



# FY2021 TIP for PA

## Proposed Adoption

of the Draft DVRPC FY2021 TIP  
for PA (FY21-FY24)





# What is the TIP?

- Financially constrained infrastructure program
- Near-term expression of Long-Range Plan
- Multi-modal improvements
- Best estimate of project schedules and costs
- Not a guarantee of funds or implementation



# Transportation Improvement Program

- The TIP represents the region's federal & state funded priority transportation projects
- Developing and maintaining the region's Transportation Improvement Program is what makes the region eligible to receive & spend federal transportation dollars

PA and NJ TIP = \$7.1 billion over 4 years

# DVRPC FY2021-2024 TIP for PA

Draft Version

Pennsylvania - Highway Program (Status: TIP)

## Bucks

MPMS# 78516    *Bridge Replacement*    *SR:2025*    **New**

LIMITS Brownsville Road over Neshaminy Creek    D6 Est Let: 12/31/2020 Est Let Date: 12/31/2020

IMPROVEMENT Bridge Repair/Replacement    NHPP:    MRPID:34

MUNICIPALITIES: Middletown    FC: 17    AQ Code:S19

PLAN CENTER: Town Center    IPD: 16

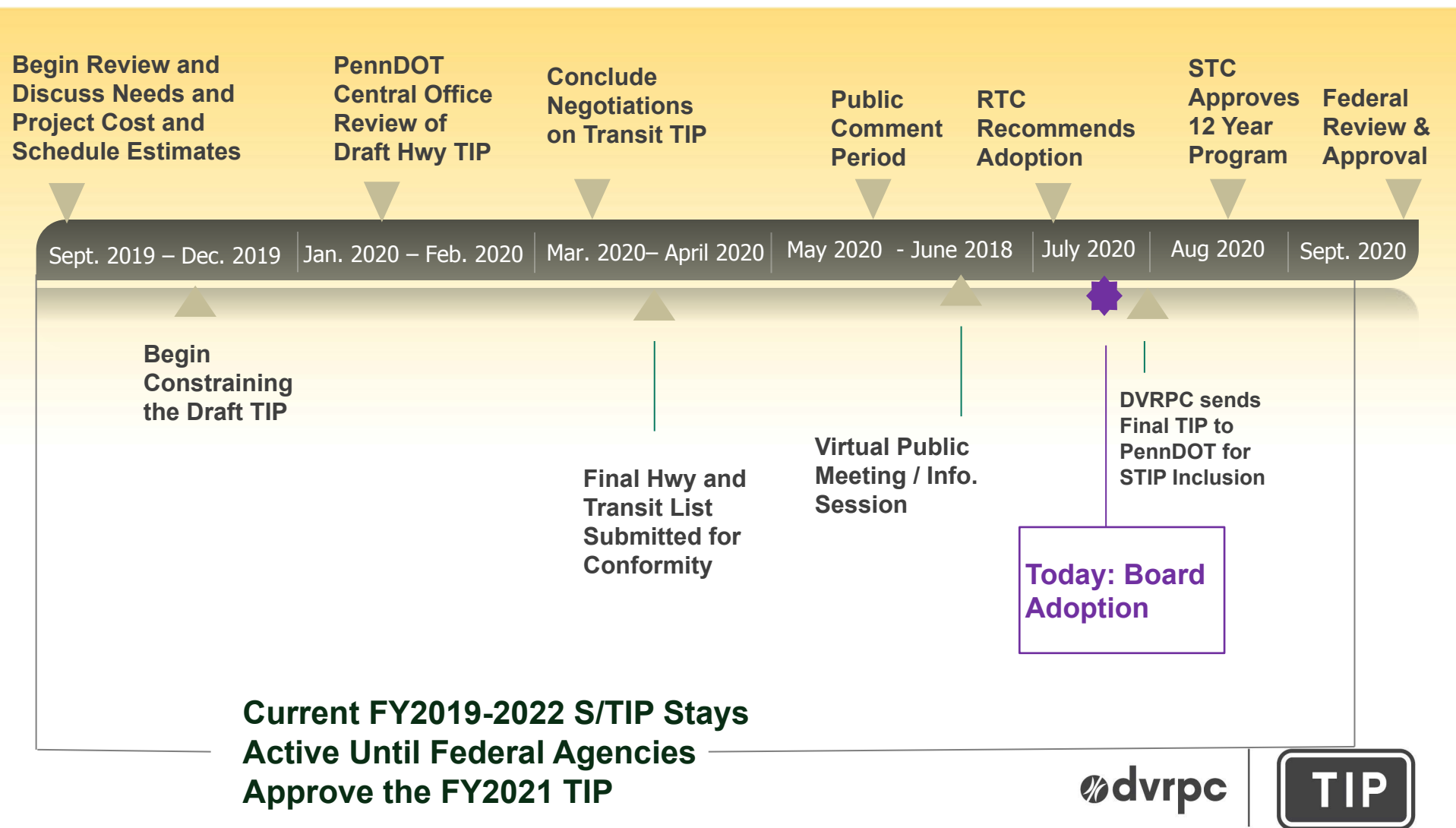
PROJECT MANAGER: EE/J. Arena    CMP: Not SOV Capacity Adding    CMP Subcorridor(s): 5I

This project involves rehabilitating or replacing the Bridge at Brownsville Road over Neshaminy Creek. The improvement is a breakout of MPMS #88706 for Bridge Rehabilitation in order to process federal authorization.

		TIP Program Years (\$ 000)											
Phase	Fund	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
CON	185	3,236											
CON	581	548											
CON	185		3,112										
		3,784	3,112	0	0	0	0	0	0	0	0	0	0
		Total FY2021-2024		6,896		Total FY2025-2028			0		Total FY2029-2032		0



# Development Process of the Draft FY2021 TIP for PA



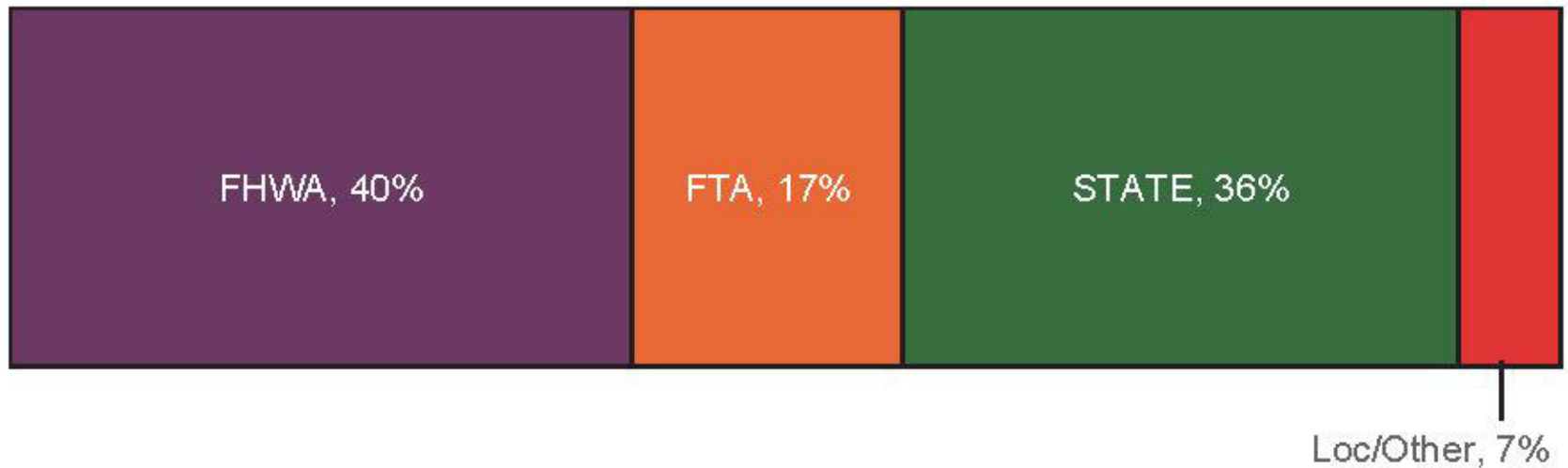


# Draft FY2021 TIP for PA

- 324 regional highway projects totaling \$1.97 billion
- 32 projects funded by \$859 million provided by the statewide Interstate Management Program (IMP) for I-95, I-76, and I-476 for reconstruction and operational improvements
- 28 transit programs totaling \$2.57 billion

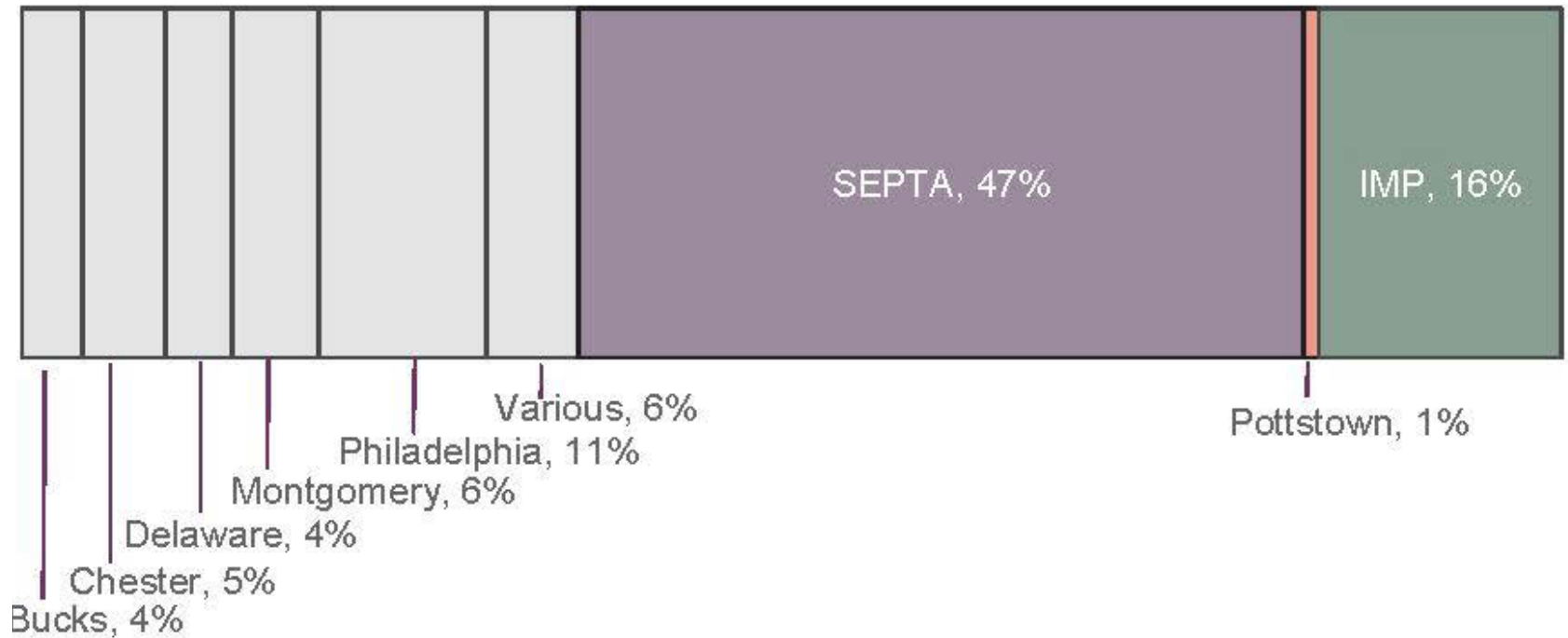
# Draft FY2021 TIP for PA

## \$5.4 Billion



# Draft FY2021 TIP for PA

## \$5.4 Billion | 384 Projects

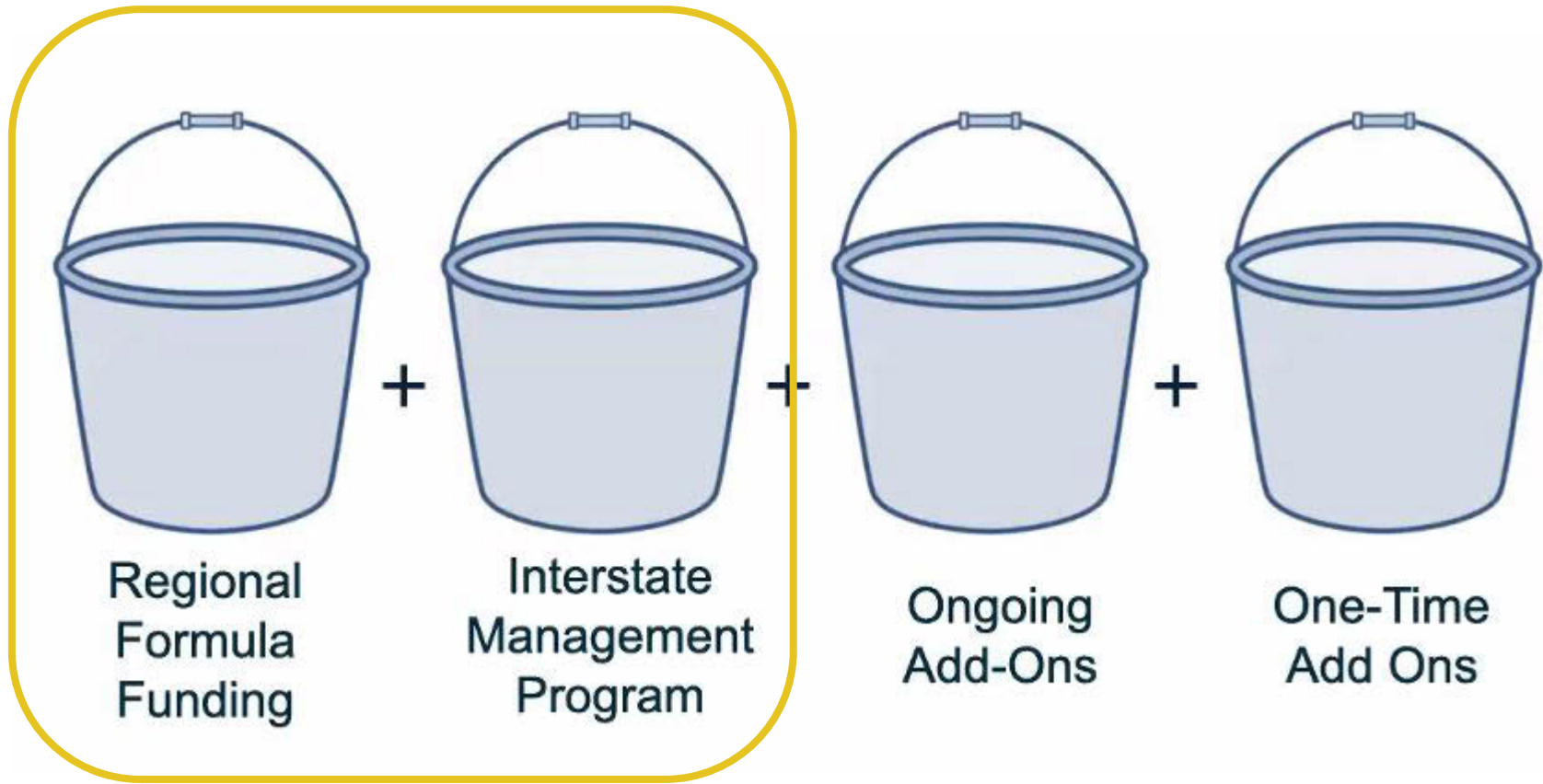


By County and Operator

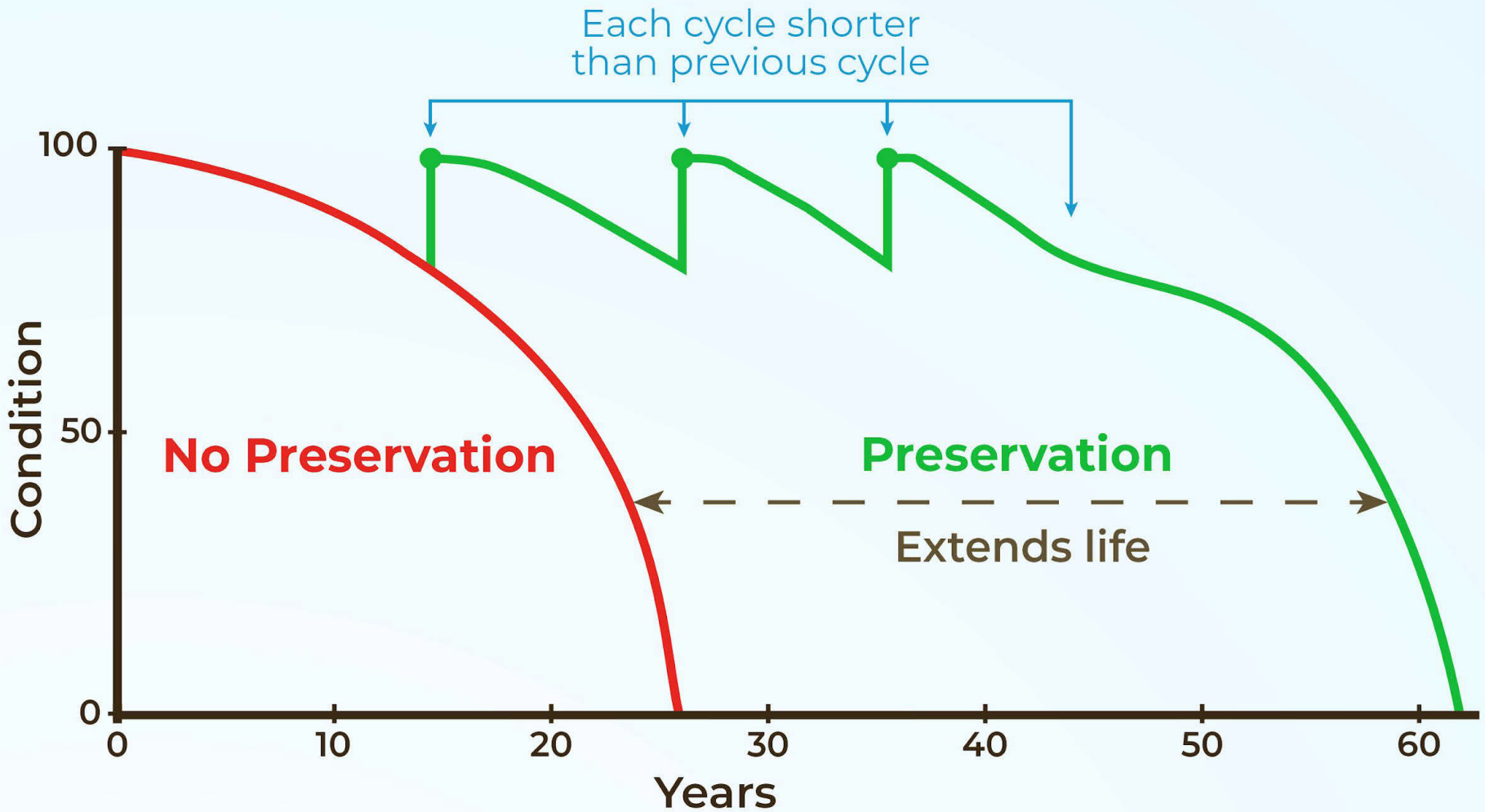




# DVRPC Regional Roadway Funding



# Lowest-Life Cycle Cost





# Examples of Project Categories (for Highway Funded Projects)

- Bridge Replacement/Rehabilitation – 28%
- Roadway Reconstruction/Restoration – 21%
- Interchanges/Intersections, Signals, ITS – 19%
- Bicycle/Pedestrian/Streetscapes – 16%
- Highway New Capacity – 7%
- Transit Flex – 4%
- Other; CMAQ Competitive Program; Transportation Management Associations, Mobility Alternatives & Share-A-Ride Programs; Reserve Line Items – 5%



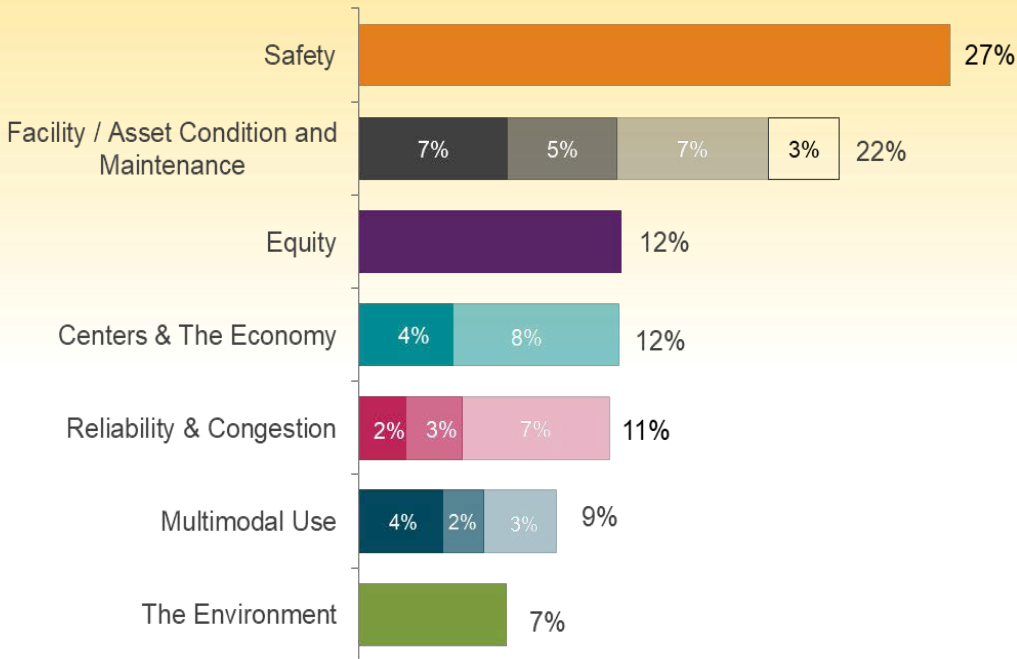
# Examples of Project Categories

(for Transit Funded Projects)

- Vehicles/Rolling Stock (includes highway flex)  
New, Overhaul, Non-Revenue – 39%
- Bridges, Track, Catenary, Substations,  
Signals, Communications, & Safety – 26%
- Lease Agreements & Debt Service – 18%
- Station Renovation & Parking – 8%
- Vehicle Storage & Maintenance Facilities – 4%
- New Rail Capacity – Elwyn to Wawa – 3%
- Fare Modernization – 2%

# TIP-LRP Benefit Evaluation Criteria

## Criteria



## Equity Criterion:

- Broad definition of Equity (all IPDs)
- Incorporates scale (population)
- Penalizes projects that increase speeds or air pollution (added VMT) in communities of concern
- **Used to inform project prioritization / selection**



# Projects with Construction Funding Moved to the LRP

- Bucks County – Route 1 Improvement Frontage Corridor (Section RC3);
- Chester County – US 30, Coatesville Downtown Bypass (CER-Eastern Section);
- Delaware County – US 1 and PA 352 Interchange, Intersection, and Roadway Improvements;
- Montgomery County – Belmont Rd/Rock Hill Rd Widening: I-76 Ramps to Rock Hill Road;
- Montgomery County – Second Collegeville Bridge Crossing; and
- City of Philadelphia – Aramingo/Harbison: Church Street to Amtrak (Section BS3).



# New Highway Projects

- Regional HSIP Program
  - *23 Projects*
  - *\$67.9M*
  - *Projects identified by region and draw from Regional HSIP Line Item*



# New Highway Projects

- Statewide HSIP Set-Aside
  - *3 Projects*
  - *\$4.4M*
- Transportation Systems Management & Operations (TSMO)
  - *2 Projects*
  - *\$2.5M*
- **Additional Funds to the Region**





# New Transit Projects

- CARES Act (\$24.85 M for Capital Projects)
  - *Automatic passenger counters on more than 1,100 vehicles*
  - *Trolley operator protective barriers on 188 vehicles, installation of fencing along Center City Concourse and Fare Line Relocation at Frankford, Norristown, and 69<sup>th</sup> Street Transportation Centers*
- *Only capital projects to receive funding; rest is to offset operating costs*



# New Transit Projects

## (Design & Study Work)

- Projects of Significance - \$50.9M (FY21-FY26)
  - *King of Prussia Rail Project*  
*(15% Design & Environmental Impact Statement)*
  - *Trolley Modernization*
  - *Trolley Acquisition and Infrastructure –*  
*Early Action Efforts*



# Public Comment Period

- Public Comment Period  
May 26, 2020 – June 29, 2020
- 2 Virtual Public Meetings Held June 17, 2020
  - 2-3 PM
  - 7-8 PM
- Comments Were Sent:
  - *Electronically Via Public Comment Web Application at [www.dvrpc.org/tip/draft](http://www.dvrpc.org/tip/draft)*
  - *Or By Email at [tip@dvrpc.org](mailto:tip@dvrpc.org)*
  - *Or By US Mail to DVRPC*
  - *Or By Fax to 215-592-9125*
  - *Or By Virtual Public Meeting*
- View Complete Documents on Website  
[www.dvrpc.org/tip/draft](http://www.dvrpc.org/tip/draft)





# Comments & Responses

- Index of Comments – Summary & Commenter
- All Comments Received
  - *Each “Issue” has an “Item ID#”*
  - *From Individuals*
  - *From our DVRPC “Planning Partners”*
  - *From other Agencies or Organizations*
- Responses Provided by Appropriate Entity

[More Information ↓](#)

## Transportation Improvement Program (TIP)

[TIP Homepage](#)[Draft FY2021 TIP for PA](#)[TIP Guide](#)[FY2019 TIP for PA](#)[Project Implementation](#)

## Draft FY2021 Transportation Improvement Program for Pennsylvania (FY21-24)

DVRPC's Draft TIP for Pennsylvania represents the region's federally funded transportation improvement priorities and is required by federal law in order for the region to receive and spend federal transportation funds. It has been developed in cooperation with the Pennsylvania Department of Transportation (PennDOT), Southeastern Transportation Authority (SEPTA), Pottstown Area Rapid Transit (PART) and DVRPC's member counties and cities. After consideration of public comments, the Draft TIP with any recommended changes will be presented to the DVRPC Board for adoption at the regularly scheduled Board meeting on July 23, 2020.

DVRPC invites you to review and comment on the Draft FY2021 TIP for the DVRPC PA



# Comments (500+) & Responses

(about 45 different issues)

- Henry Ave Safety Improvements – 65%
  - *Project Concerns, Questions, & Suggestions*
  - *Install Protected Bike Lanes – 39%*
  - *Reduce Speed – 46%*
- Supports Project – 24.5%
  - *Please Advance “The Circuit” Network*
- Bicycle/Pedestrian Improvement Progress Requests – 8%
- Not Supportive of Project – 2.5%



# List of Recommended Changes – (will be incorporated into final document)

- Recommended Changes –  
Table of Changes that Would Become  
Part of the Final TIP Document
- Highway Schedule Adjustments &  
Cost Restructuring (pages 1-2)
  - *Cash flow changes – do not change project cost*
  - *Funds may not be needed for a phase*
  - *Switch fund source (some due for conversion)*
  - *Moving funds between individual projects & appropriate line item or between line items*
  - *Add PreCon phase back into TIP*
  - *Minor cost increases or decreases*



# List of Recommended Changes

- Transit Project Cost Changes and Project Additions (pages 2-3)
  - *Make sure TIP and SEPTA capital budget are in-line*
  - *Cash flow changes*
  - *Switch fund source*
  - *Cost increases or decreases*





# List of Recommended Changes

- Add Swarthmore Station to out years
- Exton Station and Paoli Transportation Center
  - *Phase 3 and 2 (respectively) are fully funded*



# List of Recommended Changes (Misc)

- **Project Title & Description Revisions (Page4)**
  - *Change I-95: Bridge Street Ramps (Section BS5) title to I-95: Delaware Avenue Extension (BS5)*
- **New Projects if Funded With Discretionary Funding & Do Not Impact Conformity, Constraint, or CMP**
  - *SEPTA CARES Act funding for Automatic Passenger Counters, Trolley Operator Protective Barriers, Fencing along the Center City Concourse and Fare Line Relocation at Frankford, Norristown, and 69th Street Transportation Centers*
- **Technical Corrections for Final TIP Document**
  - *Minor Description or Title Edits, Rounding Issues*



# MOU for Amending & Modifying the Program





# MOU for Amending & Modifying the Program

## • **Minor Updates to Provide Consistency with PennDOT/FHWA/FTA MOU**

- *Clarify Advance Construct Conversion – if no other phases have funds obligated then the action of conversion is a Formal Action*
- *Clarifying draw downs and returns of \$5M or more to a Line Item would be part of the Formal Action*
- *Clarified Language when a project breakout occurs in 2 or more separate projects to facilitate delivery-Admin Modification*
- *Add or remove PE/FD phase (below \$5M) to already programmed project below – Admin Amendment*



# MOU for Amending & Modifying the Program

- **Minor updates to provide consistency with PennDOT/FHWA/FTA MOU**
  - *New projects derived from statewide managed programs and selected by PennDOT Staff or Sec. of Transportation will go through formal review and DVRPC Board will be requested to 'Accept' projects and add their additional funds to TIP*
  - *Clarify language that funding is allocated to the project, not the county*



# MOU for Amending & Modifying the Program

- **Update language that TIP revisions are consistent with:**
  - *Pennsylvania's Transportation Performance Management (TPM)*
  - *PA & DVRPC LRPs*
  - *PennDOT's Transportation Asset Management Plan (TAMP)*
  - *Transit Asset Management (TAM) Plan*
  - *Strategic Highway Safety Plan (SHSP)*
  - *Congestion Management (CMP)*
  - *PennDOT Connects, and Performance-Based Planning and Programming (PBPP)*
- **All new projects derived from Statewide Managed Programs will be screened for AQ significance prior to adding to TIP**



# MOU for Amending & Modifying the Program

- Update Language to clarify if LRP expires then TIP MOU will not be utilized and all changes using federal funds would need DVRPC Board and federal approval.

**MPMS# 16194 – High Street over Manatawny Creek in Pottstown**



*Photo Credit: Montgomery County*



# MPMS# 80054 – Bridges over Vine Street Expressway in Philadelphia



Photo Credit: PennDOT

# MPMS# 80054 – Bridges over Vine Street Expressway in Philadelphia



Photo Credit: PennDOT

# MPMS# 80054 – Bridges over Vine Street Expressway in Philadelphia



Photo Credit: PennDOT

# MPMS# 60655 – Levittown Station



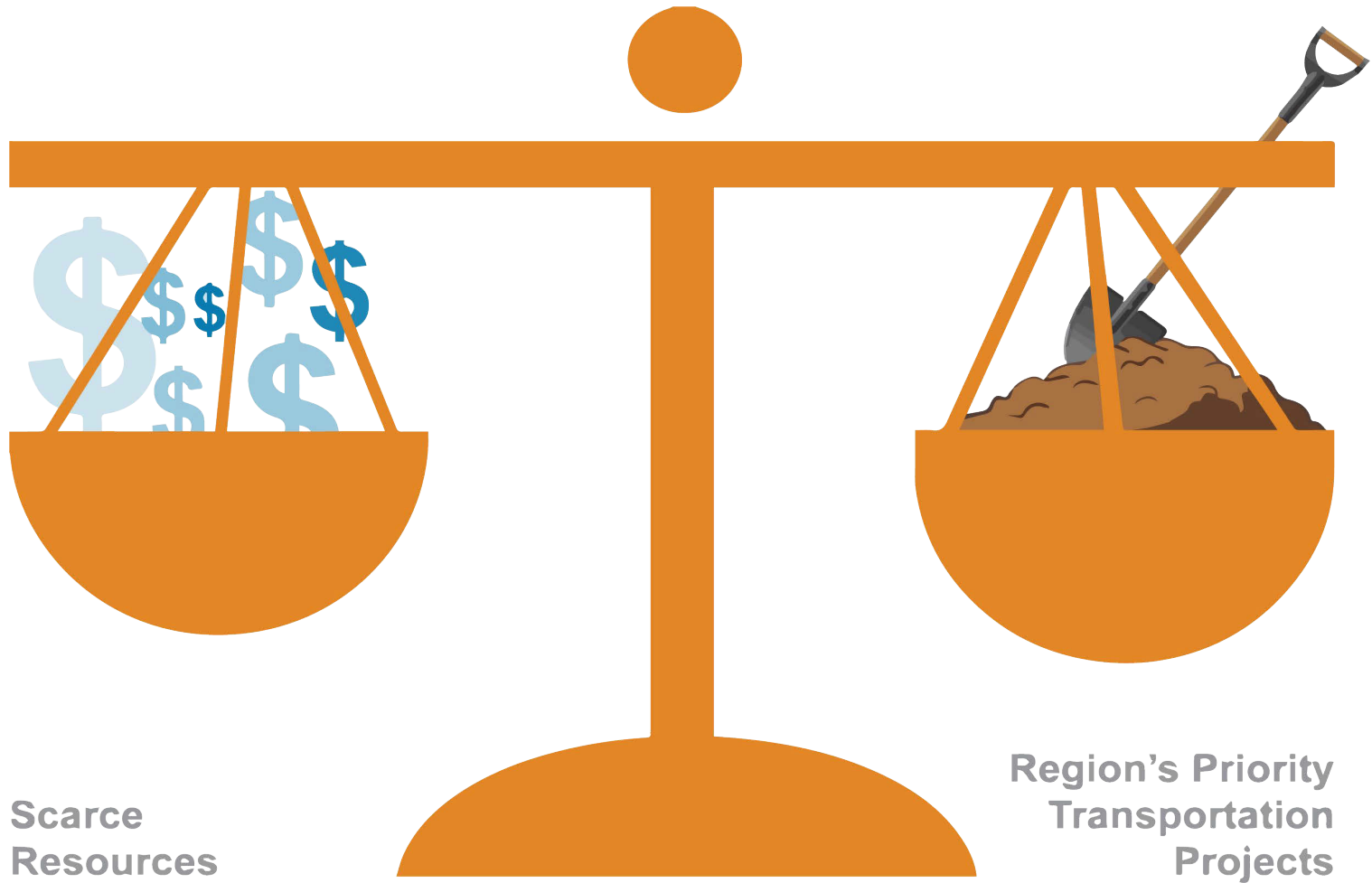
Photo Credit: SEPTA

**MPMS# 77183 – Transit and Regional Rail Station Program (Direct Bus)**



Photo Credit: SEPTA

# Regional Decision Making is Critical



Scarce  
Resources

Region's Priority  
Transportation  
Projects



**Thank You!**  
You Know Who You Are





# Adopt the DVRPC FY2021 TIP

That the Board approve the Memorandum of Understanding (MOU) and adopt the DVRPC FY2021 Transportation Improvement Program (TIP) for Pennsylvania (FY21-FY24) with the proposed list of recommended changes as the region's official selection of transportation projects for funding.





# Thank You

Connect With Us!



**Richard Murphy**  
Manager, PA Capital Programs  
215-238-2946/rmurphy@dvrpc.org  
www.dvrpc.org/TIP





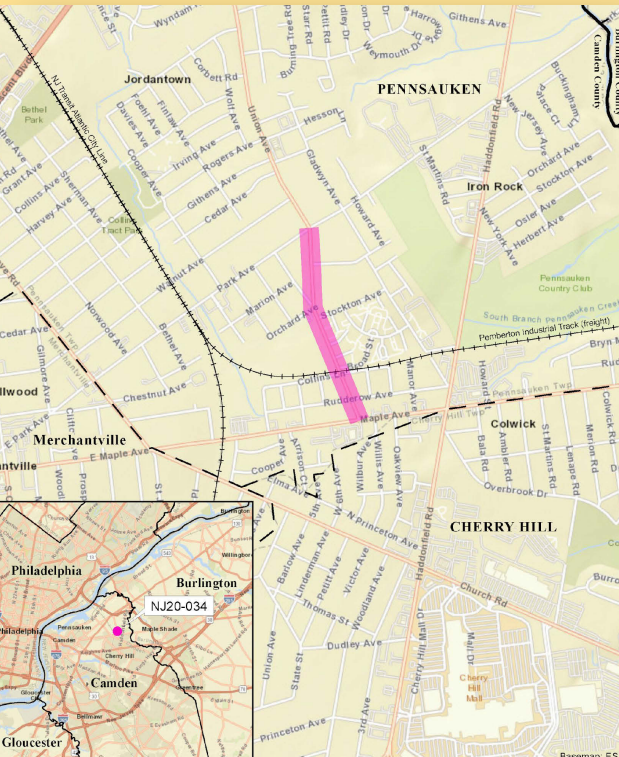
# TIP ACTIONS

Transportation Improvement Program  
Pennsylvania TIP (FY2019-2022)  
New Jersey TIP (FY2020-2023)



# CR 615 (Union Avenue), CR 621 (Park Avenue) to CR 537 (Maple Avenue)

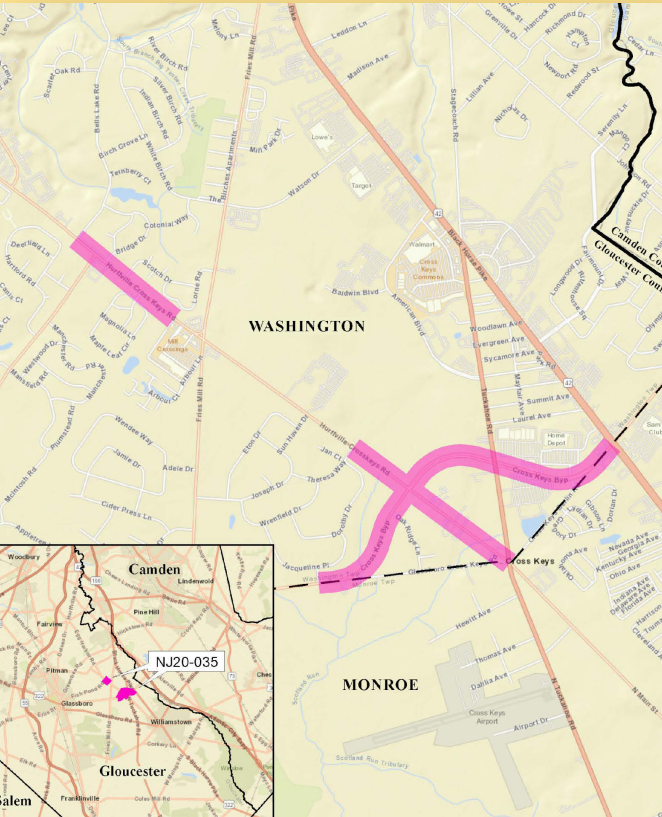
## Camden County | Add a New Project to TIP



- **TIP Amendment**
- **Action:** Add new \$1.651 M STBGP-PHILA funded project for FY21 construction (CON)
- **Background:**
  - **Mill and overlay pavement project**
  - FY21 Quick Obligation (3 new projects total \$7.251 M)
  - Project will not carry over if it misses FY21 authorization (use it or lose it)

# CR 689 / CR 654 Resurfacing

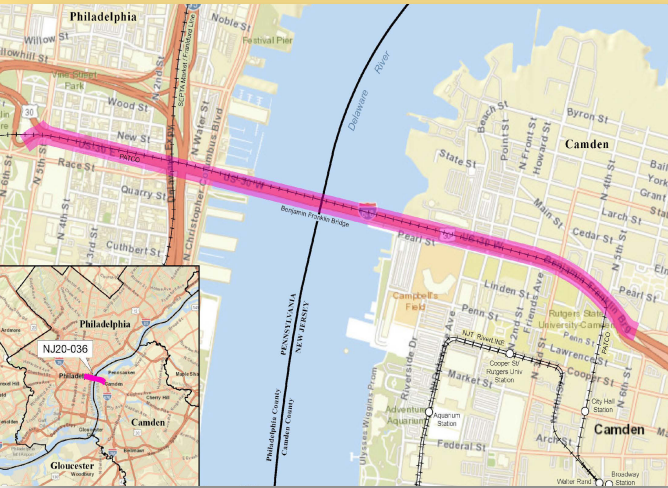
## Gloucester County | Add a New Project to TIP



- **TIP Amendment**
- **Action:** Add new \$2.6 M (\$2.11 M STBGP-PHILA / \$490,000 HWYINF) project for FY21 CON
- **Background:**
  - **Roadway rehabilitation / resurfacing project**
  - FY21 Quick Obligation (3 new projects total \$7.251 M)
  - Additional federal Highway Infrastructure Program (HWYINF) funds for the Phila urbanized area in New Jersey
  - Project funding will not carry over if it misses FY21 authorization (use it or lose it)

# Benjamin Franklin Bridge Deck Overlay and Approaches

DRPA / PATCO | Add a New Project to TIP



- **TIP Amendment**
- **Action:** Add new \$3 M HWYINF project for FY21 CON
- **Background:**
  - Bridge repair / pavement resurfacing project
  - FY21 Quick Obligation (3 new projects total \$7.251 M total)
  - Additional federal Highway Infrastructure Program (HWYINF) funds for the Philadelphia urbanized area in New Jersey
  - Project funds will not carry over if it misses FY21 authorization (use it or lose it)



# TIP ACTIONS | Proposed – NJ

*Agenda Items 2a, 2b, and 2c*

**That the DVRPC Board approve Camden County, Gloucester County, and DRPA / PATCO's TIP Amendment requests:**

Add 3 new projects to the TIP for FY21 CON totaling \$7.251 M

(\$3.761 M STBGP-PHILA / \$3.49 M HWYINF)

Camden County:

- **CR 615 (Union Avenue), CR 621 (Park Avenue) to CR 537 (Maple Avenue) – \$1.651 M STBGP-PHILA**

Gloucester County:

- **CR 689 / CR 654 Resurfacing – \$2.6 M (\$2.11 M STBGP-PHILA / \$490,000 HWYINF)**

DRPA / PATCO:

- **Benjamin Franklin Bridge Deck Overlay and Approaches – \$3 M HWYINF**

# Restriping Program & Line Reflectivity Management System

## NJDOT Statewide Program | Cost Increase

- **TIP Amendment**
- **Action:** Increase FY20 Engineering/Right-of-Way/Construction (ERC) phase by \$23.207 M STBGP-FLEX
- **Background:**
  - Statewide program funds application of long-life pavement markings and raised pavement markers on the state highway system
  - Line item increasing from \$20 M to \$43.207 M STBGP-FLEX funds
  - NJDOT must have all three MPO Board approvals for this action in order to proceed



# TIP ACTION | Proposed – NJ

*Agenda Item 2d*

**Recommend Board approval of NJDOT's TIP Amendment request for the Statewide Program:**

## **Restriping Program & Line Reflectivity Management System**

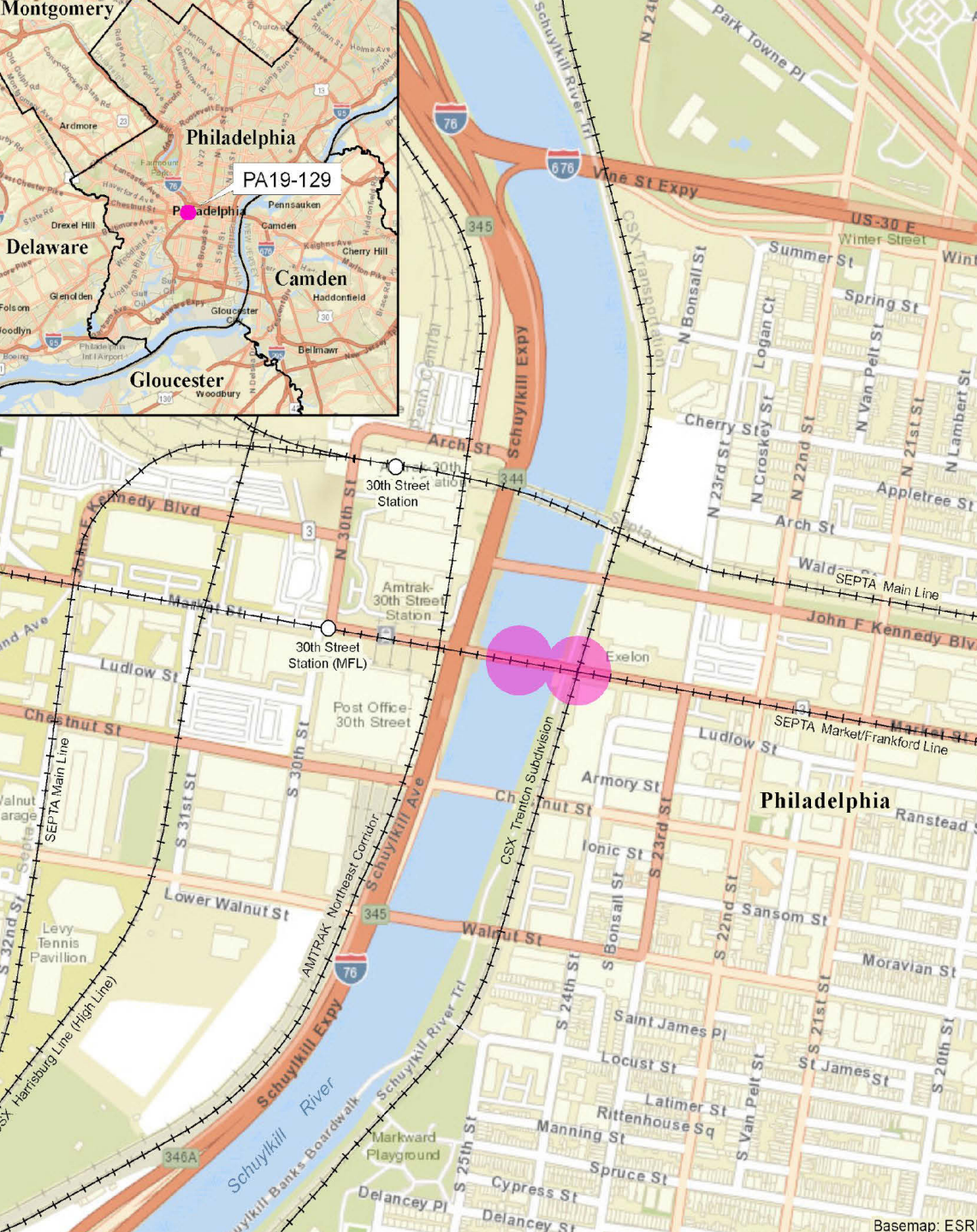
Increase FY20 ERC phase by \$23.207 M  
STBGP-FLEX



# Market Street Bridges Over Schuylkill River and CSX Railroad (MSB)

City of Philadelphia | Increase Final Design Phase

- **TIP Amendment**
- **Action:** Increase Final Design (FD) phase by \$6.291 M (\$5.033 M NHPP / \$1.258 M State 185) in FY20
- **Background:**
  - \$100 Million Project includes:
    - Rehabilitation of 2-span bridge carrying Market St. over the Schuylkill River,
    - Replacement of bridge carrying Market Street over the Schuylkill River Park and CSX railroad
    - Replacement of Market Street bridge over I-76 at the Schuylkill Avenue West intersection - adding to scope
  - Nearby Chestnut Street Bridges, Ramps, (8) at 30th Street project should be completed when this project starts CON in Spring / Summer 2022



## Cost increase due to design work includes:

- Widening of sidewalk on Market St. bridge over CSX railroad;
- Bulkhead repairs;
- Modifications to erosion and sedimentation plans;
- Complex traffic control plans, including analysis of the full detour of I-76 that will be required;
- Investigation of feasibility of protected bicycle facilities on Market Street including traffic analysis;
- Coordination to mitigate impacts on SEPTA Market Street Subway line which is UNDER the bridge
- Utility coordination.



Trader Joe's

Trader Joe's

Philly's B101.  
1 | WBEB FM

23rd Street

Joa  
Kitch

Google

Schuyl



# TIP ACTION | Proposed – PA

*Agenda Item 2d*

**That the DVRPC Board approve PennDOT's TIP Amendment request:**

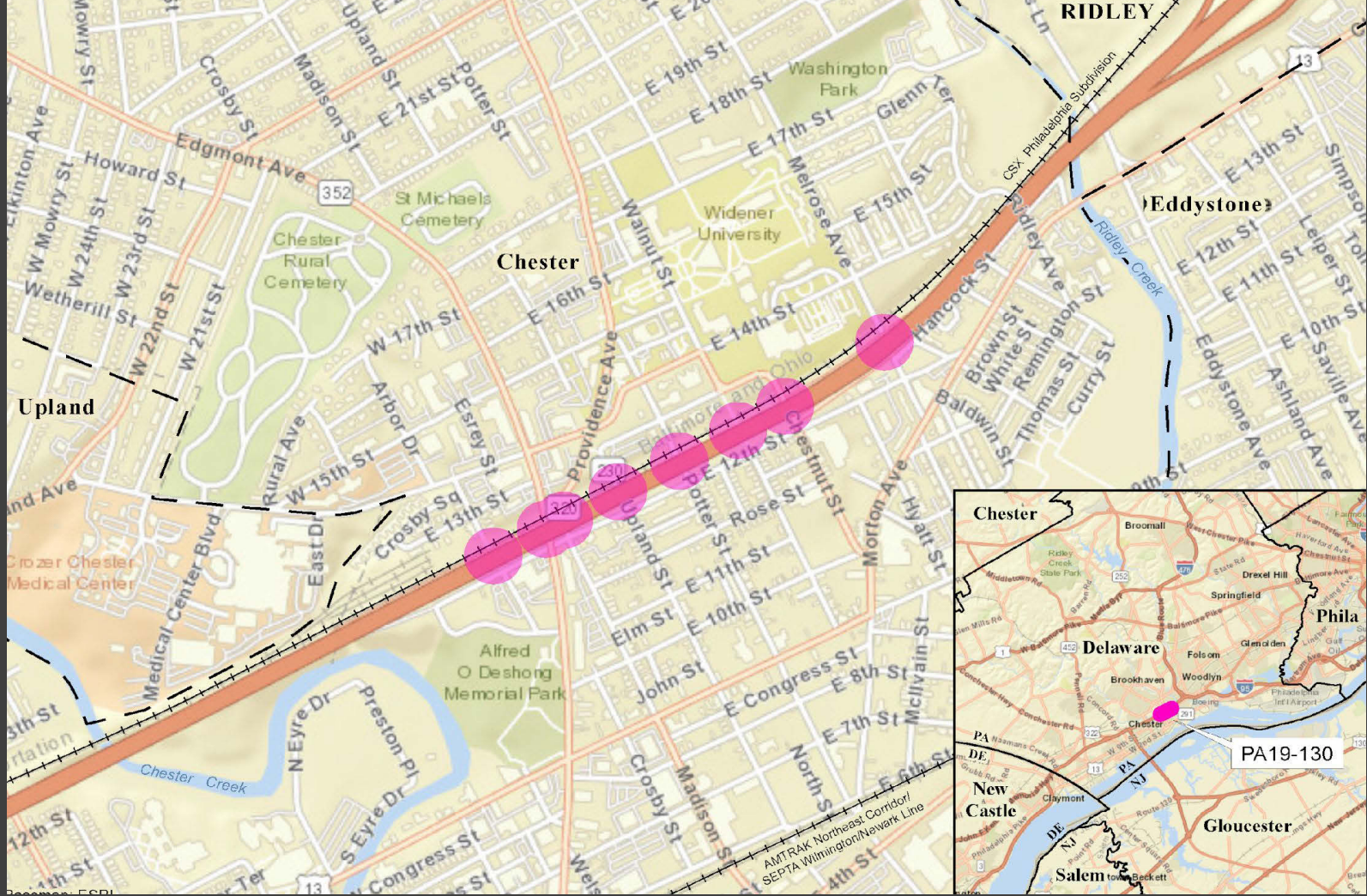
**Market Street Bridges (2) Over Schuylkill River and CSX Railroad (MSB)**

Increase FY20 FD phase by \$6.291 M (\$5.033 M NHPP / \$1.258 M State 185)

# I-95 Overhead Bridges

## Delaware County | Increase Construction Phase

- **TIP Amendment**
- **Action:** Increase Construction (CON) phase by \$8.028 M State 581 (FY20: \$5.528 M; FY21: \$2.5 M)
- **Background:**
  - Inspections during CON revealed bridges had deteriorated significantly since last evaluation;
  - Additional work includes traffic protection and maintenance including construction of an access road, replacement of deck spans, concrete base installation, & sign structure replacement
  - Total estimated CON (including proposed increase) = \$32.742 M



## Project includes:

- Rehabilitation & painting of 8 bridges spanning I-95 in the City of Chester;
- Potter St. & Melrose Ave. bridges will have deck replacements;
- All bridges will have miscellaneous concrete repairs & will be painted;
- Protective fences will be repaired or replaced.



# TIP ACTION | Proposed – PA

*Agenda Item 2e*

**That the Board approve PennDOT's TIP Amendment request:**

## **I-95 Overhead Bridges**

Increase CON phase by \$8.028 M

State 581

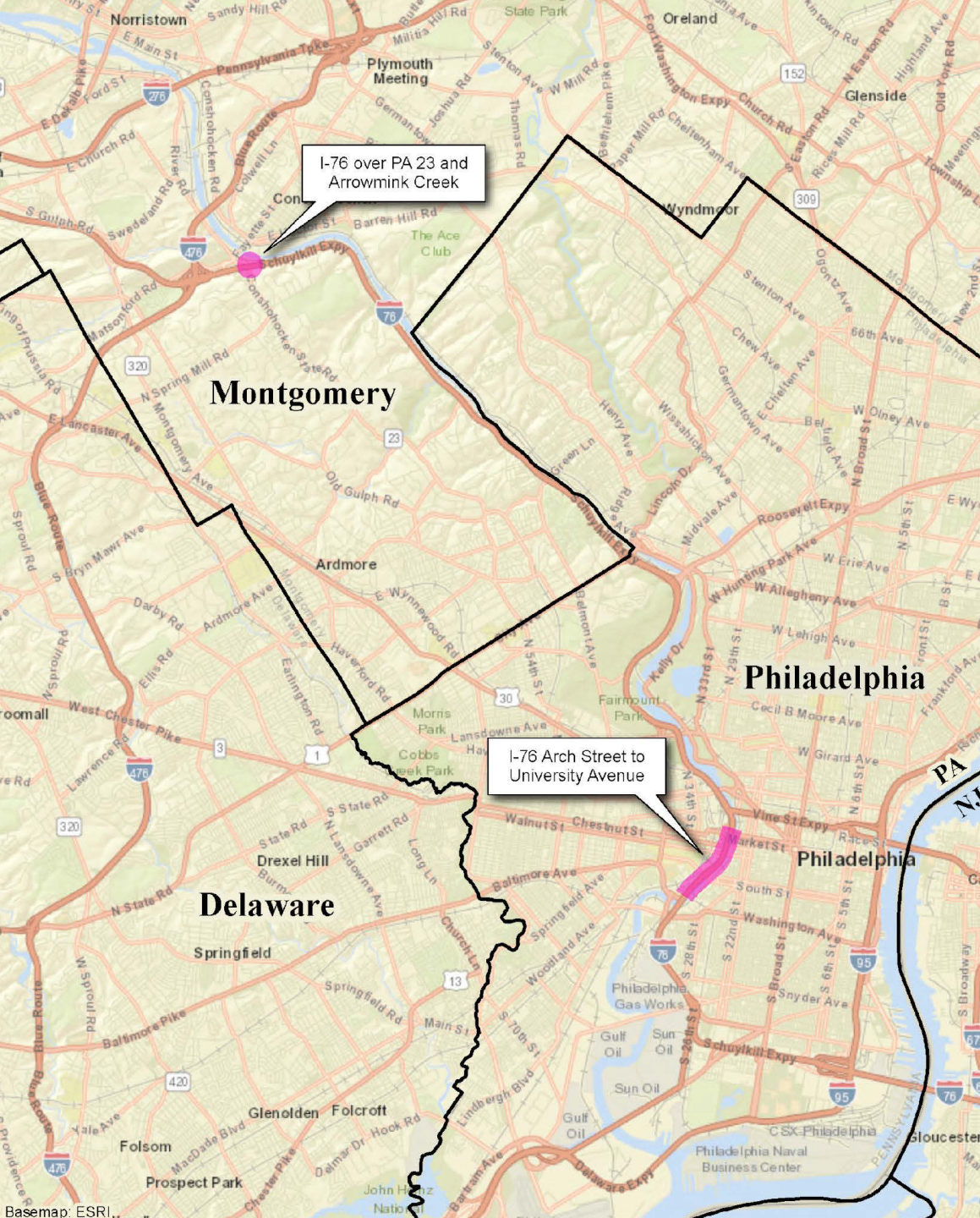
(FY20: \$5.528 M; FY21: \$2.5 M)

# I-76 Bridge Repair Section SRE

## Various Counties | Increase Construction Phase

- **TIP Amendment**
- **Action:** Increase Construction (CON) phase by \$8.3 M NHPP / Toll Credit (FY20: \$6.244 M; FY21: \$2.056 M)
- **Background:**
  - Inspections during CON revealed conditions had deteriorated significantly since last evaluation
  - Deterioration of the steel structures due to roadway beneath the barrier leaking onto steel structure required increase to quantity of Polyester Polymer Concrete
  - Total estimated CON (including proposed increase) = \$50.066 M





## Additional required work includes:

- Increase to quantity of Polyester Polymer Concrete;
- Steel repairs & reinforcement;
- Roadway stabilization foam;
- Engineering & design costs for bent cap support systems & exterior framework jacking;
- Additional Variable Message Sign;
- Tree and debris Removal.



# TIP ACTION | Proposed – PA

*Agenda Item 2f*

**Recommend Board approval of  
PennDOT's TIP Amendment request:**

## **I-76 Bridge Repair Section SRE**

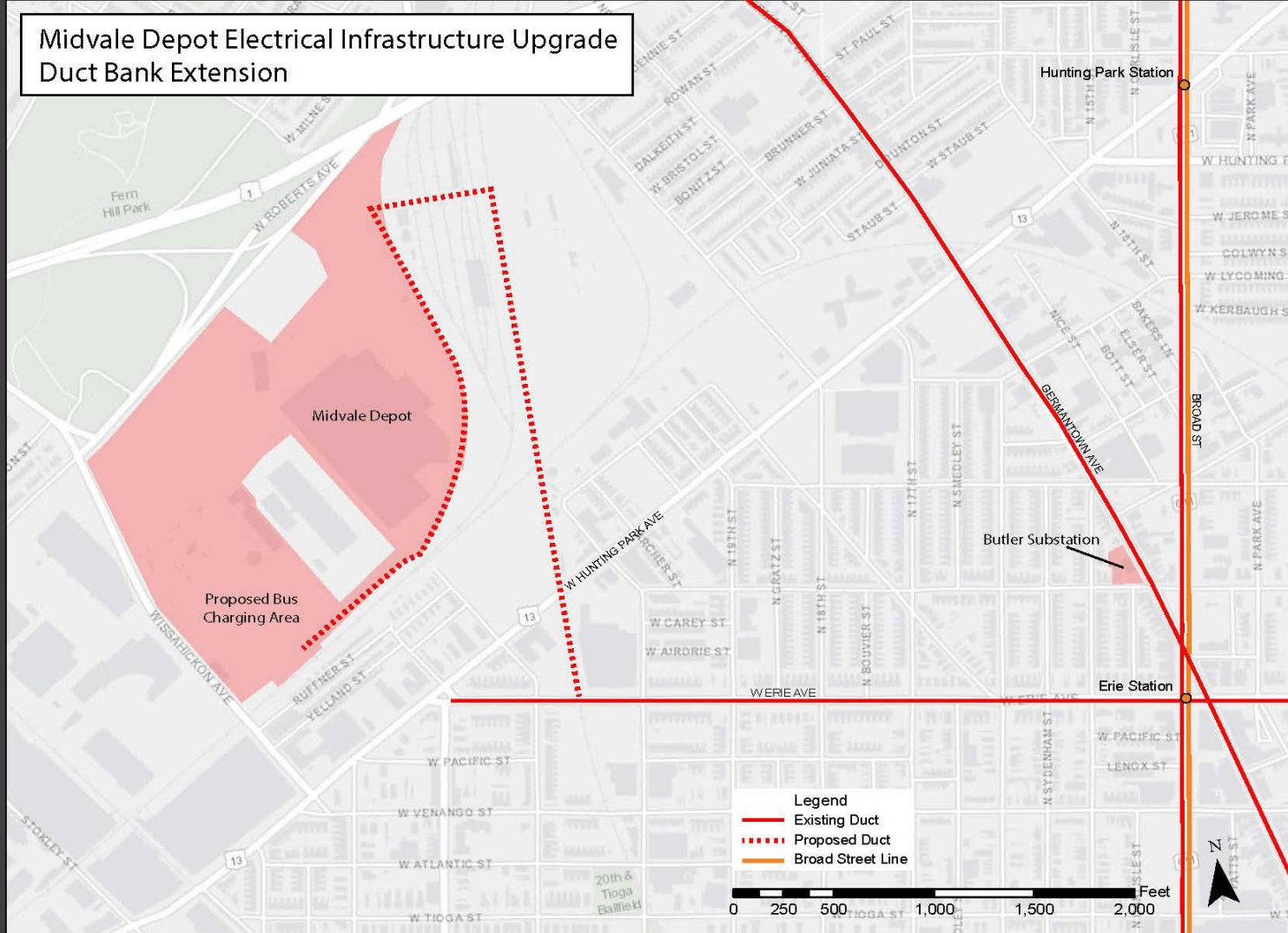
Increase CON phase by \$8.3 M NHPP /  
Toll Credit (FY20: \$6.244 M;  
FY21: \$2.056 M)

# Maintenance & Transportation Facilities Program

## SEPTA | Add a New Project to Program

- **TIP Amendment**
- **Action:** Add the Midvale Depot Electric Bus Infrastructure project to FY20 Engineering / Right-of-Way / Construction (ERC) phase of program for \$4.3 M Federal Section 5339C
- **Background:**
  - SEPTA selected for Federal Transit Administration Low or No Emission Program Section 5339C funds to support \$5.375 M Midvale Depot Electric Bus Infrastructure project
  - Project will allow SEPTA to utilize electrical power feeds from Broad Street Subway line to charge electric buses
  - *Additional funds to the region*

# Midvale Depot Electrical Infrastructure Upgrade Duct Bank Extension



## Project includes:

- Reconfiguring existing access road at Midvale Depot to accommodate 10 electric bus charging berths
- Extending duct bank linked to Butler Substation ½ mile to Midvale Depot



# TIP ACTION | Proposed – PA

*Agenda Item 2g*

**Recommend Board approval of SEPTA's TIP Amendment request:**

## **Maintenance & Transportation Facilities Program**

Add the Midvale Depot Electric Bus Infrastructure project to FY20 ERC phase of program for \$4.3 M Federal Section 5339C

*Note: Additional funds to the region*



# Thank You

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[www.dvrpc.org/TIP](http://www.dvrpc.org/TIP)



# *Connections 2045* Amendment

CONNECTIONS

2045

DVRPC Board

July 23, 2020



# Agenda

1. Reasons for this Amendment
2. TPM requirements
3. Revenue & Allocation
4. Changes to Major Regional Project List
5. Public Comment
6. Requested Action





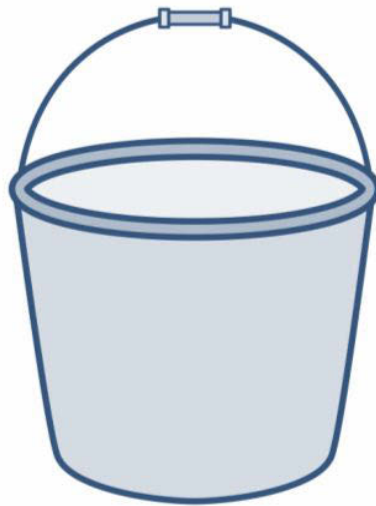
# Reasons for this Amendment

# Pennsylvania Roadway Funding



Regional  
Formula  
Funding

+



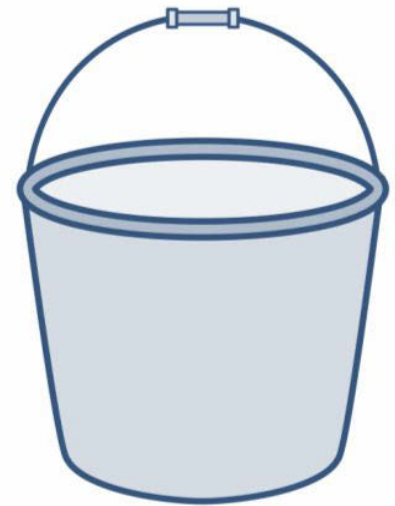
Interstate  
Management  
Program

+



Ongoing  
Add-Ons

+



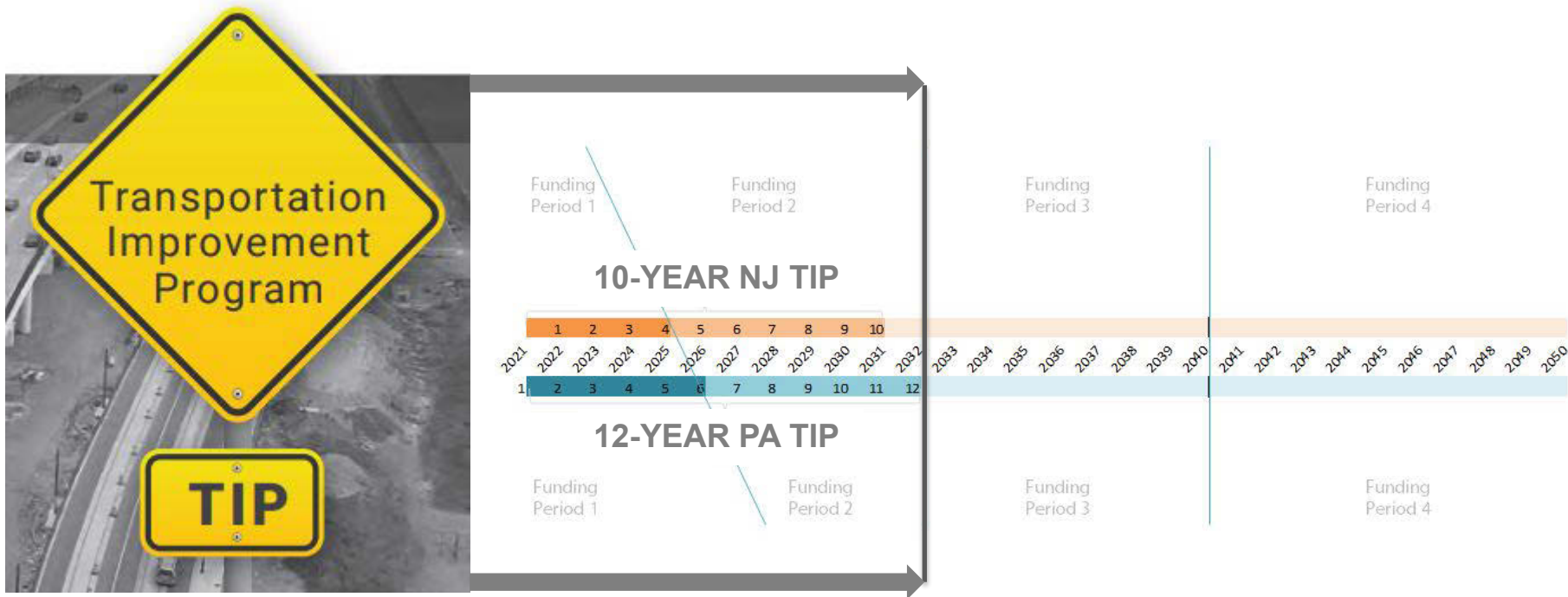
One-Time  
Add-Ons



# Moved out of FY 21 PA TIP

MPMS #	Facility	County
93446	US 1 - Frontage Corridor	Bucks
87781	US 30-Coatesville-Downingtown Bypass (CER-Eastern Section)	Chester
15251	US 1 at PA 352 and 452 Intersection Improvements	Delaware
64795	Belmont Avenue/Rock Hill Road at I-76 Interchange	Montgomery
102273	Second Collegeville Bridge Crossing	Montgomery
87784	I-95 Philadelphia North (BS3) - Aramingo / Harbison: Church Street to Amtrak	Philadelphia

# New Jersey TIP



CONNECTIONS

2045

# New Federal Requirements



Transportation Performance Management

Focusing on Performance for Safe, Reliable Journeys



# Transportation Performance Management (TPM) Requirements

# Roadway Transportation Performance Management (TPM)

## TPM 1. Road Safety\*

- Number of Fatalities
- Fatality Rate per 100 million VMT
- Number of Serious Injuries
- Serious Injury Rate per 100 million VMT
- Number of non-motorized fatalities and serious injuries

## TPM 2. Road Conditions

- Good Pavement Lane Miles
- Poor Pavement Lane Miles\*
- Good Bridge Deck Area
- Poor Bridge Deck Area\*

## TPM 3. Roadway Performance

- Person-Miles Traveled with Reliable Travel Times (%)
- Truck Travel Time Reliability Index
- Non-Single Occupant Vehicle Travel
- Peak Hour Excessive Delay (PHED) per Capita
- CMAQ Emissions Reductions

*\*Has penalty associated with not meeting target(s)*



# Transportation Performance Management (TPM)

## Transit Conditions

- Rolling Stock (Revenue Vehicles)
- Equipment (Non-Revenue Vehicles)
- Facilities (Passenger and Administrative / Maintenance Facilities)
- Infrastructure (Rail Track)

## Transit Safety

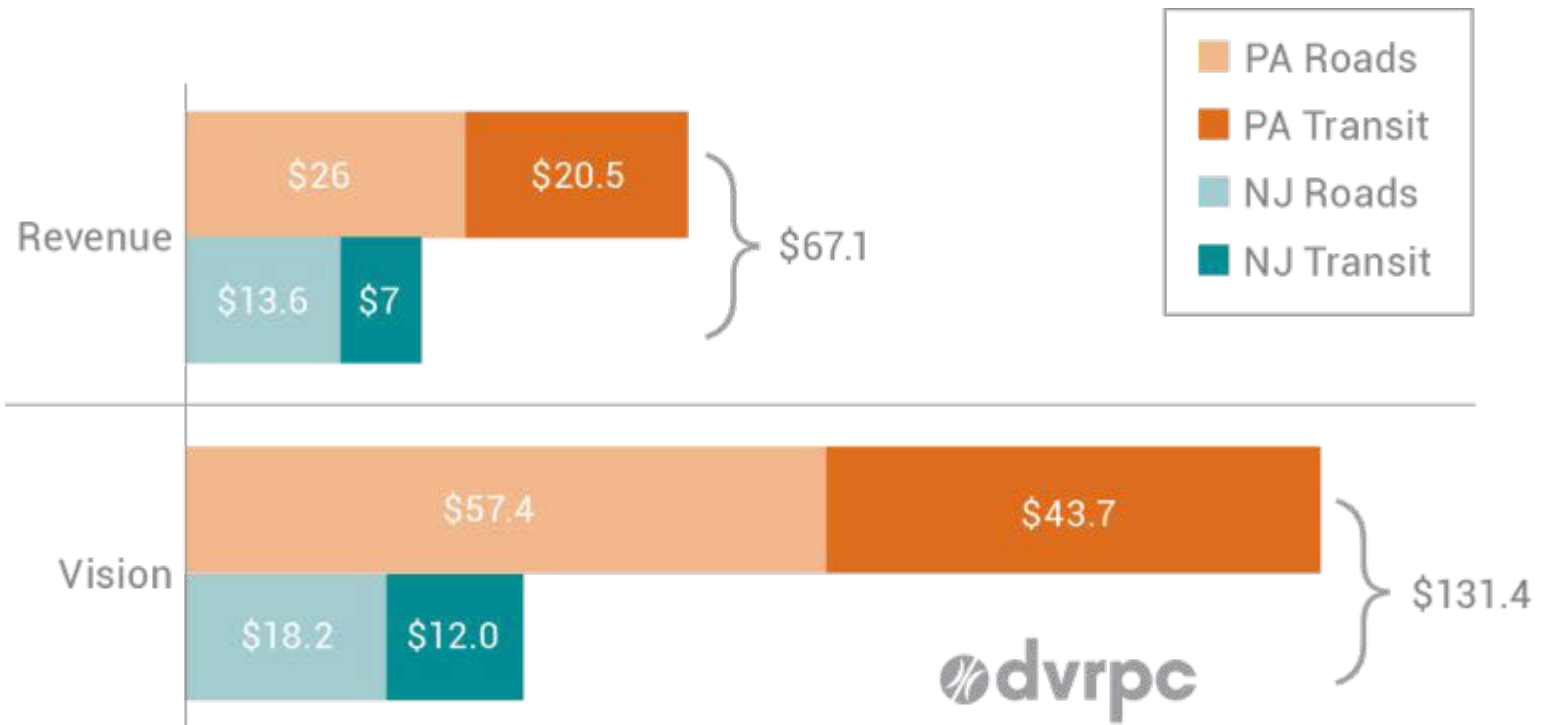
- Fatalities: Total number and rate per total vehicle revenue miles (VRM) by mode
- Injuries: Total number and rate per total VRM by mode
- Safety Events: Total number and rate per total VRM by mode
- System Reliability: Mean distance between major mechanical failures by mode





# Revenue & Allocation

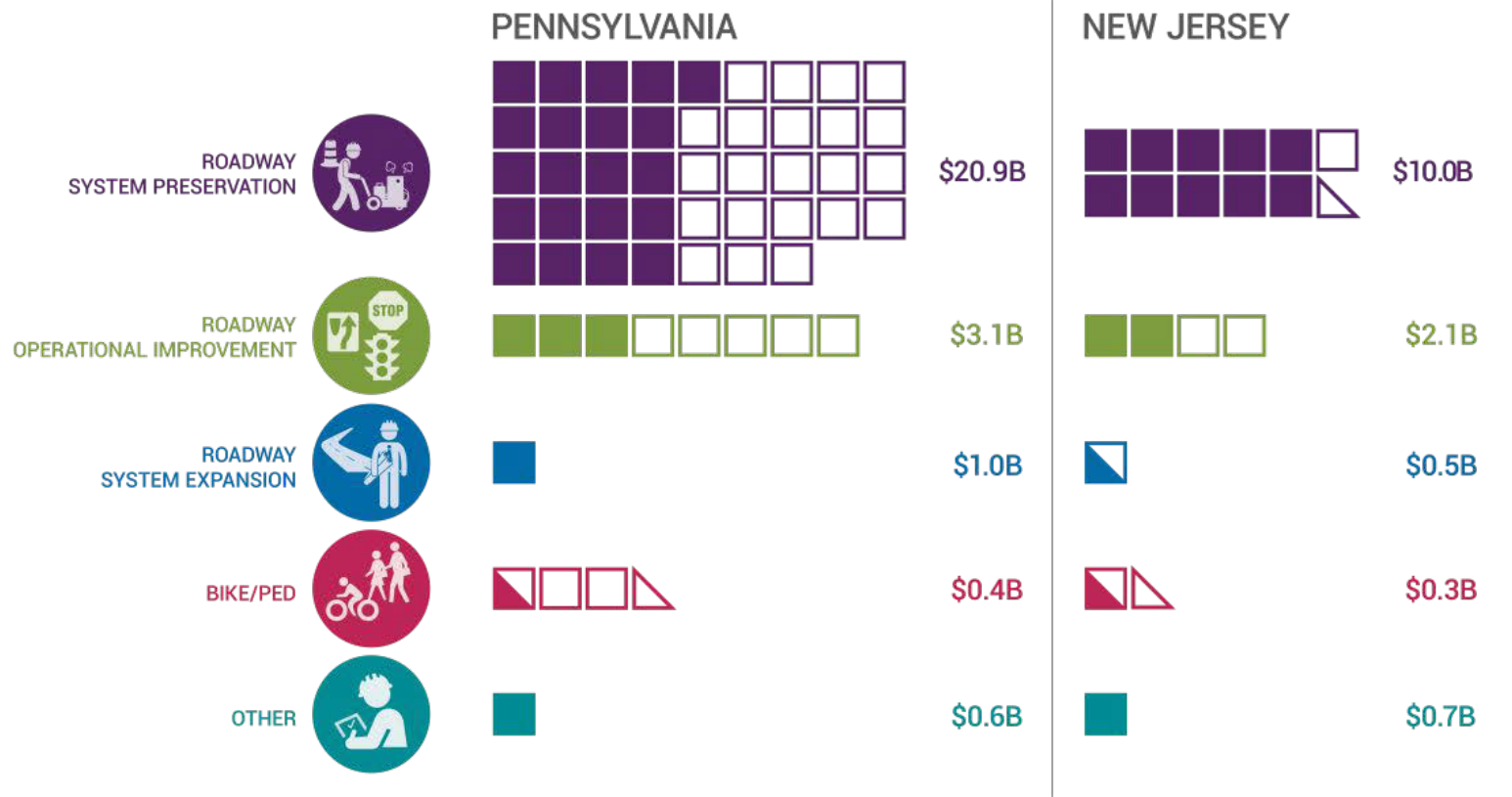
# Revenue & Vision Plan



# Roadway Revenue Allocation

■ FUNDED = \$1 Billion Year-of-Expenditure (Y-O-E)

□ UNFUNDED = \$1 Billion Year-of-Expenditure (Y-O-E)



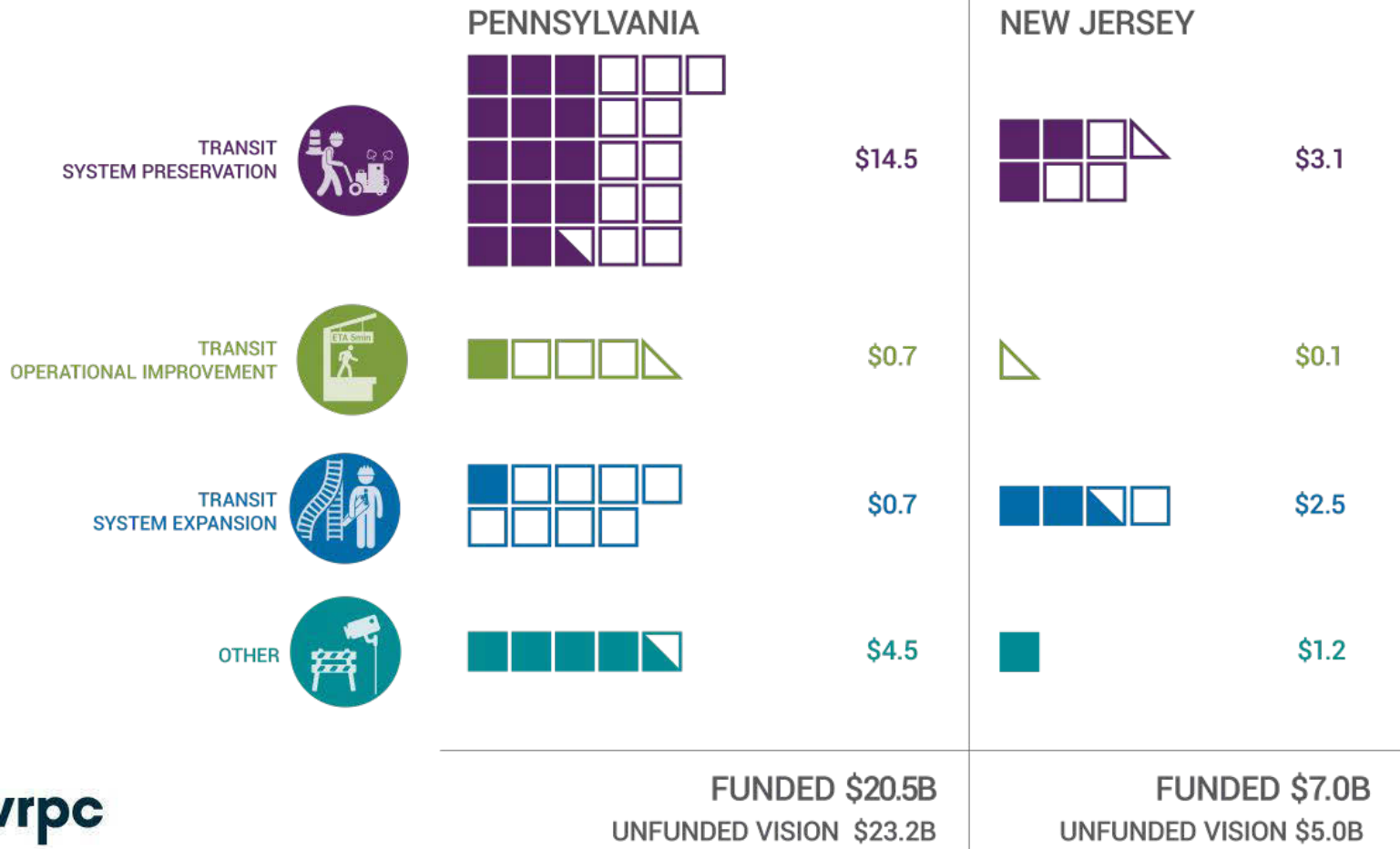
FUNDED \$26.0B  
UNFUNDED VISION \$31.4B

FUNDED \$13.6B  
UNFUNDED VISION \$4.6B

# Transit Revenue Allocation

 FUNDED = \$1 Billion Year-of-Expenditure (Y-O-E)

 UNFUNDED= \$1 Billion Year-of-Expenditure (Y-O-E)



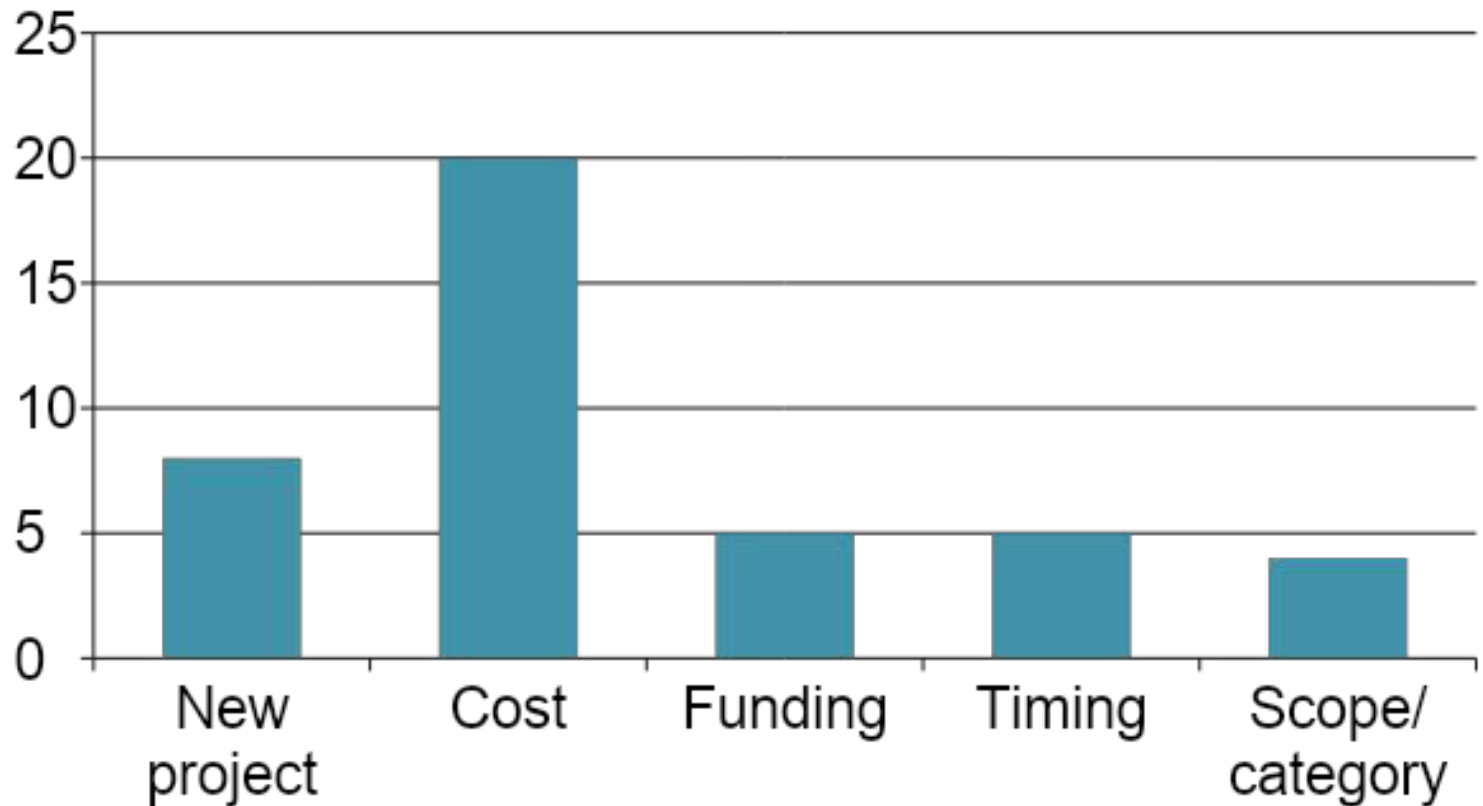


# Changes to Major Regional Project List



# 34 Major Regional Projects Updated

10 include 2 or 3 changes



# Moved from TIP into LRP

Facility	County
<b>I-95 Philadelphia North</b>	Philadelphia
<b>US 1 at PA 352 and 452</b>	Delaware
<b>US 1</b>	Bucks
<b>Belmont Avenue at I-76 Interchange</b>	Montgomery
<b>US 30-Coatesville-Downingtown Bypass</b>	Chester



Source: PennDOT

# Moved into Unfunded List

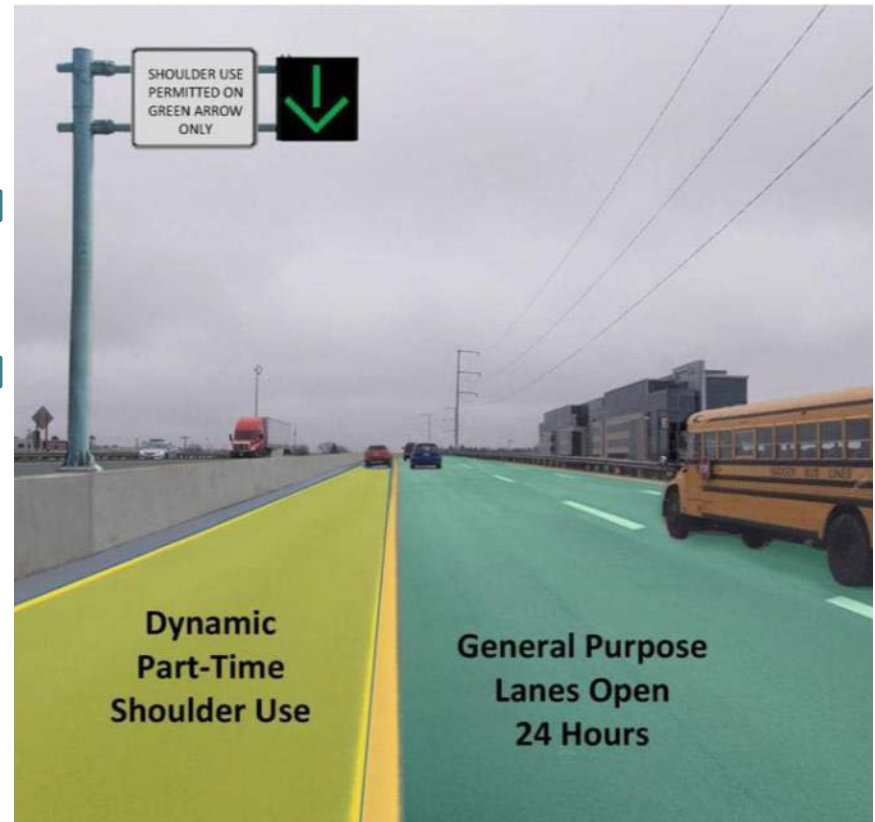
Facility	County
Second Collegeville Bridge Crossing	Montgomery
I-295 at NJ 38	Burlington





# Change in Scope or Category

Facility	County
<b>I-476 Active Traffic Management</b>	Delaware
<b>I-95 Active Traffic Management</b>	Delaware
<b>PA 63 at Welsh Road</b>	Montgomery



Source: PennDOT



# New Minor System Expansions Projects

Facility	County
<b>PA 663 from Portzer to Hickory</b>	Bucks
<b>Orvis Road</b>	Chester
<b>Ashburn Rd. Extension</b>	Chester
<b>Horsham Road</b>	Montgomery
<b>Spring House Road</b>	Montgomery
<b>37th St. Extension</b>	Philadelphia

# Changes to Major Regional Project List

## Bucks

- PA 663 from Portzer Road to Hickory Drive
- Bristol Road Extension
- US 1

## Chester

- Orvis Road
- Ashburn Road Extension
- US 30-Coatesville- Downingtown Bypass

## Delaware

- West Chester Pike (PA 3)
- I-95 Sound Walls
- I-95/US 322/Highland Avenue Interchange
- US 1 at PA 352 and 452
- I-476 Active Traffic Management
- I-95 Delaware County Active Traffic Management

## Montgomery

- Spring House Road
- Horsham Road
- Henderson Road and South Gulph Road
- I-76 Integrated Corridor Management
- Belmont Avenue at I-76 Interchange
- District 6 Traffic Management Center
- Philmont Avenue/Tomlinson Road/Pine Road
- Second Collegeville Bridge Crossing
- PA 63 at Welsh Road
- I-276/PA 611 Willow Grove Interchange
- I-276/ I-76 Valley Forge Interchange
- I-276 and Virginia Drive Interchange
- I-276 and Henderson Road
- I-276 and PA 63/Welsh Road

## Philadelphia

- Market Street over Schuylkill River
- 37th Street Extension
- Penn's Landing Cap and Civic Space
- Schuylkill River Swing Bridge
- I-95 Philadelphia North

## Burlington

- I-295 at NJ 38

## Camden / Gloucester

- I-295/NJ 42 (Missing Moves)

## Mercer

- US 1 from Alexander Road to Mapleton Road



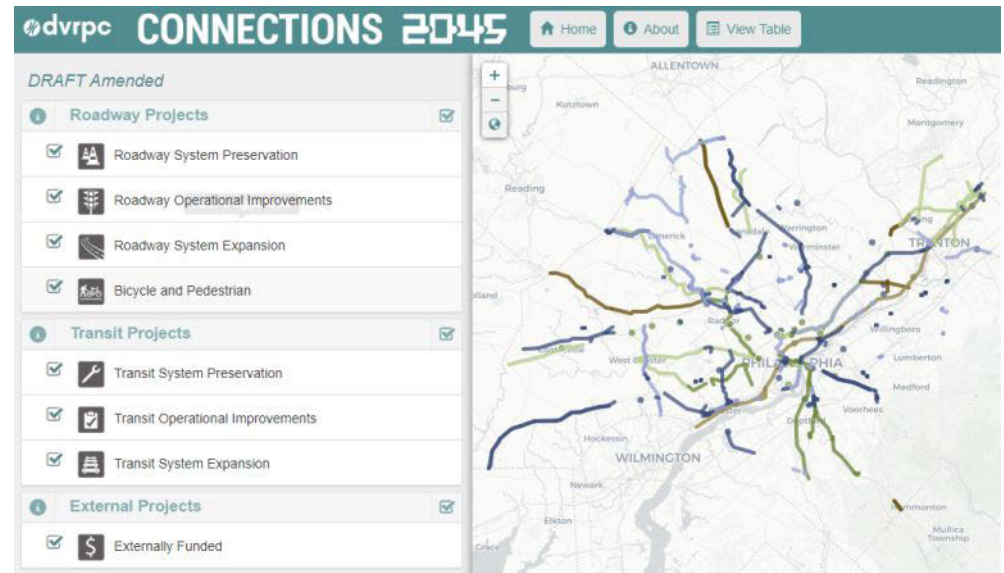
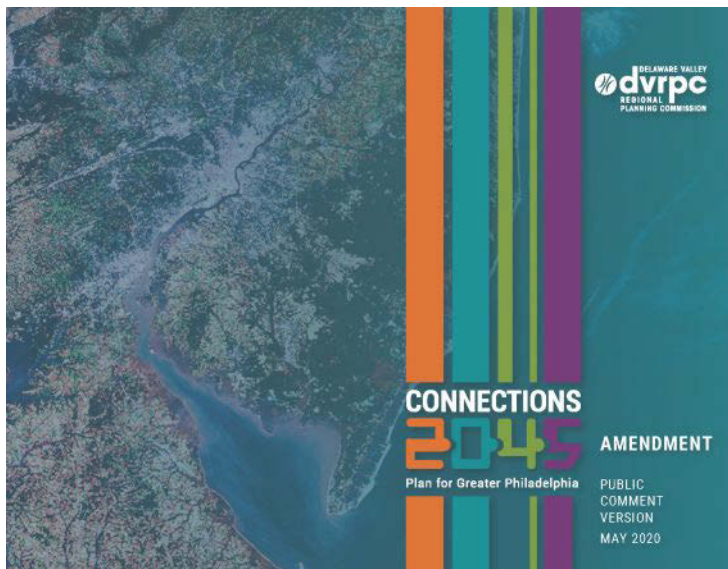
# Public Comment

CONNECTIONS

2045

# Public Comment Period

Public comment period held from May 26 to June 29, 2020.  
Two public comment meetings held June 17, 2020.





# 3 Public Comments Received

Anna Perng

- Concerned about racism and gentrification at new PATCO Chinatown Station, with recommendations to combat both.

Sanjeev Ramchandra

- Proposal to increase the sales tax in order to create reliable local funding for NJ Transit.

Daniel Trubman

- Stop prioritizing auto infrastructure.



**Questions?**

**Then**

**Requested Action**



# Action Proposed

Approve the July 2020 Amendment to *Connections 2045 Plan for Greater Philadelphia*, which incorporates required FHWA and FTA performance measures and revises the scope, funding, status, and/or timing of 34 major regional projects.





# Thank You!



CONNECTIONS

2045

[www.dvrpc.org/LongRangePlan/](http://www.dvrpc.org/LongRangePlan/)



CONNECT WITH US  
[www.dvrpc.org](http://www.dvrpc.org)



Michael Boyer  
DVRPC Board  
July 23, 2020

# Transportation Conformity Demonstration: Draft Connections 2045 LRP Amendment, FY 2020 NJ TIP, and Draft FY 2021 PA TIP

# What is Transportation Conformity?

Transportation Conformity is a federal requirement to control emissions of on-road, mobile sources of NAAQS pollutants in designated air quality non-attainment or maintenance areas.



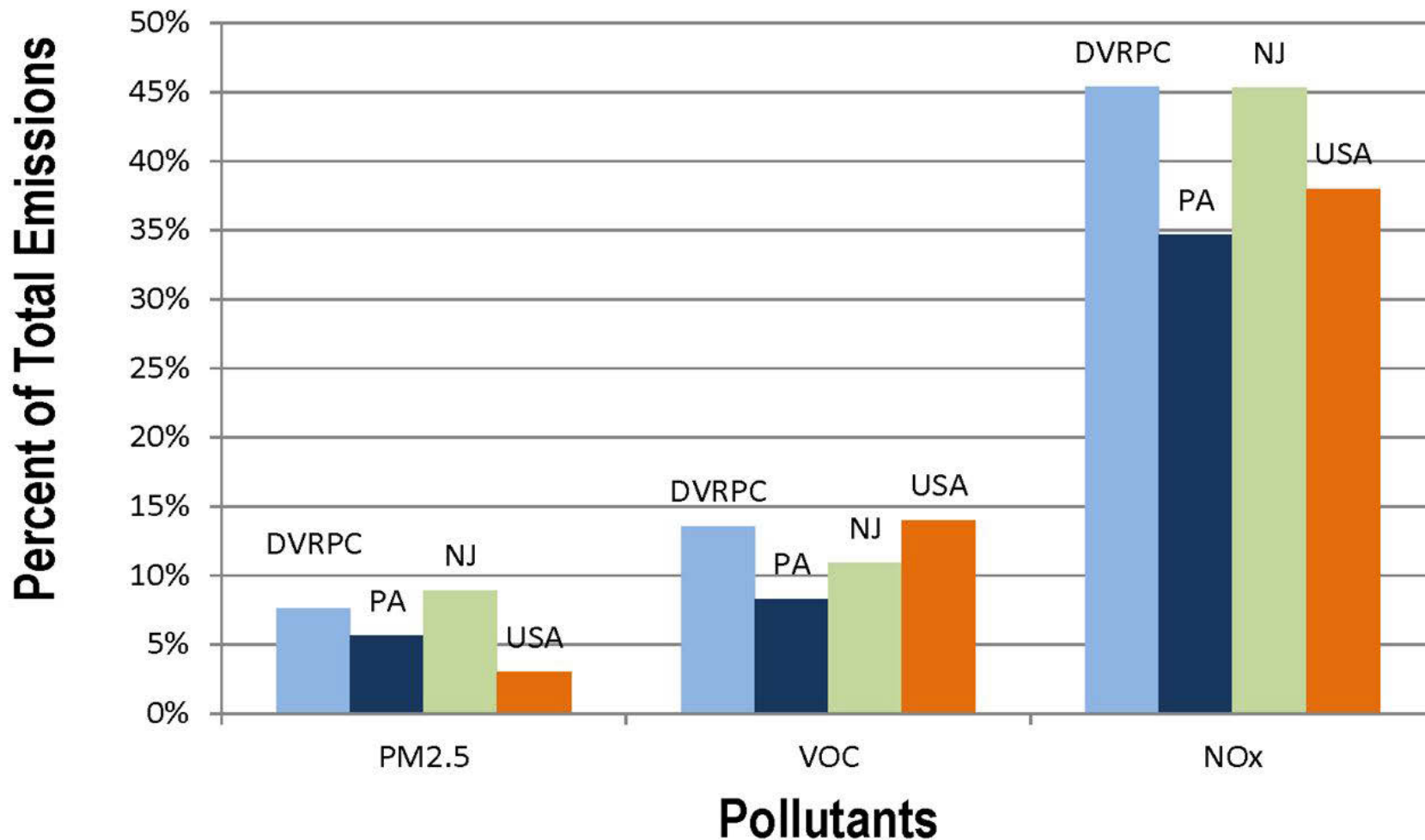
# What is Transportation Conformity?

There are three major sources of emissions:

- ❖ Stationary – power plants, industrial boilers...
- ❖ Industry – petroleum refineries, cement kilns...
- ❖ **Mobile Sources**
  - Off-road – trains, planes, construction equipment
  - **On-road mobile sources – cars, trucks, buses**
    - **Accounts for 38% NO<sub>x</sub>, 14% VOC, 3% PM<sub>2.5</sub>**

└──────────────────┘  
Combine to form Ozone

# On-Road Mobile Emissions



# What is Transportation Conformity?

## Conformity Triggers:

- ❖ Connections 2045 LRP Amendment
- ❖ Amendments to the FY 2020 TIP for NJ
- ❖ A new FY 2021 TIP for PA

# Who Must Demonstrate Conformity?

## **Non-Attainment Areas**

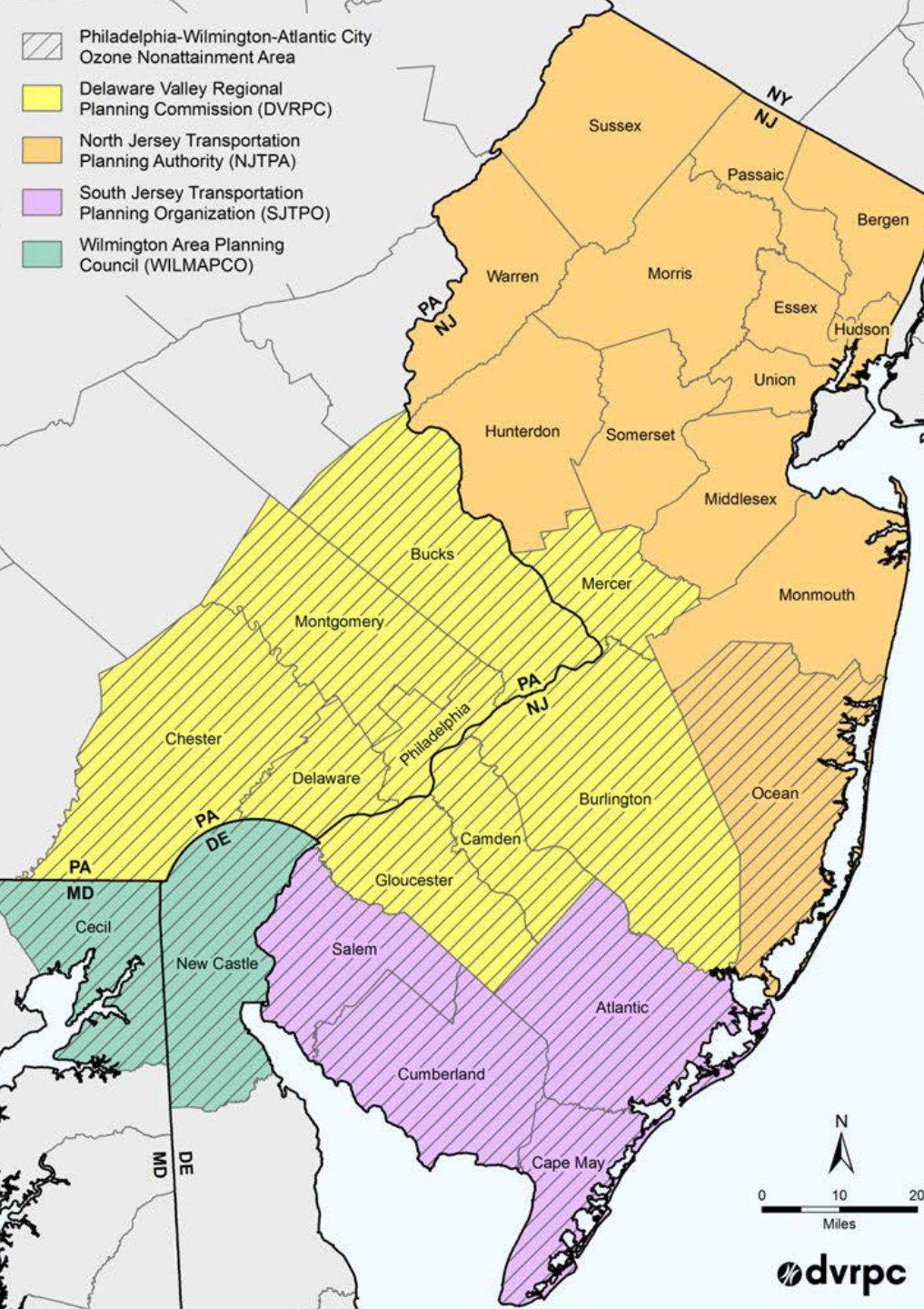
- ❖ Area not meeting federal air quality standard(s) (NAAQS)

## **Maintenance Area**

- ❖ Area that previously was in non-attainment

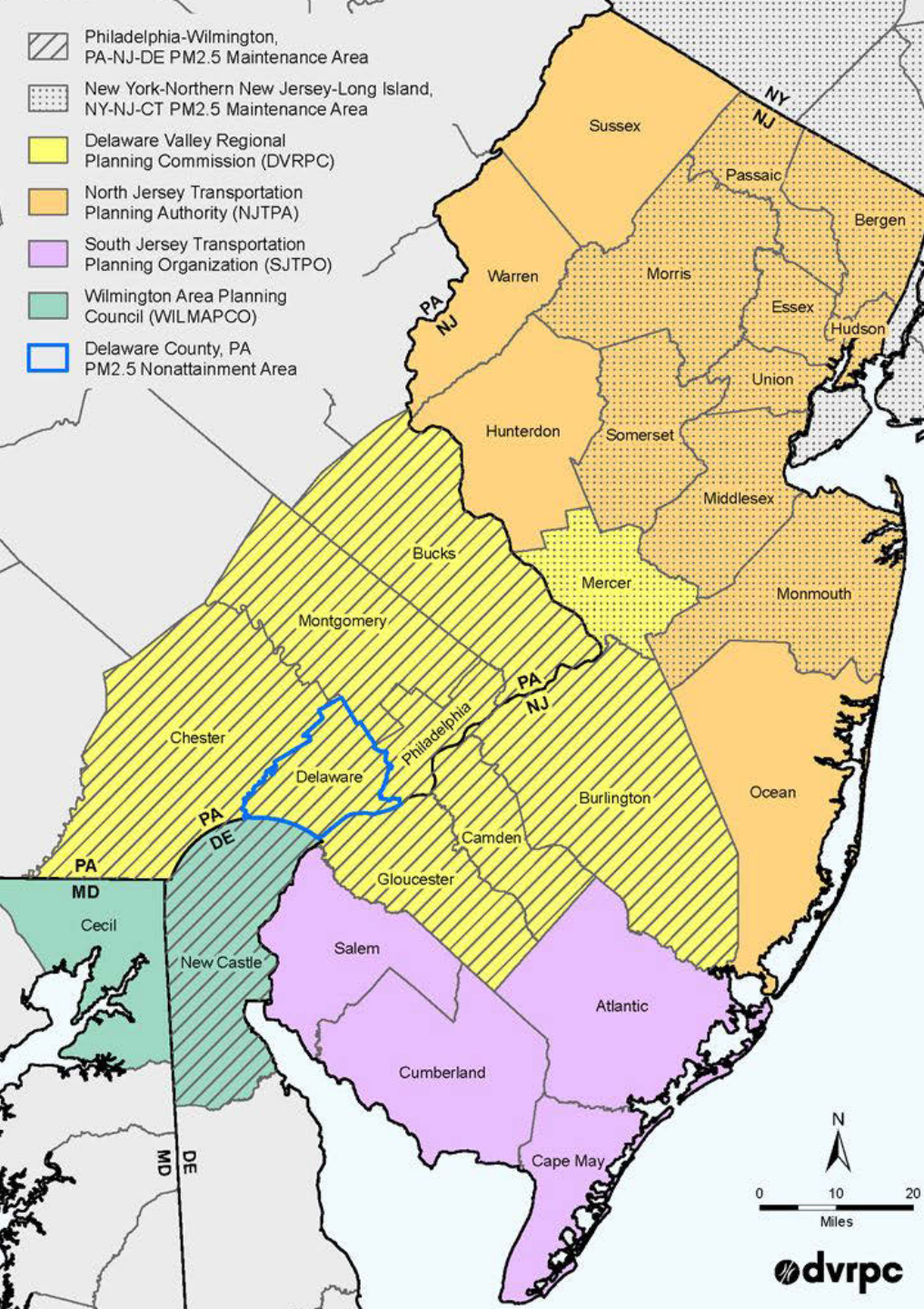
## **State Implementation Plans (SIPs)**

- ❖ States must develop plans (SIPs) to meet or continue to maintain the NAAQS



# Ozone Non-Attainment Area





# PM<sub>2.5</sub> Maintenance Areas

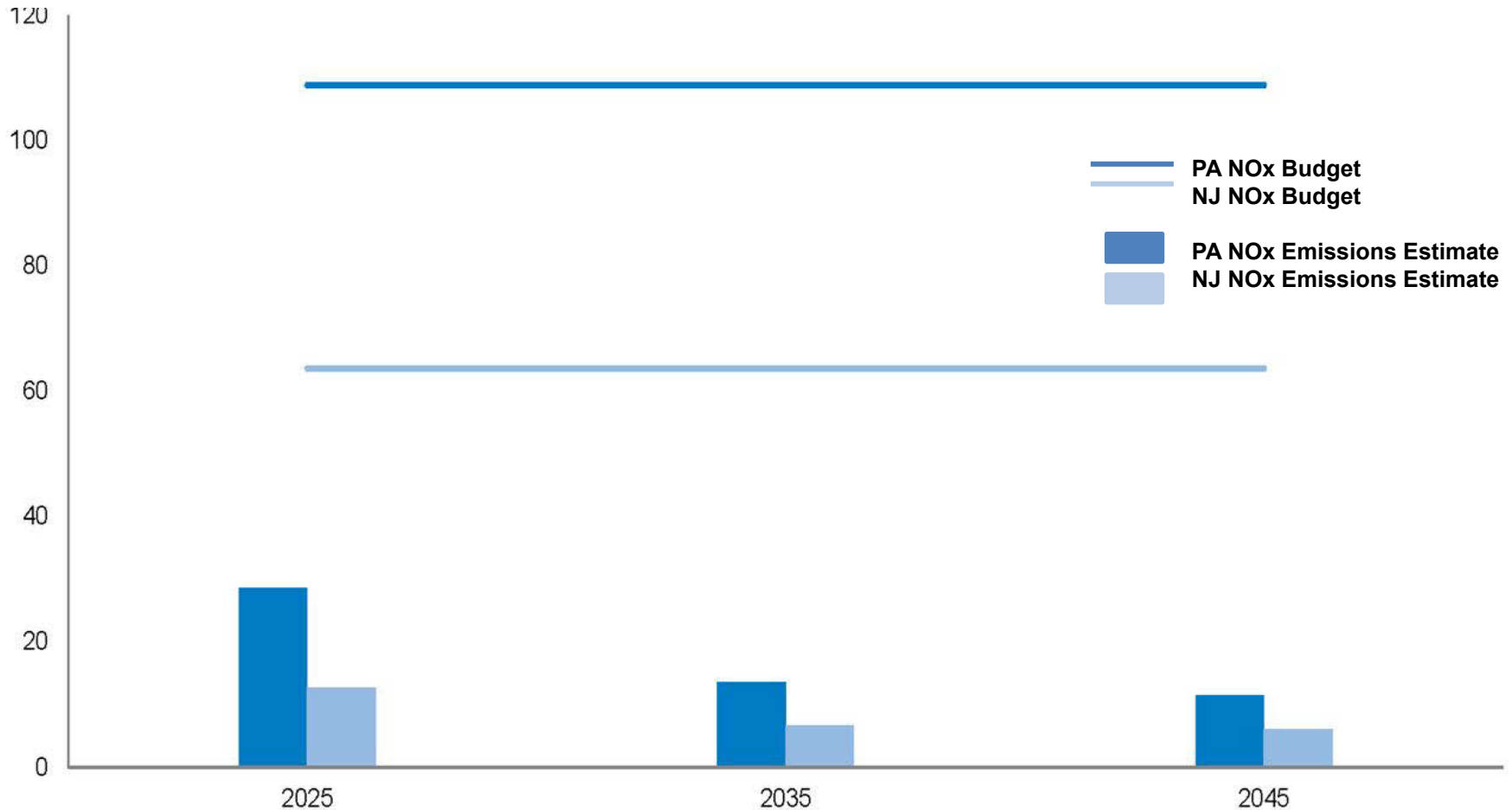


# Conformity Test

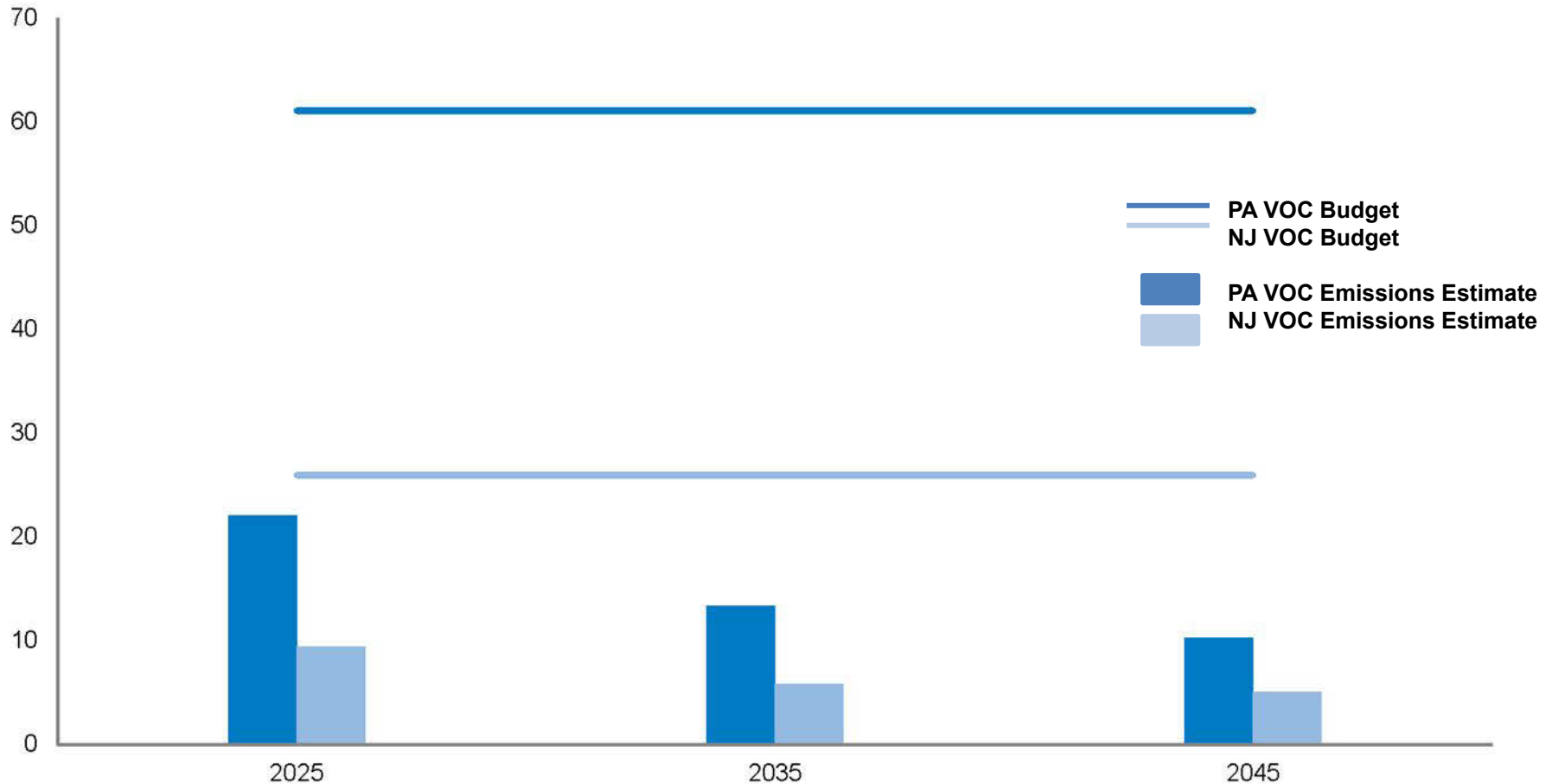
Conformity is tested against SIP “budgets”

- ❖ A budget is an emissions ceiling established in the SIP
- ❖ Projected emissions from projects in the Plan and TIP are compared to SIP budgets
- ❖ If projected emissions are less than the budget, the Plan or TIP is conforming to the SIP

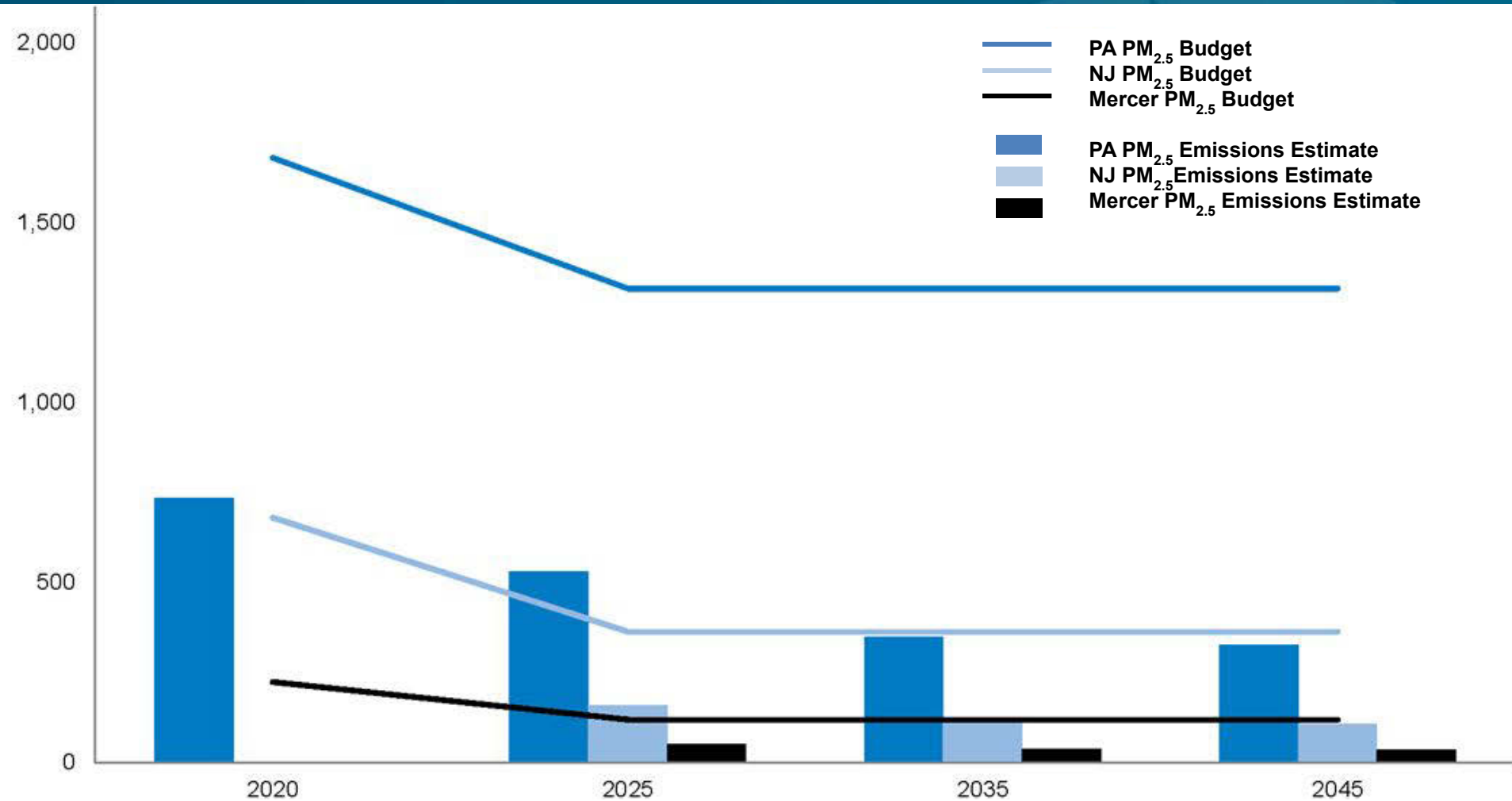
# NO<sub>x</sub> Emissions Results



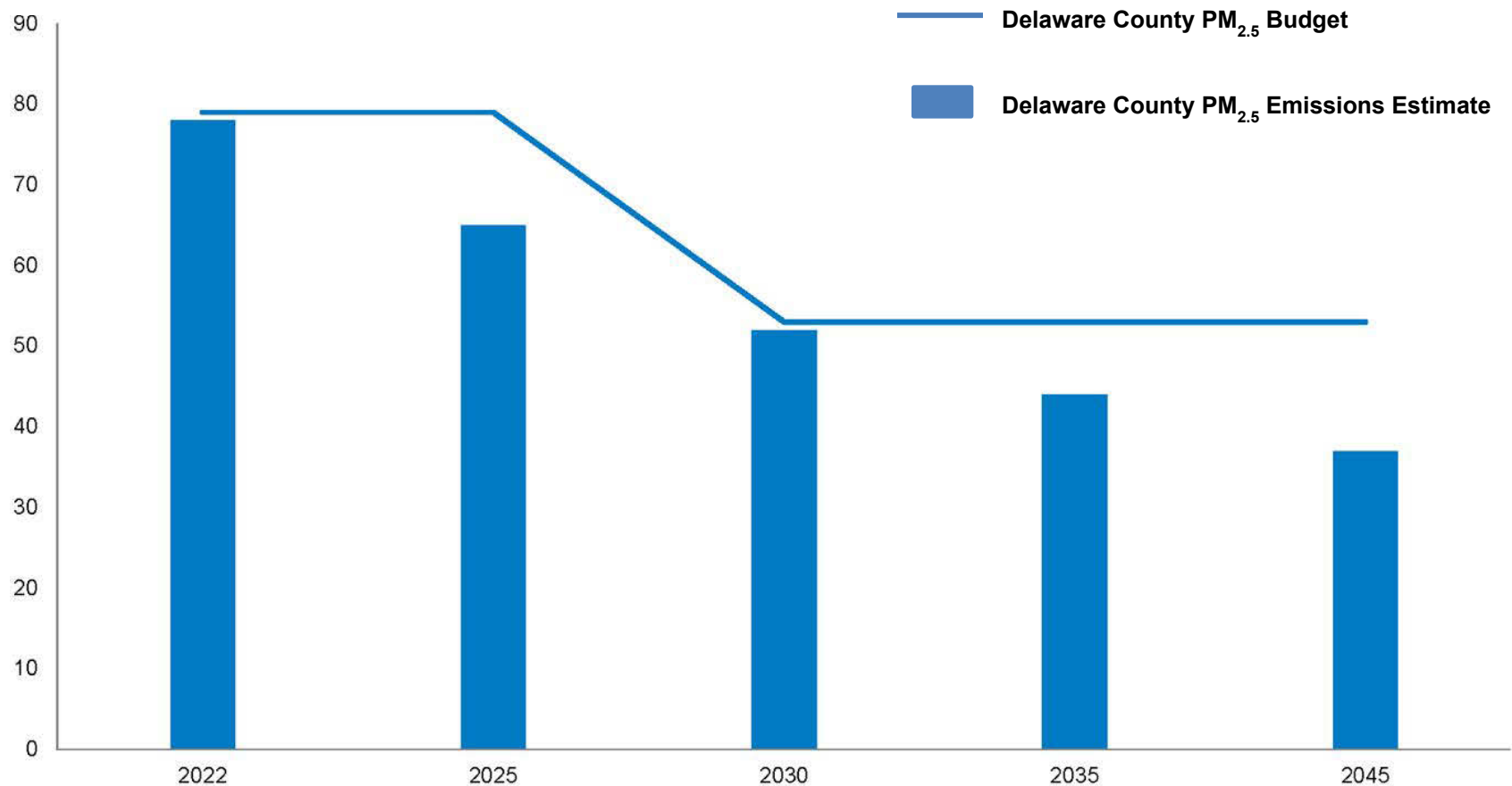
# VOC Emissions Results



# PM<sub>2.5</sub> Emissions Results



# PM<sub>2.5</sub> Emissions Results – Delaware County



# Emissions Analysis Results

Draft Connections 2045 LRP Amendment, FY 2020 NJ TIP, and Draft FY 2021 PA TIP

- ❖ “Conform” to the corresponding SIPs and the current final conformity guidance under the CAA, including all applicable NAAQS requirements
- ❖ Transportation investments identified in the Plan and TIPs do not impede efforts to attain NAAQS
- ❖ Replaces the existing conformity finding of September 2019

# Public Comment

## Public Comment Period

- ❖ June 3, through July 6, 2020
- ❖ Two virtual public meetings
  - June 17 at 2PM and 7PM

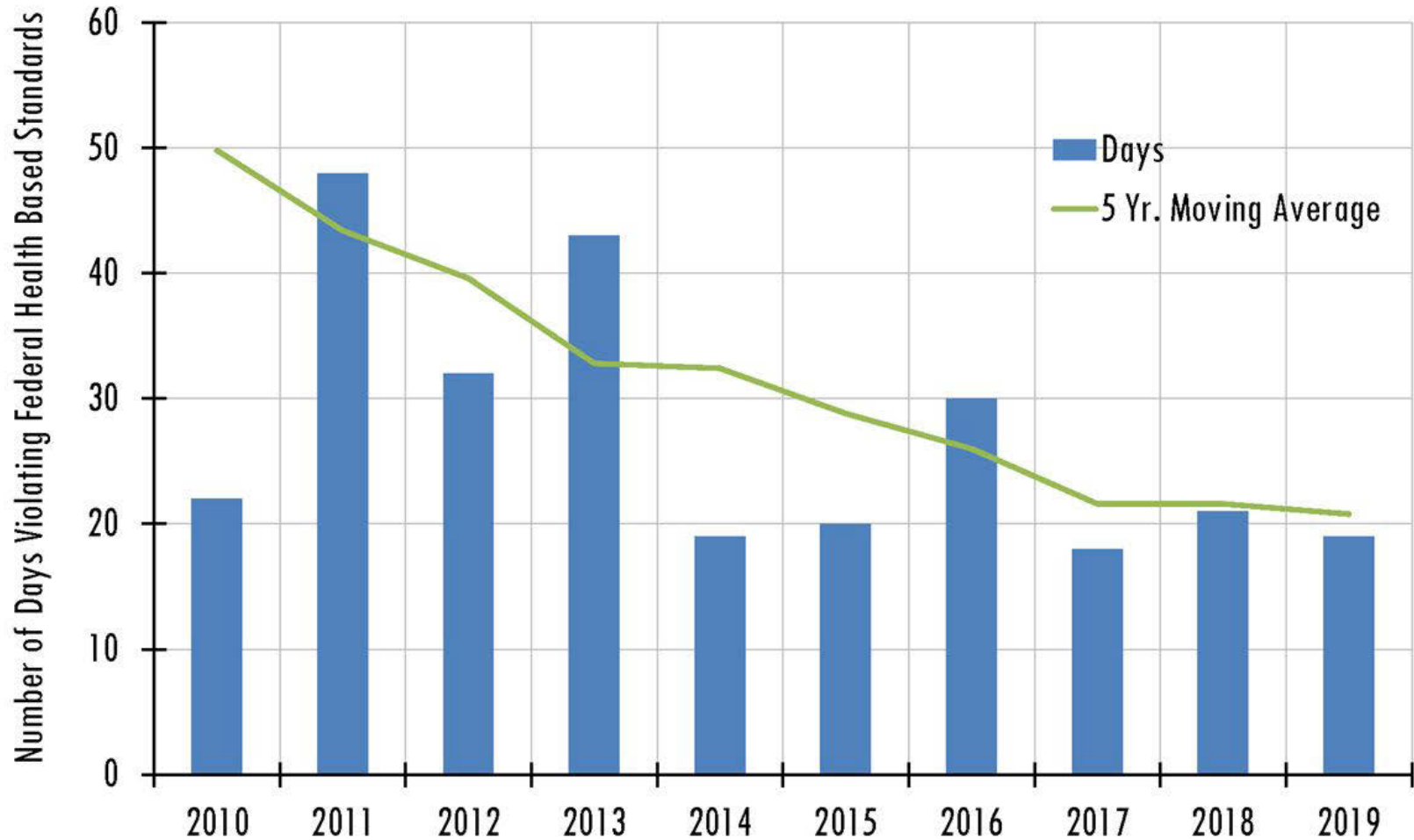
## Comments were accepted:

- ❖ at public meeting
- ❖ via email ([airconformity@dvrpc.org](mailto:airconformity@dvrpc.org))
- ❖ online ([www.dvrpc.org/AirQuality/Conformity/](http://www.dvrpc.org/AirQuality/Conformity/))
- ❖ via mail and fax

**There were no public comments on this action**



# Regional Air Quality Trends



# What Can We Do Better?

Regional air quality is improving but...

- ❖ Pockets of poorer air quality at the local level
  - Near transportation, goods movement hubs, and point sources
- ❖ Often times located within disadvantaged communities

What can we do?

- ❖ Identify sources of localized emissions
- ❖ Invest in improving operations, reducing congestion, promoting alternative transportation options, and modernizing the fleet of vehicles

# Action Proposed

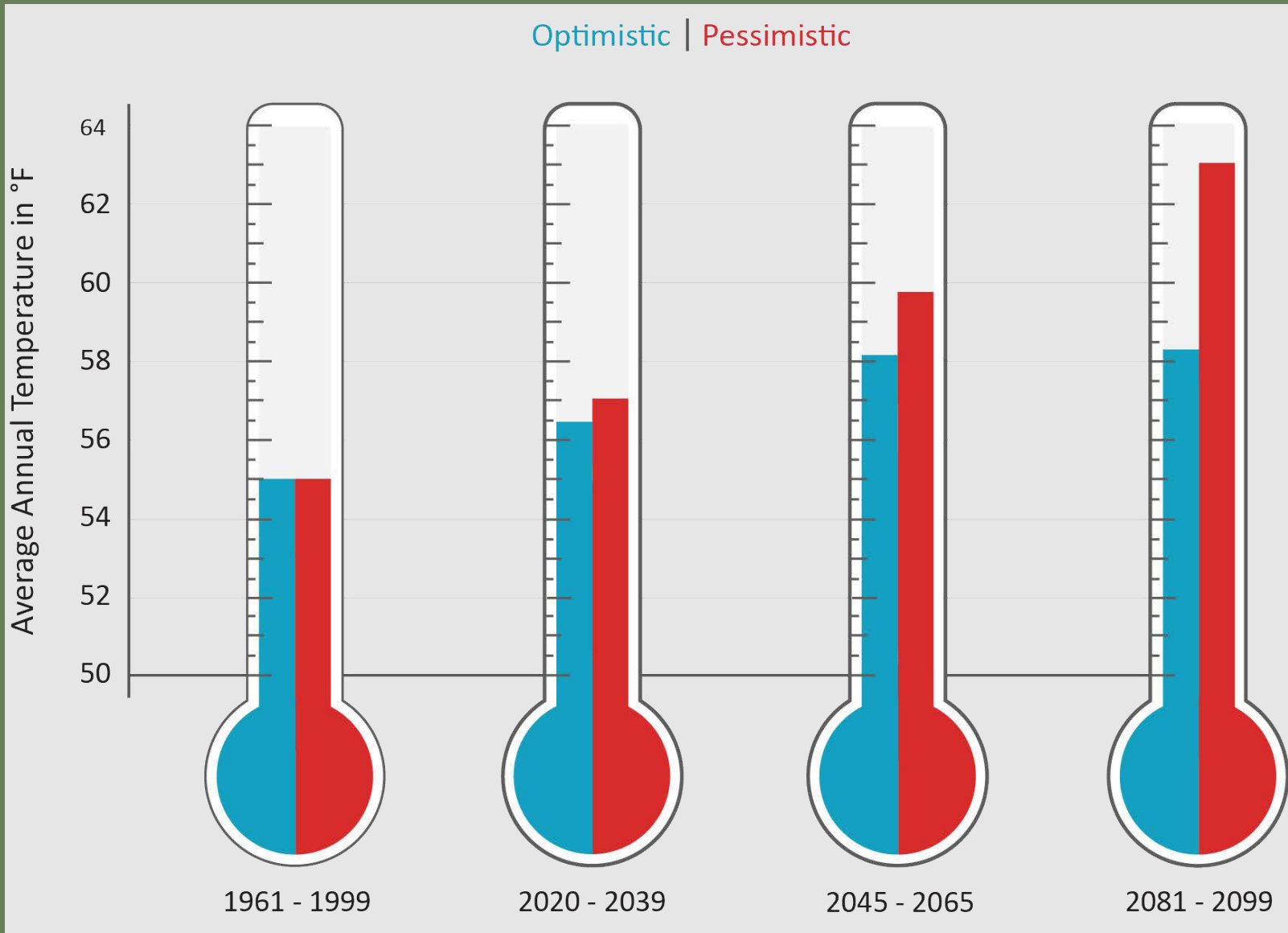
That the DVRPC Board adopt the conformity findings of the Draft Connections 2045 LRP Amendment, FY 2020 TIP for New Jersey, and Draft FY 2021 TIP for Pennsylvania for Ozone and  $PM_{2.5}$  in the DVRPC planning area.

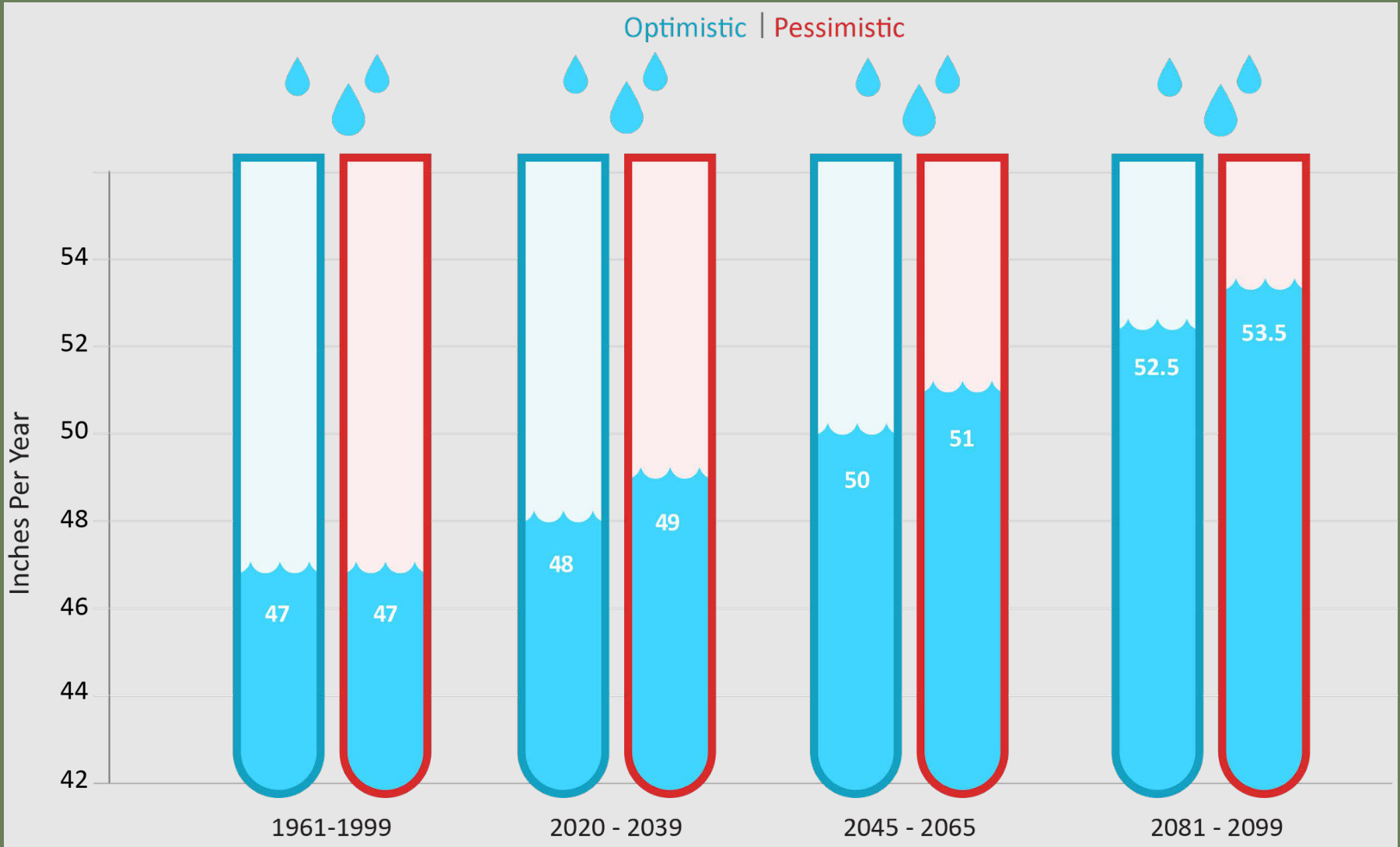
# An Assessment of Planning Tools for Climate Change Resiliency in the Delaware Valley

Miles Owen, Office of Environmental Planning  
DVRPC Board Meeting  
July 23, 2020

1. Climate Change and Resiliency
2. Resiliency Planning Tools for the Delaware Valley
3. Organizing the Tools
4. Utilizing Resiliency Tools

# Climate Change and Resiliency







## Projected Sea Level Rise

### Projections for 2050

Regardless of whether a high- or low-emissions scenario is used to forecast SLR, the projections for 2050 are very similar. (4) Therefore, we only used one emissions scenario for the 2050 analysis.

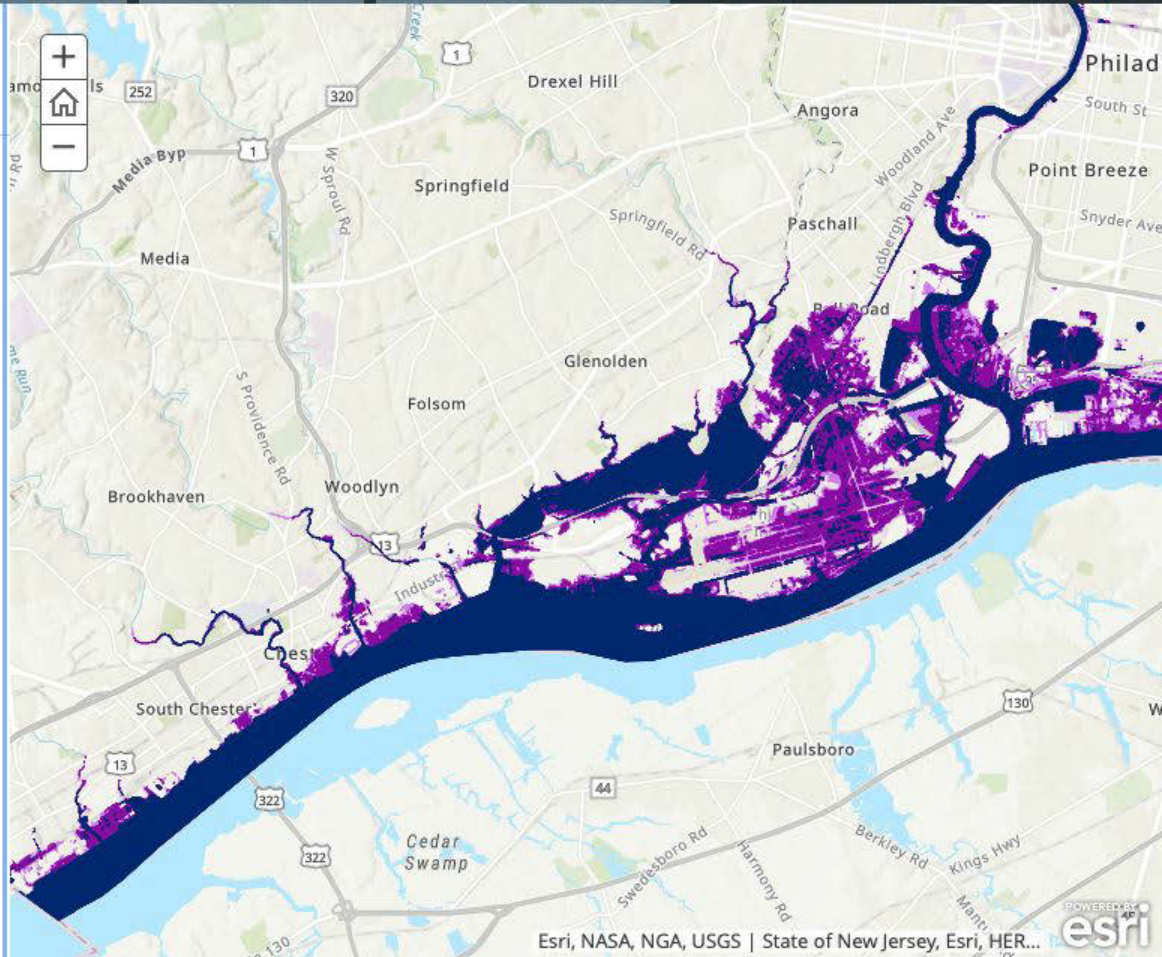
Under this emissions scenario, by 2050, sea level in this region is likely to rise by between 1.0 and 1.8 feet above the height of sea level in the year 2000. The middle value of this range, known as the *central estimate*, is 1.4 feet.

#### 2050 Scenario

- High Tide
- 10% Storm Flooding
- 1% Storm Flooding

Sources: DVRPC, NOAA (2018), Kopp, et al. (2014)

Please see [About Our Analysis](#) for more information on the climate change and SLR projections we used to create these layers, and a description of our model.



Esri, NASA, NGA, USGS | State of New Jersey, Esri, HER...

*Resiliency*: the capacity of individuals, communities, institutions, businesses, agencies, and systems to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience

# Resiliency Planning Tools for the Delaware Valley

## Tools

Filter by topic: ▼

Filter by tool function: ▼

Filter by steps to resilience: ▼

Filter by region: ▼

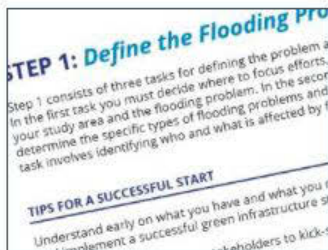
Tools are available to help you manage your climate-related risks and opportunities, and to help guide you in building resilience to extreme events.

Browse the list below, or filter by topic and/or tool functionality in the boxes above. To expand your results, click the Clear Filters link.

SHARE

TWEET

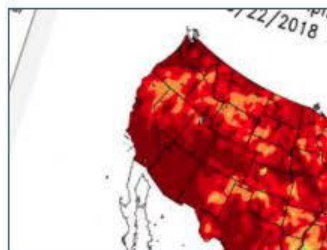
PRINT



### A Guide to Assessing Green Infrastructure Costs and Benefits for Flood Reduction

Communities can use this six-step process as a framework—and to spark discussion—when assessing the costs and benefits of green infrastructure projects.

[Read more >](#)



### ACIS Climate Maps

Generate maps of temperature and precipitation variables for the United States.

[Read more >](#)



### Adaptation Tool Kit: Sea-Level Rise and Coastal Land Use

This toolkit presents information on 18 different land-use tools (generally used legal devices) that could be used to preemptively respond to threats that sea level rise poses to public and private coastal development and infrastructure.

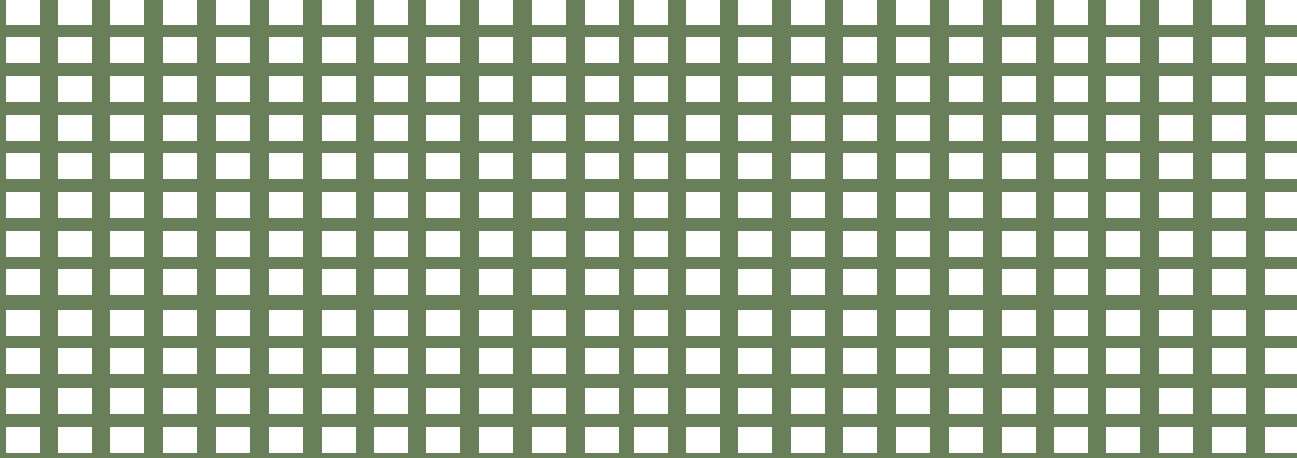
[Read more >](#)



### Adaptation Workbook for Land Management and Conservation

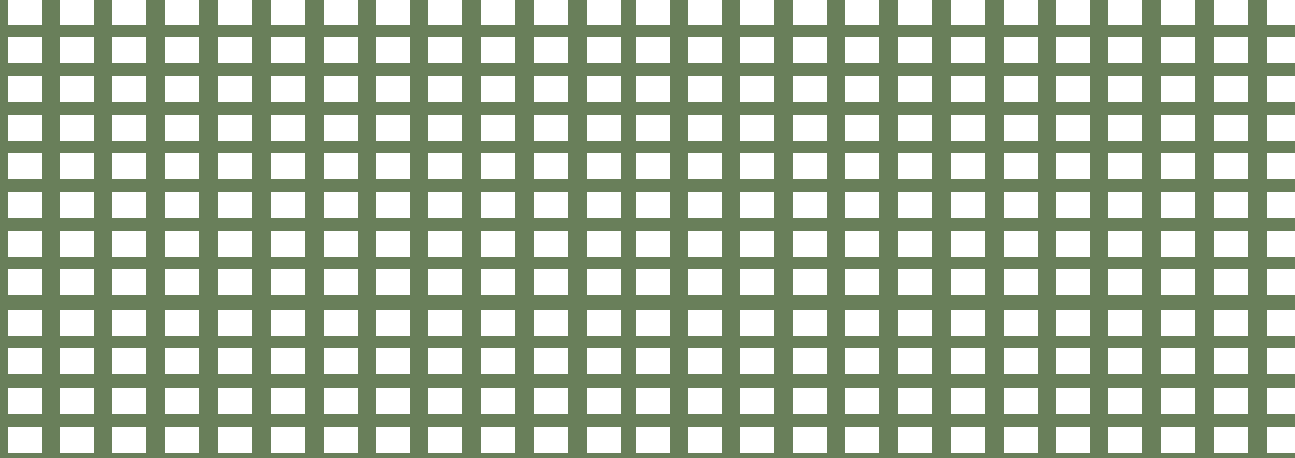
Land managers, natural resource professionals, and motivated landowners can use this structured process to consider the effects of climate change on forests, urban forests, and agricultural properties.

[Read more >](#)

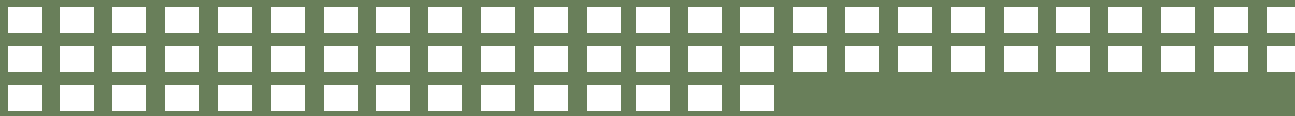


Hundreds of tools on  
online aggregations  
websites



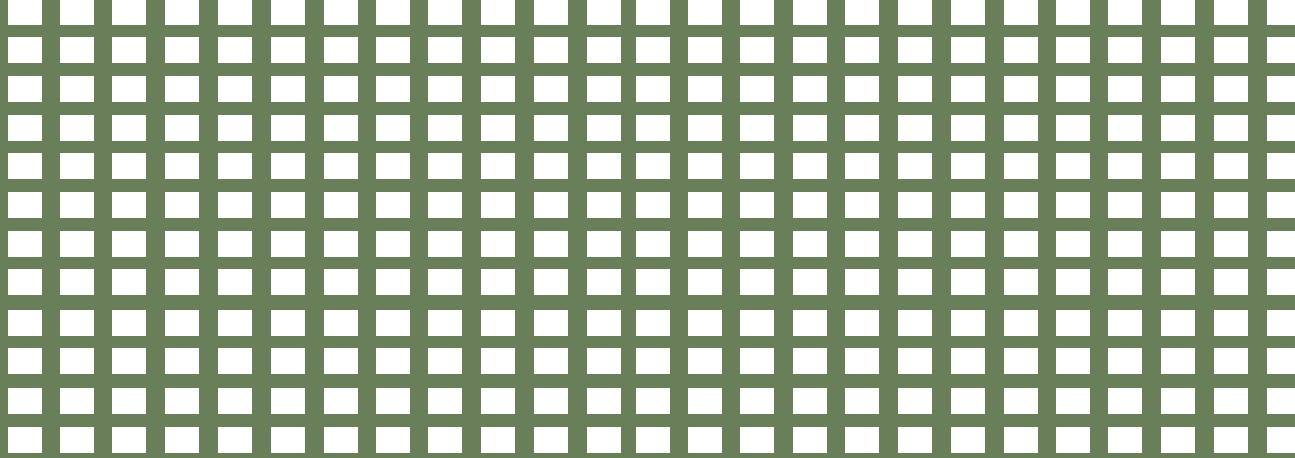


Hundreds of tools on  
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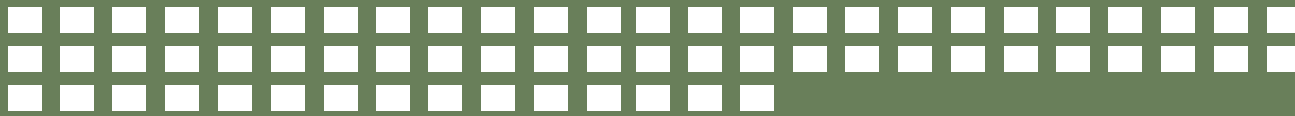


65 tools and  
resources deemed  
broadly applicable for  
general planning





Hundreds of tools on  
online aggregations  
websites



65 tools and  
resources deemed  
broadly applicable for  
general planning



18 tools and  
resources deemed  
particularly useful for  
Delaware Valley  
Communities

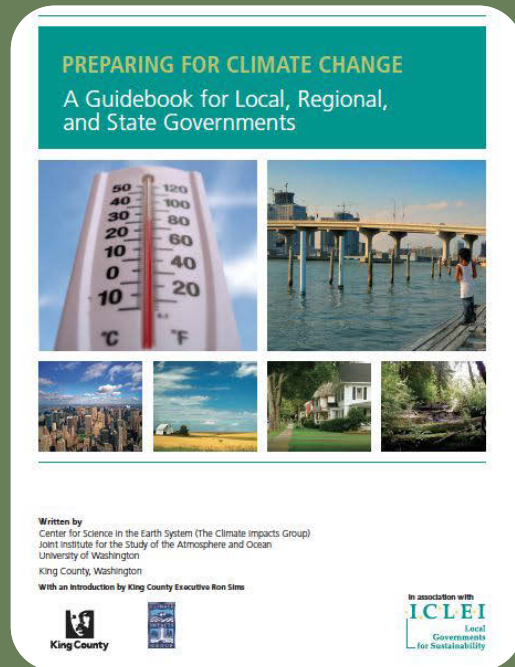
# Organizing the Tools



1. Planning Process Tools
2. Decision Support Tools
3. Data Analysis and Interpretation Tools
4. Communication and Stakeholder Engagement Tools

1. Planning Process Tools
2. Decision Support Tools
3. Data Analysis and Interpretation Tools
4. Communication and Stakeholder Engagement Tools

- Outlines a sequence of planning steps to effectively plan for and build resilience

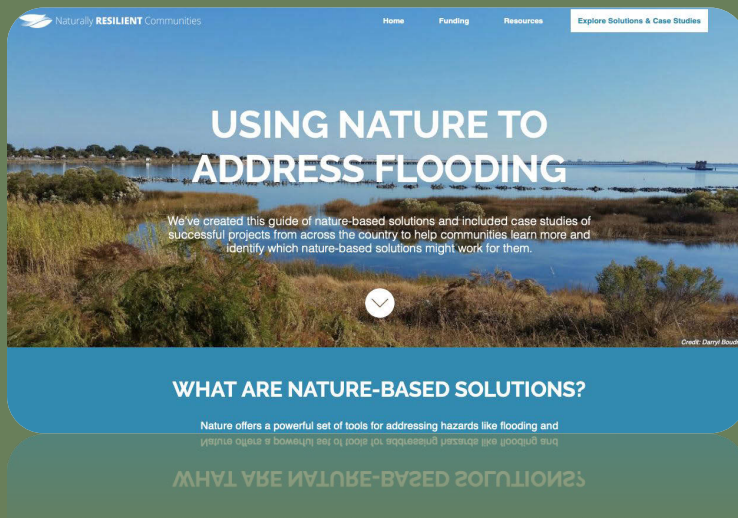


## Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments

1. Planning Process Tools
2. **Decision Support Tools**
3. Data Analysis and Interpretation Tools
4. Communication and Stakeholder Engagement Tools

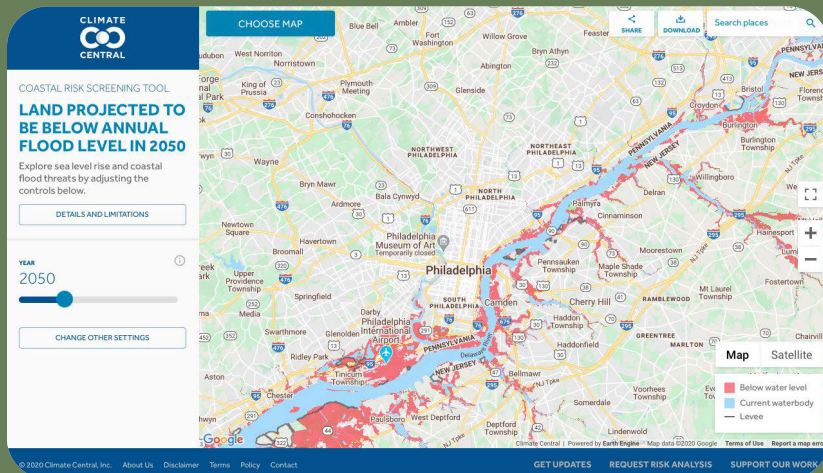
- Uses data, questionnaires, checklists, and decision trees to help practitioners draw conclusions and prioritize actions

## Naturally Resilient Communities



1. Planning Process Tools
2. Decision Support Tools
3. Data Analysis and Interpretation Tools
4. Communication and Stakeholder Engagement Tools

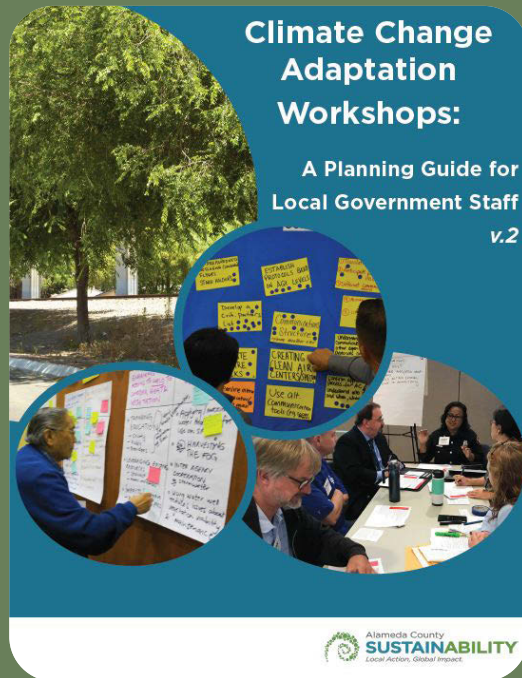
- Provides data, data visualization, and data interpretation in order to support a planning or decision making process and/or educate audiences



## Climate Central: Surging Seas

1. Planning Process Tools
2. Decision Support Tools
3. Data Analysis and Interpretation Tools
4. Communication and Stakeholder Engagement Tools

- Engages diverse stakeholders and promote community dialogue and knowledge transfer



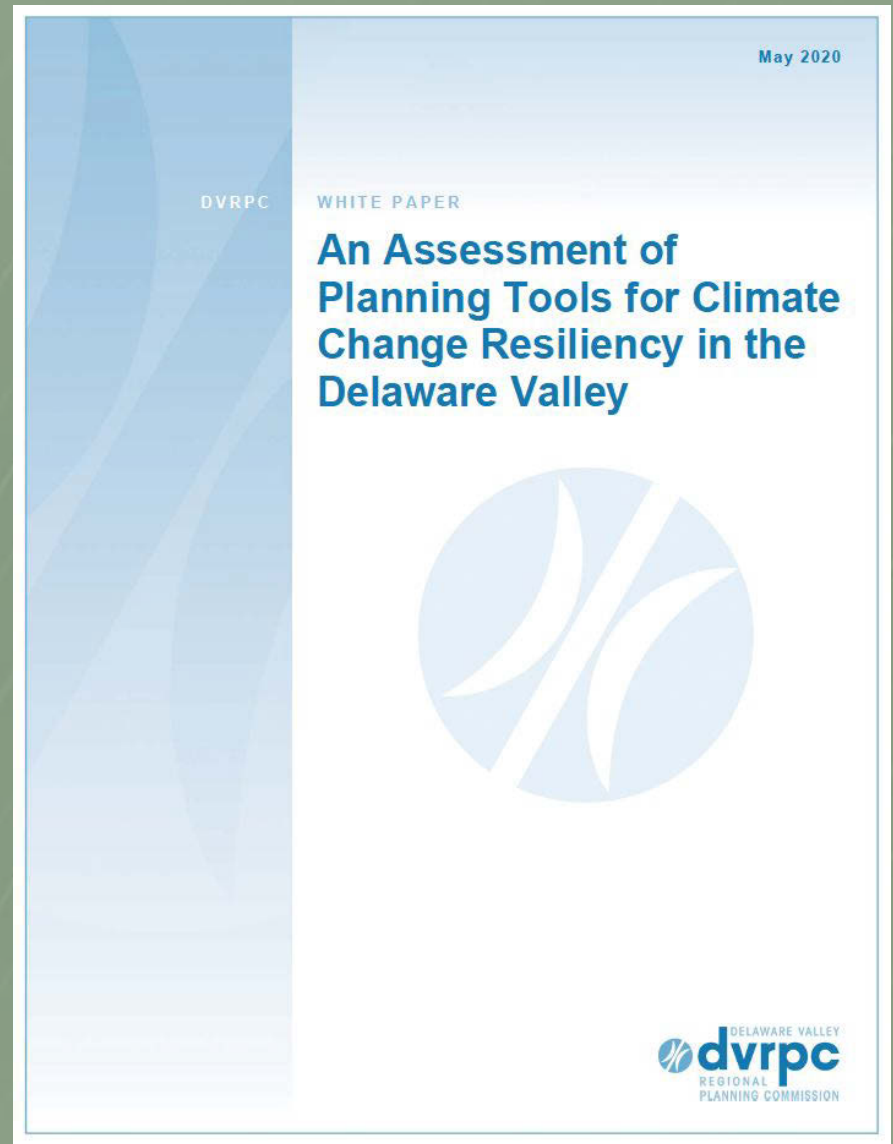
## Climate Change Adaptation Workshops: A Planning Guide for Local Government Staff

# Utilizing Resiliency Tools

- Three Approaches to Resiliency Planning
- Building a Toolkit

# Questions?

Miles Owen  
mowen@dvrpc.org



<https://www.dvrpc.org/Products/19030>