Introduction to the Transportation Improvement Program (TIP)
SHOW OF HANDS

Interactive exercise for the room.
Raise your hand if the question applies to you and your experience.
This meeting is for education and discussion

Learn about the TIP and how you can participate.
This meeting is for education and discussion

Learn about the TIP and how you can participate.

Public Meeting for public comments will be on May 24th from 4:00-6:00 pm

DVRPC staff present to formally accept in-person comments
This meeting is for education and discussion
Learn about the TIP and how you can participate.

Public Meeting for public comments will be on May 24th from 4:00-6:00 pm
DVRPC staff present to formally accept in-person comments

Give us feedback!
Help us improve and hone our outreach.
GROUND RULES

- Let everyone have a chance to speak
- Ok to disagree
- But... disagree with the idea, not the person.
- Do not interrupt one another
Transportation Improvement Program

Developing and maintaining the region’s Transportation Improvement Program is what makes the region eligible to receive and spend federal transportation dollars.
This project involves rehabilitating or replacing the Rudolph and Arthur Covered Bridge on Camp Bonsul Rd. over Big Elk Creek. Built in 1880, the bridge retains its original Burr arch truss construction and is listed on the National Register of Historic Places. The rehabilitation will strengthen the bridge for continued vehicular use and original timber trusses, decking, and boards will be re-used and restored in-kind where necessary to maintain the original appearance of the covered bridge. This Chester County owned bridge (#26) is structurally deficient and has sufficiency rating of 16.9. It is posted for 3 tons.

The project was selected to receive $1.6 million in federal funds through the FY2009 National Historic Covered Bridge Preservation Program (NHCB).

A final alternative for bridge rehabilitation or replacement is determined upon federal National Environmental Policy Act (NEPA) or state Categorical Exclusion clearance.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Fund</th>
<th>FY2019</th>
<th>FY2020</th>
<th>FY2021</th>
<th>FY2022</th>
<th>FY2023</th>
<th>FY2024</th>
<th>FY2025</th>
<th>FY2026</th>
<th>FY2027</th>
<th>FY2028</th>
<th>FY2029</th>
<th>FY2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROW</td>
<td>HCB</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROW</td>
<td>183</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTL</td>
<td>HCB</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UTL</td>
<td>183</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON</td>
<td>BOF</td>
<td>1,003</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON</td>
<td>HCB</td>
<td>997</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CON</td>
<td>183</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total FY2019-2022: 2,579
Total FY2023-2026: 0
Total FY2027-2030: 0
Examples of Project Categories
(for highway funded projects)

- Bridge Replacement/Rehabilitation
- Roadway Reconstruction/Restoration
- Highway New Capacity
- Interchanges/Intersections, Signals, ITS
- Bicycle/Pedestrian/Streetscapes
- Transit Flex
- Other; CMAQ Competitive Program; Transportation Management Associations, Mobility Alternatives and Share-A-Ride programs; Reserve Line Items
Project Categories for transit...Large Programs versus individual projects....

Photo Credit: Matthew Popek, Montgomery County Planning Commission
Other Components of the Program

Examples:

- Financial Guidance (statewide)
- Documentation of funds for DVRPC region
- Transit Financial Capacity Analysis
- Documentation of the Air Quality Conformity Analysis
- TIP Benefit Criteria
- MOU for Amending and Modifying the Program
TIP = Capital Programming

Where do we want to go?
LRP: How are we going to get there?

What will it take?

Project Implementation & Evaluation
Let’s do it!
How did we do?

Planning

Capital Programming
Regional Decision Making is Critical
Draft FY2019 TIP for PA

- 286 Regional Highway projects totaling $2.7 Billion

- 20 projects funded by $600 million provided by the Statewide Interstate Management Program (IMP) for I-95, I-76, and I-476 for Reconstruction and operational improvements
Draft FY2019 TIP for PA
$5.5 Billion  |  360 Projects

By County and Operator
Draft FY2019 TIP for PA
$5.5 Billion  |  360 Projects

By Funding Source

- FHWA, 37%
- State, 35%
- FTA, 18%
- Local/Other, 10%
### MPO VOTING AGENCIES

**New Jersey**
- NJDOT
- New Jersey Department of Community Affairs
- New Jersey Governor’s Appointee
- Burlington County
- Camden County
- Gloucester County
- Mercer County
- Camden City
- Trenton City

**Pennsylvania**
- PennDOT
- Pennsylvania Governor’s Policy Office
- Pennsylvania Governor’s Appointee
- Bucks County
- Chester County
- Delaware County
- Montgomery County
- Chester City
- Philadelphia City

### MPO PARTICIPATING (NON-VOTING) AGENCIES

- USDOT FHWA (Pennsylvania Division)
- USDOT FHWA (New Jersey Division)
- U.S. Department of Housing and Urban Development Region III
- Southeastern Pennsylvania Transportation Authority (SEPTA)
- NJ TRANSIT
- Delaware River Port Authority/Port Authority Transit Corporation (DRPA/PATCO)
- FTA, Region III
- U.S. Environmental Protection Agency, Region III
- U.S. Environmental Protection Agency, Region II
- Pennsylvania Department of Environmental Protection
- New Jersey Department of Environmental Protection
- New Jersey Office for Planning Advocacy
- Pennsylvania Department of Community and Economic Development
There is a lot of information on every project listing in the TIP.

This “Roadmap” is on the website and in the document.

It explains what most of the fields mean and helps you find out more information about a project, e.g. what municipality it is in, whether it’s a new project, what the functional classification of roadway is, or even who the project manager is in case you have specific questions.
<table>
<thead>
<tr>
<th>Bucks County New Projects</th>
<th>Chester County New Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-95/US 13/PA 132 Slip Ramp Operation Improvement</td>
<td>Brandywine Creek Slope Restoration</td>
</tr>
<tr>
<td>Almshouse at Jacksonville Road</td>
<td>PA 41 at State Road Intersection</td>
</tr>
<tr>
<td>Old Lincoln Highway and Hulmeville Avenue Safety Improvements</td>
<td>Baltimore Pike/Newark Road Intersection Improvements</td>
</tr>
<tr>
<td>Easton Road Roundabout</td>
<td>Horseshoe Pike and Manor Road Intersection</td>
</tr>
<tr>
<td></td>
<td>PA 10 Shoulder Widening</td>
</tr>
<tr>
<td></td>
<td>Manor Road Roundabout</td>
</tr>
</tbody>
</table>
# New Projects in the FY2019 TIP

<table>
<thead>
<tr>
<th>Delaware County New Projects</th>
<th>Montgomery County New Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glenn Riddle over Chrome Run (Bridge)</td>
<td>Township Line O/Stoney Cr (Bridge)</td>
</tr>
<tr>
<td>I-476 Travel Management</td>
<td>Belmont Avenue Bridge over Schuylkill River (CB #200)</td>
</tr>
<tr>
<td>I-95 Noise Abatement</td>
<td>Philmont Avenue/Tomlinson Road/Pine Road Improvements - 6 Point Intersection</td>
</tr>
<tr>
<td>Macdade Blvd. Corridor Safety Improvements</td>
<td>RTMC General Contract</td>
</tr>
<tr>
<td>Marshall Road Corridor Safety Improvements</td>
<td>RTMC Electrical Contract</td>
</tr>
<tr>
<td>Bethal Road Roundabout</td>
<td>RTMC HVAC Contract</td>
</tr>
<tr>
<td>Chichester Avenue Corridor Safety Improvements</td>
<td>RTMC Plumbing Contract</td>
</tr>
<tr>
<td></td>
<td>Old Skippack Rd. Roundabout</td>
</tr>
<tr>
<td></td>
<td>Main Street Safety Improvements</td>
</tr>
<tr>
<td></td>
<td>Conshohocken Garage (I-76 ICM)</td>
</tr>
</tbody>
</table>
# New Projects in the FY2019 TIP

<table>
<thead>
<tr>
<th>City of Philadelphia New Projects</th>
<th>Various Counties New Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-95, Utility Relocation &amp; Surface Sts (CP3)</td>
<td>District Wide Bridge Rehab Group O</td>
</tr>
<tr>
<td>I-95 Corridor ITS (GR8)</td>
<td>District Wide Bridge Rehab Group P</td>
</tr>
<tr>
<td>I-95 Central Access Philadelphia (CAP) / Waterfront Access</td>
<td>Bridge Group U</td>
</tr>
<tr>
<td>I-95 Bridge Repairs (95/MB4)</td>
<td>ROW Divestment 6-0</td>
</tr>
<tr>
<td>30th Street Viaduct over 30th Street Lower (Bridge)</td>
<td>LED Lighting Conversion 6-0</td>
</tr>
<tr>
<td>Schuylkill Banks Christian to Crescent (TIGER)</td>
<td>Wrong Way Entry Design Build</td>
</tr>
<tr>
<td>Castor Avenue Roundabout</td>
<td></td>
</tr>
</tbody>
</table>
## New Projects in the FY2019 TIP

<table>
<thead>
<tr>
<th>SEPTA New Projects</th>
<th>TIP Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Bridge Program</td>
<td>Tasker-Morris Stormwater</td>
</tr>
<tr>
<td>Wayne Junction Shop Improvements</td>
<td>Bus Operator Shields</td>
</tr>
<tr>
<td>Fern Rock Safety Improvements</td>
<td>Ivy Ridge Parking Improvements</td>
</tr>
<tr>
<td>Chestnut Hill East Station ADA Improvements</td>
<td>Malvern Station High Level Platforms</td>
</tr>
<tr>
<td>South Street Station ADA Improvements on Broad Street Line</td>
<td>Stadium Station on Norristown High Speed Line</td>
</tr>
<tr>
<td>Doylestown &amp; Warminster Tie Renewal &amp; Surfacing</td>
<td>Norristown High Speed Line Interlockings</td>
</tr>
<tr>
<td>Track &amp; ROW Rail Service Improvements</td>
<td>Trolley Tunnel Track Renewal</td>
</tr>
</tbody>
</table>
New Project Development Process
PA Municipal Bridge Retro-Reimbursement Program

Now Accepting Applications!

To continue reducing the number of structurally deficient bridges, DVRPC’s Municipal Bridge Retro-Reimbursement Program (MBRP) will fund locally owned, structurally deficient bridge rehabilitation or replacement projects within Bucks, Chester, Delaware, and Montgomery counties that employ PennDOT’s retro-reimbursement process.

From Fiscal Year (FY) 19 to FY22, up to $10 million state bridge funds (subject to DVRPC Board approval of the Draft FY2019 TIP in June 2018), will be made available for selected municipal bridge projects with existing deck spans of 20 feet (20') in length or greater. The application period for this program opens on Tuesday, May 1, 2018 and will close at 5:00 PM on Friday, June 1, 2018.
TIP DEVELOPMENT TIMELINE

1. SUMMER/FALL
   DVRPC’s TIP Subcommittee reviews/discusses projects, costs, and schedules, including priorities/concerns.

2. FALL/WINTER
   DVRPC, the state DOT, and transit agencies work to constrain the TIP according to expected resources, projected needs, and feedback from member governments.

3. WINTER
   MPOs and member governments review the constrained draft TIP and work with the state DOT and transit agencies to address issues.

4. SPRING
   The draft TIP is revised, per MPO and member governments’ review and comments. Air Quality Conformity Analysis also occurs.

5. SPRING/SUMMER
   Public comment period.

6. SUMMER
   The DVRPC Board adopts the Draft TIP with the list of recommended changes. DVRPC then submits the document to the state DOT to be included into the STIP.

7. FALL
   STIP approvals by FHWA and FTA; current TIP retire. Approved TIP becomes effective.

ENVIRONMENTAL JUSTICE (EJ) AND THE TIP

Planning for the TIP is a collaborative and inclusive planning process. There are two primary federal non-discretionary criteria that guide DVRPC’s planning efforts. The first set of criteria is based on environmental justice (EJ). To be consistent with the provisions of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination in Employment Act of 1976, the Equal Credit Opportunity Act, and Title VII of the Civil Rights Act of 1964, the planning process is designed to ensure that no group, or set of groups, is adversely affected, discouraged or disproportionately burdened, by means of a transportation program, project, or activity.

The TIP is an important component of DVRPC’s overall transportation and urban development process. As such, the considerations for transportation investments can impact the region’s equity of benefit and burden. It is intended that this process will result in a TIP that is consistent with the goals, objectives, and policies of the region’s EJ ordnance. The process is intended to ensure that all transportation investments are consistent with the region’s EJ ordinance.

HOW DOES A PROJECT GET ON THE TIP?

Projects are added to the TIP in a two-step process. The first step is to develop an identified project. This step involves a number of activities, including:

- Identifying project needs and potential projects;
- Developing project justification and analysis;
- Developing project documentation and analysis.

Once a project is identified, it is added to the TIP through a public hearing process. This process involves a number of activities, including:

- Hosting a public hearing;
- Reviewing project documentation and analysis;
- Making a decision on whether to add the project to the TIP.

The process is intended to ensure that all transportation investments are consistent with the region’s EJ ordinance. The process is intended to ensure that all transportation investments are consistent with the region’s EJ ordinance.
TIP Public Meeting

Thursday, May 24, 2018
4:00 PM–6:00 PM
DVRPC conference room
190 N. Independence Mall West, 8th floor
Philadelphia, PA 19106
(Web conferencing is available)
TIP Public Comment Period
Ends June 3rd

By web application: www.dvrpc.org/TIP/Draft

By Email: TIP@dvrpc.org

By Mail: PA TIP Comments,
c/o DVRPC Office of Communications and Engagement
190 N. Independence Mall West, 8th Fl.
Philadelphia, PA 19106

By Fax: 215-592-9125
Stay Involved!

▶ Social media
  - Facebook
  - Twitter
  - Instagram
▶ TIP website: www.dvrpc.org/TIP
▶ Monthly TIP Actions – Board Comment Process
▶ Public Comment Period for TIP Update
Thank You!

www.dvrpc.org/TIP
I-76 ICM Design Limits- Mainline
I-76 Concept of Operations  Project Vision and Goals

The traffic and transit operations of the Schuylkill Expressway Corridor will be managed seamlessly across multiple jurisdictional and agency boundaries, with the assistance of advanced technologies and cooperative strategies.

• New Goals
  – **Alleviate** persistent recurrent *congestion* along the corridor
  – **Reduce crashes**, more specifically those related to rear-end collisions
  – Better **manage** unbalanced *traffic* volumes
  – Better **incentivize** transit, bicycle and pedestrian trips throughout the corridor
## I-76 Concept of Operations Project

### Vision and Goals

<table>
<thead>
<tr>
<th>Feature</th>
<th>Variable Speed Limits</th>
<th>Queue Warning</th>
<th>Junction Control</th>
<th>Ramp Metering</th>
<th>Part-Time Shoulder Use</th>
<th>Multi-Modal Improvements</th>
<th>Connected Vehicle Applications</th>
<th>Managed Arterials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve Traffic Operations</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Reduce Incidents</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Capacity Enhancement</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Optimize Multi-Modal Options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Integrated Corridor Management

Benefits of Integrated Corridor Management

• Smaller operational footprint requiring less R/W
• Less environmental impacts
• Faster project delivery
• More economical
• Scope is scaled to fit the traffic demand
Variable Speed Limits (VSL) / Queue Warning (QW) Project Update

- Construction Contract awarded
- Construction to begin late Spring/early Summer
- Daytime and Nighttime work periods
- Physical Work Complete – Spring, 2019
- VSL/QW operational – June, 2019

- Project Elements
  - 72 Enforceable VSL Signs
  - Nine Dynamic Message Signs (DMS)
  - Deployed along entire 13 mile project area
  - New Software Module/Control Algorithm
Flexible Lane Use (Flex Lanes) Preliminary Design

• Design Alternatives Development Progress
  • Looking at physical constraints and widening options in the Turnpike to Blue Route and Belmont to U.S. 1 areas
  • Modeling safety and traffic impacts of multiple alternatives and tie-in locations
  • Pull-offs / Additional Access Points considered

• Flexible Lane Concept
  • Considering providing the temporary lane on either the left-hand side or the right-hand side—geometric and operational characteristics
  • Flexible (Flex) Lane Branding consistent throughout PA—Highway specifics will dictate where flex lane located
Flexible Lane Use (Flex Lanes) Preliminary Design
Modify Operational Constraints
Overcome Physical Constraints
TSMO & Parallel Corridors

**LEGEND**
- Traffic Cameras
- Dynamic Message Signs
- Montgomery County Signals
- Philadelphia Signals
- PennDOT Arterial
- Montgomery County Arterial
- Municipal Arterial
- I-76 Mainline

<table>
<thead>
<tr>
<th>Municipality</th>
<th>I-76 Parallel Corridor Signals</th>
<th>Total # of Signals</th>
<th>% PennDOT Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgeton Borough</td>
<td>8</td>
<td>8</td>
<td>100%</td>
</tr>
<tr>
<td>Conshohocken Borough</td>
<td>7</td>
<td>10</td>
<td>70%</td>
</tr>
<tr>
<td>Lower Merion Township</td>
<td>22</td>
<td>63</td>
<td>33%</td>
</tr>
<tr>
<td>Norristown Borough</td>
<td>9</td>
<td>25</td>
<td>36%</td>
</tr>
<tr>
<td>Plymouth Township</td>
<td>10</td>
<td>29</td>
<td>34%</td>
</tr>
<tr>
<td>Upper Merion Township</td>
<td>36</td>
<td>56</td>
<td>62%</td>
</tr>
<tr>
<td>West Conshohocken Borough</td>
<td>10</td>
<td>10</td>
<td>100%</td>
</tr>
<tr>
<td>Whittemore Township</td>
<td>6</td>
<td>21</td>
<td>29%</td>
</tr>
<tr>
<td>City of Philadelphia</td>
<td>52</td>
<td>2,950</td>
<td>2%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>160</strong></td>
<td><strong>3,149</strong></td>
<td><strong>5%</strong></td>
</tr>
</tbody>
</table>
Bicycle and Pedestrian Opportunities

- Connections
- Wayfinding
- Amenities
- Safety
- Gaps
- Concerns
- Goals
Program Committees

- Executive Stakeholder Group
- Incident Management Task Force
- Advisory Committee
Website/Public Involvement

- [www.transform76.com](http://www.transform76.com)
- Website Go-Live – May/June, 2018
- Twitter (@transformi76) and Facebook (Transform76) activated with website.
- Developing educational video introducing the challenges of the corridor and the improvements being considered (first of a series).
- VSL / QW deployment will be first visible aspect of the overall program.