



February 2018

TIP Actions

Transportation Improvement Program

Pennsylvania TIP (FY2017-2020) New Jersey TIP (FY2018-2021)



I-95: Allegheny Avenue Interchange Advance Contract (AF1) City of Philadelphia | Increase CON Phase

- ► Action Type: TIP Amendment
- ▶ Action: Increase CON by \$16,779,000:
 - FY18 CON increase \$6,943,000 NHPP/\$282,000
 STP/\$719,000 STU/\$249,000 State 581/\$78,000 State 185;
 - FY19 CON increase \$14,196,000 NHPP/\$710,000 State 581/\$312,000 State 185;
 - FY20 CON decrease \$1,039,000 NHPP/\$372,000 State 581/\$299,000 State 185;
 - FY21 CON decrease \$4,000,000 NHPP/\$500,000 State 581/\$500,000 State 185.
- ▶ Reason: Construction of SEPTA track and electric traction, reconstruction of SEPTA Westmoreland Loop; reconstruction of Madison Ave. sewer; Street lighting, water line relocation, soil/water test pits, and traffic signal improvements.

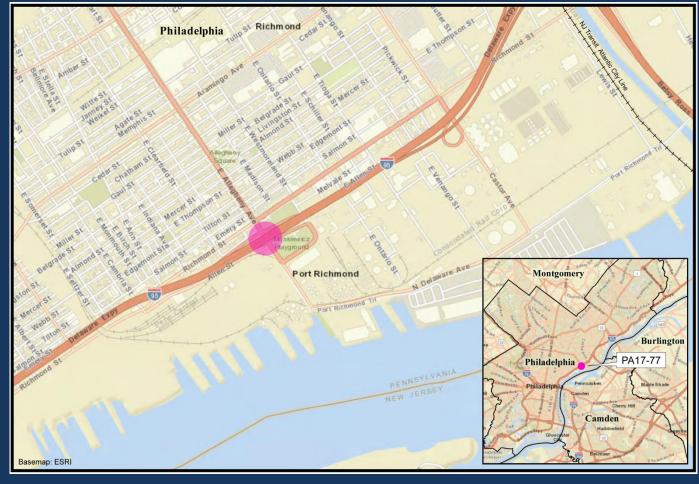
I-95 Sector A Construction Sections



<u> I-95 Sector A – Over \$2 billion total investment</u>

- 5 sections, over 30 MPMS #s
- Mostly in Interstate Program, some in Regional Highway Program

Section AFC – Over \$360 million total investment



Construction
Cost Increase:
New Work &
Expanded
Scopes

- Reconstruction of SEPTA Westmoreland Loop facility (50% reimbursement from SEPTA)
- Reconstruction of Madison Avenue sewer (100% reimbursement from PWD)
- Disposal of contaminated soil & water
- Expanded scopes of work for:
 - Street lighting
 - Water line relocation; soil & water test pits
 - SEPTA trolley track construction & electric traction
 - Traffic signal improvements

TIP Action | Proposed – PA Amend the PA TIP for the Following Project:

a. I-95 Allegheny Avenue Interchange Advance Contract (AF1)

That the RTC Recommend that the Board approve amending the TIP by increasing the CON phase by \$16,779,000:

- FY18 CON increase \$6,943,000 NHPP/\$282,000 STP/\$719,000 STU/\$249,000 State 581/\$78,000 State 185;
- FY19 CON increase \$14,196,000 NHPP/\$710,000 State
 581/\$312,000 State 185;
- FY20 CON decrease \$1,039,000 NHPP/\$372,000 State
 581/\$299,000 State 185;
- FY21 CON decrease \$4,000,000 NHPP/\$500,000 State
 581/\$500,000 State 185.



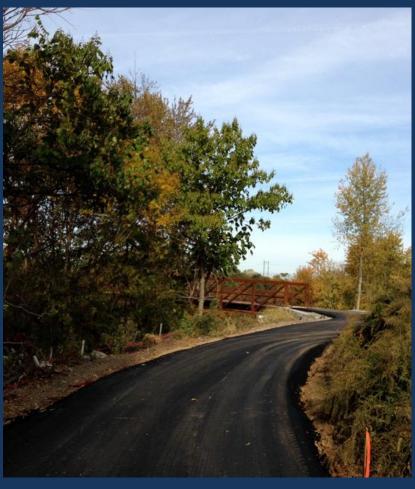
Baxter Trail/Delaware Waterfront Mitigation Improvements City of Philadelphia | Add New Project to the TIP

- ► Action Type: TIP Amendment
- Action: Add a new \$7,123,000 locally funded project to the TIP and program accordingly:
 - FY18 PE (\$243,000 Local)
 - FY19 FD (\$405,000 Local)
 - FY20 CON (\$3,238,000 Local)
 - FY21 CON (\$3,237,000 Local)
- Reason: Mitigation required to allow trail to open to the public.
 - All funds for this project provided by the City of Philadelphia.



PA17-78: Baxter Trail/Delaware Waterfront Mitigation Improvements









TIP Action | Proposed – PA Amend the PA TIP for the Following Project:

b. Baxter Trail/Delaware Waterfront Mitigation Improvements

That the RTC Recommend that the Board approve amending the TIP by adding a new \$7,123,000 locally funded project to the TIP and programming accordingly:

- FY18 PE (\$243,000 Local)
- FY19 FD (\$405,000 Local)
- FY20 CON (\$3,238,000 Local)
- FY21 CON (\$3,237,000 Local)









BUILDING CAPACITY TO FACILITATE CLIMATE ADAPTATION PLANNING AND COMMUNITY RESILIENCY

FY2018 Work Program Amendment



ABOUT THE PROJECT

Pennsylvania Coastal Zone Study Area

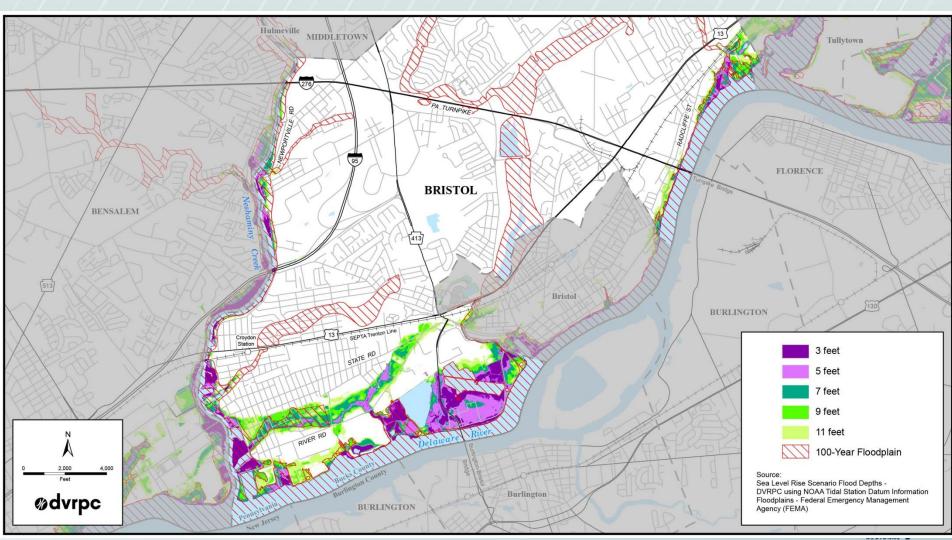
20-Foot Contour / Study Area Boundary

Coastal Zone Management Boundary





ABOUT THE PROJECT



ABOUT THE PROJECT



What's Going On And What's Coming Up?

Pennsylvania's climate is changing, and these changes are predicted to affect Bristol Township. The earth has warmed by about one degree Fahrenheit (°F) in the last century. If today's trends in greenhouse gas emissions continue, by the middle of the 21st century, Pennsylvania is predicted to warm by between 5.4-6.0°F from current temperatures.

Increases in temperature are predicted to cause higher sea levels and more frequent heavy storms, both of which will introduce new vulnerabilities in Bristol that the community will need to address.

The following chart shows tide gauge heights above high tide (the "mean higher high water" measurement used by NOAA) at the Philadelphia tide gauge in the Delaware River. The chart lists flood height measurements from some of the most recent strong storms (the "Current" column) and how those flood heights are predicted to increase in a likely sea level rise scenario (the "2030," "2050," and "2100" columns). These measurements and calculations form the basis for the map of flood extents and depths in Bristol on the reverse side of this poster.

Flooding Estimates at Philadelphia Tide Gauge

	Current (ft)	2030 (ft)	2050 (ft)	2100 (ft)
1%/100-year flood	4.13	4.93	5.53	7.53
Flood of April 2005 (~April 4, 2005)	3.06	3.86	4.46	6.46
Hurricane Irene (~August 28, 2011)	3.23	4.03	4.63	6.63
Hurricane Lee (~September 3, 2011)	1.65	2.45	3.05	5.05
Superstorm Sandy (~October 30, 2012)	3.94	4.74	5.34	7.34
10%/10-year flood	3.05	3.85	4.45	6.45
99%/1-year flood	1.12	1.92	2.52	4.52
Permanent inundation at high tide (mean higher high water)	0	0.8	1.4	3.4

Sources: NOAA, central estimate from Kopp et. al 2016

What Does It Mean for Your Community?

Bristol's location in the Delaware Estuary Coastal Zone already makes it vulnerable to flooding from several sources. Regular tides along the Delaware River as well as riverine flooding and coastal storm surge from extreme storms already cause damage to property in Bristol. Future flooding may cause additional problems. In general, some of the greatest flooding

problems for Bristol Township and other communities along the Delaware River include:

- · Flooding of private property (especially homes, businesses, and cars)
- · Flooding of roadways
- Stress on aging water-related infrastructure (sewer lines, storm drains, inlets, dikes, and levees)
- · Secondary effects of flooding: siltation, erosion, pollution
- · Destruction of tidal wetland habitat
- · Insufficient flood monitoring systems

What Can You Do About It?

The problems listed above can be addressed using a variety of strategies, including the following:

Plans, Regulations, and Ordinances

- Incorporate flood information into municipal plans, ordinances, and building codes.
- Use the zoning ordinance to regulate setbacks from rivers and streams, increase base flood elevations for buildings, and set requirements for managing stormwater.
- Begin a community-wide planning process to prepare for the long-term effects of storm surge and sea level rise beyond the standard 20- or 25-year planning horizon.
- Add flood mitigation projects into a capital improvements plan or hazard mitigation plan.
- Develop a post-disaster recovery plan.

Project

- Participate in National Flood Insurance Program's Community Rating System program to reduce insurance premiums for residents in the FEMA 100-year/1-percent floodplain.
- Work with property owners in repeat flood areas to buy out properties, converting them into parks or other open space.
- Work with local environmental organizations to educate residents about the benefits of natural floodplains and riverine wetland habitat in order to achieve long-term support for preserving these areas.
- Preserve existing natural floodplains and riverine wetland habitat.
- Use living plants (green stormwater infrastructure) to reduce stormwater runoff in areas that get flooded by more regular, smaller storms.

- Conduct regular outreach to the residents living in floodprone areas on flood preparedness and disaster assistance.
- Create an evacuation plan that includes multiple routes out of the municipality, and share that information with residents.

Other coastal flooding preparation and response strategies can be found at https://www.dvrpc.org/Resiliency/Coastal.

What's Available?

Funding (\$) and technical assistance (TA) resources are available to better plan for and respond to flooding impacts:

Federal

- FEMA: Pre-Disaster Mitigation Grant and Hazard Mitigation Grant Programs (\$)
- · HUD: Community Development Block Grants (\$)
- · NOAA: Digital Coast (TA)

State

- DCNR: Community Conservation Partnerships Program (\$)
- PennVest (Pennsylvania Infrastructure Investment Authority) (\$)
- PA DEP: Coastal Zone Management and Growing Greener Grants (\$)

Other

- · Bucks County Municipal Open Space Program (\$)
- · DVRPC: TCDI and TAP (\$)
- · Natural Lands and PECO: Green Region Open Space Program (\$)
- · NFWF and Wells Fargo: Resilient Communities Program (\$)

Other resources can be found at

https://www.dvrpc.org/Resiliency/Coastal.



Bristol Township Waterfront Communities, south of the Delaware River Bridge | Source: PADEP.

PROPOSED ACTION

That the Regional Technical Committee recommend that the Board amend the DVRPC FY2018 Work Program to include **Building Capacity to Facilitate Climate Adaptation Planning and Community Resiliency**, and authorize the Executive Director to enter into a contract with PADEP for this project.



King of Prussia Rail Project

An Extension of the Norristown High Speed Line













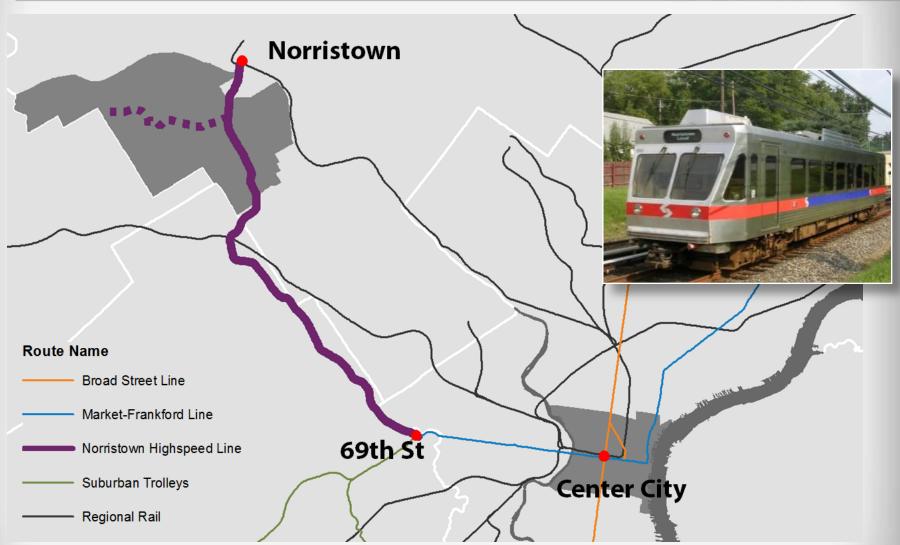
Agenda



- Draft Environmental Impact Statement (DEIS)
 - DEIS Evaluation of Effects
 - Fall 2017 Public Hearings
 - Public Comments/Feedback
- Next Steps
- Final Environmental Impact Statement (FEIS)
- DVRPC Action

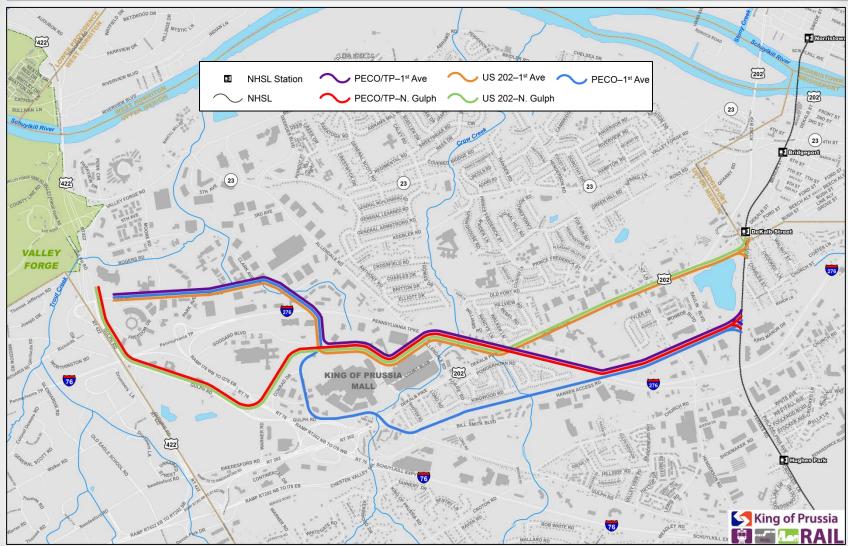
Norristown High Speed Line





DEIS Action Alternatives





DEIS Findings



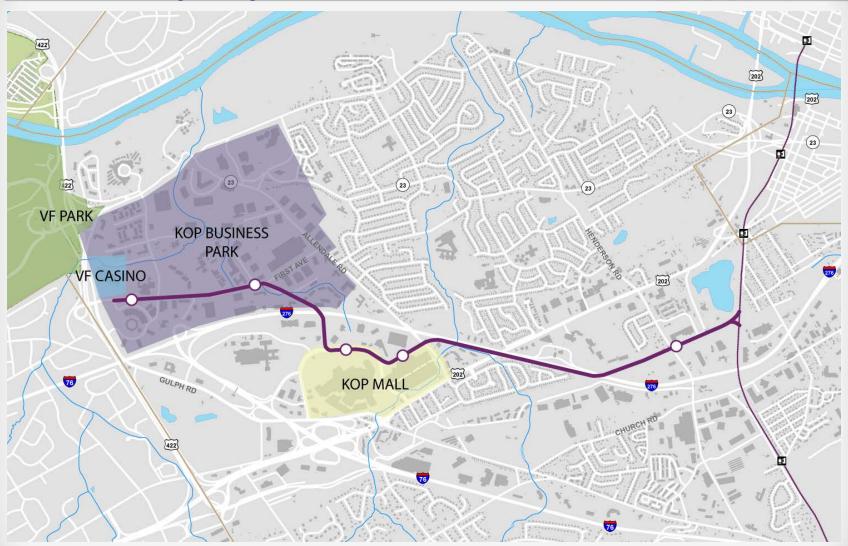
Evaluate Effects of the 5 Action Alternatives and 2 Design Options On:

- Transportation and Traffic
- Land Use and Economic Development
- Community Facilities
- Property Acquisitions and Displacements
- Parks, Recreational Land and Open Space

- Historical and Archaeological Resources
- Visual Effects
- Air Quality
- Noise and Vibration
- Natural Resources
- Contaminated and Hazardous Materials
- Energy Use
- Utilities Effects

Recommended Locally Preferred Alternative (LPA)





Renderings





Renderings





Public Hearings



Three public hearings were held in November, 2017 which included an open house, presentation, and public comment session.

- Doubletree Hotel, King of Prussia (two sessions)
- Norristown Municipal Building

Dates:	Mon., Nov. 13	Mon., Nov. 13	Wed., Nov. 15
Open House & Private Oral Comments:	1 - 2 p.m.	5 - 6 p.m.	5 - 6 p.m.
Presentation:	2 p.m.	6 p.m.	6 p.m.
Public Oral Comments:	2 - 4 p.m.	6 - 8 p.m.	6 - 8 p.m.
Locations:	Valley Forge Jefferson Ballroom 301 West DeKalb Pike King of Prussia, PA 19406	DoubleTree Hotel Valley Forge Jefferson Ballroom 301 West DeKalb Pike King of Prussia, PA 19406	Norristown Municipal Building 235 E. Airy Street Norristown, PA 19401





Additional Outreach



- Public information sessions were also held with display boards and team members present to answer questions at Norristown TC, 69th Street TC, Upper Darby, KOP TC.
- Community Working Group
- Neighborhood Meeting
- Committee Meetings Steering,
 Agency, Technical, and Stakeholder
- 29,000 postcards mailed, 1,500 newsletters, 6,000 flyers distributed at transit hubs, local newspaper ads, social media & email.



DEIS Public Comments



In total, **279** stakeholder & public comments were received on the DEIS

In addition, we received:

- **24** comments from government agencies
- 2 petitions
- **2** Resolutions of Support

Comments were received through:

- Project website
- Oral comments (public & private)
- Comment cards
- Mail

What we heard

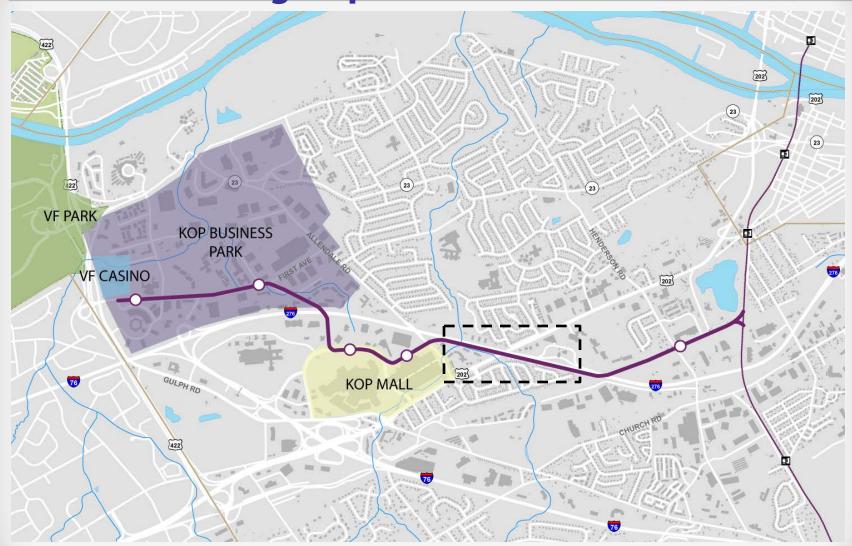


Of the 278 stakeholder & public comments...

- More than ½ expressed support, citing transportation benefits, land use benefits, economic benefits, environmental benefits, and financial benefits.
- Less than ¼ expressed opposition, citing lack of benefits for locals, environmental impacts, and cost.
- Other comment topics:
 - In support of another alternative
 - Support/oppose one of the design options
 - Comments of FEIS and Design Issues
 - Comments on public outreach
 - Questions about the project
 - Other (out of scope)

SEPTA Board Adoption of the LPA and North/South Design Option





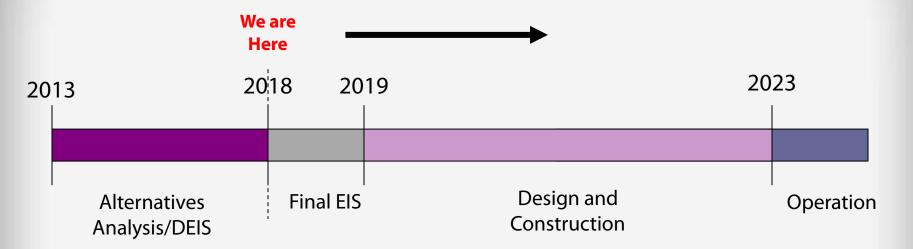
North/South Design Option





Next Steps





- FEIS begins March 2018
- RFP for 30% Design released Spring 2018
- Final EIS complete Late 2019

Final EIS



- Considers only the adopted Locally Preferred Alternative
- Commits to specific minimization and mitigation
- Responds formally to substantive comment made during DEIS Public Comment Period
- The FEIS will include a greater level of engineering to support the analysis of effects.

DVRPC Action



- FTA New Starts Program requires that project be included as funded project in region's LRP
 - KOP Rail is shown as funded in Connections 2045, at capital cost estimate of adopted Locally Preferred Alternative
- In order to show regional support not just for the project but for the SEPTA action taken, SEPTA is asking DVRPC to endorse the selection of the Locally Preferred Alternative



An Extension of the Norristown High Speed Line









Thank You!

info@kingofprussiarail.com
info@kingofprussiarail.com
www.facebook.com/KOPRail
www.twitter.com/KOPRail



Patty Elkis, PP/AICP Melissa Andrews















What is this project?

- Funded by the William Penn Foundation
- Stakeholder-based research
- Interdisciplinary project team:
 - Alison Hastings; Patty Elkis; Chris Linn; Melissa Andrews; Christina Arlt; Robert Beatty;
 Stephanie Lipartito; interns













What is this project?

- Main research questions:
 - What are the barriers to, and conditions of, success for municipal-based conservation practices?
 - How could municipal technical assistance be more effective?

Why aren't municipalities doing more to protect and improve water quality?







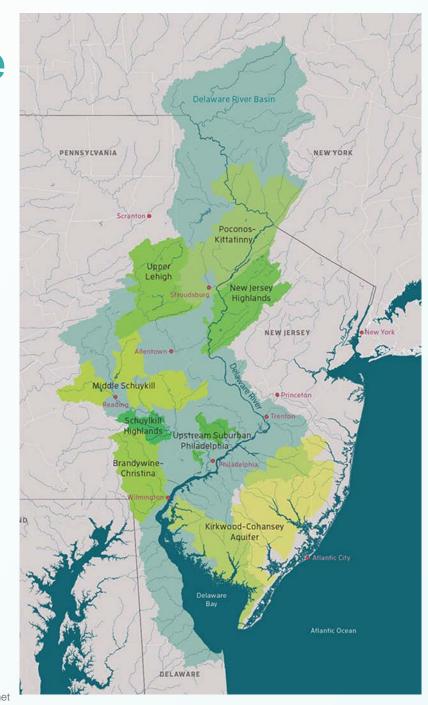






Project Scope

- Delaware River Watershed
- 843 municipalities
- Blend of qualitative/quantitative analysis
- Advisory Panel of content experts



Source: DRWI.net





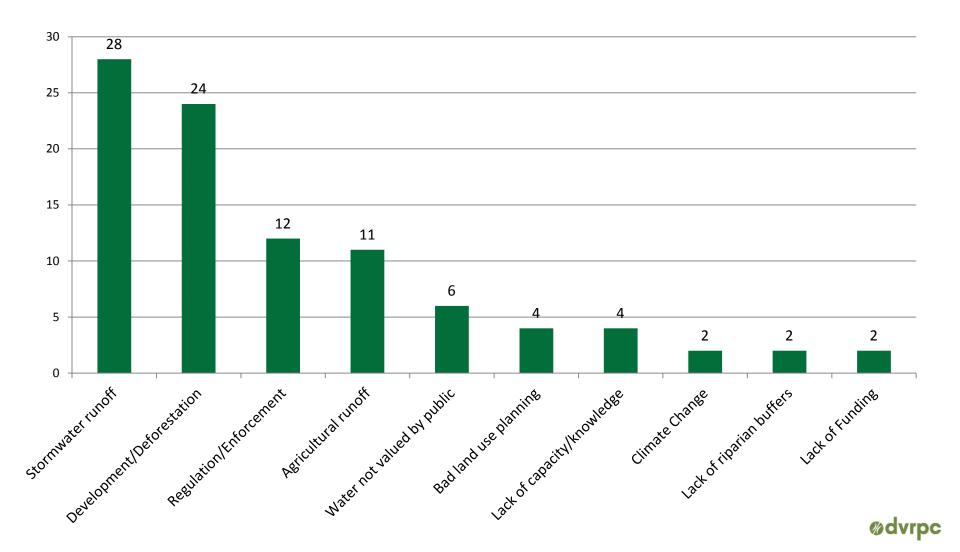
Qualitative Interview Findings

- Content Experts
 - Outreach for Municipal Technical Assistance Advisory Panel (MTAAP)
 - 60+ interviews

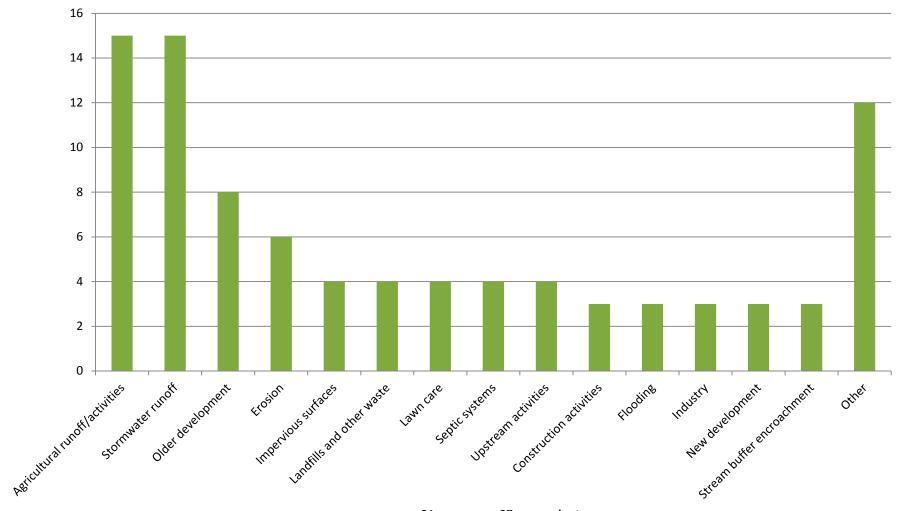
- Municipalities Primary Target Audience
 - Inform case studies, ground-truth MTAAP interview findings and early recommendations
 - Outreach to nearly 60 municipalities
 - 37 participated in individual interviews
 - 15 Case Studies



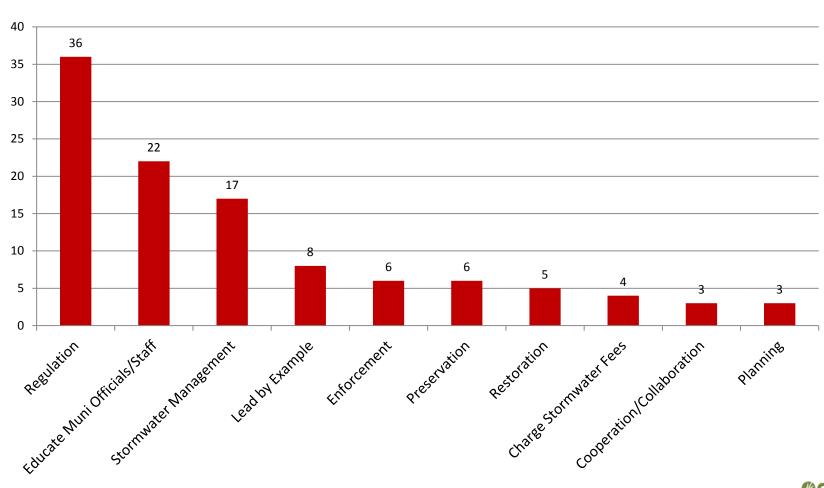
Biggest Threats – to the watershed (MTAAP interviews)



Biggest Threats – to your watershed (municipal interviews)

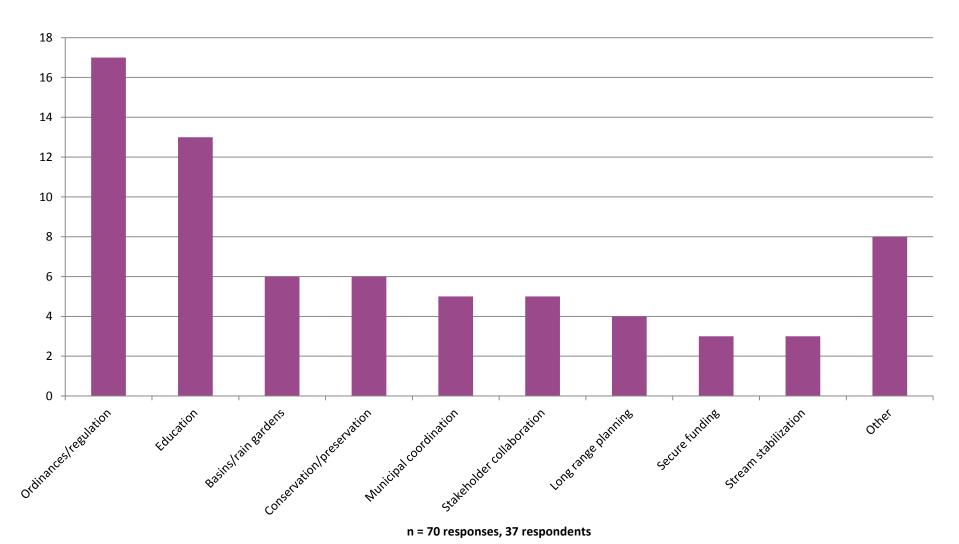


Important Municipal Actions (MTAAP Interviews)

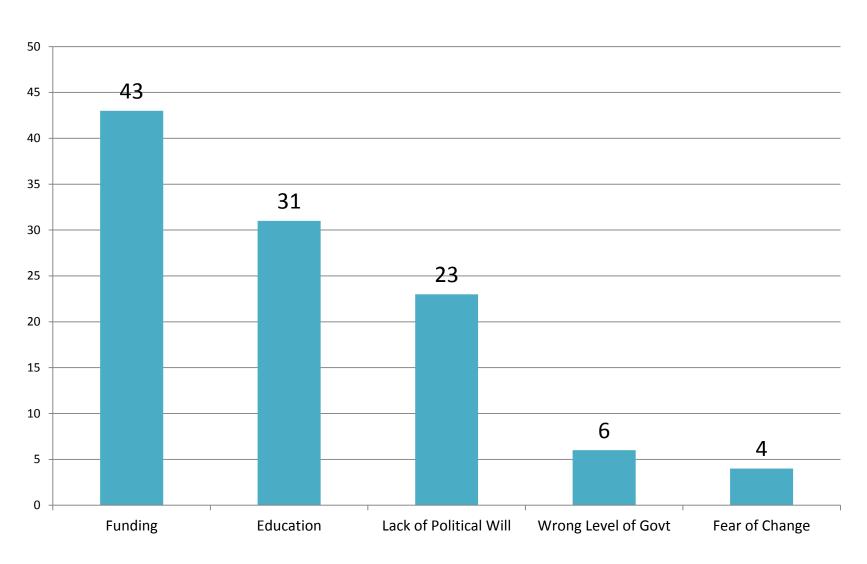




Important Municipal Actions (Municipal Interviews)

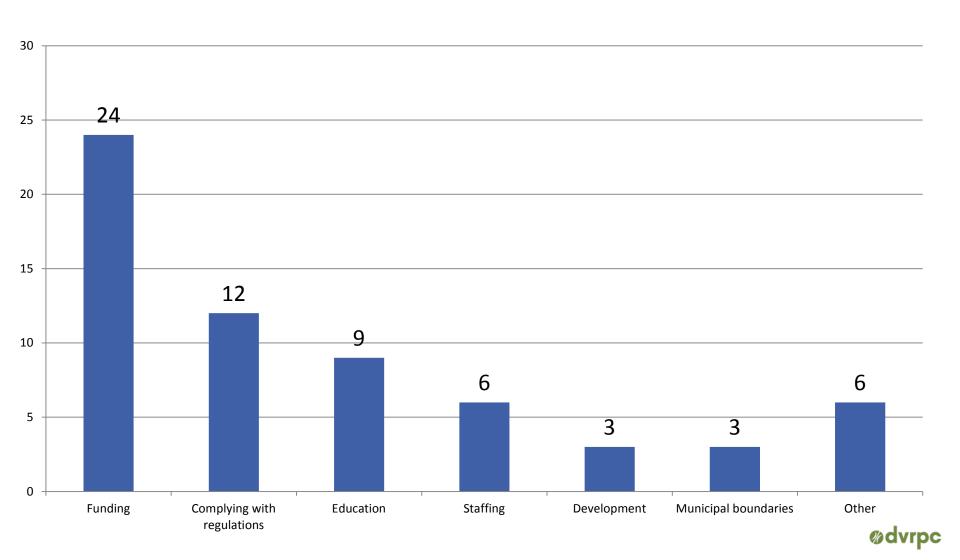


Greatest Limitation faced by municipalities (MTAAP Interviews)



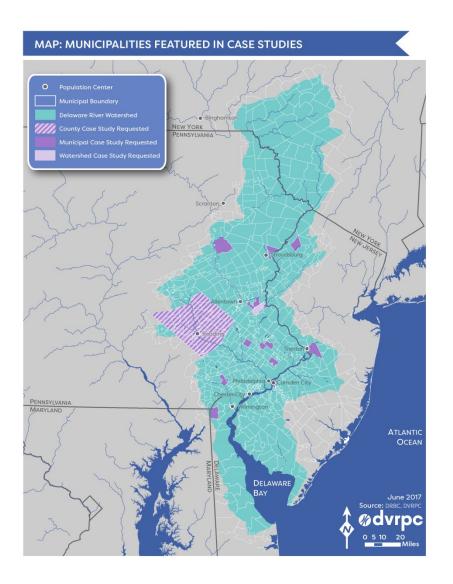


Greatest Limitations faced by municipalities (Municipal Interviews)



15 Case Studies

- Abington Township, Montgomery County
- Berks County Water and Sewer Association
- Camden City, New Jersey
- Durham Township, Bucks County
- East Bradford Township, Chester County
- Hamilton Township, Mercer County
- Kidder Township, Carbon County
- Lower Salford Township, Montgomery County
- Lower Saucon Township, Northampton County
- Montgomery Township, Montgomery County
- Newark CCD, New Castle County
- Smithfield Township, Monroe County
- Stillwater Township, Sussex County
- Warrington Township, Bucks County
- West Chester City, Chester County, PA







Prioritized Recommendations

- Identified over 400 recommendations/ideas
- Project Team consolidated into 48 distinct recommendations/ideas grouped by four "actors"
 - Municipalities
 - Nonprofits
 - State Agencies (PADEP)
 - Collaborations (all three working in concert)
- Prioritized by MTAAP
- Identified "coalition of the willing"
 - Action Plans





15 Action Plans

- Organized by Category
 - Expand Existing Efforts
 - Municipalities Lead by Example
 - Innovative New Ideas
 - Create an Environmental Defense Fund
 - Create a Watershed Academy
 - Advocacy and Policy Campaigns
 - Create a New State Funding Source for SW BMPs





15 Action Plans

- Three Very Promising
 - Statewide funding program to incentivize municipalities to pass stormwater fees
 - Legal Defense Fund
 - Watershed Academy





New State Funding Source







Environmental Defense Fund







Watershed Academy

















Project Wrap-Up

- Outreach Plan
 - Disseminate website materials via
 - Email (everyone who "touched" project)
 - Basecamp Email
 - Social media
 - Partners' newsletter stories
 - "Pitch" to municipal periodicals
- Conferences and webinars











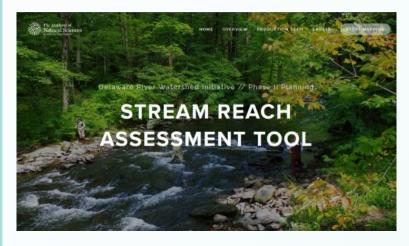


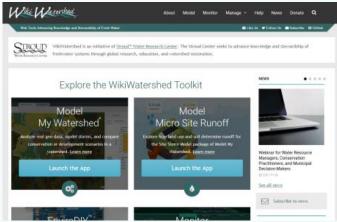




Next Steps

- Outreach Plan
- DRWI Data/GIS/Modeling Workgroup
- Ongoing MTAAP meetings
- Further Develop Water Table, Watershed Academy

















Thank you!

Full report:

dvrpc.org/Environment/Water/MunicipalActions/

Patty Elkis, PP/AICP, Director of Planning, DVRPC pelkis@dvrpc.org

Melissa Andrews, Environmental Planner, DVRPC mandrews@dvrpc.org





2000 - 2015 TRAVEL TRENDS

DVRPC RTC Meeting

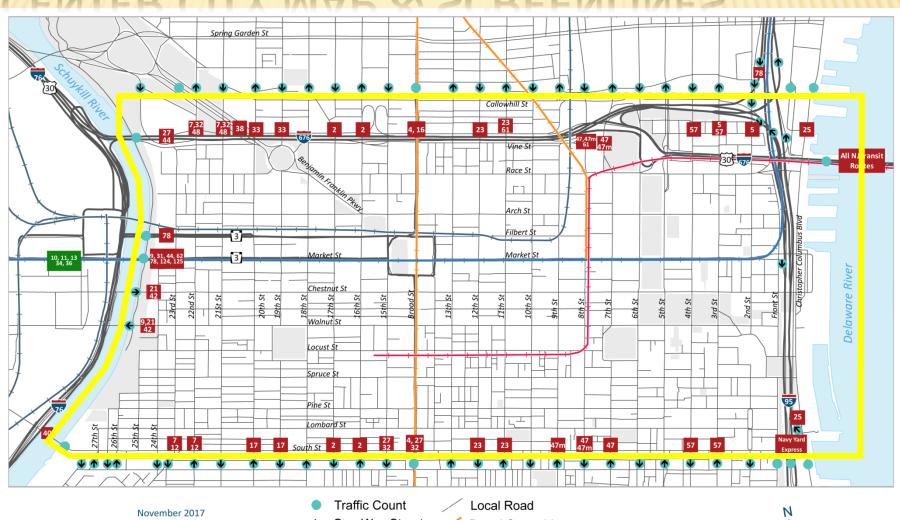
February 13, 2018

OVERVIEW

- DVRPC does this report every 5 years
- It's a snapshot at a point in time
- By comparing to previous reports can see how things change over time
- Need the data for model development
- One drawback doesn't always tell you WHY things changed



CENTER CITY MAP & SCREENLINES





One-Way Street

Bus Route

Trolley Route

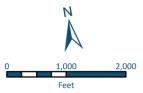
Major Road

Broad Street Line

Market-Frankford Line

PATCO

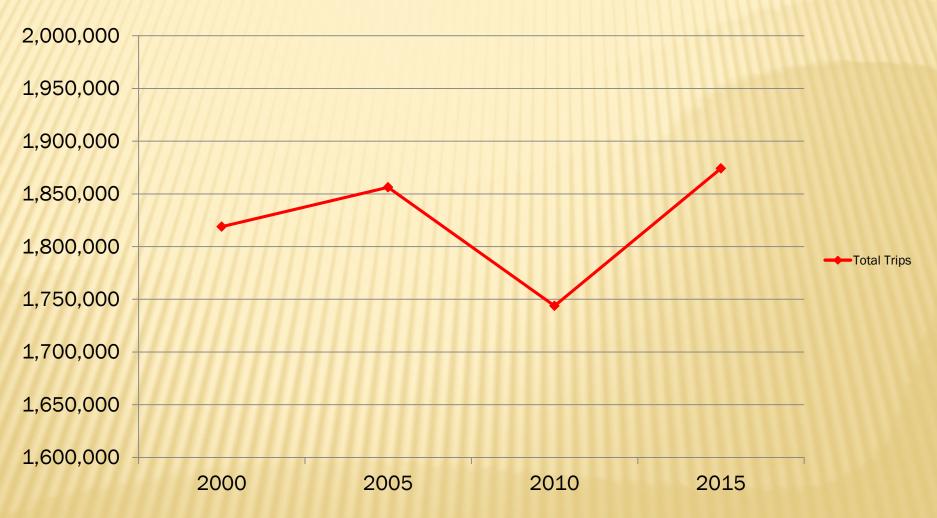
Regional Rail



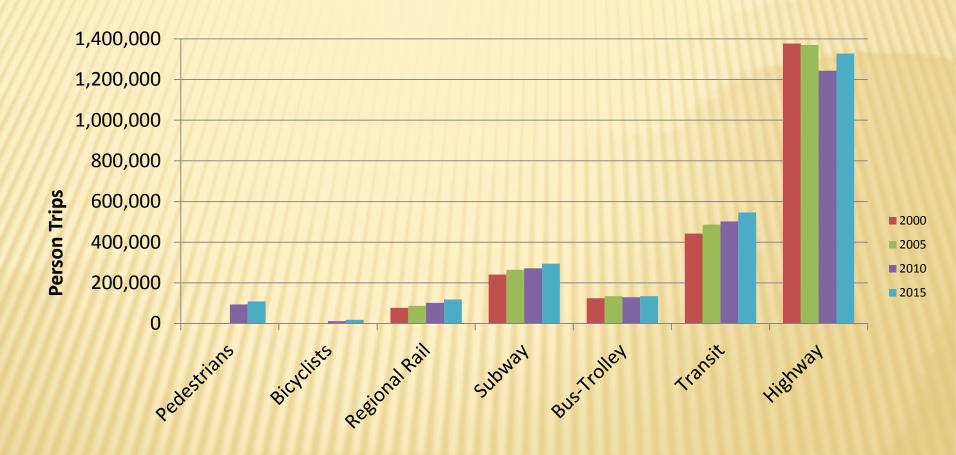
CHANGE 2000 TO 2015

	2000	2005	2010	2015
Highway	1,376,933	1,370,428	1,243,400	1,327,535
Transit				
Reg Rail	77,302	87,391	101,099	117,876
Subway	240,704	264,117	271,783	293,874
Bus - Trolley	124,007	134,222	127,504	134,846
Total Transit	442,013	485,730	500,386	546,596
Bike	NA	NA	11,438	18,295
Pedestrian	NA	NA	93,409	108,842
TOTAL	1,818,946	1,856,158	1,743,786	1,874,131

IMPACT OF RECESSION







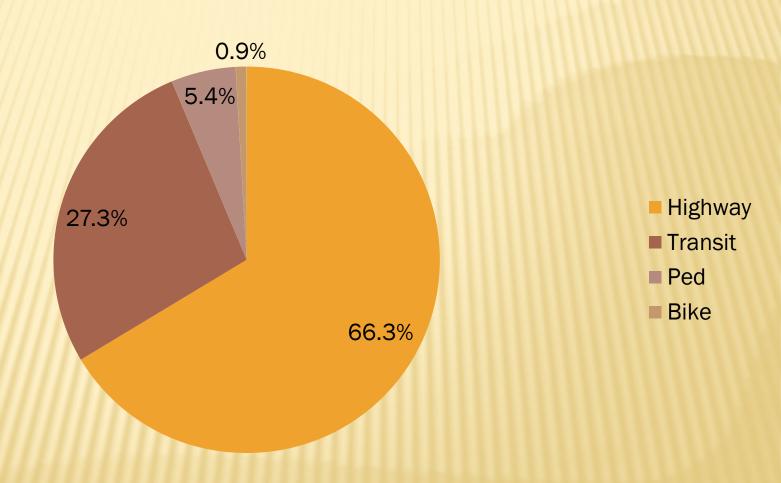
Travel Mode



PERCENTAGE CHANGE

	2000 to 2005	2005 to 2010	2010 to 2015	
Highway	-0.5%	-9.3%	6.8%	
Transit				
Reg Rail	13.1%	15.7%	16.6%	
Subway	9.7%	2.9%	8.1%	
Bus - Trolley	8.2%	-5.0%	5.8%	
Total Transit	9.9%	3.0%	9.2%	
Bike	NA	NA	59.9%	
Pedestrian	NA	NA	16.5%	
TOTAL	2.1%	-6.0%	7.4%	

MODE SPLIT - 2015





EXPLANATION FOR CHANGES

- In addition to rebounding economy several other factors played a major role
 - Construction on several major roadways (I-676,) and bridges (Ben Franklin)
 - > Toll increases
 - Changes to transit routes

× Limitations of the data



- More details in the report
- Copies available on table up front





CORRECTIONS - CENTER CITY EAST

	2000	2005	2010	2015
NJ Transit Bus	6,395	6,756	6,562	4,142
corrected	6,385	6,160	5,152	4,370







IVY RIDGE STATION: CREATING

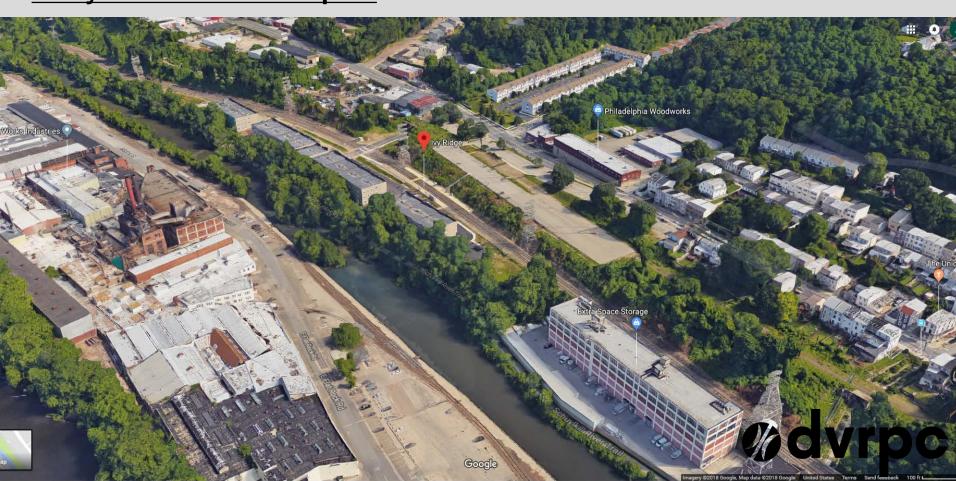
A MULTI-MODAL HUB



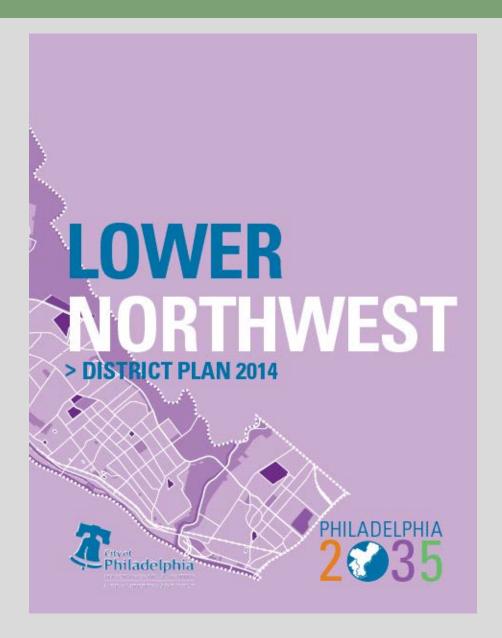
WHY ARE WE HERE?

<u>Project Purpose</u>: Identify mobility, safety, and placemaking enhancements to better serve passengers and the Ivy Ridge Station community.

Today's Presentation Purpose: Present our final recommendations.



LOWER NORTHWEST DISTRICT PLAN (2014)







Source: PCPC

WHO'S INVOLVED IN THIS PROJECT?

- SEPTA
- City of Philadelphia: Streets
 Department
- OTIS
- City of Philadelphia: Parks and Recreation
- Philadelphia Planning Commission
- Ridge Park Civic Association
- Manayunk Development Corporation
- Roxborough Development
 Corporation



BIG PICTURE FORCES AT IVY RIDGE STATION

- High-occupancy parking lot
- Growing RR ridership
- Ivy Ridge Trail implementation
- Changes in land use
- Vehicle and pedestrian conflicts
- Not ADA compliant





THREE MAIN GOALS

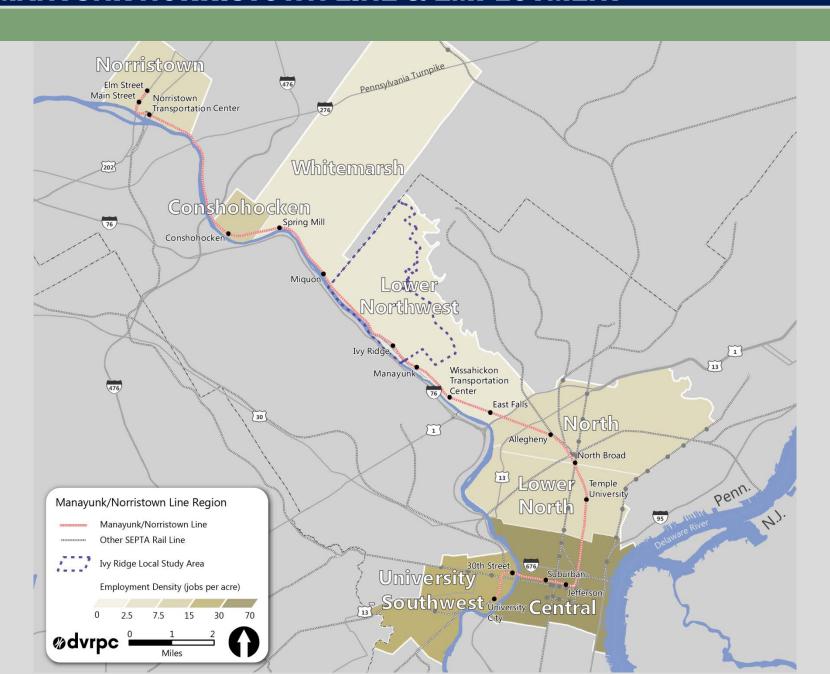
- Placemaking: Station area development attracts transit users and fits within the neighborhood context
- Mobility: All people are able to get to and from the station by their chosen mode.
- Safety: All station users experience fewer conflicts.



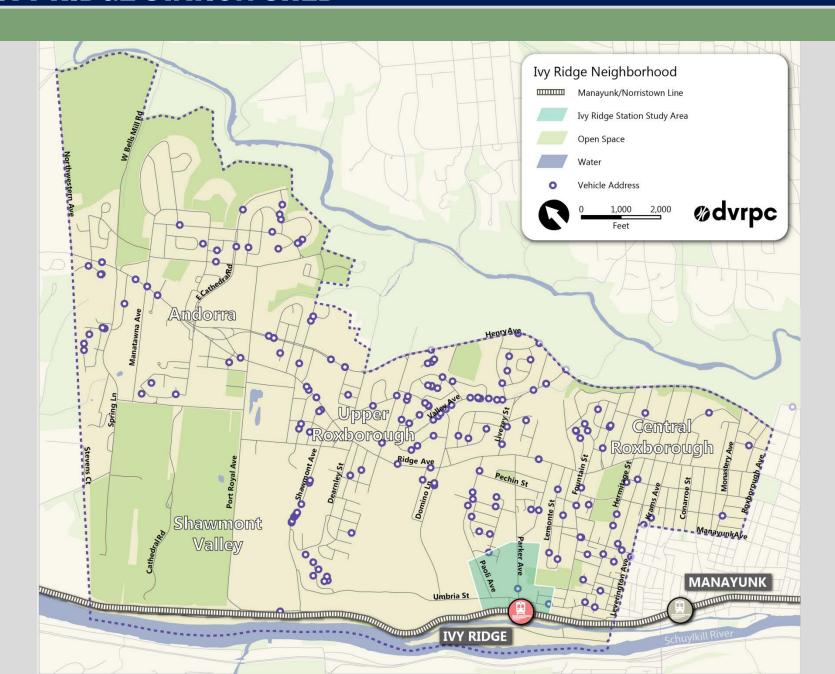




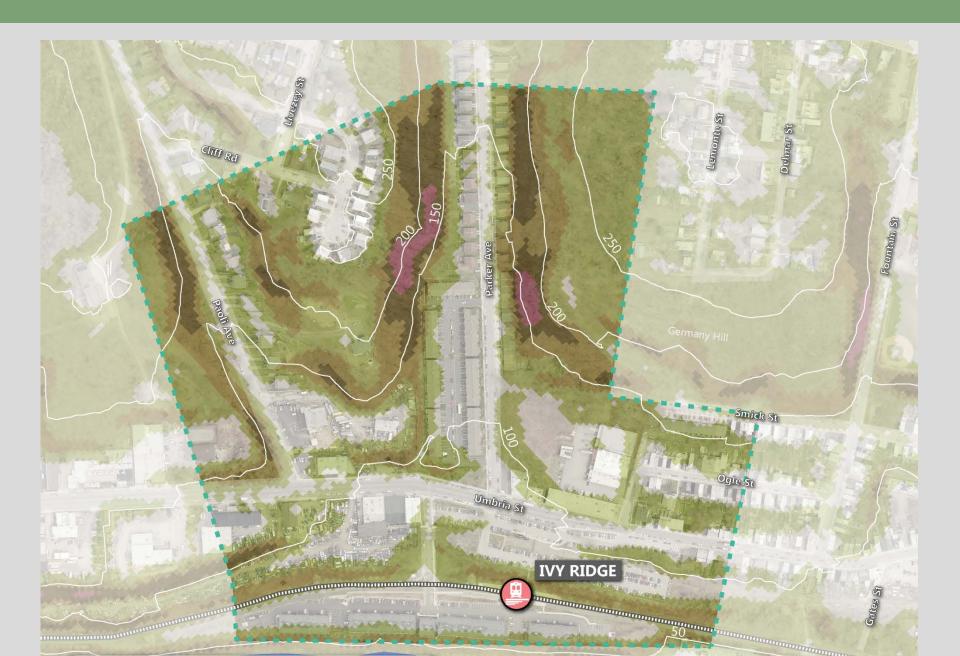
MANYUNK NORRISTOWN LINE & EMPLOYMENT



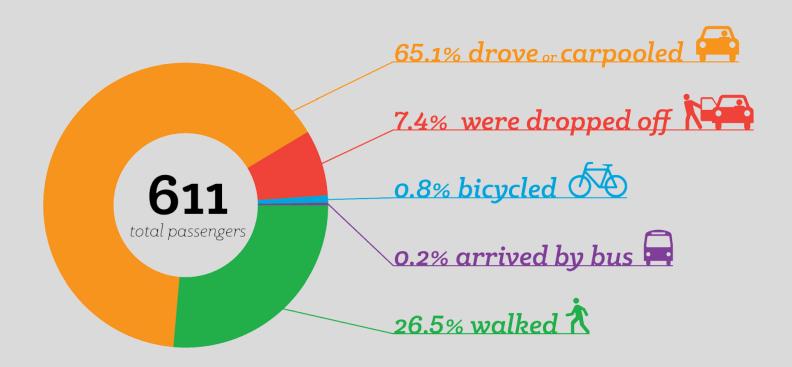
IVY RIDGE STATION SHED



SITE CONSTRAINTS: TOPOGRAPHY



HOW PEOPLE GET TO IVY RIDGE STATION?



Source: DVRPC Fieldwork (2015)

PEDESTRIAN CIRCULATION



VEHICLE CIRCULATION



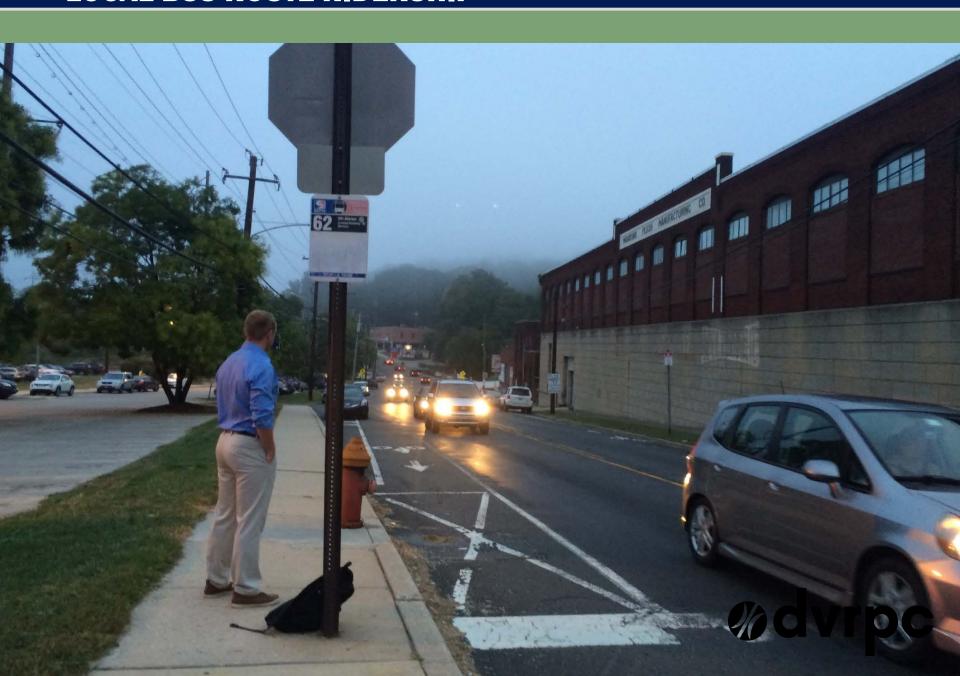
MAJOR CONFLICT POINTS



BICYCLE CIRCULATION



LOCAL BUS ROUTE RIDERSHIP



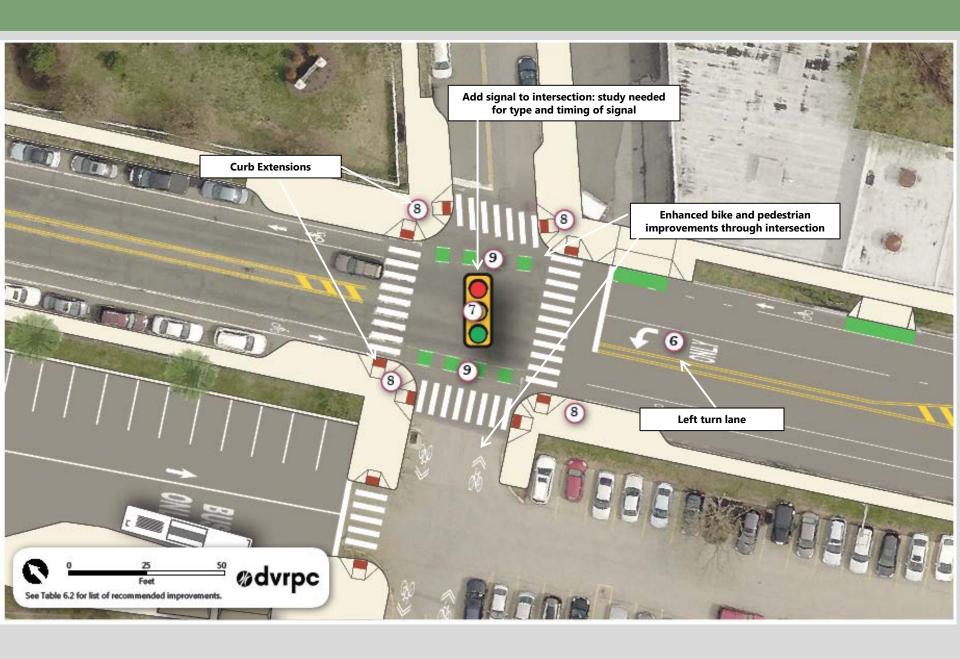
PHASE I RECOMMENDATIONS



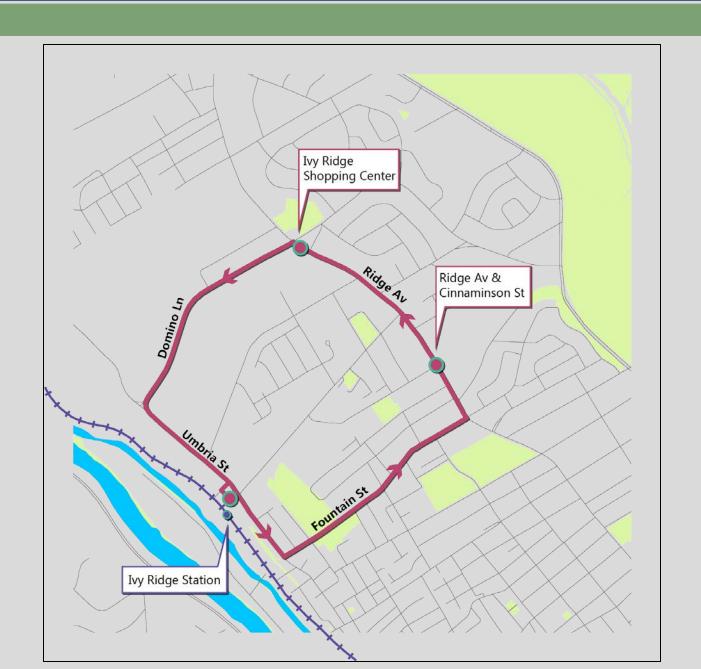
UMBRIA AND PARKER INTERSECTION SAFETY



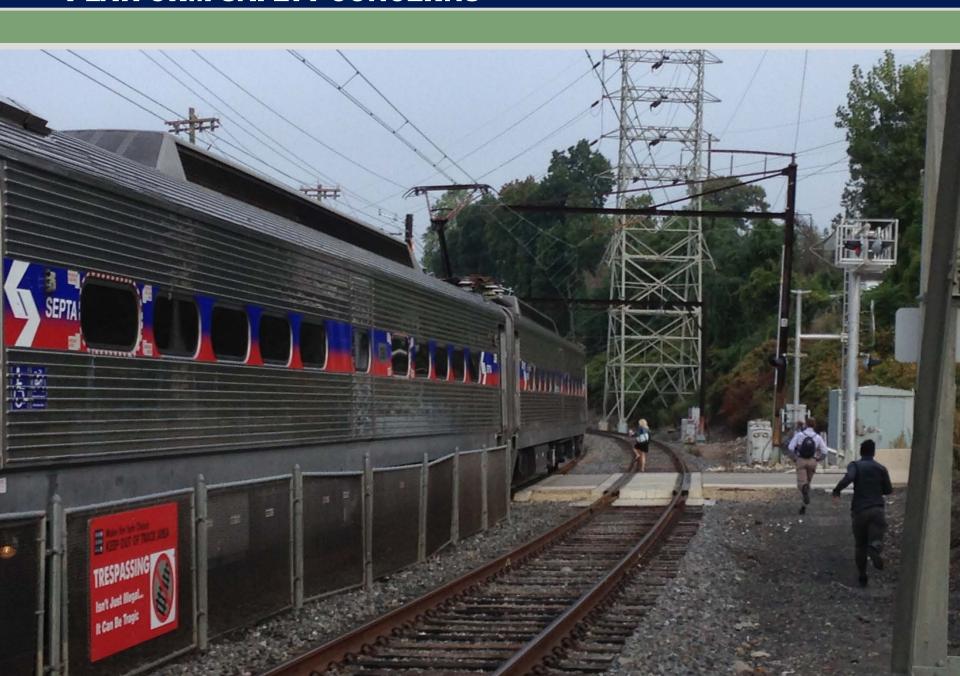
PHASE I RECOMMENDATIONS (PARKER INTERSECTION)



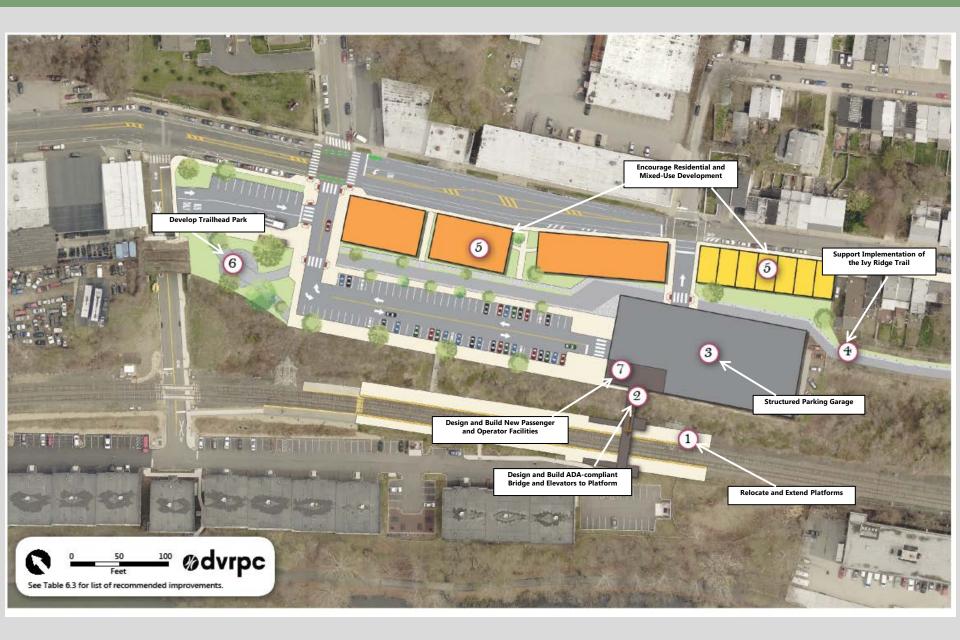
PHASE I RECOMMENDATIONS: PROPOSED BUS LOOP



PLATFORM SAFETY CONCERNS



PHASE II RECOMMENDATIONS



RECOMMENDATIONS AND OUTCOMES

- Encourage transit oriented development vs. transit adjacent development
- SEPTA to devise long range transit-supportive improvements at their facilities
- Now: Work with SEPTA to identify aspects of the regulatory and policy environment that inhibit the implementation of TOD around their rail stations in the region.