

July 7, 2020 | DVRPC RTC



TIP ACTIONS

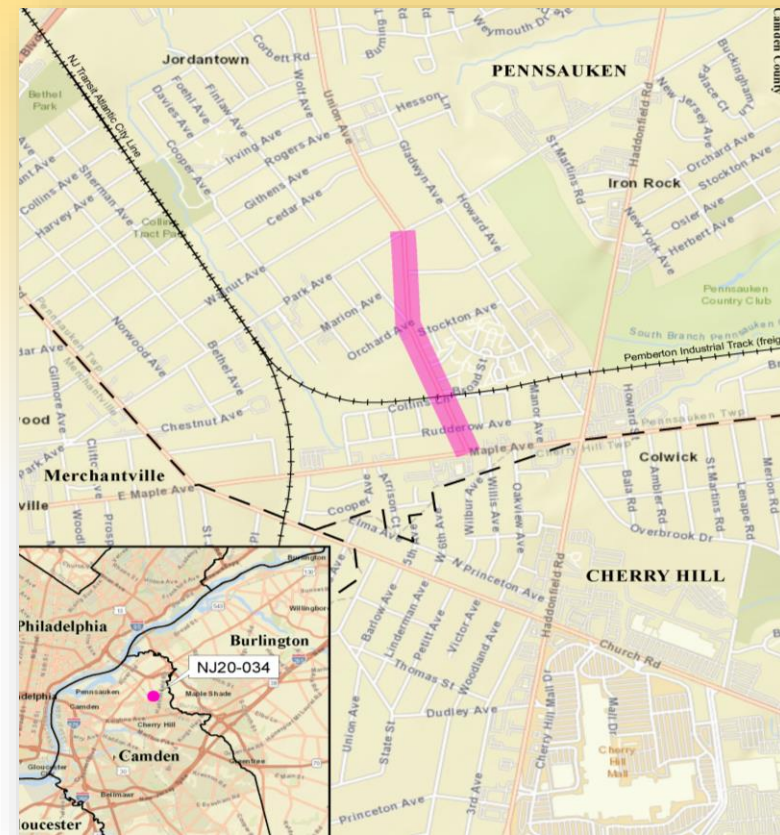
Transportation Improvement Program
Pennsylvania TIP (FY2019-2022)
New Jersey TIP (FY2020-2023)



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

Camden County | Add a New Project to TIP

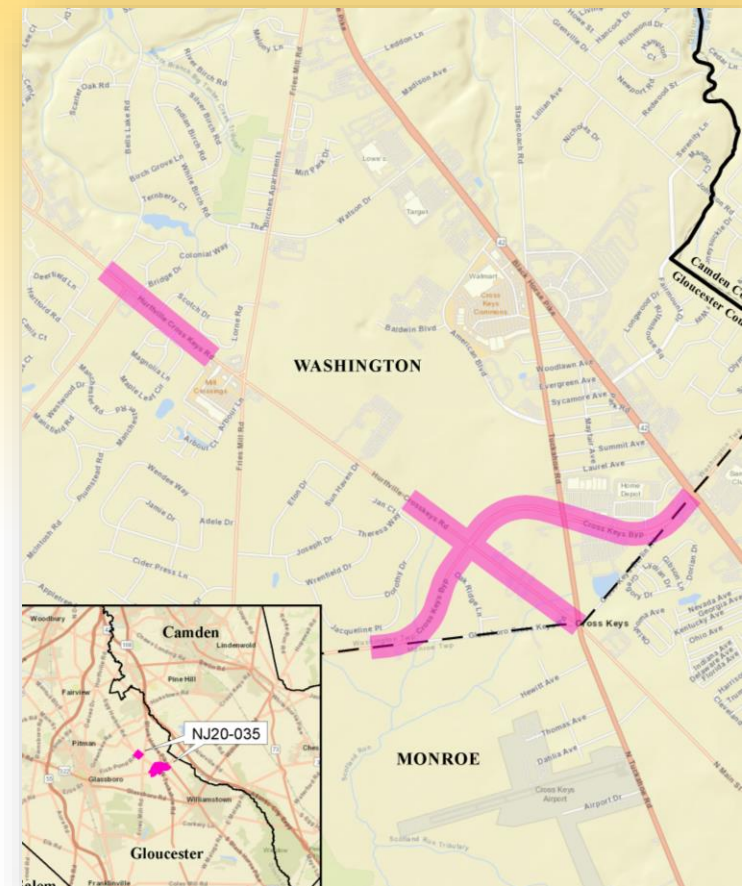
- **TIP Amendment**
- **Action:** Add new \$1.651 M STBGP-PHILA funded project for FY21 construction (CON)
- **Background:**
 - **Mill and overlay pavement project**
 - FY21 Quick Obligation (3 projects requesting \$7.251 M total)
 - Not guaranteed to carry over, if it misses FY21 authorization



CR 689 / CR 654 Resurfacing

Gloucester County | Add a New Project to TIP

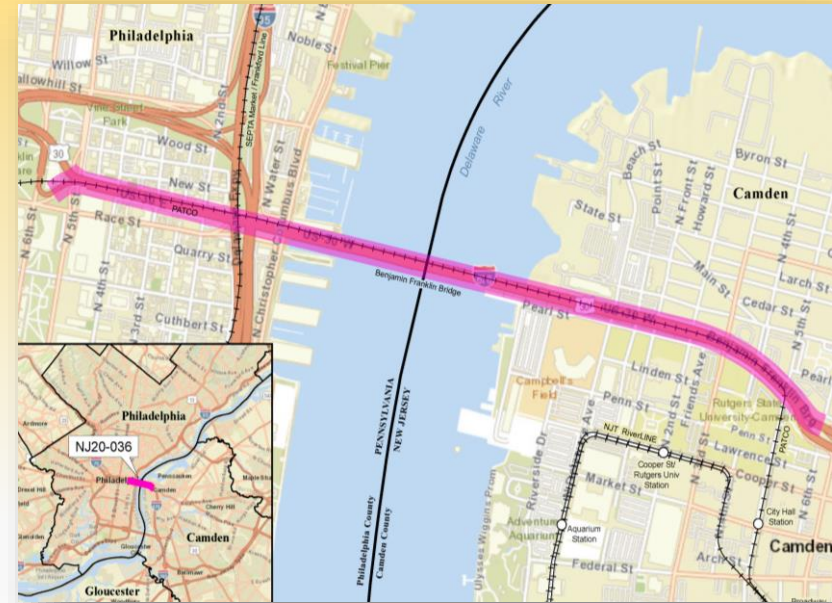
- **TIP Amendment**
- **Action:** Add new \$2.6 M (\$2.11 M STBGP-PHILA / \$490,000 HWYINF) project for FY21 CON
- **Background:**
 - Roadway rehabilitation / resurfacing project
 - FY21 Quick Obligation (3 projects requesting \$7.251 M total)
 - Additional federal Highway Infrastructure Program (HWYINF)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



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 projects requesting \$7.251 M total)
 - Additional federal Highway Infrastructure Program (HWYINF) funds for the Philadelphia urbanized area in New Jersey
 - Not guaranteed to carry over, if it misses FY21 authorization





TIP ACTIONS | Proposed – NJ

Agenda Items 5a, 5b, and 5c

Recommend Board approval of TIP Amendments, per Camden & Gloucester counties, & DRPA / PATCO's requests:

Add 3 new projects to the TIP, totaling \$7.251 M (\$3.761 M STBGP-PHILA / \$3.49 M HWYINF) for FY21 CON:

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**

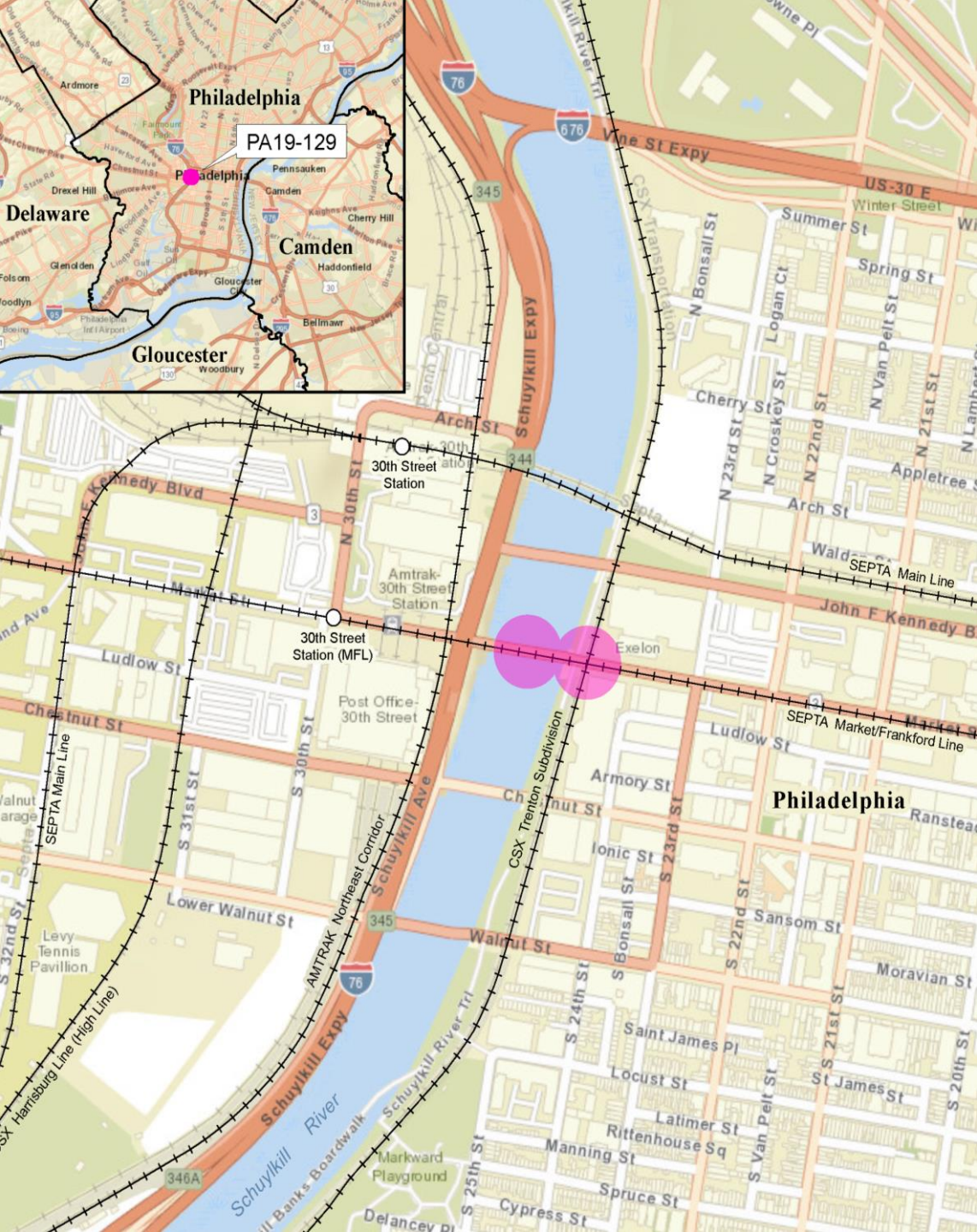


for NJ

Market Street Bridges (2) 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:**
 - 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
 - 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 including:

- 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 bicycle facilities on Market Street including traffic analysis;
- Coordination to mitigate impacts on SEPTA Market Street Subway line;
- Utility coordination.



TIP ACTION | Proposed – PA

Agenda Item 5d

Recommend Board approval of PennDOT's TIP Amendment request:

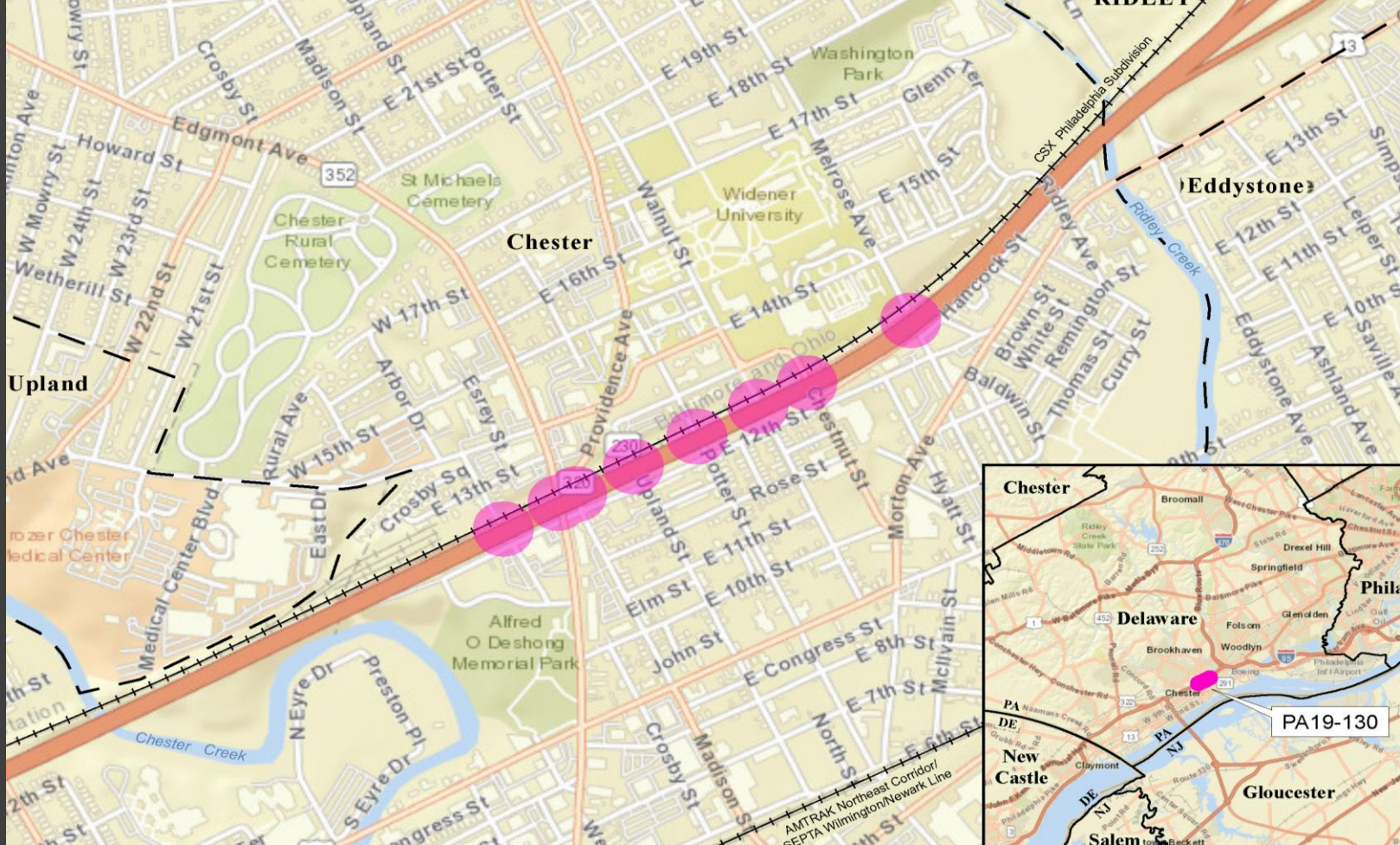
Market Street Bridges (2) Over Schuylkill River and CSX Railroad (MSB)

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 5e

Recommend Board approval of PennDOT's TIP Amendment request:

I-95 Overhead Bridges

Increase CON phase by \$8.028 M

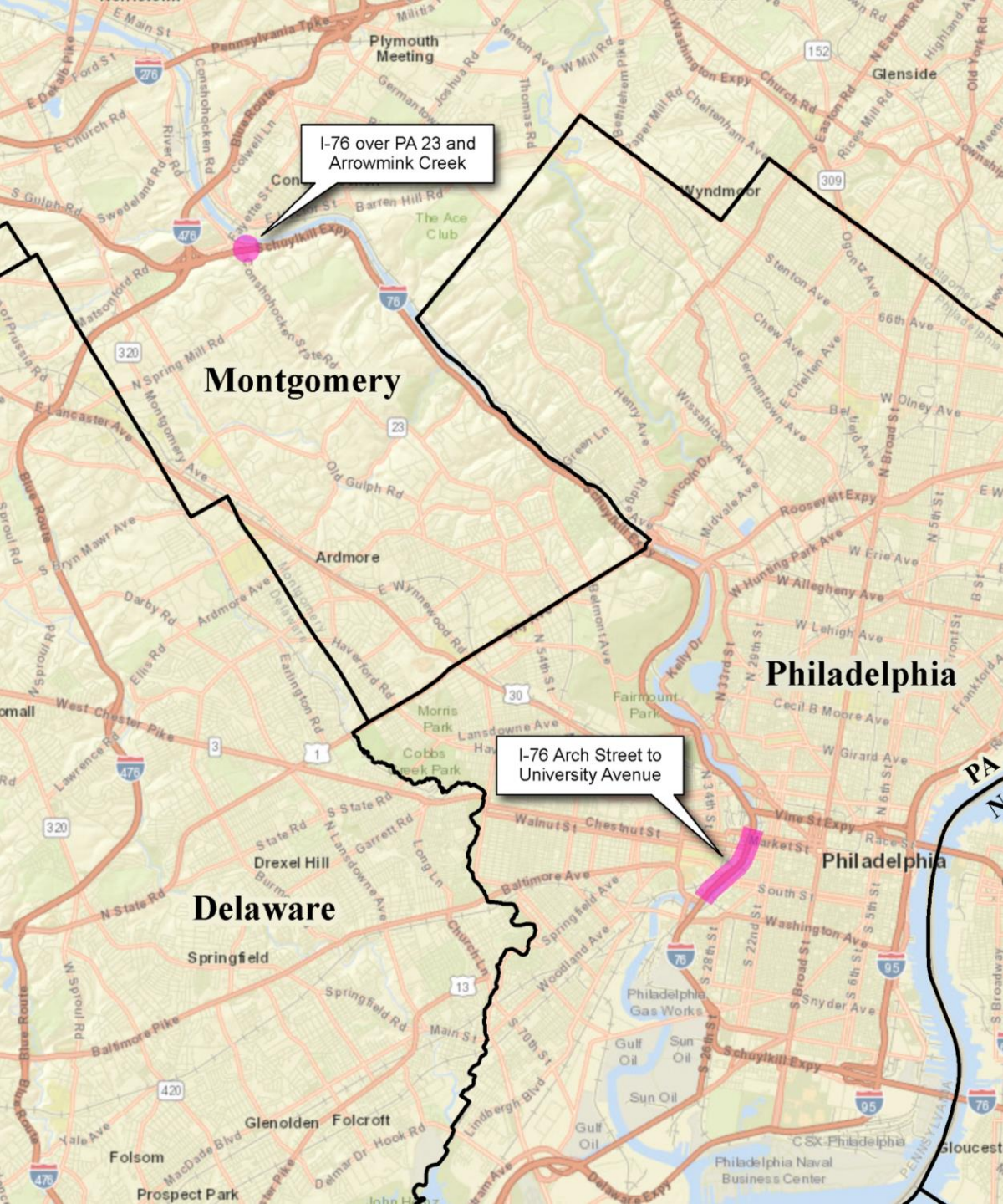
State 581

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

I-76 Bridge Repair Section SRE

City of Philadelphia | 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**



Costs covered by increase include:

- Increase to quantity of polyester polymer concrete;
- Tree removal;
- Steel repairs & reinforcement;
- Roadway stabilization foam;
- Engineering & design costs for bent cap support systems & exterior framework jacking;
- Additional variable message sign.



TIP ACTION | Proposed – PA

Agenda Item 5f

Recommend Board approval of PennDOT’s TIP Amendment request:

I-76 Bridge Repair Section SRE

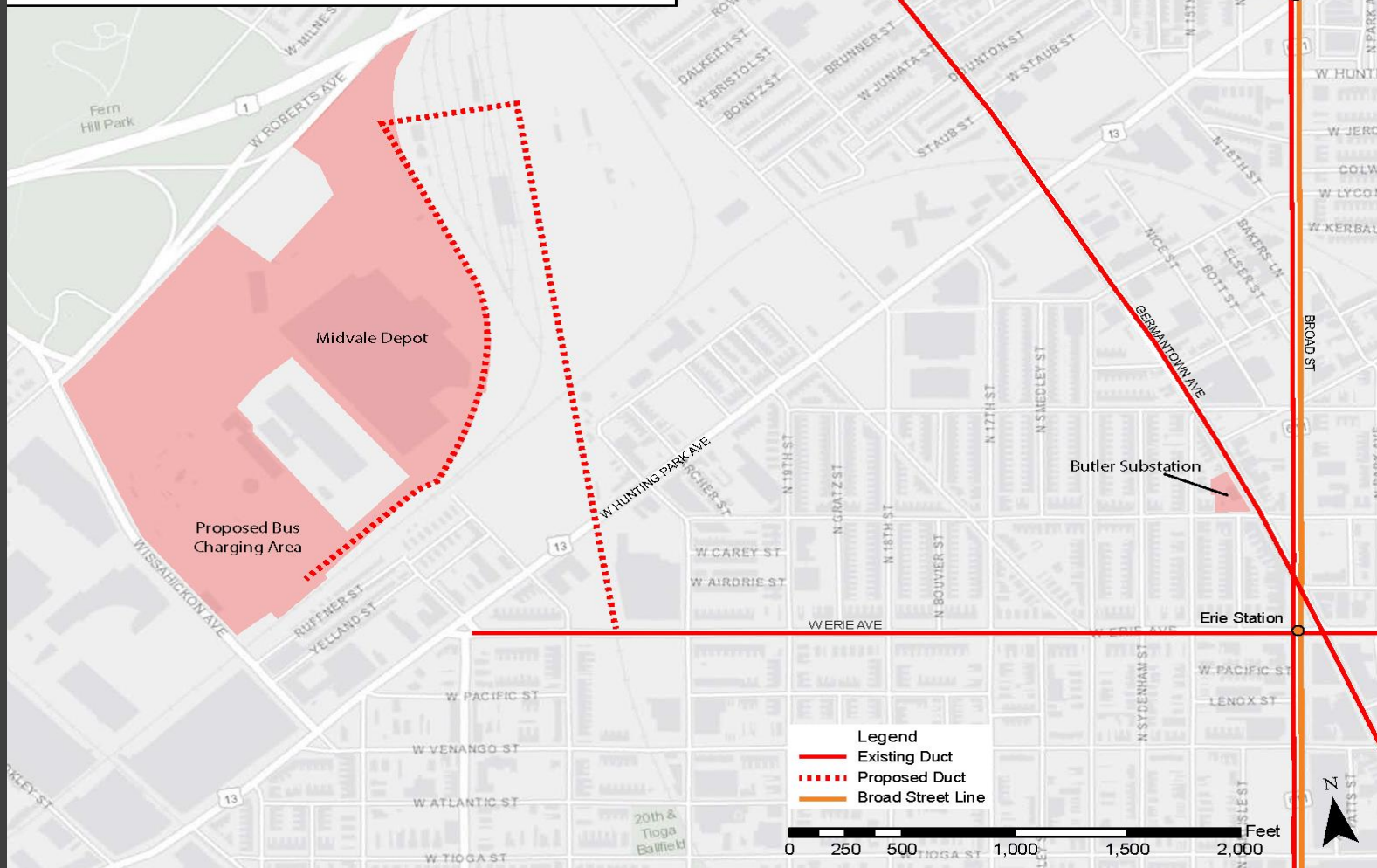
Increase CON phase by **\$8.3 M** NHPP / Toll Credit (FY20: \$6.244 M; FY21: **\$2.056 M**)

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 5g

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

Restriping Program & Line Reflectivity Management System

Statewide | 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 5h

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

**Restriping Program & Line Reflectivity
Management System**

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



Thank You

Connect With Us!



www.dvrpc.org/TIP



July 7, 2020 | RTC Meeting



FY2021 TIP for PA

Proposed Adoption

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





TIP

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
- “Obligation”/ “Authorization” is the Federal promise to pay sponsor for its federal share of the project’s eligible cost



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



Metropolitan Transportation Planning Process



TIP

Project Implementation & Evaluation

Capital Programming

Planning

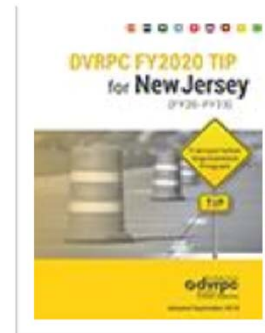
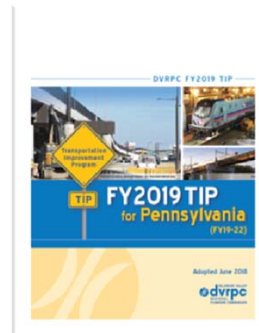
Where do we want to go?

What will it take?

*Let's do it!
How did we do?*

**CONNECTIONS
2045**
Plan for Greater Philadelphia
WWW.DVRPC.ORG/CONNECTIONS2045

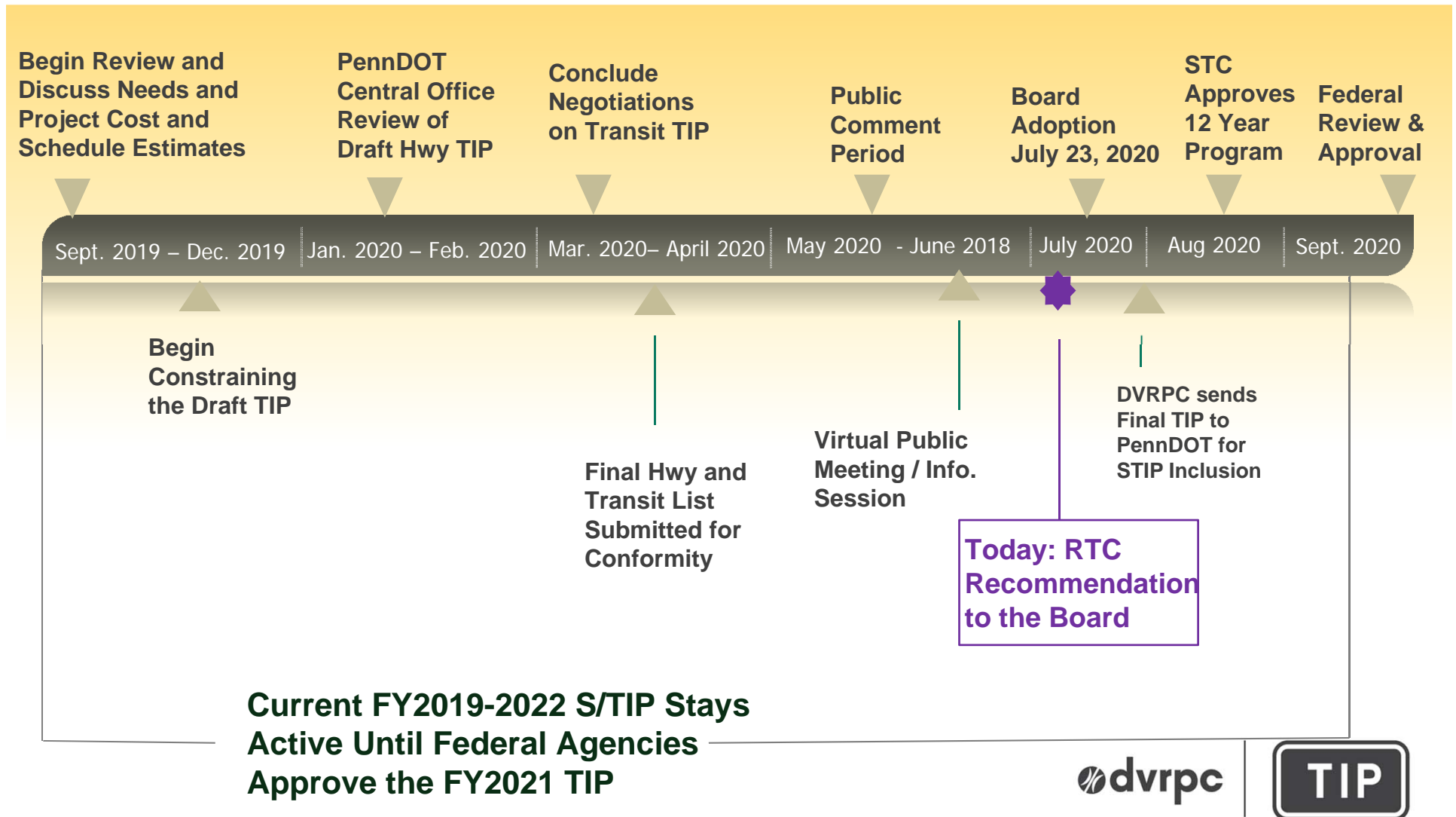
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Development Process of the Draft FY2021 TIP for PA



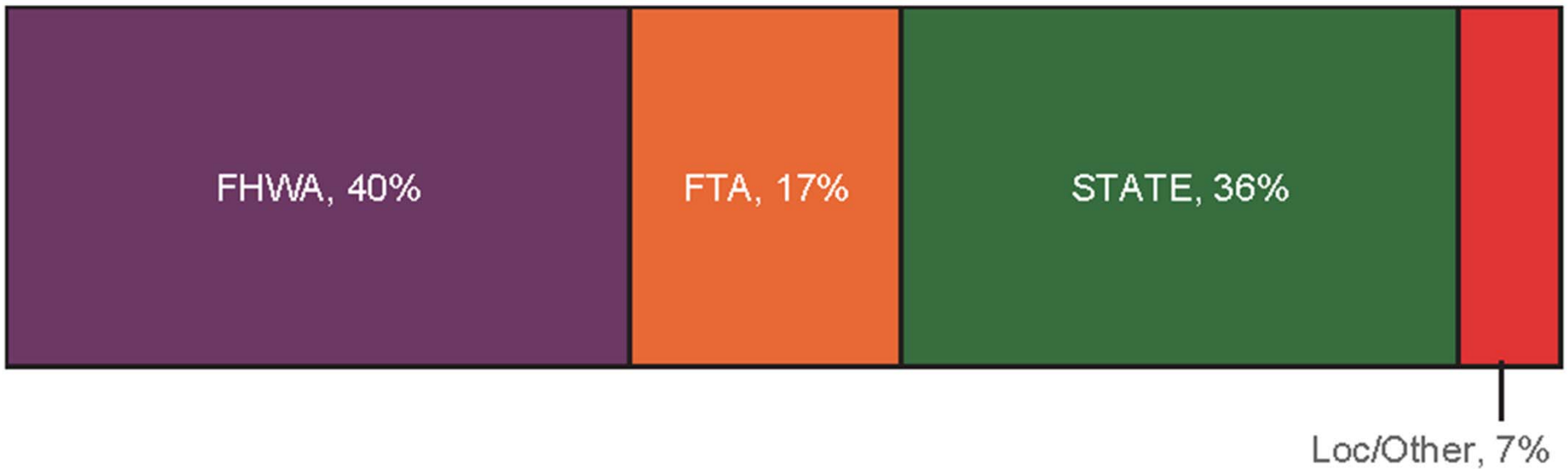


Draft FY2021 TIP for PA

- 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

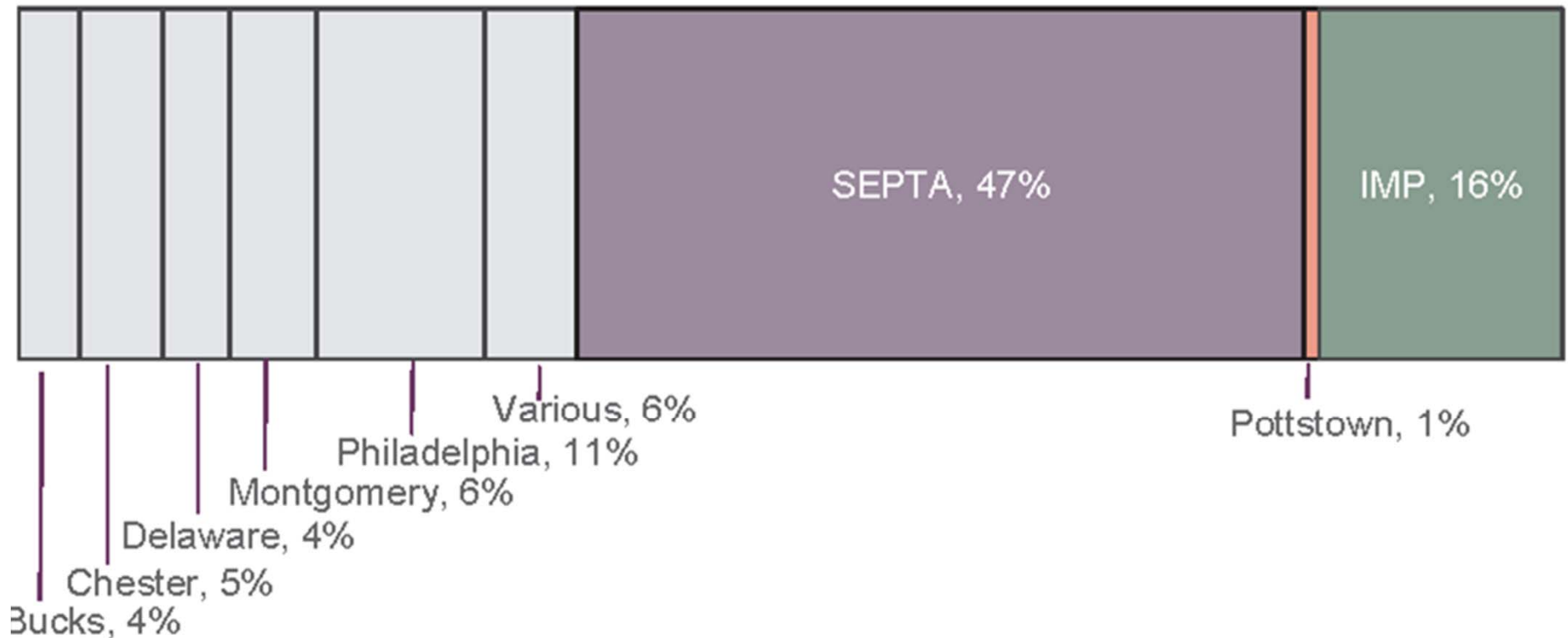
Draft FY2021 TIP for PA

\$5.4 Billion

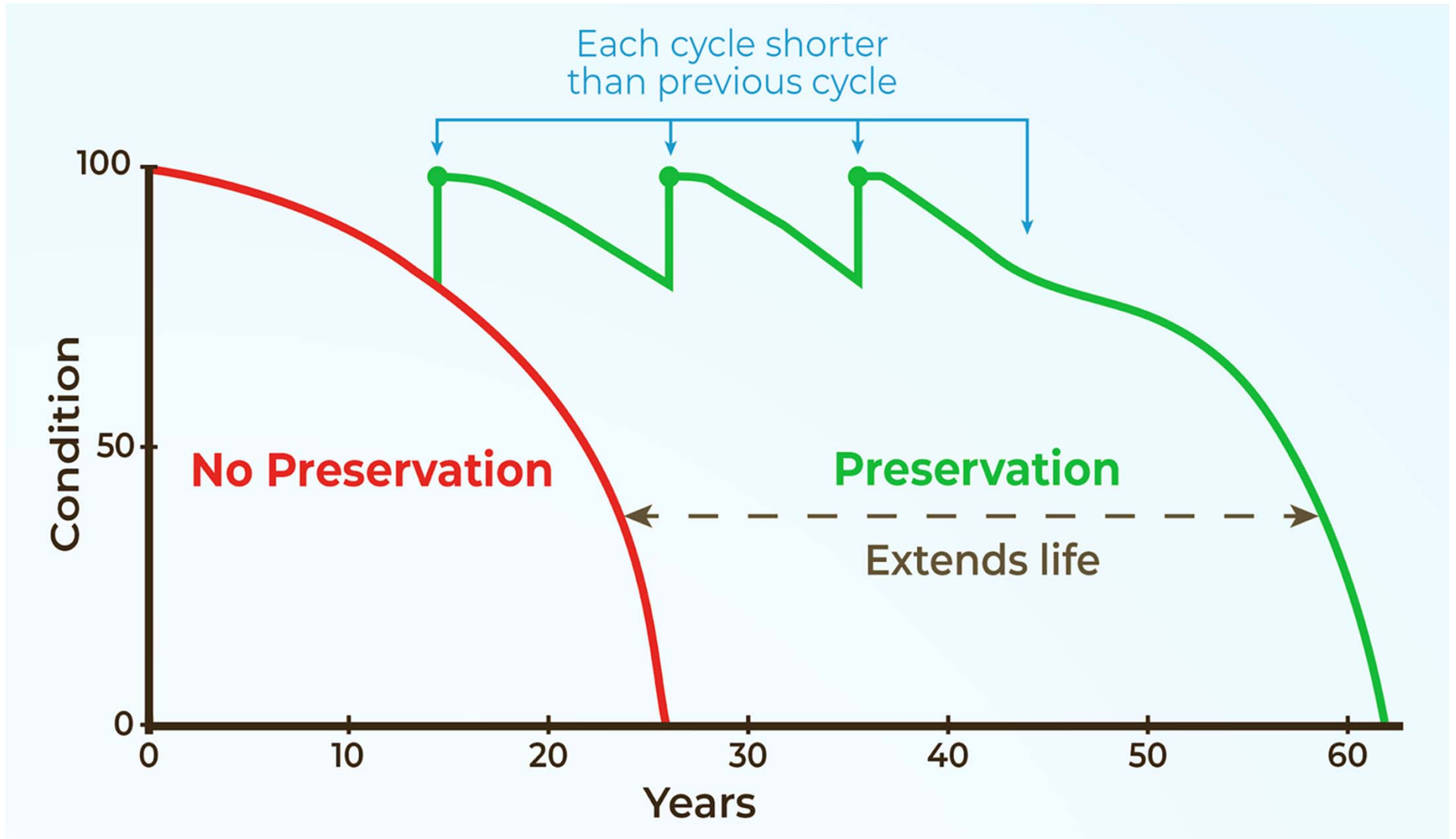


Draft FY2021 TIP for PA

\$5.4 Billion | 384 Projects



Lowest-Life Cycle Cost





Examples of Project Categories (for Highway Funded Projects)

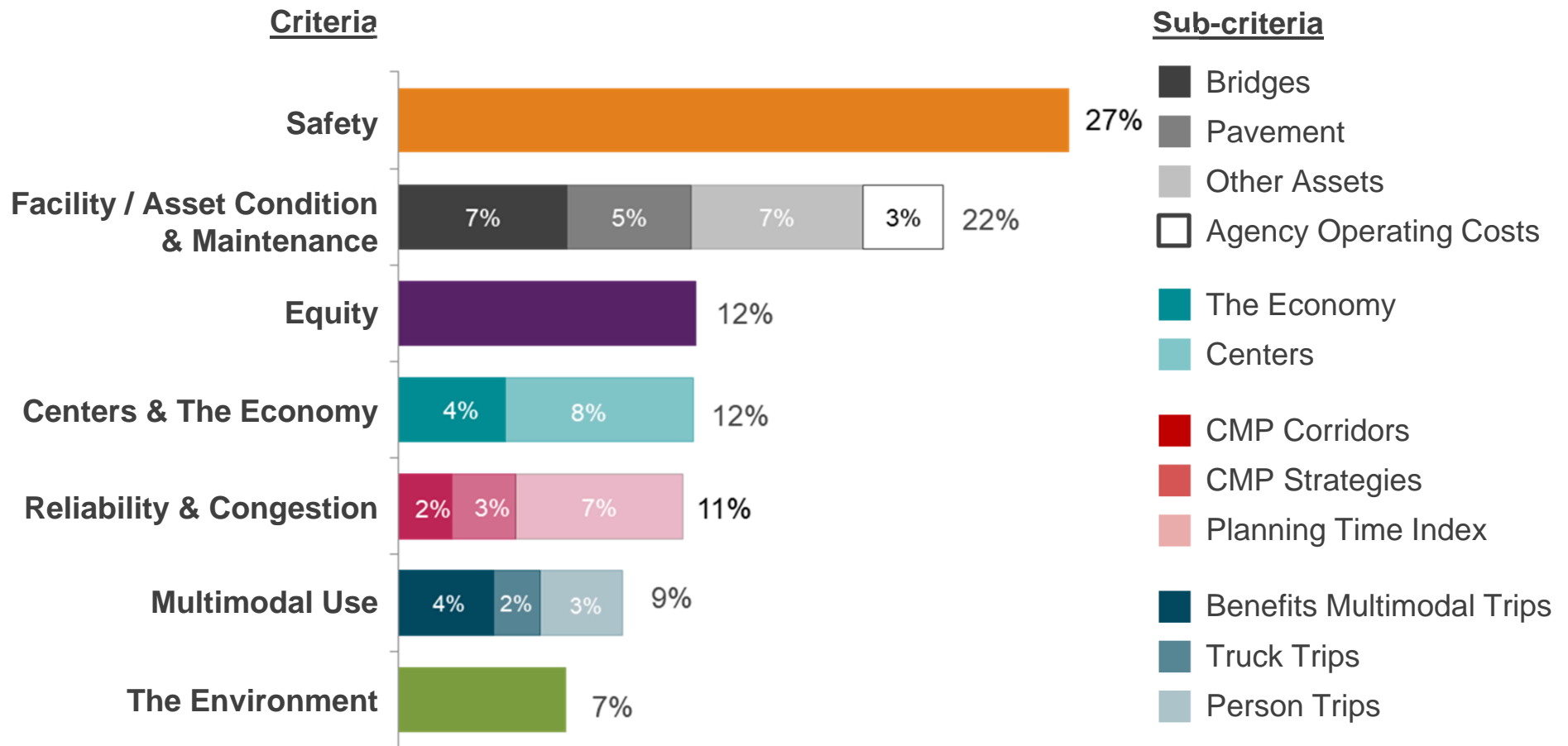
- Bridge Replacement/Rehabilitation – 28%
- Roadway Reconstruction/Restoration – 21%
- Interchanges/Intersections, Signals, ITS – 19%
- Highway New Capacity – 7%
- Bicycle/Pedestrian/Streetscapes – 16%
- Transit Flex – 4%
- Other; CMAQ Competitive Program; Transportation Management Associations, Mobility 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%
- New Rail Capacity – Elwyn to Wawa – 3%
- Vehicle Storage & Maintenance Facilities – 4%
- Fare Modernization – 2%

Updated TIP-LRP Benefit Evaluation Criteria





Equity Evaluation

- Expanded Environmental Justice / Title VI Impact Analysis for Draft FY2021 TIP for PA
- Evaluates conditions and needs
 - *Bridge, pavement condition*
 - *Safety (crashes, especially bike/ped)*
- Analysis of investment distribution, potential benefits and burdens of projects

Project Development Process





Projects with Construction Funding Moved to the LRP

- MPMS #93446 - Route 1 Improvement Frontage Corridor (Section RC3);
- MPMS #87781 - US 30, Coatesville Downingtown Bypass (CER-Eastern Section);
- MPMS #15251 - US 1 and PA 352 Interchange, Intersection, and Roadway Improvements;
- MPMS #64795 - Belmont Rd/Rock Hill Rd Widening: I-76 Ramps to Rock Hill Road;
- MPMS #102273 - Second Collegeville Bridge Crossing; and
- MPMS #87784 - Aramingo/Harbison: Church Street to Amtrak (Section BS3).



New Highway Projects

- Regional HSIP Program
 - *23 Projects*
 - *\$67.9M*
- Statewide HSIP Set-Aside
 - *3 Projects*
 - *\$4.4M*
- Transportation Systems Management & Operations (TSMO)
 - *2 Projects*
 - *\$2.5M*



New Highway Projects

- CARES Act
 - *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 69th Street Transportation Centers*



New Highway Projects

- 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*

ROADMAP FOR TIP PROJECT LISTING

Below is an example of an actual TIP project listing with modified information for display purposes.

Project location information

DVRPC Project Category

PennDOT ID#

County where project is located

DVRPC FY2021-2024 TIP for PA

Pennsylvania - Highway Program (Status: TIP) Draft Version

Bucks

MPMS# 78516 Bridge Replacement SR:2025 State Route, if applicable New

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

IMPROVEMENT: Bridge Repair/Replacement NHPP: FC: 17 MRPID:34

MUNICIPALITIES: Middletown AQ Code:S19

PLAN CENTER: Town Center IPD: 16

PROJECT MANAGER: EEJ Arena CMP: Not SOV Capacity Adding CMP Subcorridor(s): 31

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										
Total FY2021-2024		3,784	3,112	0	0	0	0	0	0	0	0	0	0
Total FY2025-2028		0				0				0			
Total FY2029-2032		0				0				0			

Project Title

Indicates if a project is "New," "New-B," or "Return." See page 81 for further explanation.

Roadways are grouped into different functional classifications based on the character of service they are intended to provide (e.g. major collector, principal arterial). All roadway projects using federal funds must be approved on the federally classified roadway system before a roadway can be included in the TIP.

Fund type for each phase; see pages 85 to 92 for explanations. An *** following a fund type indicates conversion funds for advanced construction phases.

Anticipated Preliminary Engineering, Final Design, Right of Way, Utility, or Construction project phases; see page 84 for discussion.

Project Manager assigned by PennDOT District 6-0

Community types which correspond to long range planning policies; see page 83 for discussion.

Funds are in Millions

Y indicates the project is eligible for federal National Highway Performance Program (NHPP) funding

Congestion Management Process (CMP) codes; see page 84 for explanation.

Highest Indicators of Potential Disadvantage (IPD) for Environmental Justice; see page 84 for discussion

Air Quality Code; see pages 81 for explanations

Indicates that a project is identified as a Major Regional Project in the DVRPC long-range plan

Estimated or actual date that project contractor bids for construction may be open; advertising dates occur prior to let dates. "D6" refers to PennDOT District 6-0.

Source: DVRPC 2020





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*
 - *Or By Email at tip@dvrpc.org*
 - *Or By US Mail to DVRPC*
 - *Or By Fax to 215-592-9125*
- View Complete Documents on Website
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



Search Draft TIP by Project, Keywords, Fund or Address

[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

Search Draft TIP by Project, Keywords, Fund or Address



All Categories | 1 results. | List / Tiles

Search Draft TIP by Project, Keywords, Fund or Address

Layers | Legend

- Indicators of Potential Disadvantage
- CMP Corridors
- Connections 2045 Centers
- Freight Centers
- DVRPC

TIP IPD CMP LRP Freight Land Use

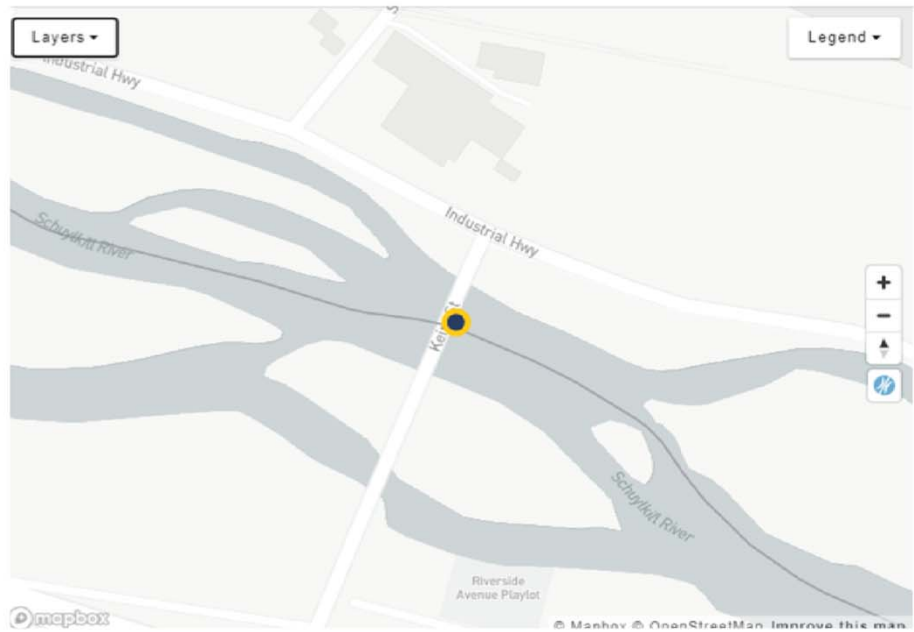
TIP Project Categories
FY21-FY24

- Streetscape

back print

Keim St
Pottstown, Pennsylvania
View on Google Maps

Search Draft TIP by Project, Keywords, Fund or Address



Submit a comment on the Draft DVRPC
FY2021 TIP for Pennsylvania

Enter your public comment here

full name | email | county

submit

190 N. Independence Mall West, 8th Floor,
Philadelphia, PA 19106-1520
215.592.1800

© Delaware Valley Regional Planning
Commission

Sign up for our
email lists

Policies



Comments (500+) & Responses

(about 45 different issues)

- Supports Project – 24.5%
Please Advance “The Circuit” Network
- Henry Ave Safety Improvements – 65%
 - *Project Concerns, Questions, & Suggestions*
 - *Install Protected Bike Lanes – 39%*
 - *Reduce Speed – 46%*
- 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

Note: Turquoise highlighted changes were made after initial RTC mailing on June 26th and were incorporated in last week's (July 2nd) email & posting



List of Recommended Changes

(very minor cost impacts)

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



TIP

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, nor 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

DVRPC FY2019 TIP



TIP

FY2019 TIP for Pennsylvania (FY19-22)

Adopted June 2018



FY2021 TIP for Pennsylvania (FY21-24)

DRAFT

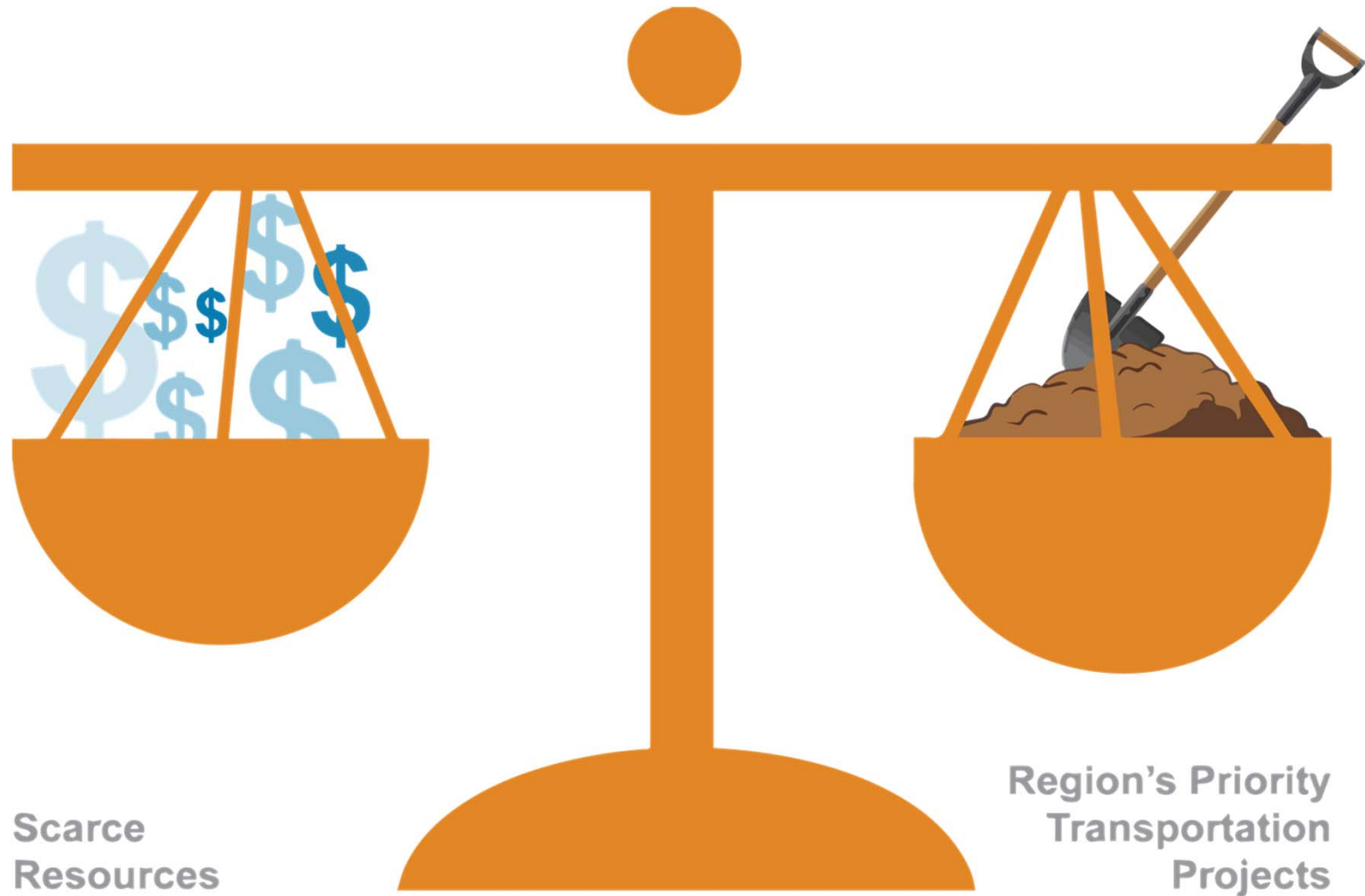
DVRPC FY2021 TIP



TIP



Regional Decision Making is Critical



Scarce
Resources

Region's Priority
Transportation
Projects



Thank You!
You Know Who You Are





Adopt the DVRPC FY2021 TIP

Recommend 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



Sean Greene
Regional Transportation Committee
July 7, 2020

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

Presentation Overview

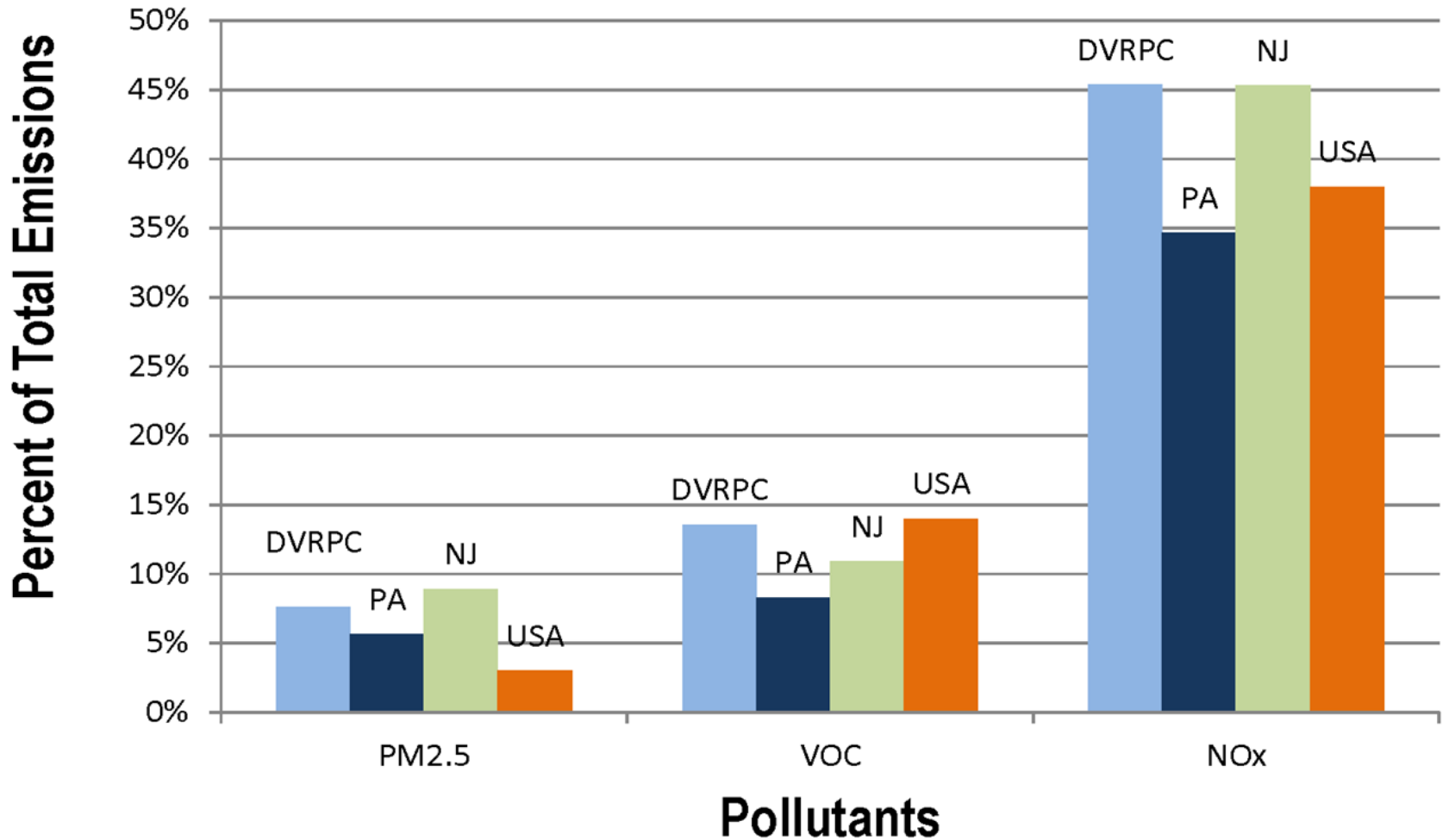
- ❖ What is Conformity?
- ❖ DVRPC Region
- ❖ Emissions Analysis Results
- ❖ Regional Air Quality Trends
- ❖ Requested Action

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_x, 14% VOC, 3% PM_{2.5}
- └──────────────────────────────────┘
Combine to form Ozone

On-Road Mobile Emissions



What is Transportation Conformity?

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



Who Must Demonstrate Conformity?

Non-Attainment Areas

- ❖ Region not meeting federal air quality standards (NAAQS)

Maintenance Area

- ❖ Area that previously was in non-attainment

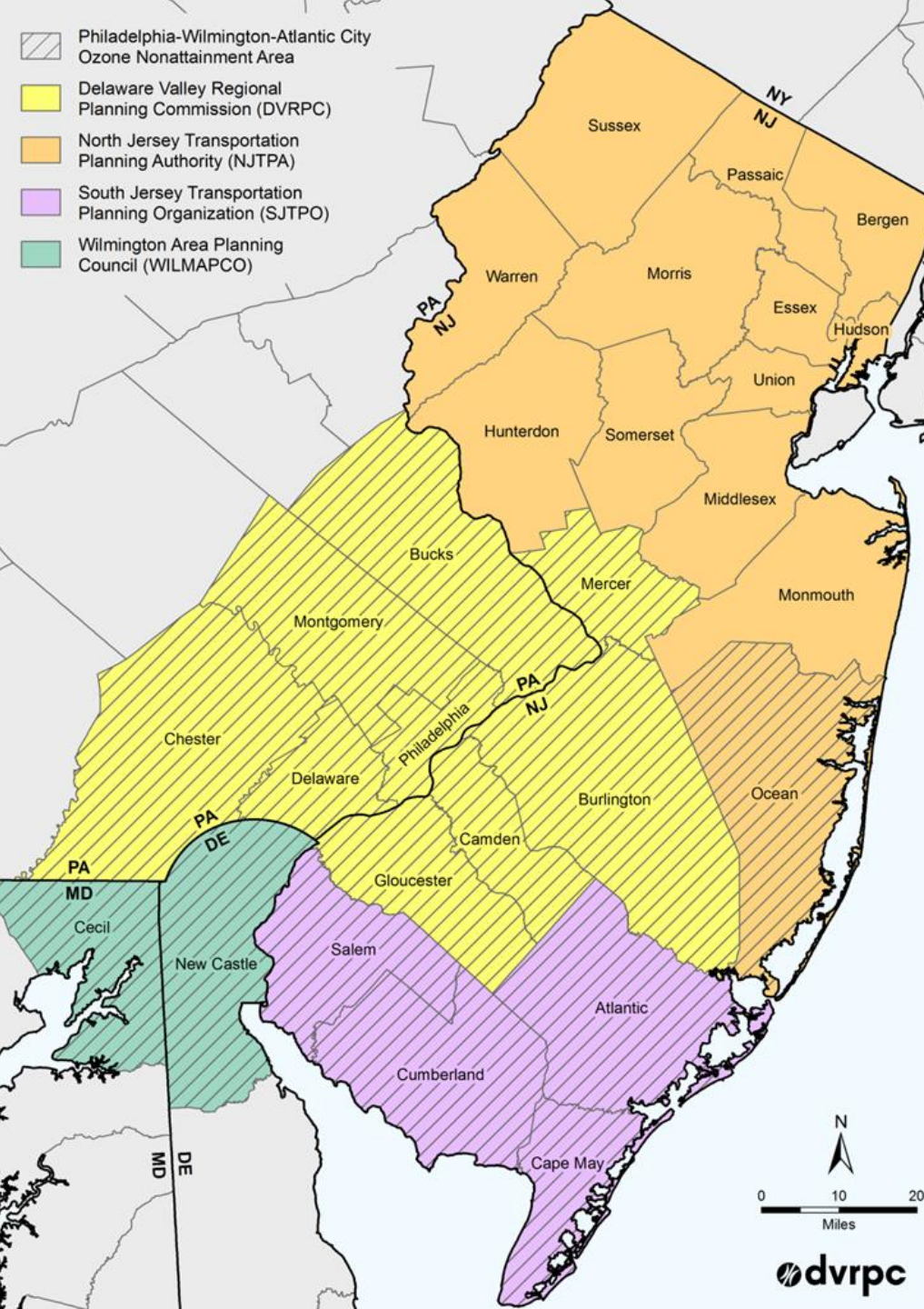
State Implementation Plans (SIPs)

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

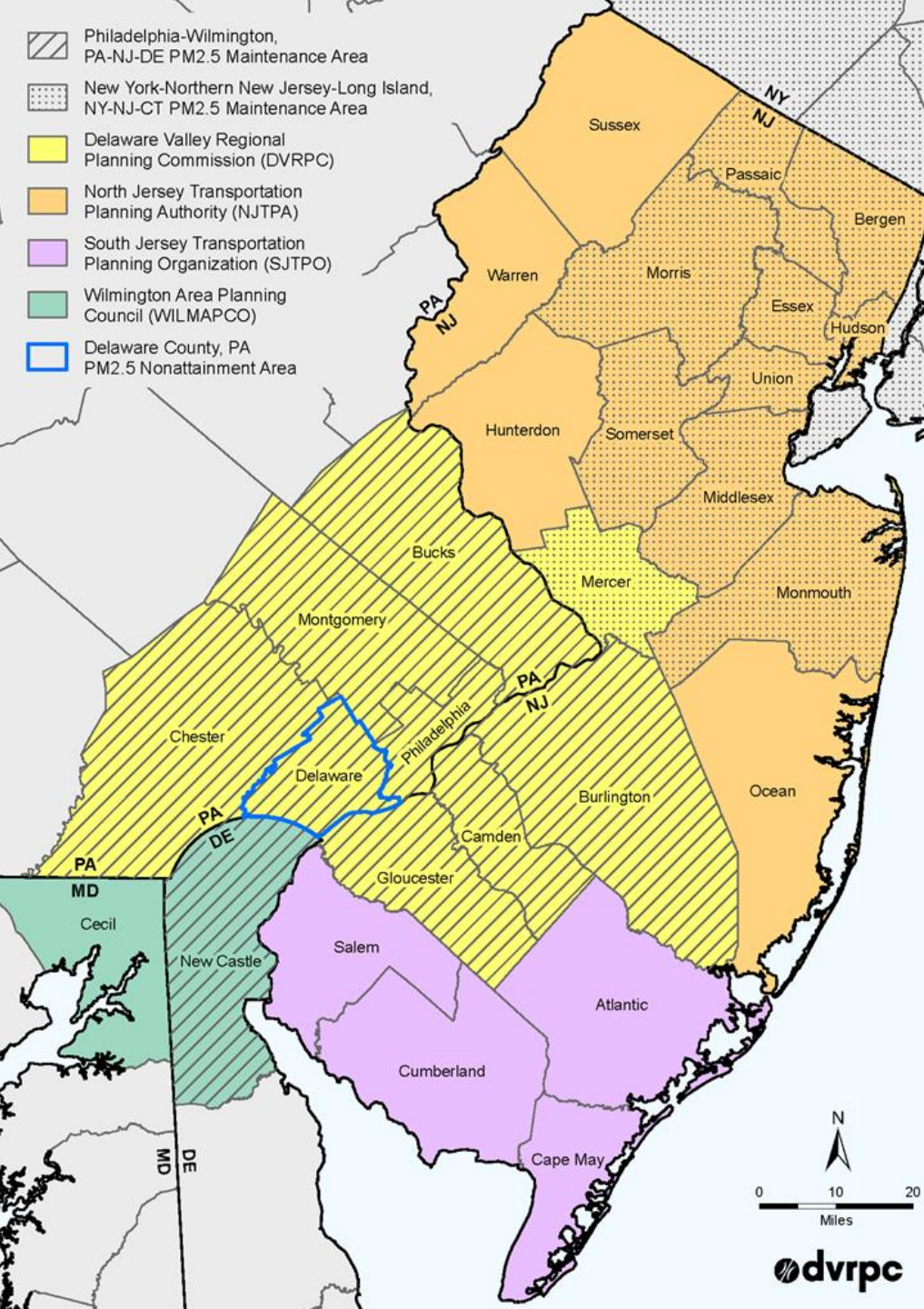
What is Transportation Conformity?

Conformity triggers

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



Ozone Non-Attainment Area



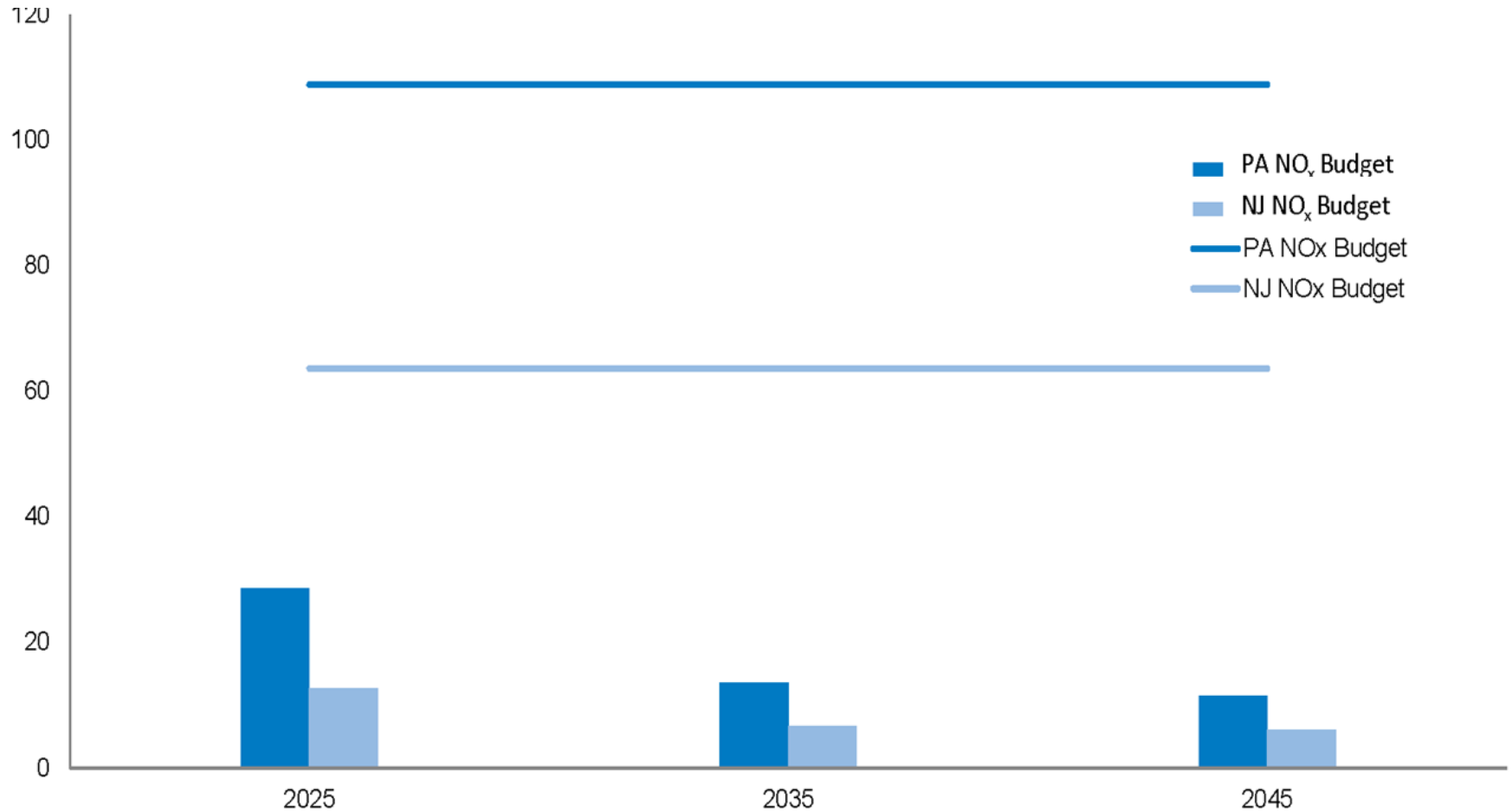
PM_{2.5} Maintenance Areas

Conformity Test

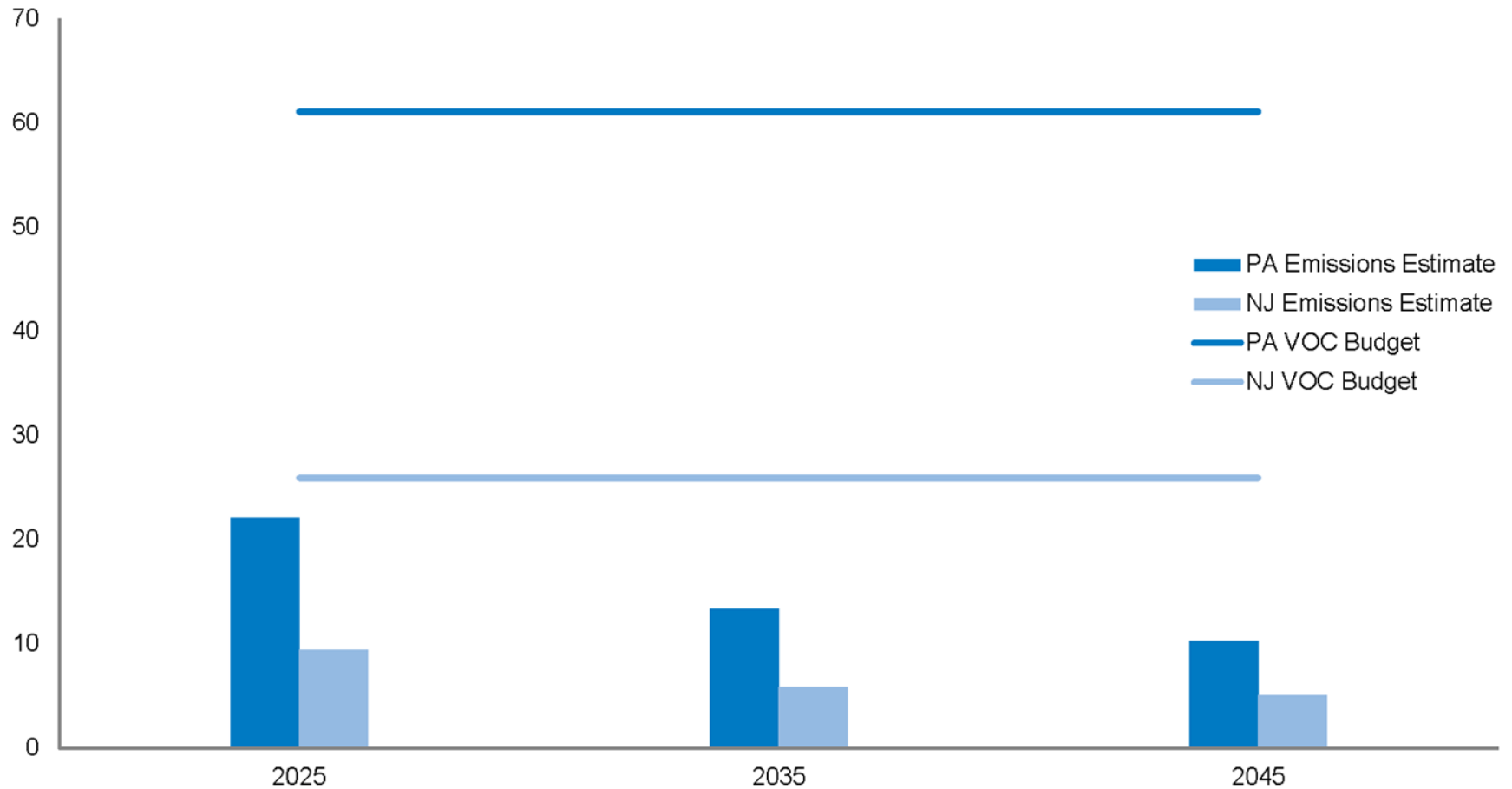
Conformity is tested against SIP “budgets”

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

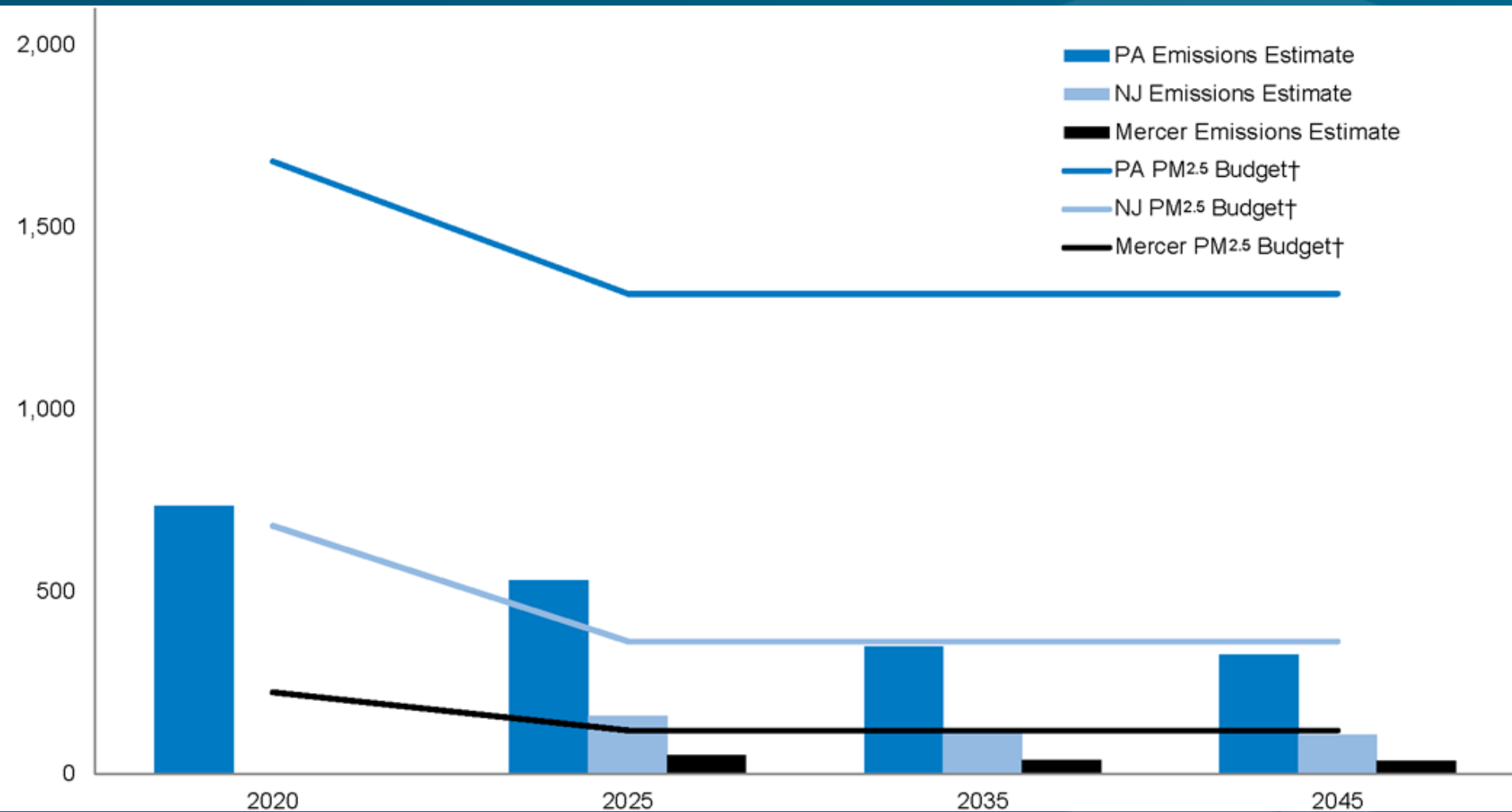
NO_x Emissions Results



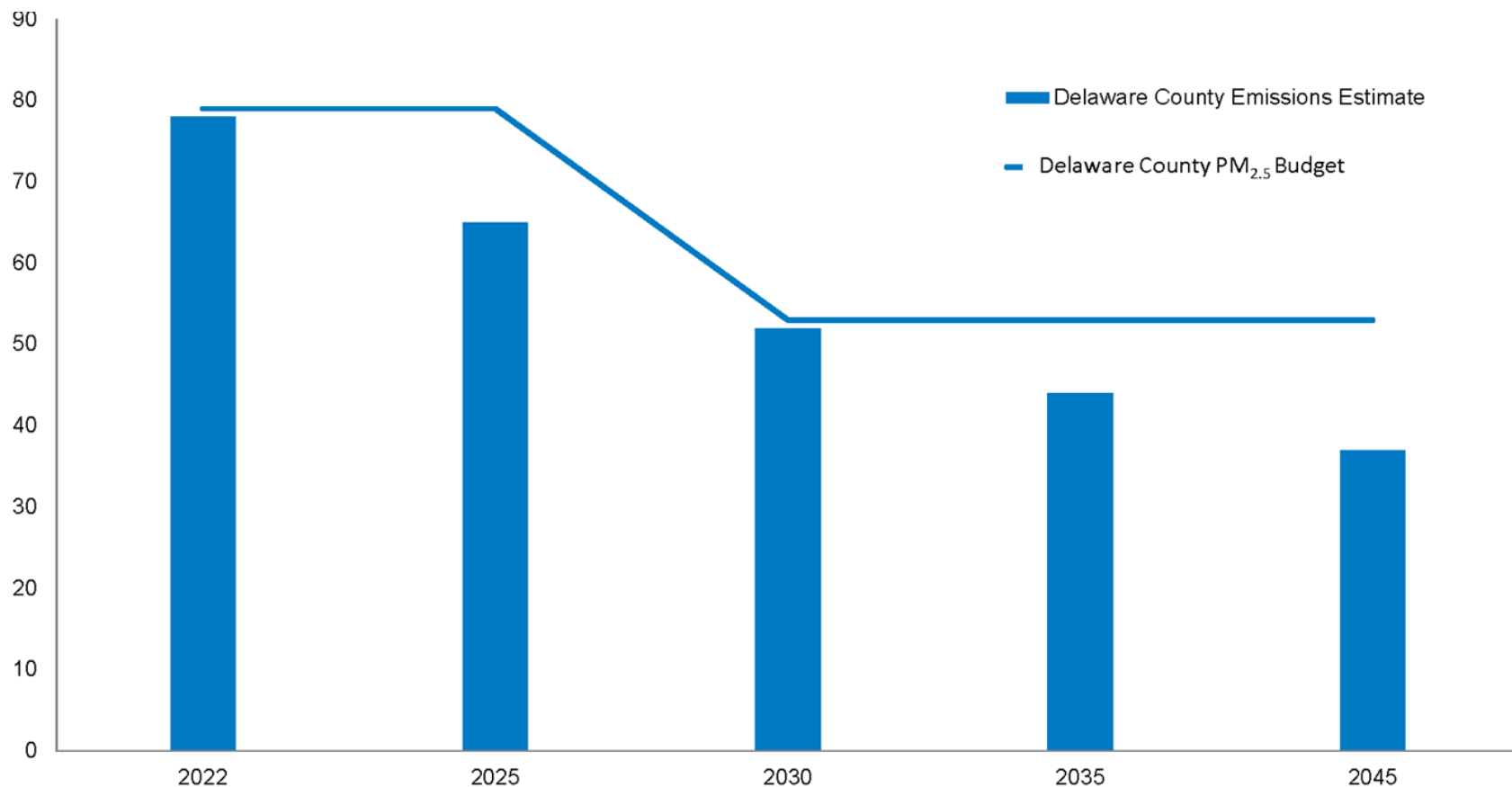
VOC Emissions Results



PM_{2.5} Emissions Results



PM_{2.5} Emissions Results – Delaware County



Emissions Analysis Results

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

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

Conformity Results

- ❖ Meet the 8-hour ozone, daily, and annual PM_{2.5} SIP requirements
- ❖ Replaces the existing conformity finding of September 2019

Public Comment

Public Comment Period

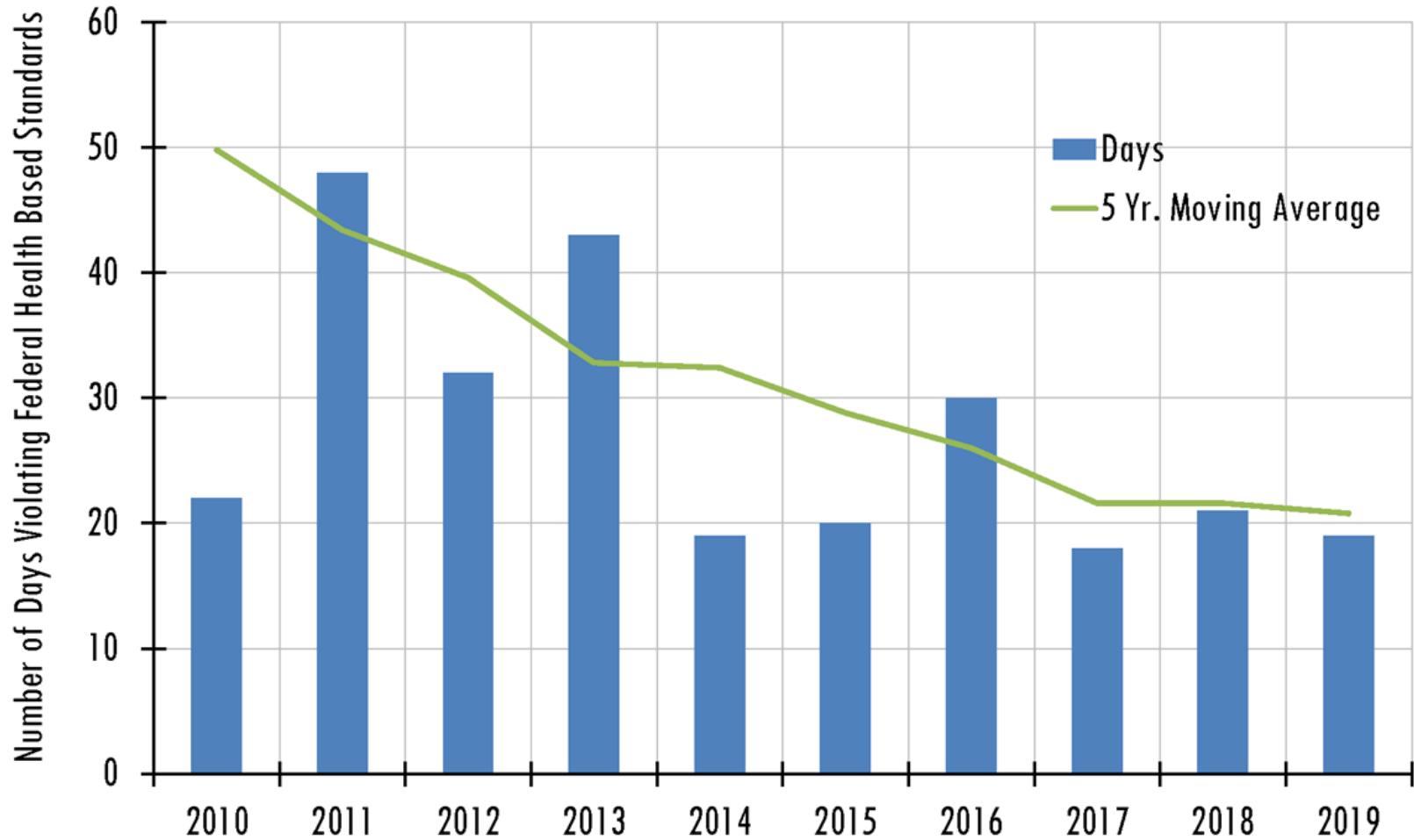
- ❖ June 3, through July 6, 2020
- ❖ Two virtual public meetings
 - June 17 at 2PM and 7PM

Comments are accepted:

- ❖ At Public Meeting
- ❖ Via email (airconformity@dvrpc.org)
- ❖ Online (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, and promoting alternative transportation options, modernize the fleet of vehicles

Action Proposed

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

Thank You!



Questions?
Contact: Sean Greene
sgreene@dvrpc.org



Connections 2045 Amendment



CONNECTIONS

2045

Regional Technical Committee

July 7, 2020



Agenda

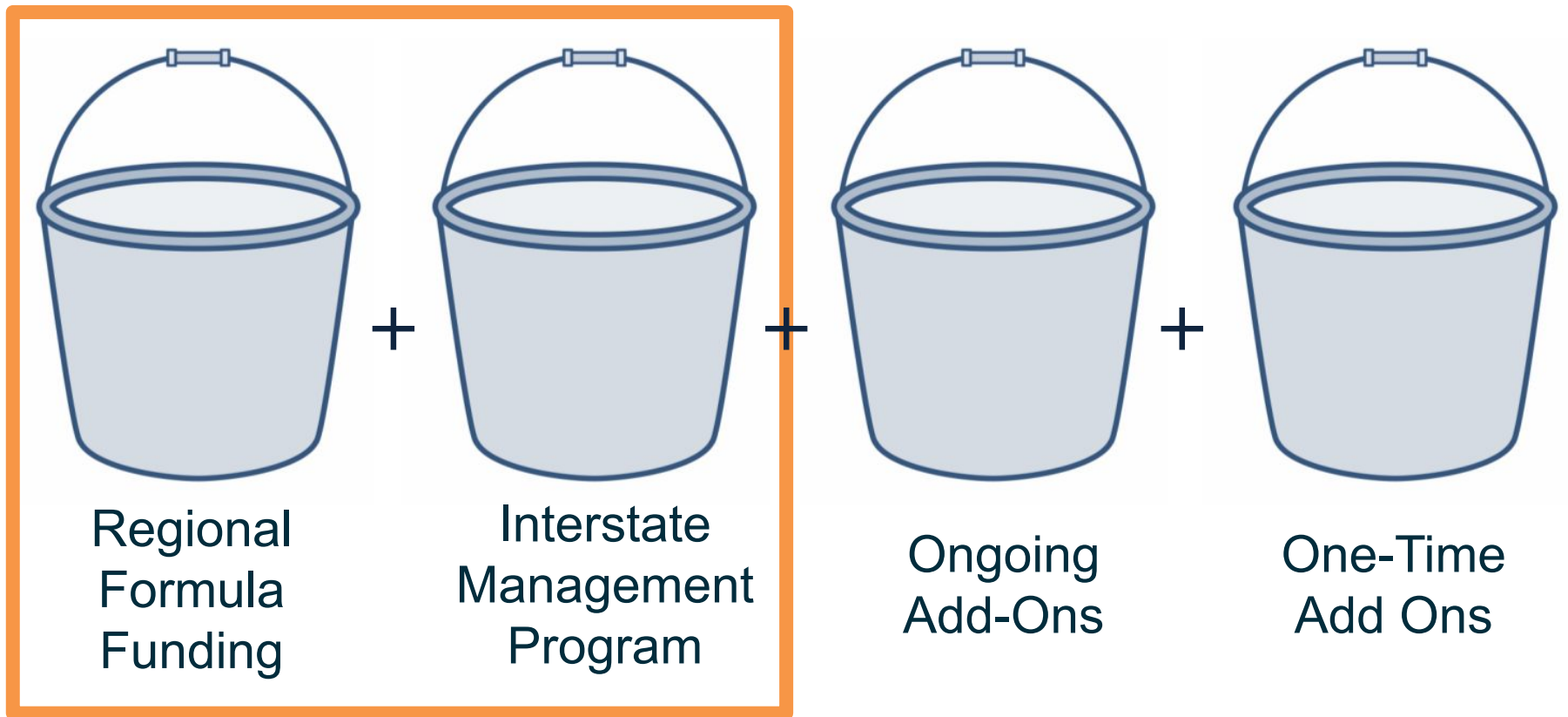
1. Triggering of an Amendment
2. TPM requirements
3. Revenue & Allocation
4. Changes to Project List
5. Action Requested



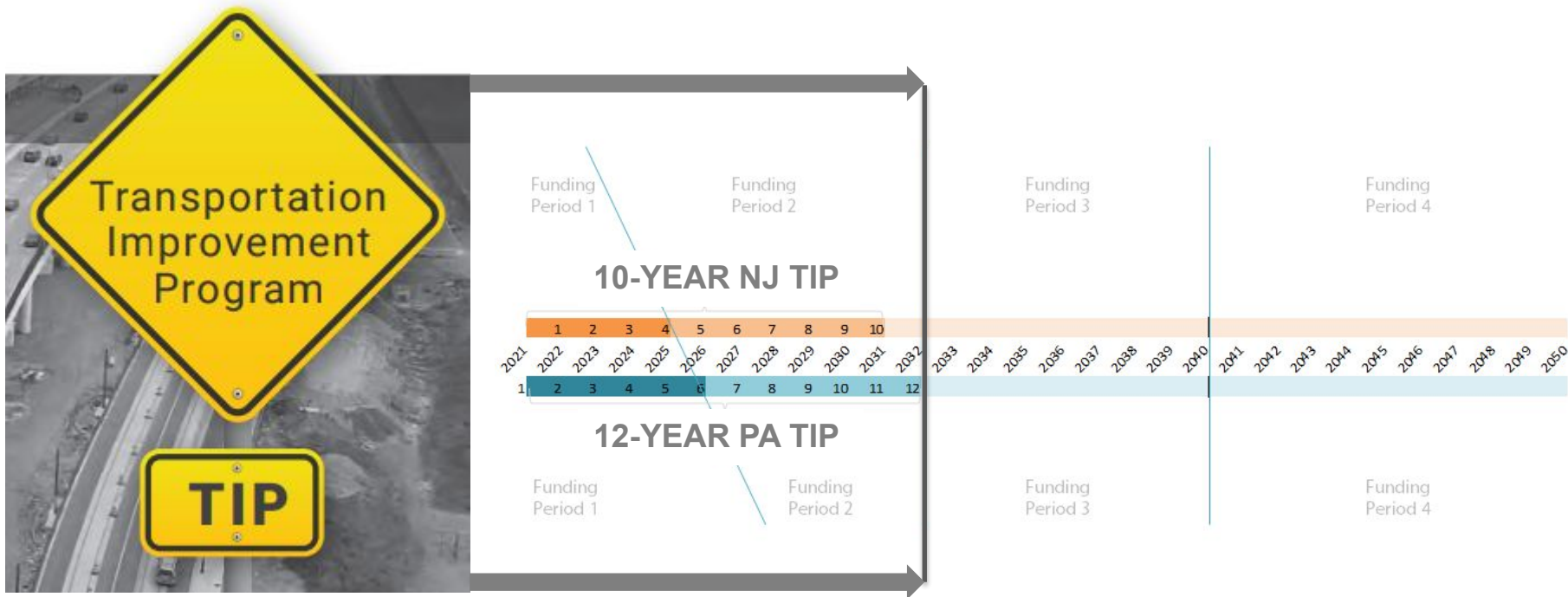
Triggering of an Amendment

Triggering of an Amendment

Pennsylvania Roadway Funding Changes



Triggering of an Amendment





Triggering of an Amendment

While we're at it...



Transportation Performance Management

Focusing on Performance for Safe, Reliable Journeys



TPM Requirements



TPM Requirements

- Set “Targets” & Report on Progress
 - MPOs can either develop their own targets or support State & Transit Operator targets
- Incorporate Performance Measures into the Planning Process
- Develop Agreements Between Planning Partners



Roadway TPM Requirements

TPM	Performance Measure	Area	Network	Reporting Frequency
1	Number of Fatalities	Statewide	All Roads	Annual
	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			
2	Good Pavement Lane Miles	Statewide	Interstates & NHS	2-Year Interim Target, 4-Year Target
	Poor Pavement Lane Miles			
	Good Bridge Deck Area	Statewide	NHS	
	Poor Bridge Deck Area			



Roadway TPM 3 Requirements

Performance Measure	Area	Network	Reporting Frequency
Person-Miles Traveled with Reliable Travel Times (%)	Statewide	Interstates & NHS	2-Year Interim Target, 4-Year Target
Truck Travel Time Reliability Index		Interstates	
Non-Single Occupant Vehicle Travel	Philadelphia (PA, NJ, DE, MD) and New York (NY, CT, NJ) Urbanized Areas	All Urbanized Area Commuters (via ACS)	
Peak Hour Excessive Delay (PHED) per Capita		All NHS roads within Urbanized Areas, AM & PM Peak Periods	
CMAQ Emissions Reductions	Regional and Statewide	CMAQ Projects	



Transit Assets TPM Requirements

Performance Measure	Geography	Network/Assets	Reporting Frequency
Rolling Stock	Entire Transit Agency Service Area	Revenue Vehicles	Annual
Equipment		Non-Revenue Vehicles	
Facilities		Passenger and Administrative / Maintenance Facilities	
Infrastructure		Rail Track	



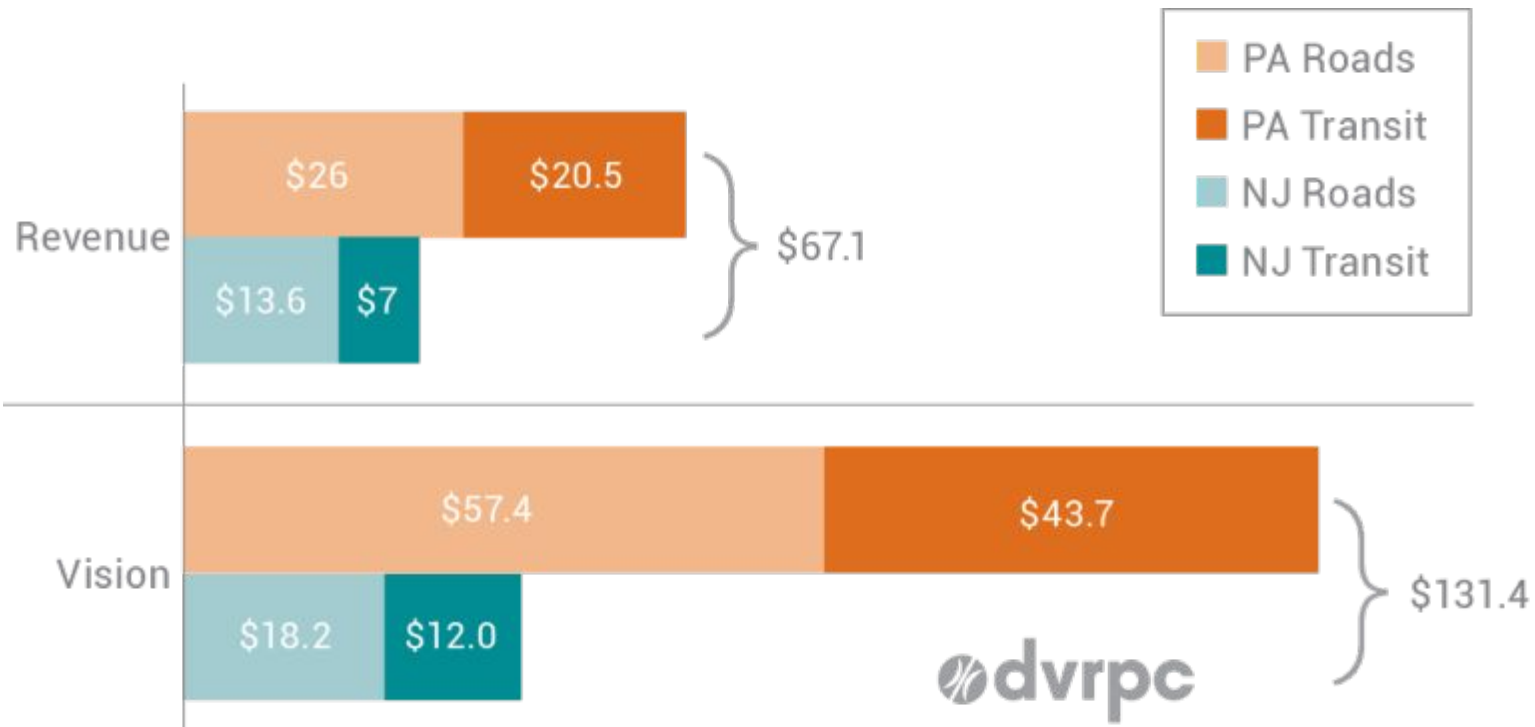
Transit Safety TPM Requirements

Performance Measure	Geography	Network/Assets	Reporting Frequency
Fatalities	Entire Transit Agency Service Area	Entire Transit Agency Network	Annual
Injuries			
Safety Events			
System Reliability			



Revenue & Allocation

Revenue & Allocation

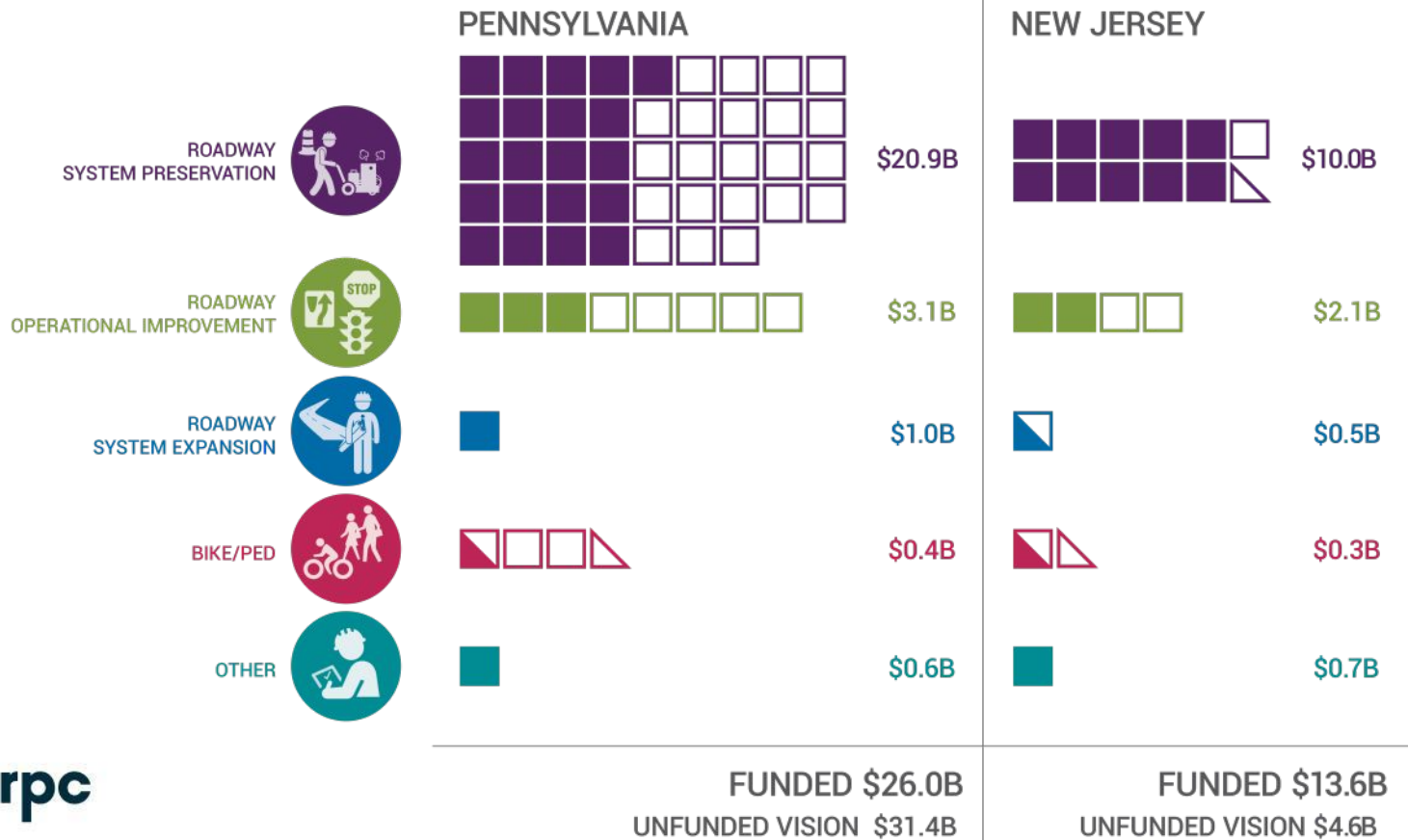


Revenue & Allocation

ROADWAY FUNDING: ALLOCATED REVENUE




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




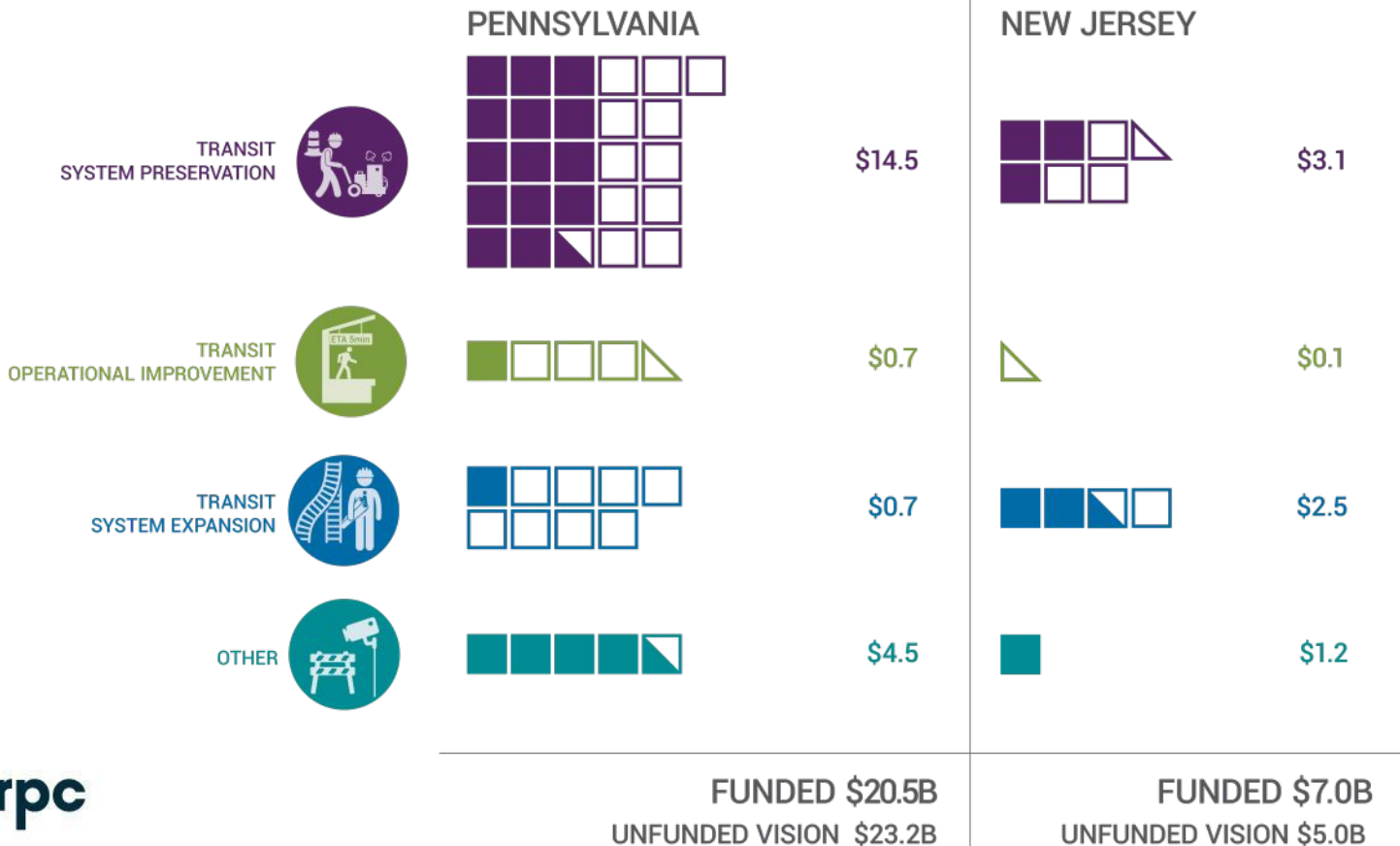
Revenue & Allocation

TRANSIT FUNDING: ALLOCATED REVENUE

@dvrpc

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

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



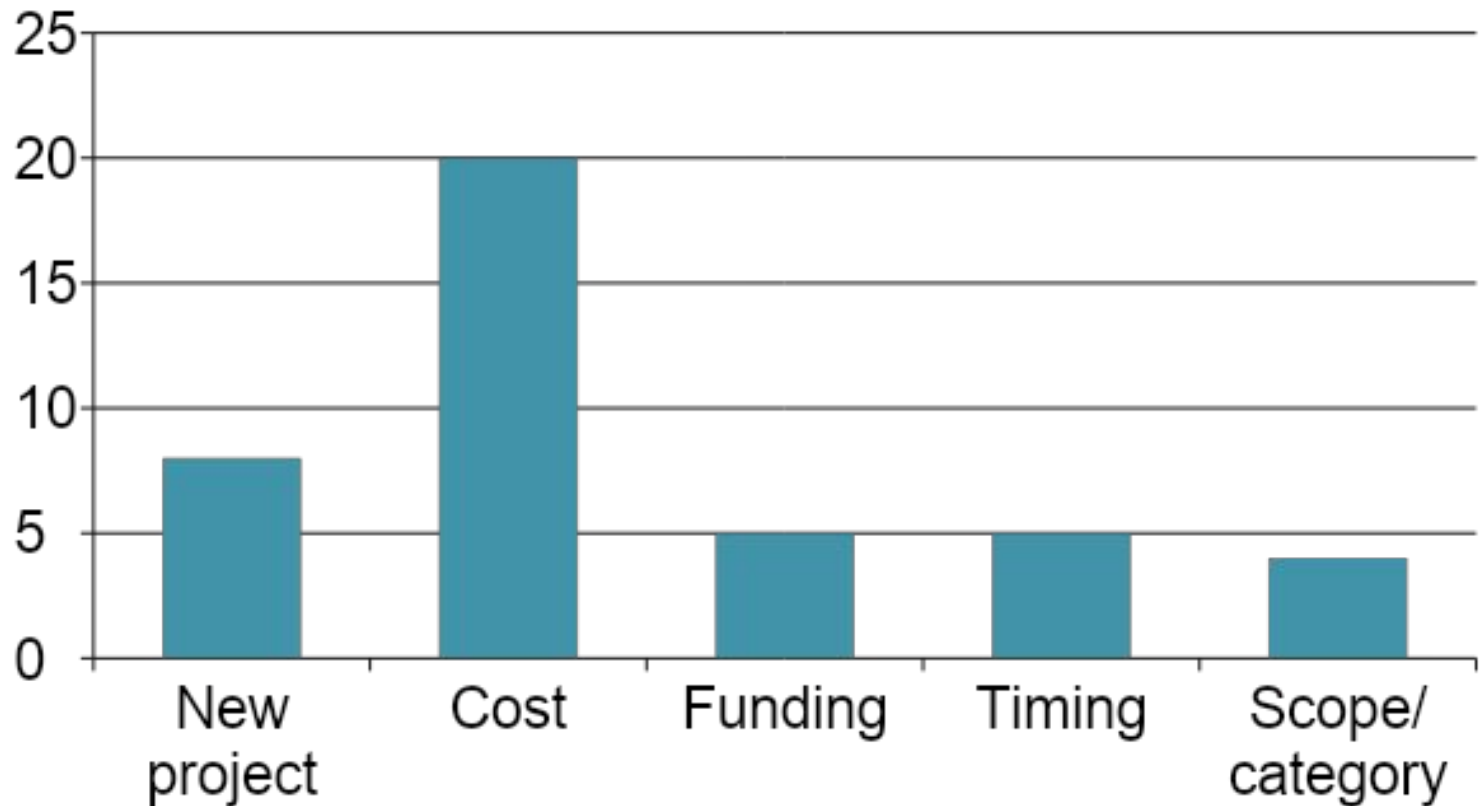


Changes to Major Regional Project List



34 Major Regional Projects Updated

10 include 2 or 3 changes



Moved from TIP to LRP

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



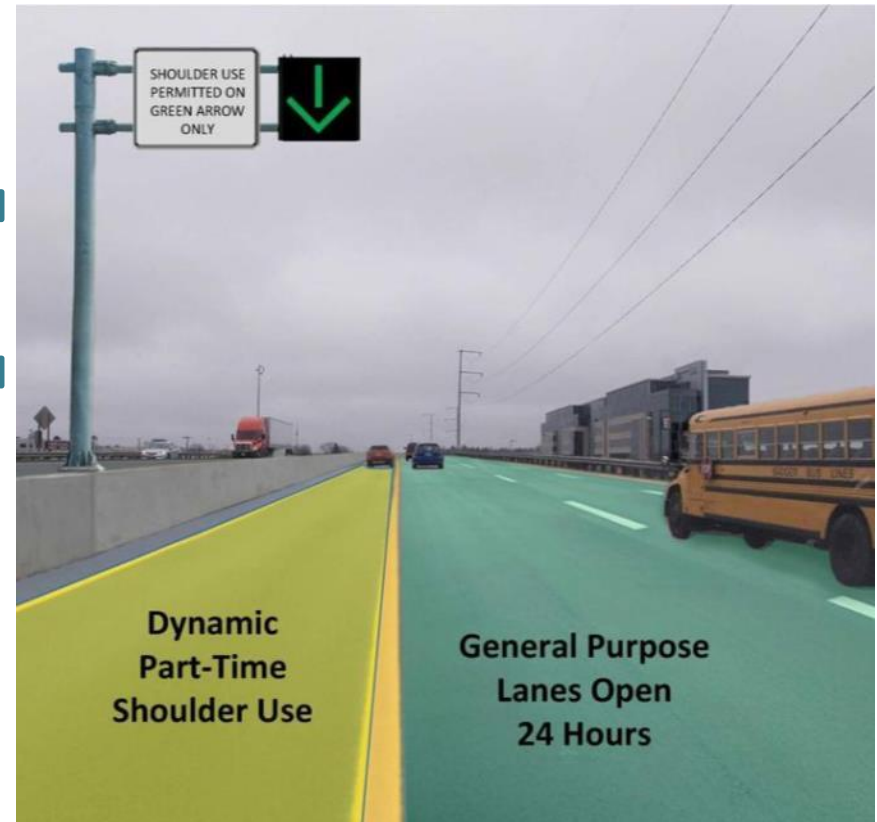
Moved into Unfunded List

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



Change in Scope or Category

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



Changes to Major Regional Project List

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

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

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

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

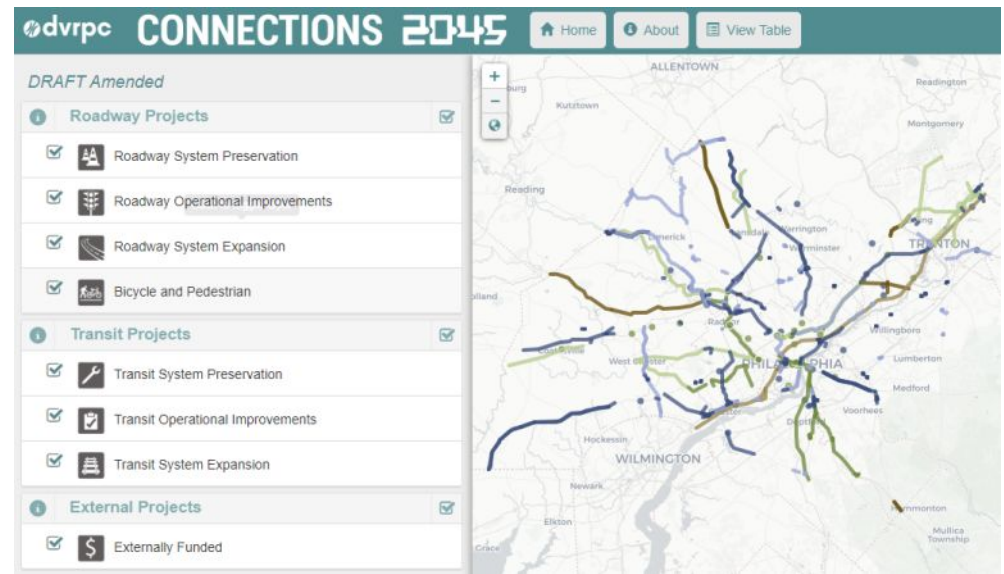
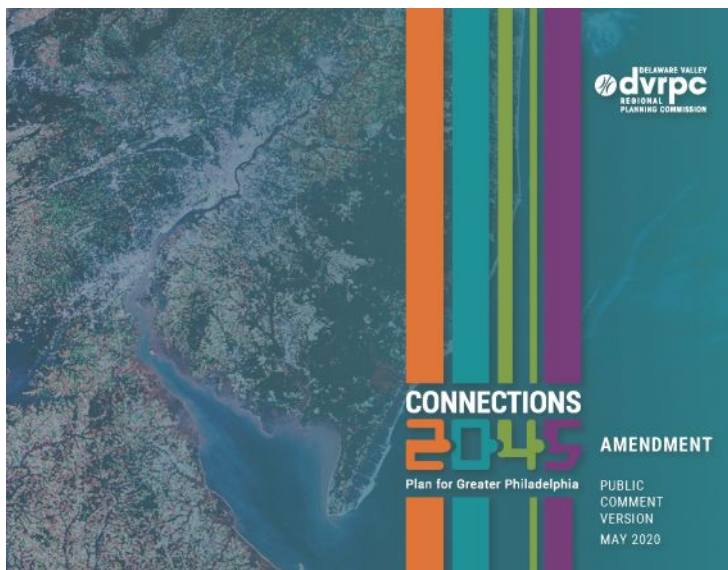
CONNECTIONS

2045

Public Comment

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 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.



Requested Action

Action Proposed

Recommend Board approval of the July 2020 Amendment *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/



CONNECT WITH US
www.dvrpc.org



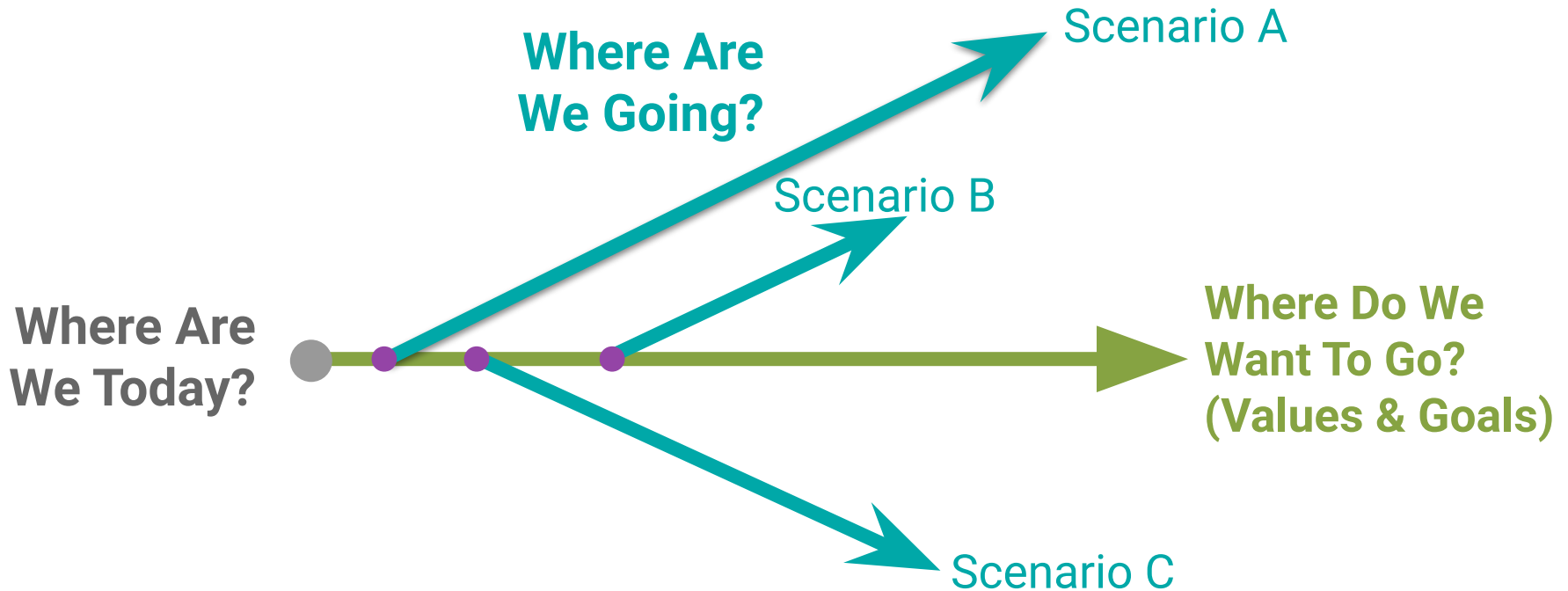


The Futures Group & DVRPC Long-Range Planning

Jackie Davis

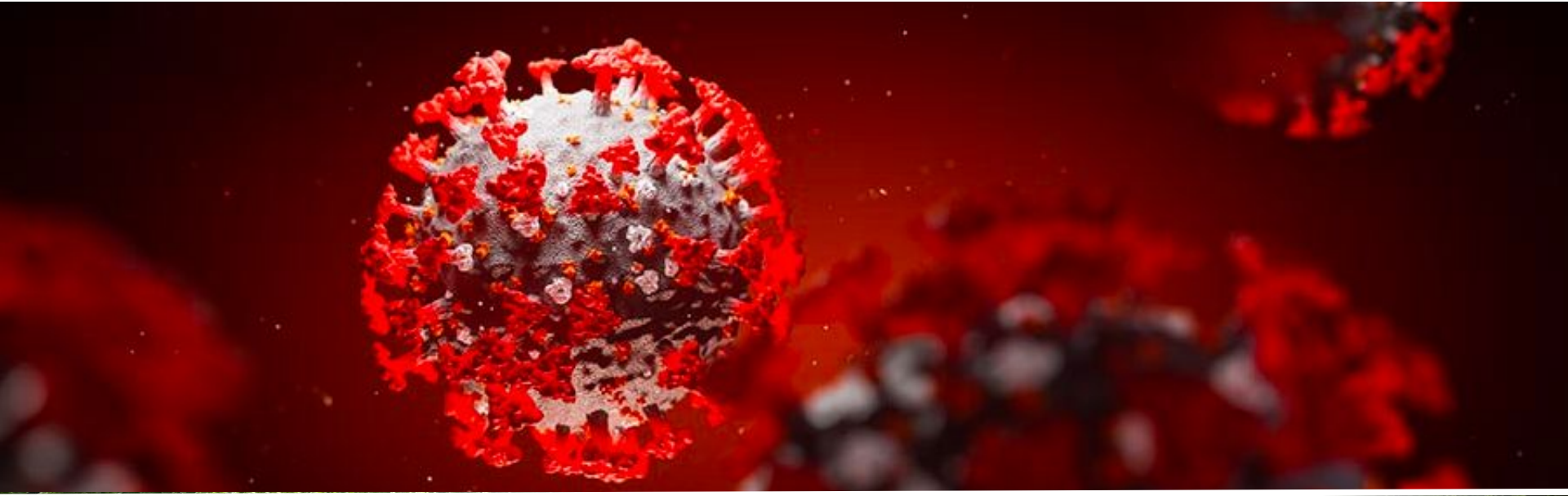


Scenarios and Long-Range Planning



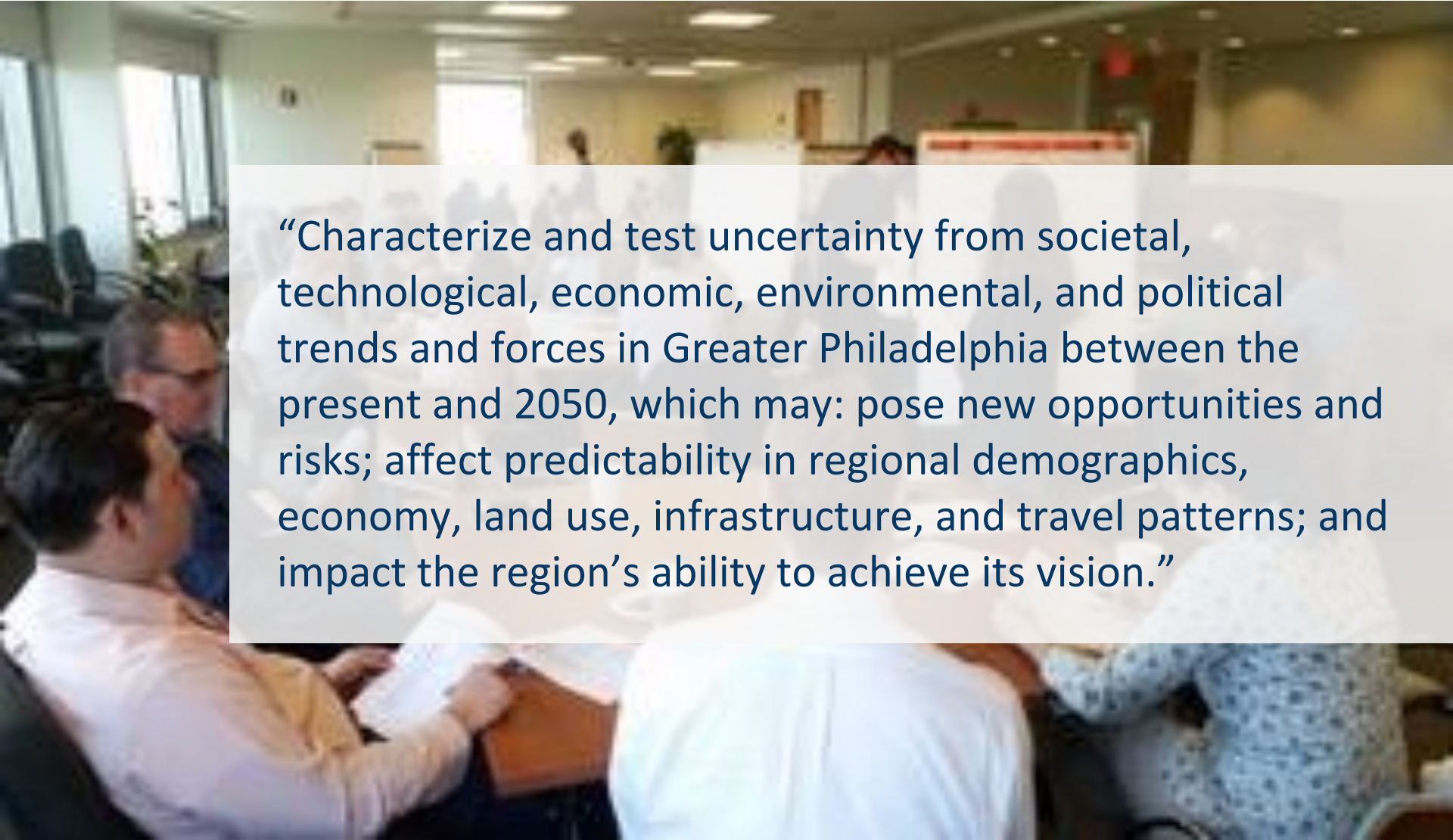


Current Tipping Points





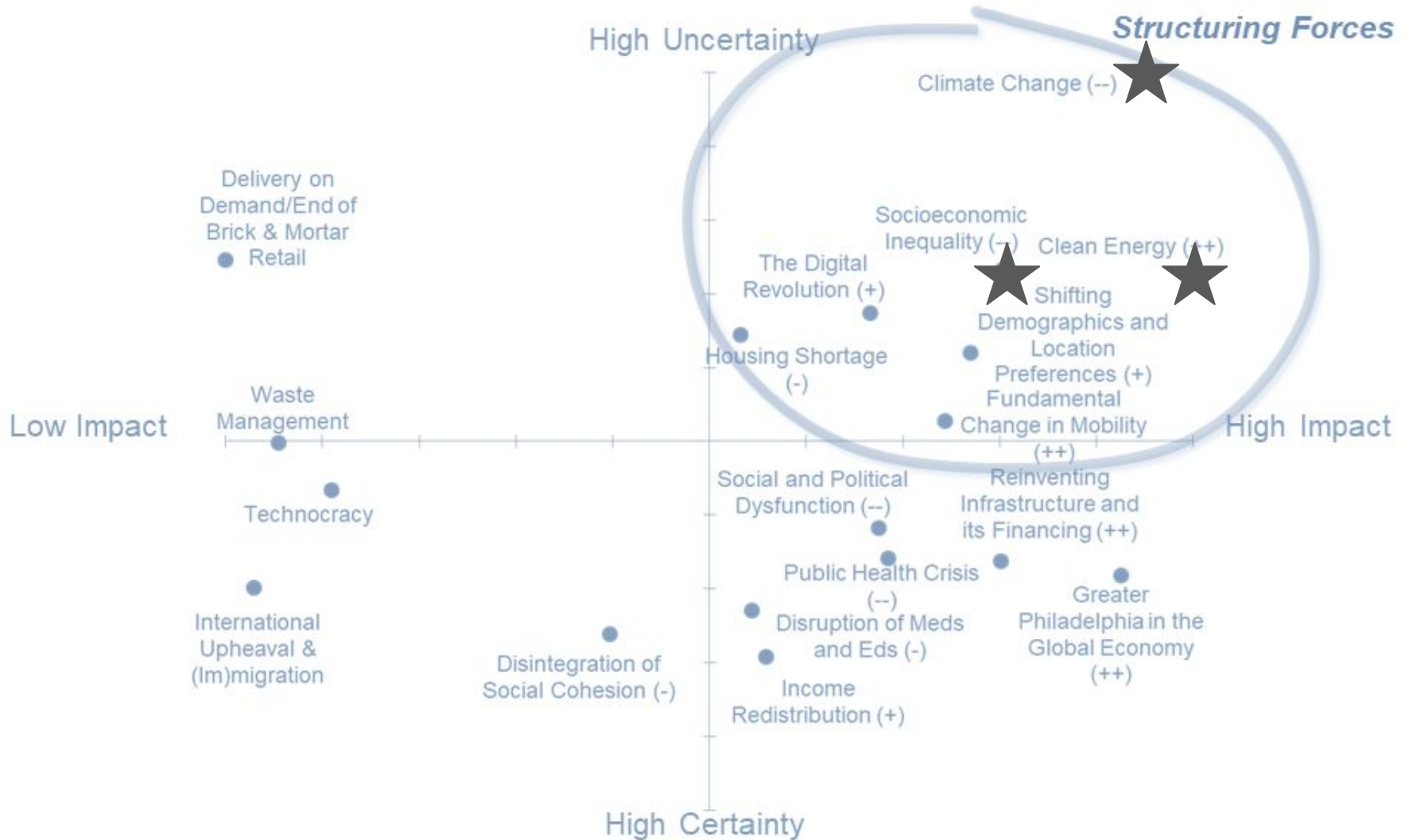
Futures Working Group

A blurred background image of a meeting room. Several people are seated at tables, looking towards the front of the room. The room has large windows on the left and a whiteboard or presentation board in the background.

“Characterize and test uncertainty from societal, technological, economic, environmental, and political trends and forces in Greater Philadelphia between the present and 2050, which may: pose new opportunities and risks; affect predictability in regional demographics, economy, land use, infrastructure, and travel patterns; and impact the region’s ability to achieve its vision.”



Forces Affecting the Region



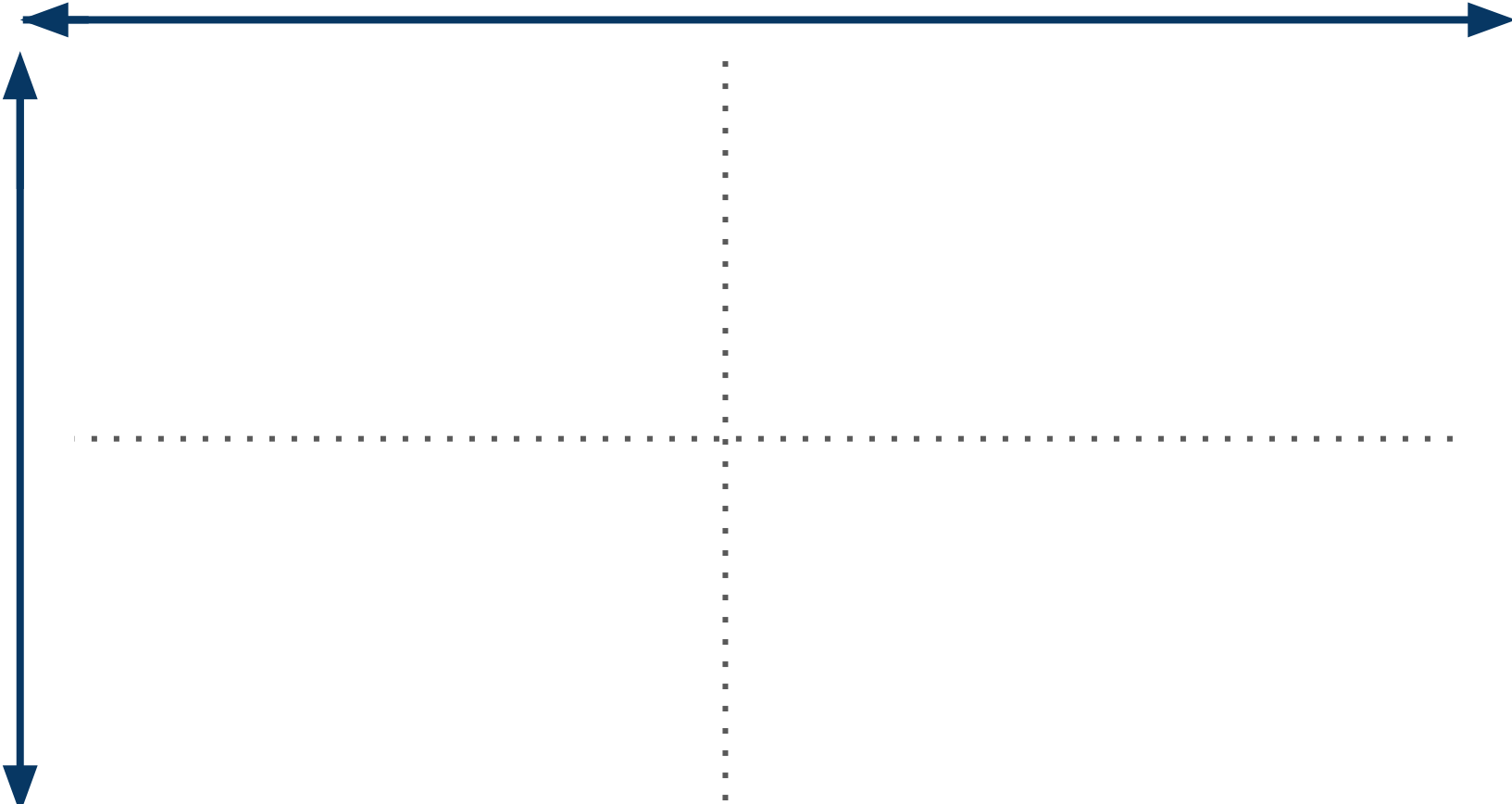


Axes of Uncertainty

Technology

Incremental Change

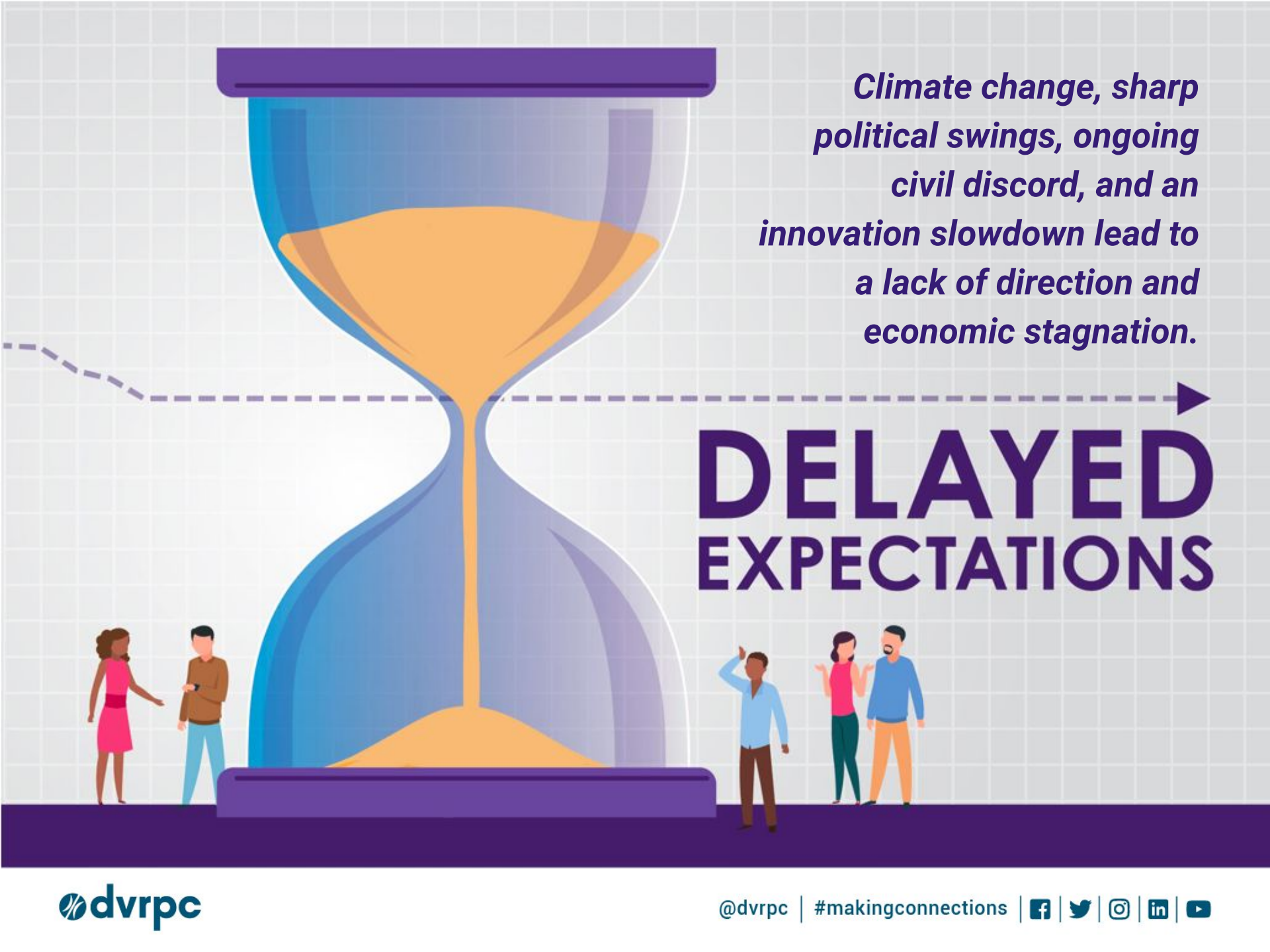
Transformative Change



Climate Change & Equity

Political Will /
Collective Action

Market Forces /
Individual
Responsibility



Climate change, sharp political swings, ongoing civil discord, and an innovation slowdown lead to a lack of direction and economic stagnation.

DELAYED EXPECTATIONS



January 14, 2024

Climate Refugees Compound Crisis on Southern Border



January 31, 2035

Gig Economy All That's Left?



March 9, 2041

2040 Census: Greater Philadelphia Population Declines Amidst Undercount, Hurricane, & Pandemic Concerns



PEOPLE POWER

Grassroots democracy gives citizens more input into the development of their communities and the economy; while readily available technologies are deployed to fight climate change.



September 21, 2023

Antitrust Suit Brought Against Amazon



April 9, 2038

Transit Renaissance Continues as SEPTA Regional Rail Returns to West Chester



March 9, 2041

2040 Census: Greater Philadelphia Still Growing Slowly



TECHNOLOGY IN THE DRIVER'S SEAT

Markets drive economic growth through
Big Data, algorithms, and innovation.



February 27, 2023

Ready or Not, the Automated Vehicle Race Arrives in Philly Area



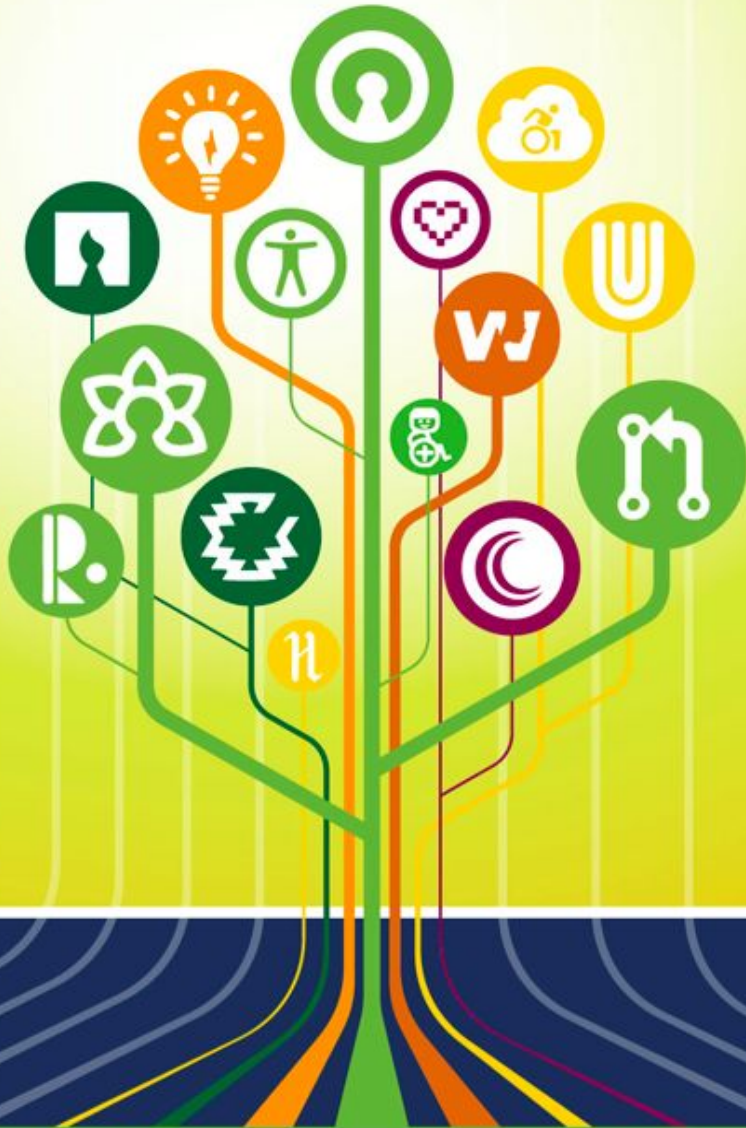
November 3, 2035

Ubiquitous Cryptocurrency Undermining the U.S. Dollar



March 9, 2041

2040 Census: Greater Philadelphia Growth Shifts to the Suburbs



*A collaborative,
networked, open-source
economy of abundance
emerges from societal
efforts to make
technological advances
more sustainable and
equitable.*

INCLUSIVE TECH



June 25, 2025

End of the Road for Brick-and-Mortar Retail?



December 16, 2036

Push for Programmable Roads as Carbon Tax Dwindles



March 9, 2041

2040 Census: Greater Philadelphia Growth Still Driven by Foreign Immigration



EXPLORATORY SCENARIOS FOR GREATER PHILADELPHIA

DISPATCHES from ALTERNATE FUTURES

DELAYED EXPECTATIONS

A world overcome by
climate change
and economic slowdown

PEOPLE POWER

Grassroots movement
to a more just and
sustainable future

TECHNOLOGY IN THE DRIVER'S SEAT

Big Tech takes control

INCLUSIVE TECH

A new equitable economy
emerges through
open source technologies

IN THIS ISSUE

COVID-19 BREAKING NEWS FROM THE REGION

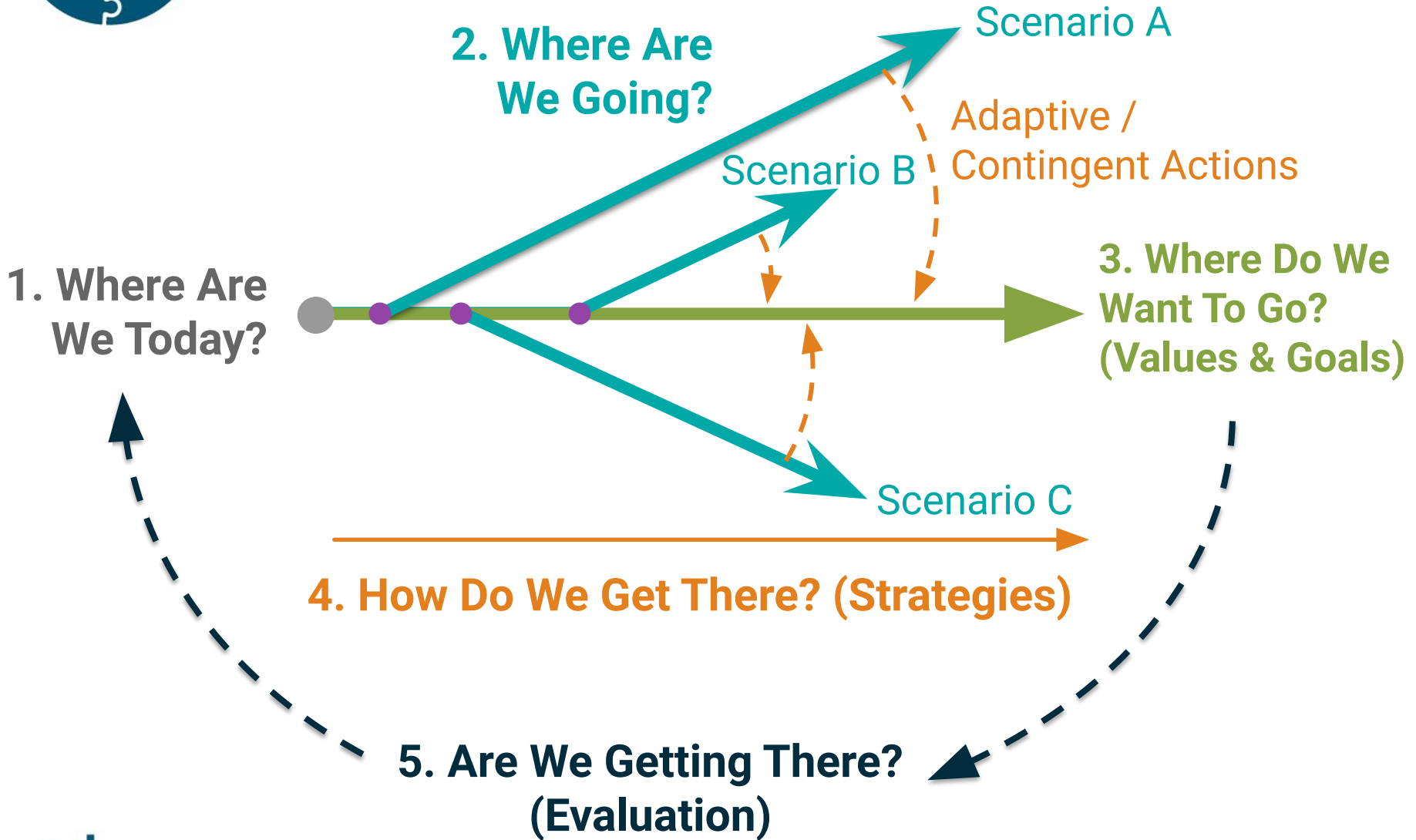
See pages 26, 40, 54, and 68

JUNE 2020





Informing Strategies





Timeline





THANK YOU!

Jackie Davis
jdavis@dvrpc.org



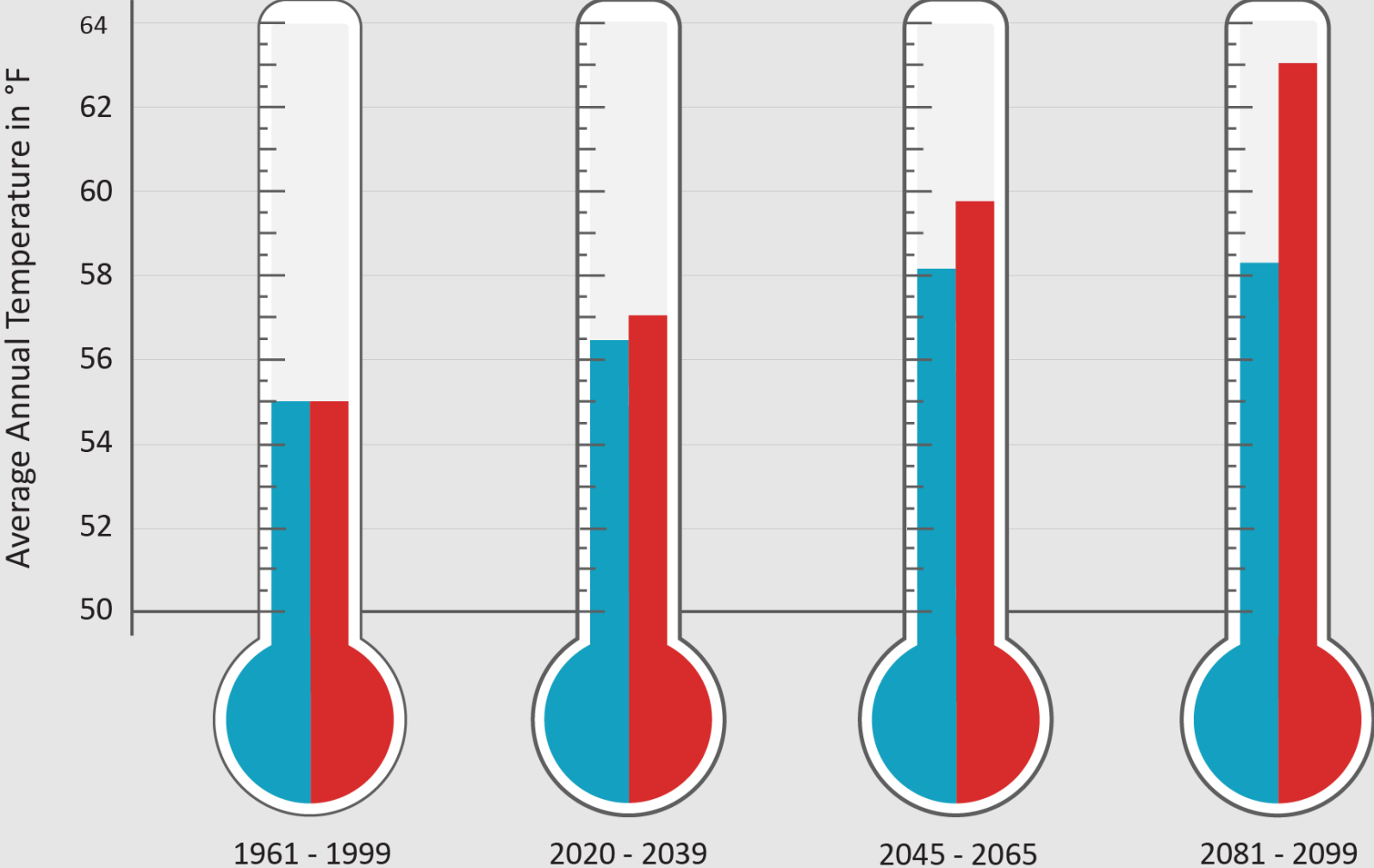
An Assessment of Planning Tools for Climate Change Resiliency in the Delaware Valley

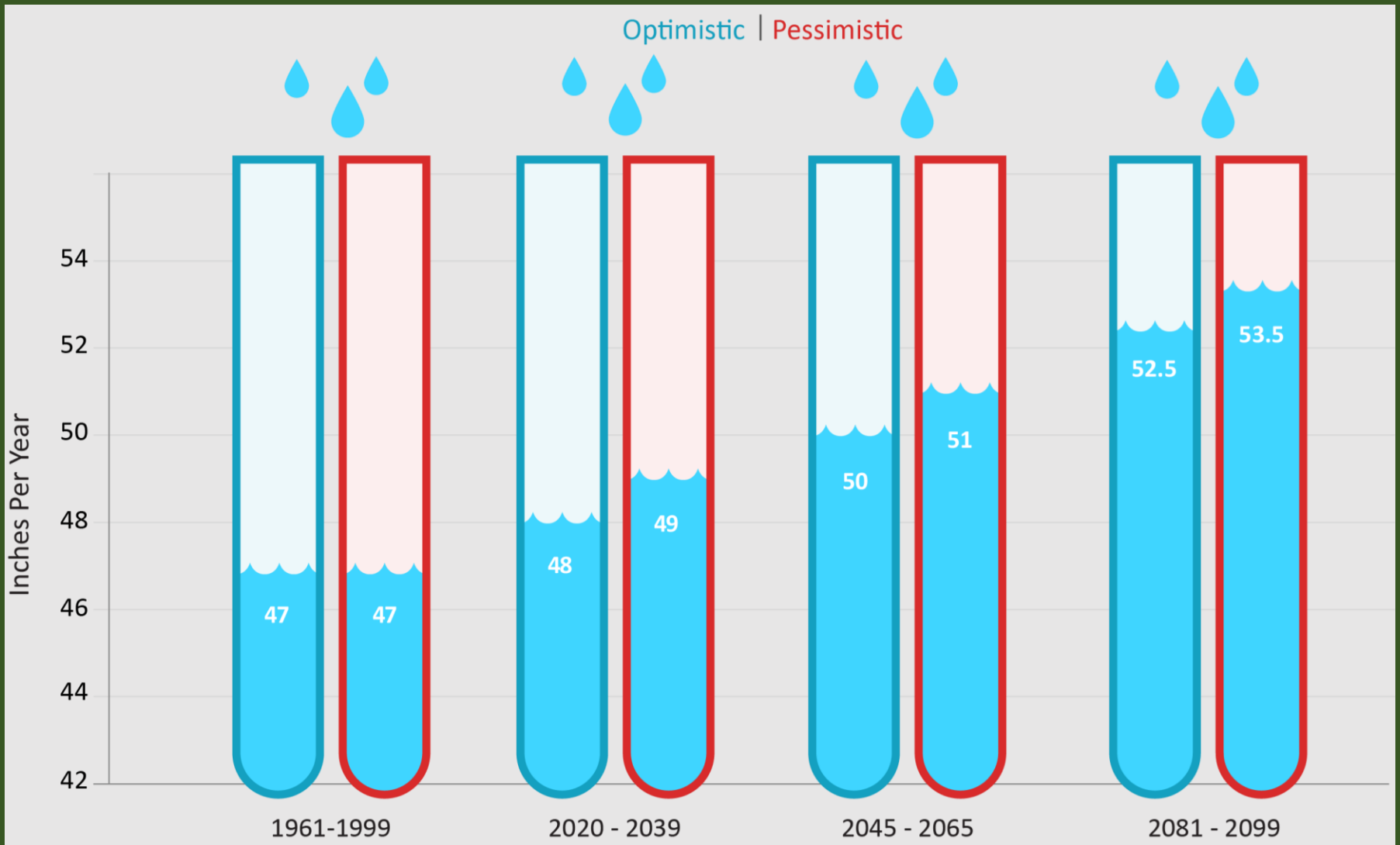
Miles Owen, Office of Environmental Planning
July 7, 2020

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

Optimistic | Pessimistic








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.

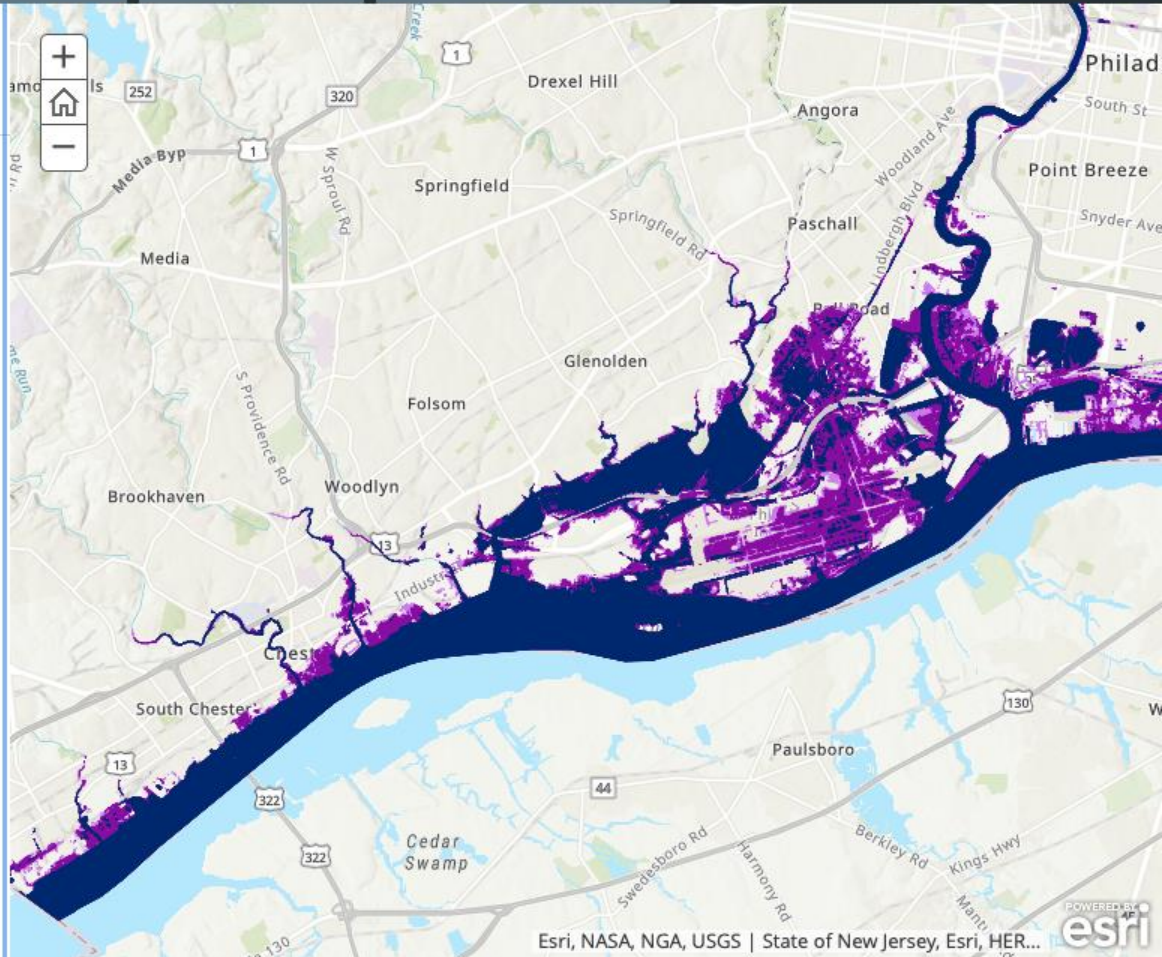
Under this emissions scenario, by 2050, sea level in this region is likely to rise by between 1.0 and 1.8 feet above the height of sea level in the year 2000. The middle value of this range, known as the *central estimate*, is 1.4 feet.

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...

POWERED BY 

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: ▼

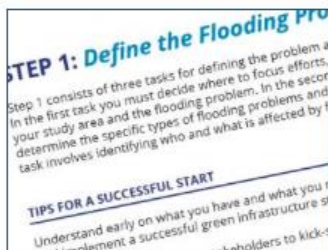
Tools are available to help you manage your climate-related risks and opportunities, and to help guide you in building resilience to extreme events.

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

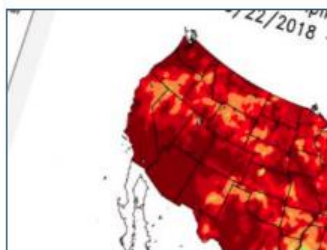
PRINT



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.

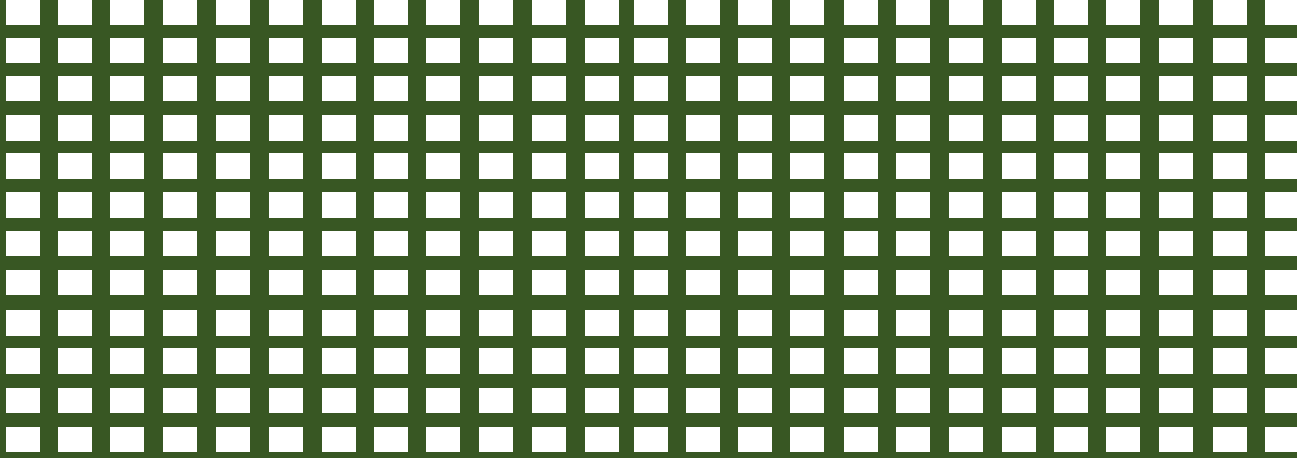
[Read more >](#)



Adaptation Workbook for Land Management and Conservation

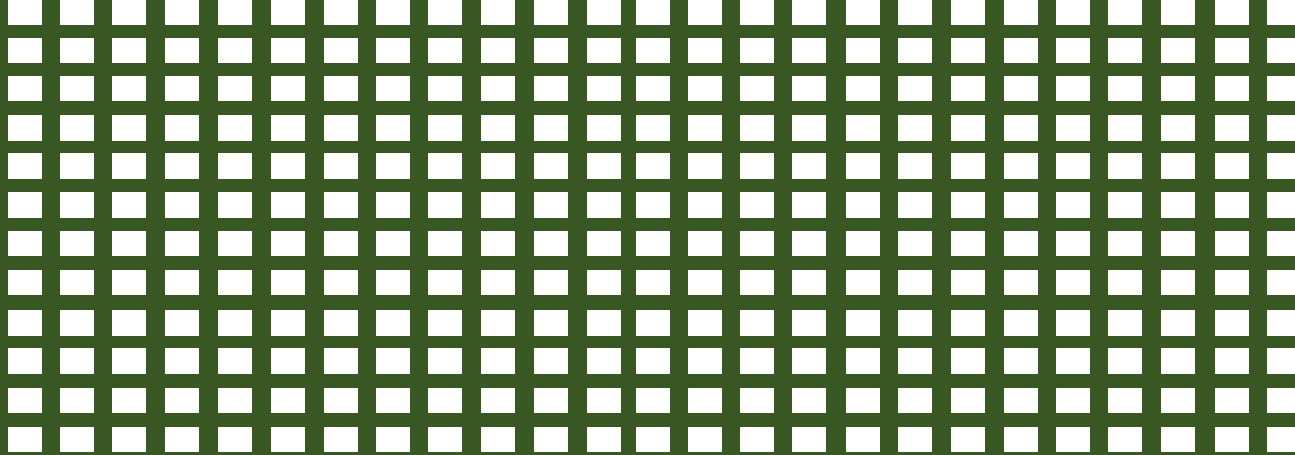
Land managers, natural resource professionals, and motivated landowners can use this structured process to consider the effects of climate change on forests, urban forests, and agricultural properties.

[Read more >](#)

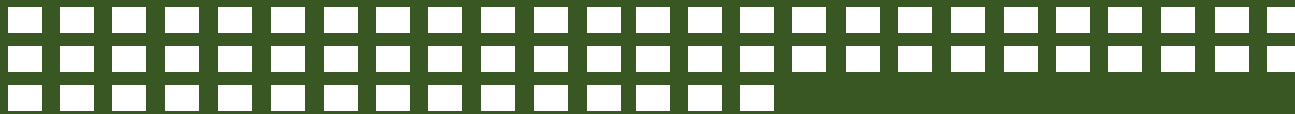


Hundreds of tools on
online aggregations
websites



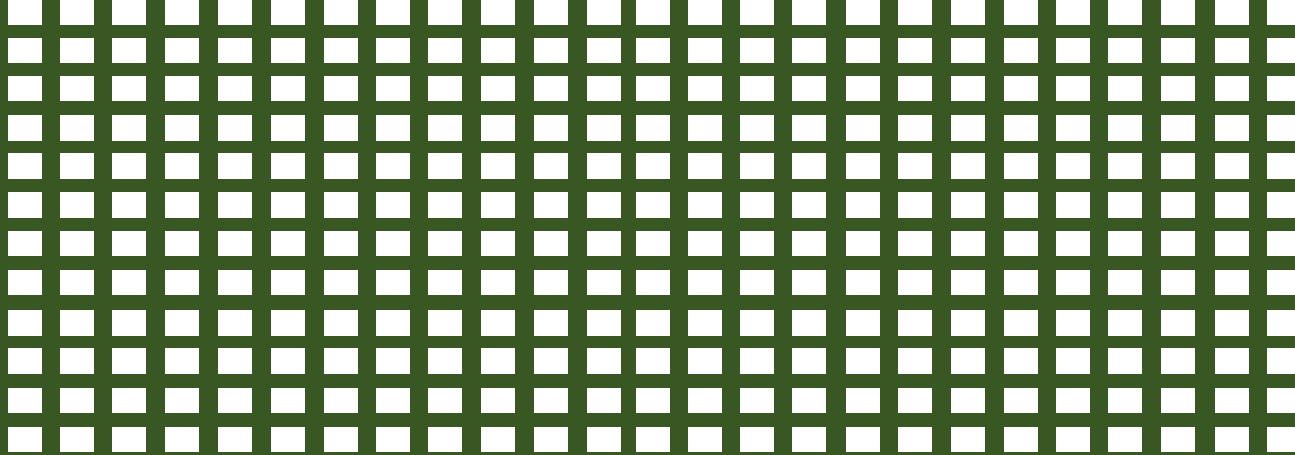


Hundreds of tools on
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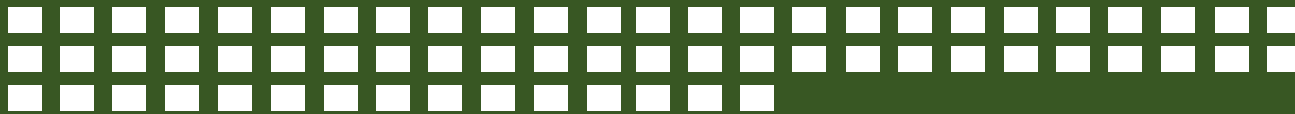


65 tools and resources
deemed broadly
applicable for general
planning





Hundreds of tools on
online aggregations
websites



65 tools and resources
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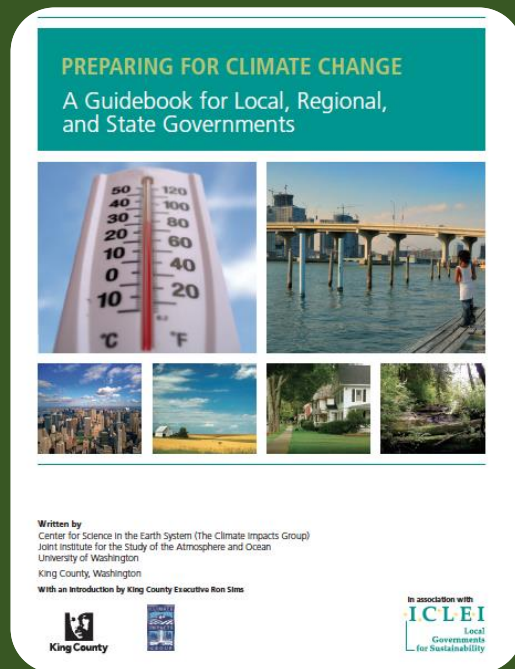
18 tools and resources
deemed particularly
useful for Delaware
Valley Communities

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

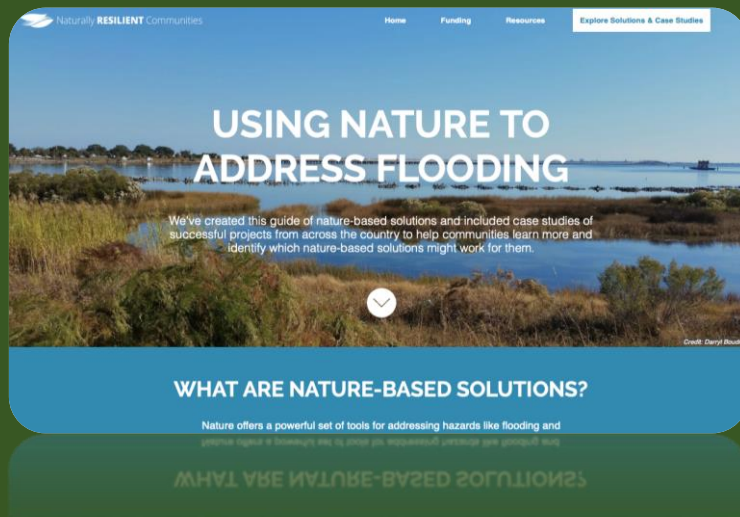
- Outlines a sequence of planning steps to effectively plan for and build resilience



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

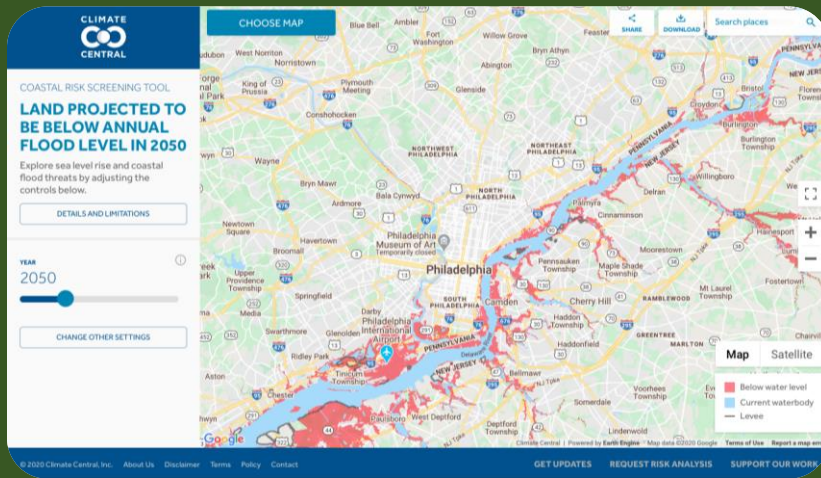
- Uses data, questionnaires, checklists, and decision trees to help practitioners draw conclusions and prioritize actions



Naturally Resilient Communities

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

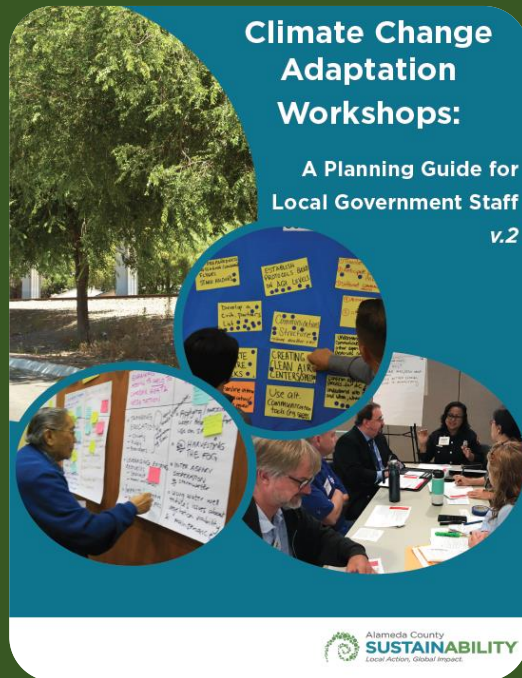
- Provides data, data visualization, and data interpretation in order to support a planning or decision making process and/or educate audiences



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

