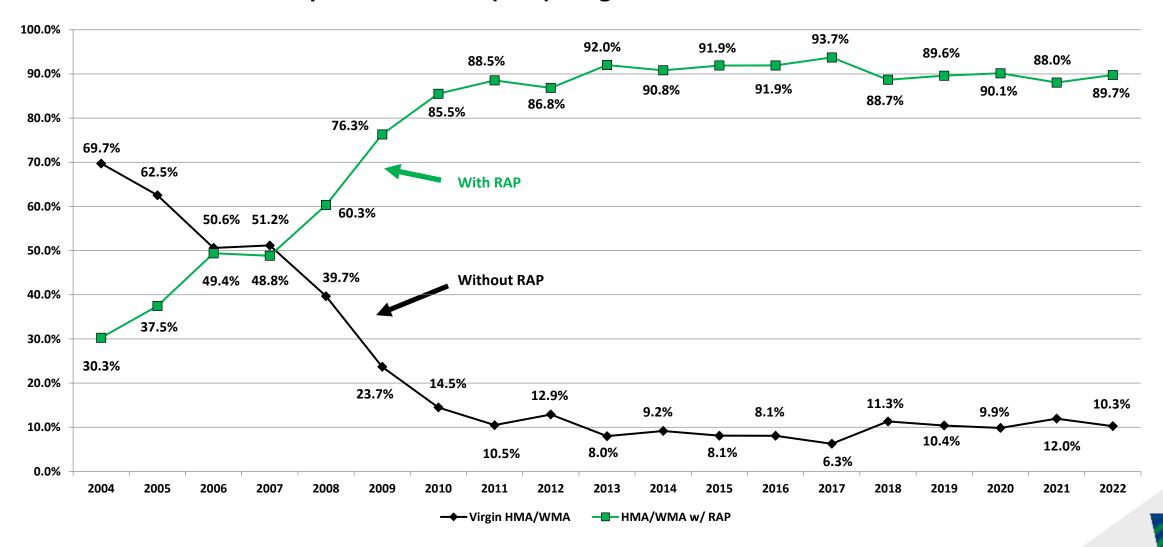
2022 - All 9.5 mm Wearing Courses - Std. Dev. for Asphalt Content



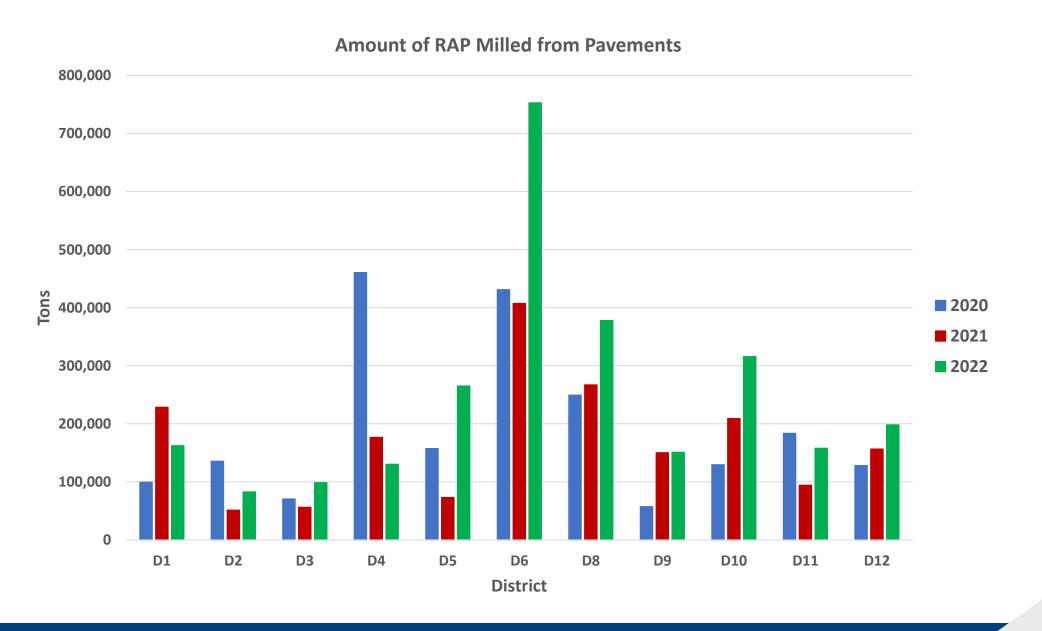


GREEN INITIATIVES - RAP

Reclaimed Asphalt Pavement (RAP) Usage Trend in HMA & WMA



GREEN INITIATIVES - RAP





INNOVATION



<u>MOBILE APPLICATIONS (APPS)</u>



MC DOCs



CID



Sample ID



PSA



MPT



Dept. ePayroll



Punchlist



CMH Mobile



E-Ticketing



Force Account



Visual Site Inspection Report





DIGITAL DELIVERY DIRECTIVE 2025 (3D2025)



PennDOT's Vision

By 2025, construction projects will be bid using 3D technology and no longer be in a traditional construction plan format.

Digital Delivery Directive 2025 ROADMAP

plan format





2025

Digital Delivery



· Standardized Digital **Delivery Process**

Document Pilots

Implemented

11 Model as the Legal

Our Mission

Our Vision

To support the digital transformation of project development within PennDOT developing modeling requirements, processes, and workforce development to enable improved asset information transfer by using 3D data-rich information models

technology and no longer be in a traditional construction

By 2025, construction projects will be bid using 3D

2024-25

Drainage and Utility **Modeling Pilots**

Priority Assets Digital As-Builts

2023-24

3 Bridge Modeling Pilots 3D Coordination and Design Reviews

Goals



Implement 3D Technology

Advance the Use of Accessible Digital **Processes and Tools**



Capture Data-Rich **Asset Models**

Strategic Approach

 Assess Stakeholder Needs. Desires and Priorities

· Align Technical Solutions with Stakeholder Input

· Advance Technical Solutions Incrementally

2022-23

2 EGCL/Roadway Modeling Pilots

> Construction Inspection

> > 2020

2021-2

6 Guiderail Digital As-Builts Pilots

3 Single Project PDF

· Create Safe Space for Experimentation

· Help People Perceive Progress

Keys to Success

· Manage Pace of Change

· Empower Pilot Project Teams

Use Construction Partnering

Email: RA-PDDIGITALDELIVERY@pa.gov

Webpage: https://www.penndot.pa.gov/ProjectandPrograms/3D2025/Pages/default.aspx

Strategic Plan

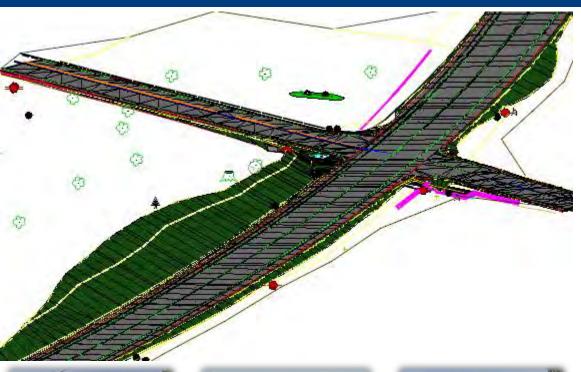


· Implementation Plan

· Digital Delivery Web Page

· Communication Plan

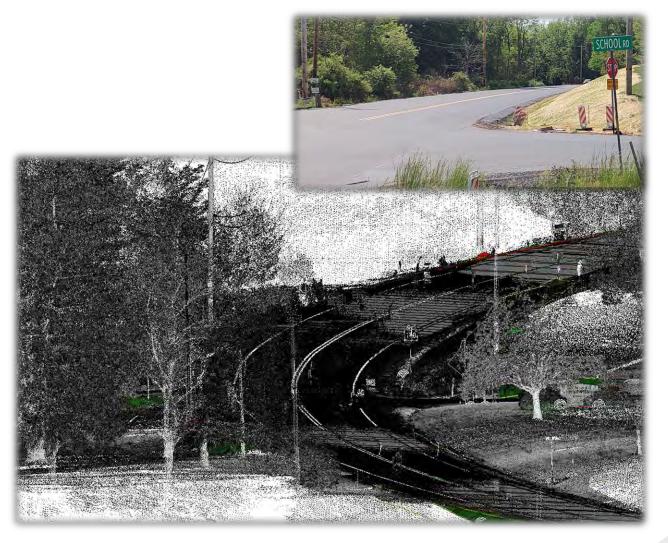
DIGITAL DELIVERY DIRECTIVE 2025 (3D2025)









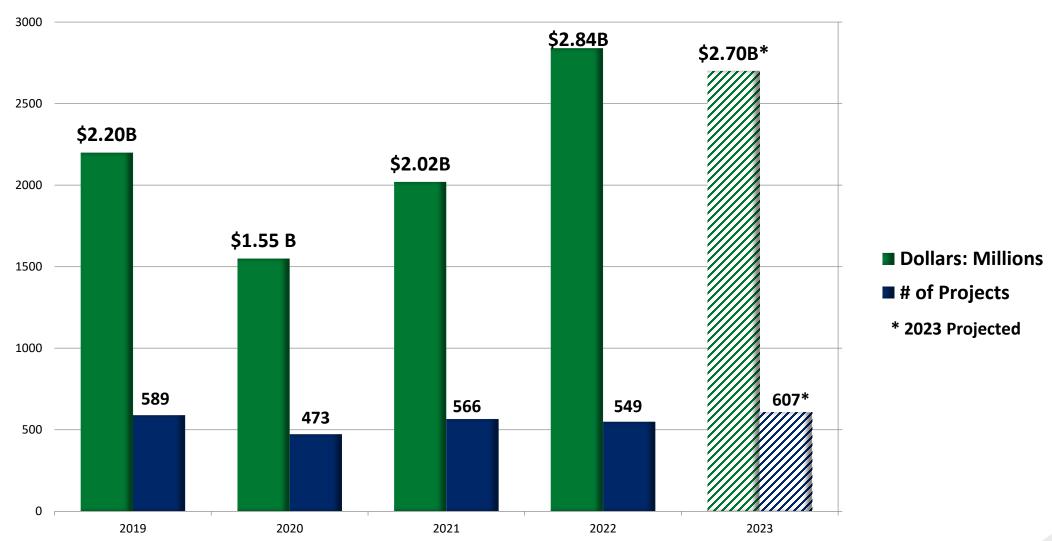




PROGRAM



PROJECT LETTING TRENDS





PROGRAM DISTRIBUTION

| | Cost Based Percentage | | | | | |
|---------|-----------------------|------|------|------|-------|--|
| | 2019 | 2020 | 2021 | 2022 | 2023* | |
| Highway | 70% | 61% | 71% | 73% | 51% | |
| Bridge | 19% | 24% | 17% | 19% | 38% | |
| Other | 11% | 15% | 12% | 8% | 11% | |



^{*2023} Projected

CONSTRUCTION MATERIAL QUANTITIES

| Material | 2018 | 2019 | 2020 | 2021 | 2022 | 2023* |
|--------------------------------|-----------|----------------------------|-----------|-----------|-----------|-----------|
| Asphalt (Tons) | 7,182,059 | 6,667,762 | 4,240,700 | 4,252,700 | 4,581,000 | 4,829,000 |
| Structural Concrete (CY) | 404,844 | 266,941 | 217,000 | 205,500 | 206,900 | 205,000 |
| Concrete Paving (SY) | 674,394 | 439,828 CSVT delayed | 532,700 | 785,500 | 546,200 | 313,200 |
| Aggregate (Tons) | 8,996,689 | 8,271,575 | 5,388,700 | 5,408,300 | 5,458,200 | 5,198,000 |



^{*} Estimated Projections

FUNDING



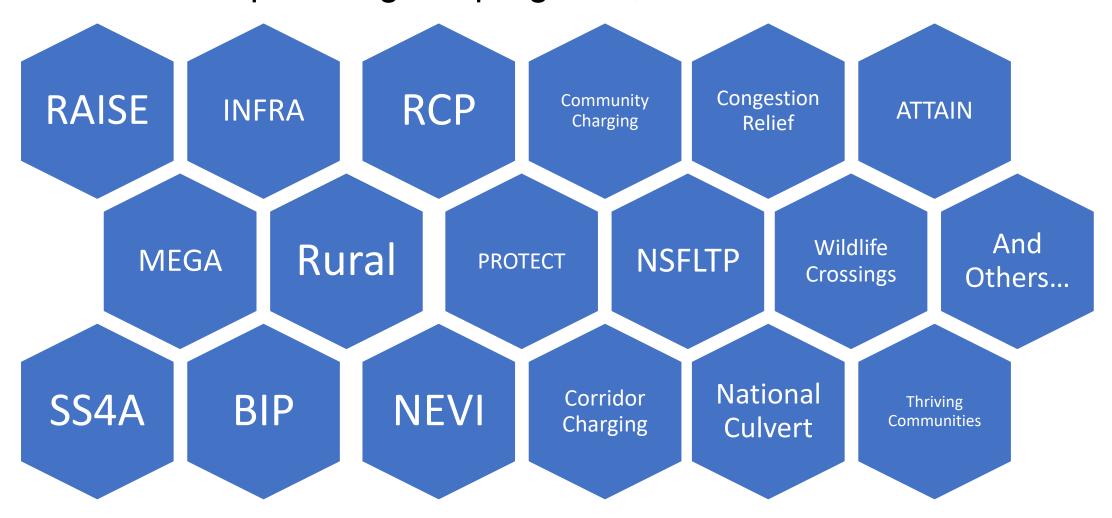
BI-PARTISAN INFRASTRUCTURE LAW (BIL)

| FFY | PA Increased Formula Highway and Bridge Funding | PA Federal Formula Highway and Bridge Funding Totals (Existing + New) | | |
|--------------|---|---|--|--|
| 2022 | \$704.7 million | \$2.5 billion | | |
| 2023 | \$748.2 million | \$2.5 billion | | |
| 2024 | \$792.5 million | \$2.6 billion | | |
| 2025 | \$837.7 million | \$2.6 billion | | |
| 2026 | \$883.9 million | \$ 2.7 billion | | |
| 5-year Total | \$4 billion | ~\$13 billion | | |



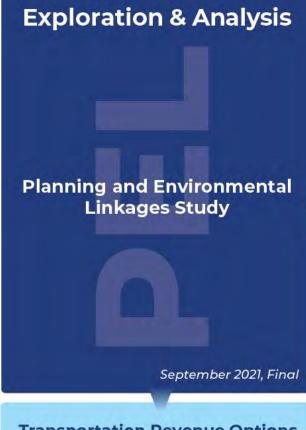
BI-PARTISAN INFRASTRUCTURE LAW (BIL)

Numerous competitive grant programs, each with a different focus.





PENNDOT PATHWAYS



Transportation Revenue Options Commission (TROC) Report

July 2021, Final

Potential Solutions







Mileage-Based User Fees



Bridge Tolling

The Pennsylvania Public-Private Partnership (P3) law, as amended by Act 84 of 2022, permits optional tolling via Pennsylvania Public-Private Partnership (P3) contracts.

Additional state legislation would be required to implement any other tolling options.

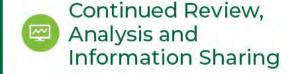
Continued Study & Public Engagement













FUNDING PROJECTS- CASH FLOW

- FY 22-23 Budget Enactment reduced the PSP funding from the Motor License Fund to \$500 million starting in FY 21-22.
- Highway Construction Appropriation is holding \$191 million, that will be held for future IIJA state match.
- Highway Maintenance was increased by \$44 million.
- \$2.7 Billion dollar letting program is sustainable for calendar year 2023. Future years may have to be reduced based on the latest revenue estimates. The future number will continue to be evaluated based on inflationary, winter and other impacts, but is expected to remain at \$2.5 Billion.





1-95 BRIDGE COLLAPSE







I-95 BRIDGE COLLAPSE









2023 PROGRAM

\$2.7 BILLION



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PennsylvaniaDOT



MOVING FORWARD IN 2023

We look forward to continue working with PAPA and its members!







BE SAFE ON OUR ROADWAYS!



AASHTO TransComm 2020 Award: Marketing/Advertising (Print and Electronic Marketing)

