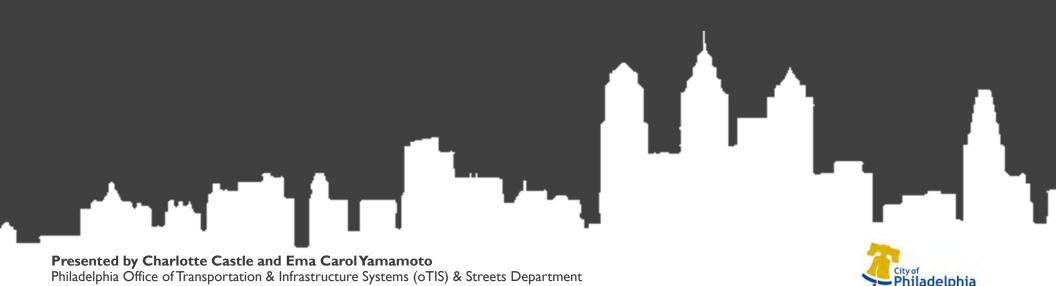
TRAFFIC SAFETY INITIATIVES IN THE CITY OF PHILADELPHIA

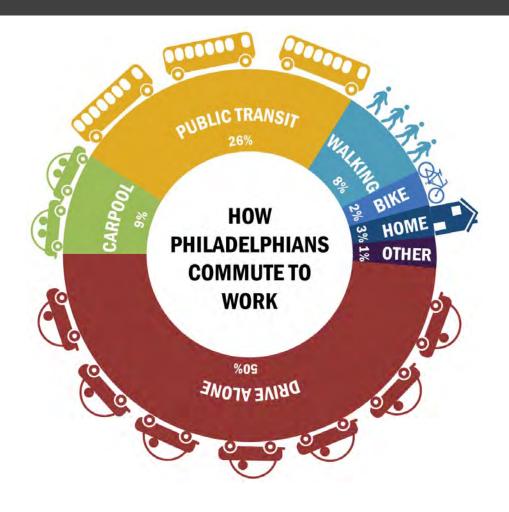
May 10, 2016 DVRPC RTC Meeting



AGENDA

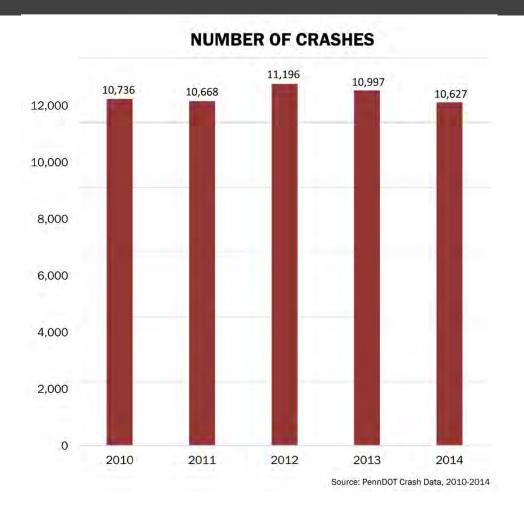
- Citywide trends
- National Highway Traffic Safety Administration (NHTSA) Focus Cities Grant
 - Engagement
 - Enforcement
 - Education
- Transportation Alternatives Program (TAP)
 - Make Way for Children
- Traffic Safety Knowledge & Behavior Study
- Next steps





• Philadelphia is multimodal city



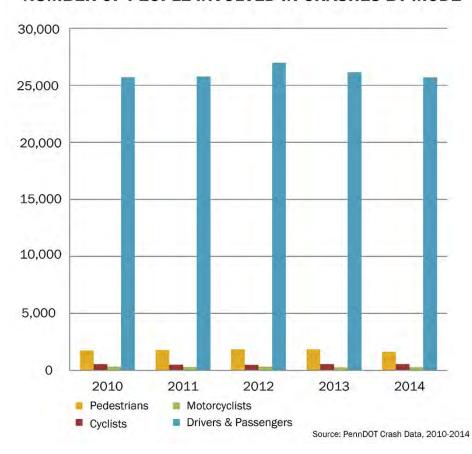


- Philadelphia is multimodal city
- Since 2010, over 10,600 crashes have occurred every year





NUMBER OF PEOPLE INVOLVED IN CRASHES BY MODE

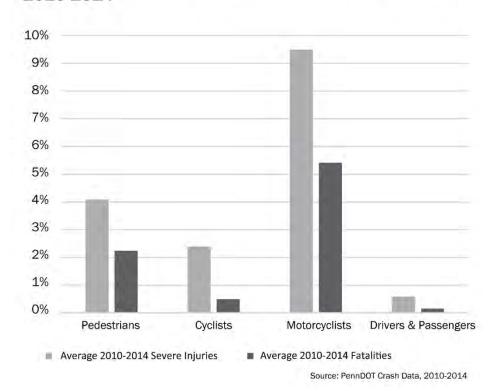


- Philadelphia is multimodal city
- Since 2010, over 10,600 crashes have occurred every year
- While drivers and passengers make up the majority of people involved in crashes...



May 10, 2016 DVRPC RTC Meeting

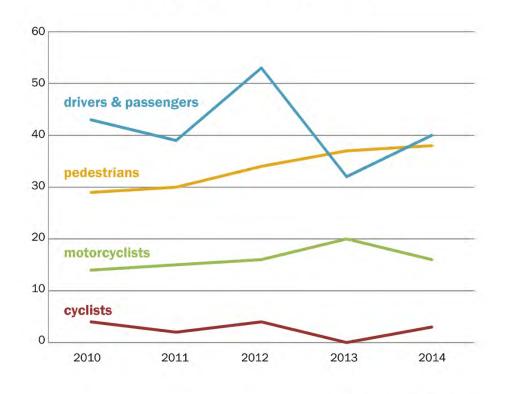
PERCENT OF PEOPLE INVOLVED IN CRASHES BY MODE WHO WERE SEVERELY INJURED OR DIED AS A RESULT, 2010-2014



- Philadelphia is multimodal city
- Since 2010, over 10,600 crashes have occurred every year
- While drivers and passengers make up the majority of people involved in crashes...
- Other modes are more likely to be severely injured or killed if involved in a crash



TRAFFIC FATALITIES BY MODE



Source: PennDOT Crash Data, 2010-2014

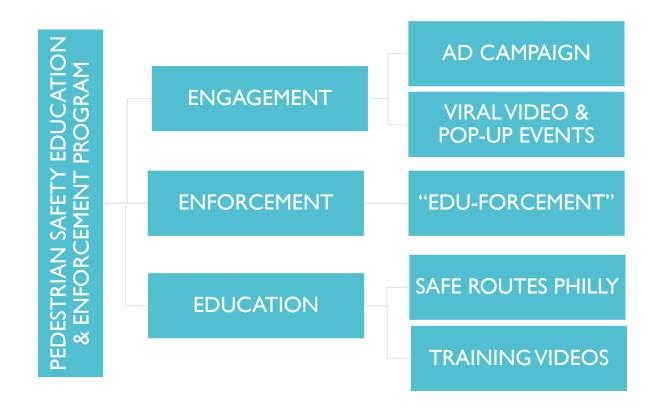
- Philadelphia is multimodal city
- Since 2010, over 10,600 crashes have occurred every year
- While drivers and passengers make up the majority of people involved in crashes...
- Other modes are more likely to be severely injured or killed if involved in a crash
- We have seen pedestrian fatalities continue to rise every year since 2010



NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA)

2014 Focus Cities Grant Recipient

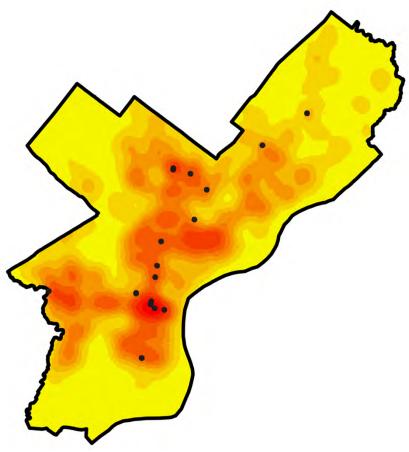








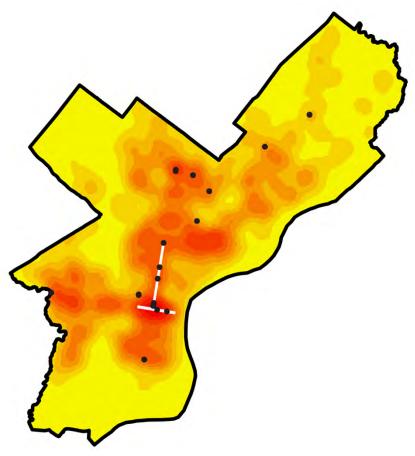








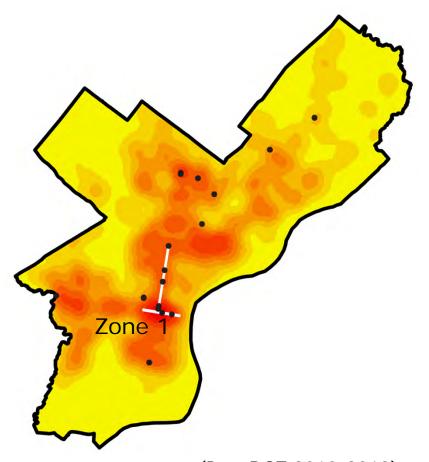










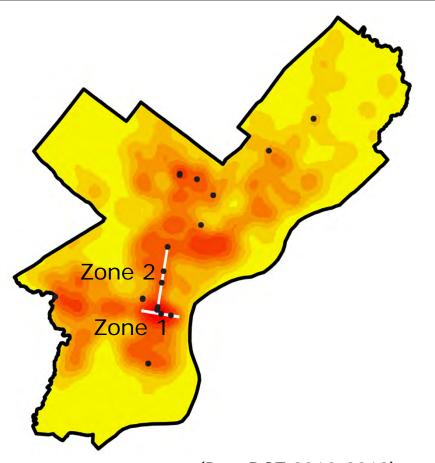


Zone 1:
 Market Street
 between 5th &
 22nd









- Zone 1:
 Market Street
 between 5th &
 22nd
- Zone 2:

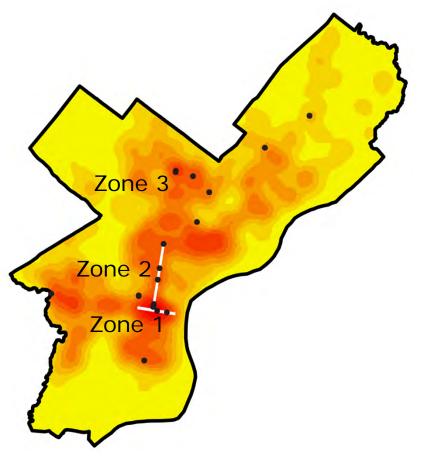
 N. Broad Street
 between Race
 Street & Lehigh

 Avenue









- Zone 1:
 Market Street
 between 5th &
 22nd
- Zone 2:

 N. Broad Street
 between Race
 Street & Lehigh

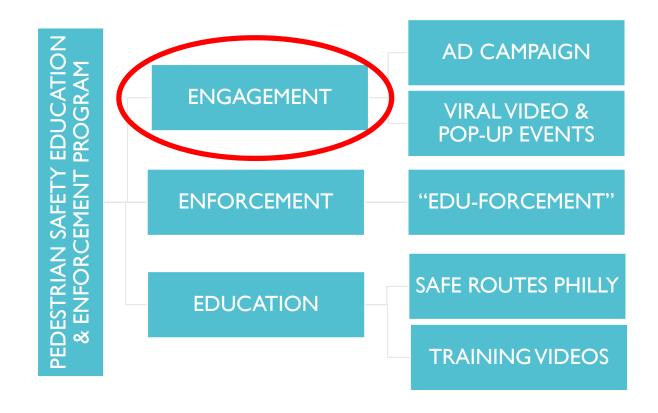
 Avenue
- Zone 3:

 N. Broad Street
 around Olney
 Transportation
 Center















IT'S ROAD SAFETY NOT ROCKET SCIENCE.

AGE BREAKDOWN OF PEOPLE
HIT BY DRIVERS IN PHILADELPHIA

大大大

30% are UNDER the age of 18



30% are BETWEEN 18 and 35



40% are 35 and OLDER







PRINT MEDIA

- (4) Custom furniture wraps
- (3) transit shelter wraps
- (60) Transit shelter posters
- (75) Bus tail ads
- (1,200) Interior car cards
- 94,889,000 impressions







SOCIAL MEDIA

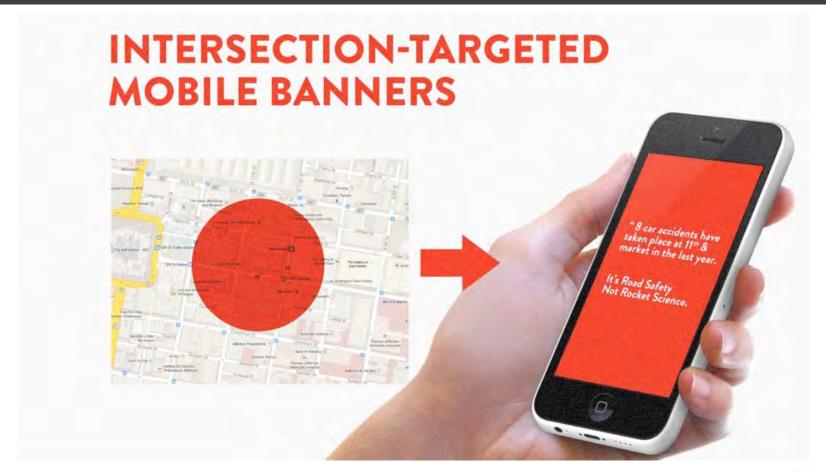
- Pandora
- Millennial Media
- Local news portals
- YouTube
- Facebook
- Twitter
- 12,2018,401 impressions







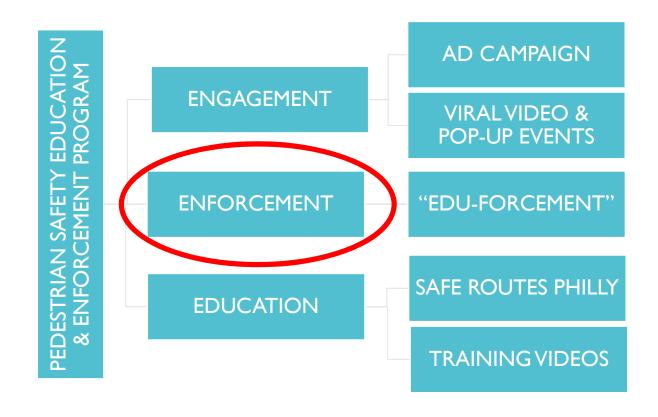






























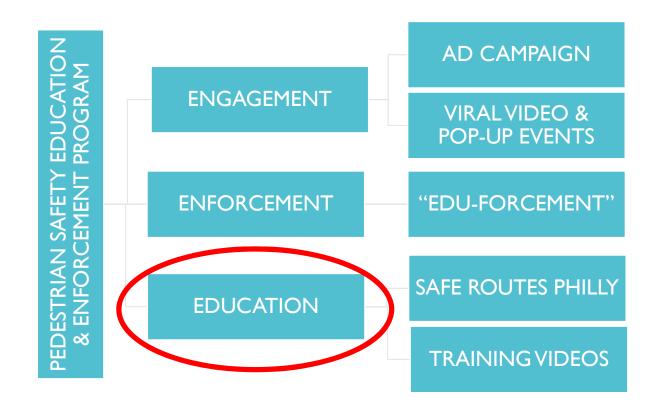






































TRANSPORTATION ALTERNATIVES PROGRAM (TAP) 2016 Recipient



• 30% of all pedestrians hit by drivers are under 18 years old

AGE BREAKDOWN OF PEOPLE HIT BY DRIVERS IN PHILADELPHIA



30% are UNDER the age of 18

30% are BETWEEN 18 and 35

40% are 35 and OLDER



- 30% of all pedestrians hit by drivers are under 18 years old
- Since 2010, 24 walkability audits have been conducted







GW Childs Elementary School School District of Philadelphia, Philadelphia County, PA





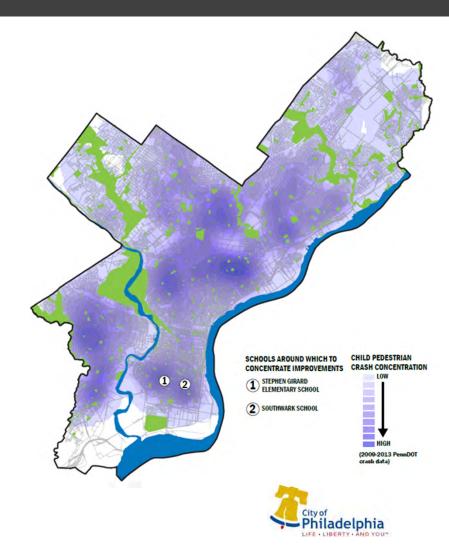




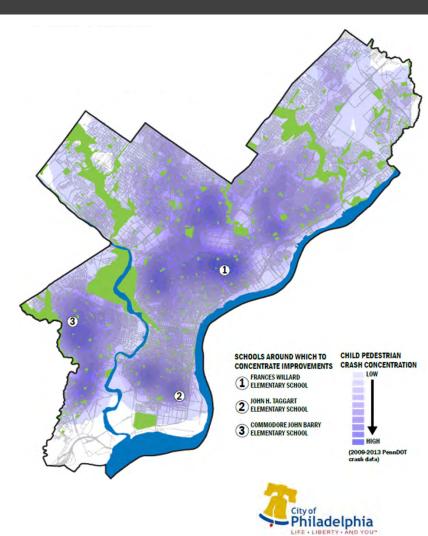
School District of Philadelphia



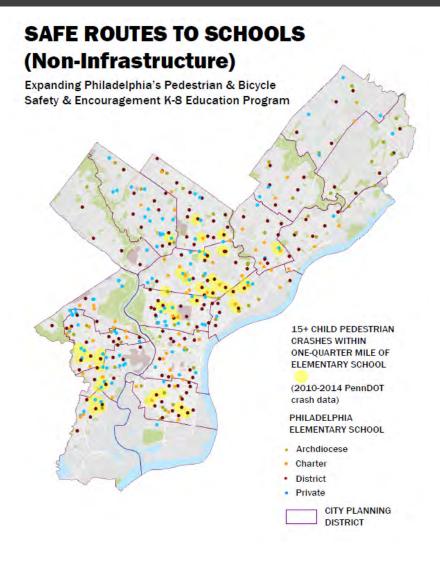
- 30% of all pedestrians hit by drivers are under 18 years old
- Since 2010, 24 walkability audits have been conducted
- Two walkability audits selected for implementation:
 - Stephen Girard School (South Philly)
 - Southwark School (South Philly)



- 30% of all pedestrians hit by drivers are under 18 years old
- Since 2010, 24 walkability audits have been conducted
- Two walkability audits selected for implementation:
 - Stephen Girard School (South Philly)
 - Southwark School (South Philly)
- We applied to implement findings from three more walkability audits (PennDOT MTF):
 - Frances Willard Elementary (Kensington)
 - 2. John H. Taggart Elementary (South Philly)
 - 3. Commodore John Barry Elementary (West Philly)



TAP APPLICATION: SRTS Non-Infrastructure







\$32,000 procurement pilot opportunity



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Seeking creative research on Philadelphians' traffic knowledge and behavior

Posted on December 16, 2015 by Ema Yamamoto — 15 Comments J.



- \$32,000 procurement pilot opportunity
- Challenge based procurement



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- \$32,000 procurement pilot opportunity
- Challenge based procurement
- Funded via Bloomberg Philanthropies' FastFWD



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- \$32,000 procurement pilot opportunity
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- Funded via Bloomberg Philanthropies' FastFWD Grant Program
- Competitive response rate (8 total responses)



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Seeking creative research on Philadelphians' traffic knowledge and behavior

Posted on December 16, 2015 by Ema Yamamoto — 15 Comments 1



TRAFFIC SAFETY KNOWLEDGE AND BEHAVIORS STUDY

- \$32,000 procurement pilot opportunity
- Challenge based procurement
- Funded via Bloomberg Philanthropies' FastFWD **Grant Program**
- Competitive response rate (8 total responses)
- Selected: Temple University Institute of Survey Research



person surveys. ISR occupies 12,000 feet of newly renovated space in the ECEC building on Cecil B. Moore that includes a 35 nediate assistance, contact Keisha Miles at 215-204-4926



TRAFFIC SAFETY KNOWLEDGE AND BEHAVIORS STUDY

- \$32,000 procurement pilot opportunity
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- Study goals:
 - Provide a baseline understanding of traffic safety:
 - Behaviors
 - Knowledge
 - Attitudes
 - Direct traffic safety investments through alternative datasets



TRAFFIC SAFETY KNOWLEDGE AND BEHAVIORS STUDY

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- Study goals:
 - Provide a baseline understanding of traffic safety:
 - Behaviors
 - Knowledge
 - Attitudes
 - Direct traffic safety investments through alternative datasets
- Study has three parts:
 - Online survey
 - Focus groups
 - Intercept surveys / behavior observation



Next steps



QUESTIONS?

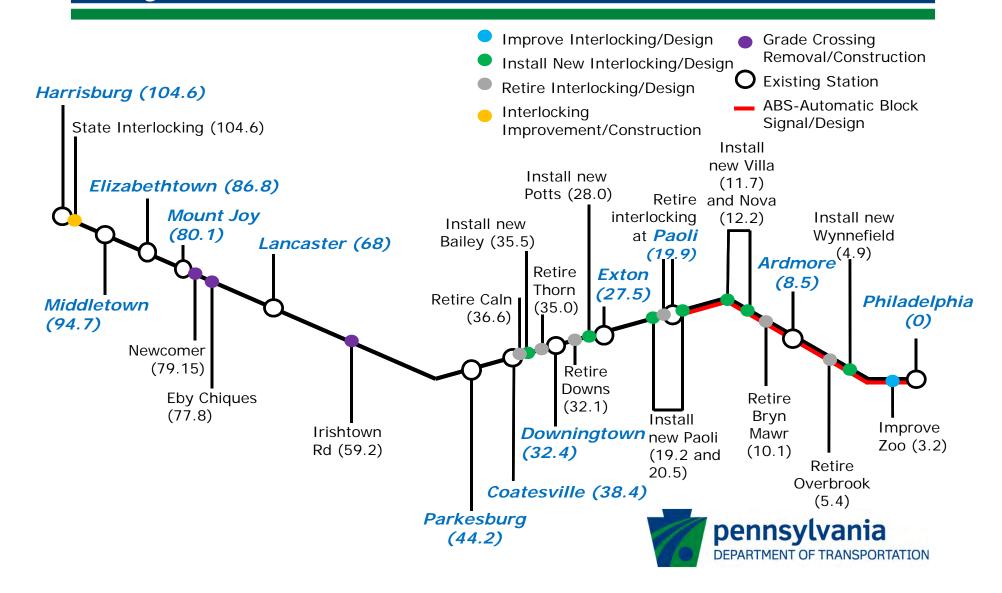


Keystone Corridor - Downingtown Station for DVRPC Regional Technical Committee

May 10, 2016



Keystone Corridor



History

- 2011 Planning Charrette
- 2012 Study of conceptual alternatives
- 2013 Identified preferred alternative that met criteria
 - ADA compliant
 - High, level-boarding platforms on tangent track
 - Access/parking availability
 - Opportunities for Transit Oriented Development (TOD)
- Since 2013
 - Advanced conceptual plans to 30% design
 - FTA environmental clearance
 - Right of way plans



Alternatives





Plan overview

- Multimodal connection including
 - Bridge over Brandywine Creek
 - Covered bicycle racks
 - Kiss and ride for buses/taxies
- Bridge replacement (Amtrak over US 322)
 - Improve pedestrian safety
 - Improve connection to downtown
- Adequate parking for Amtrak and SEPTA (2040)
- Stormwater controls
 - sensitive to intermittent stream tributary & wetlands
- Safety/Security (lights/fencing/cameras)



Funding

Phase	Dollars (Millions)
Phase I (FD,ROW, Utilities)*	\$20.4
Phase II (approximate construction cost)	\$55.0
Total	\$75.4



Questions



King of Prussia Rail Project

An Extension of the Norristown High Speed Line







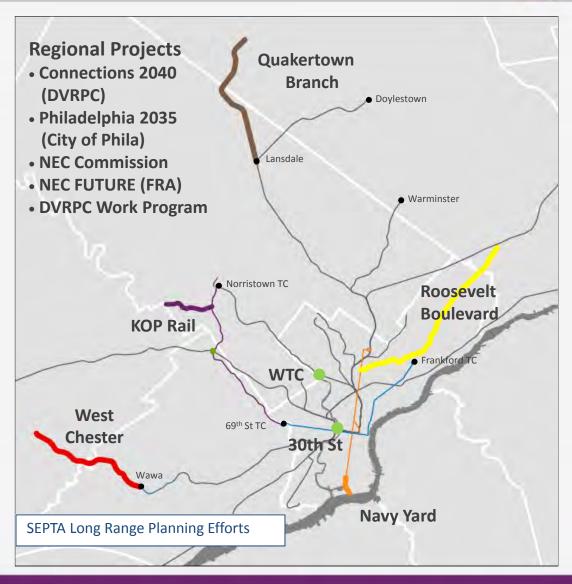


King of Prussia Railymouth

Liz Smith, SEPTA May 10, 2016



Long Range Planning Efforts King of Prussia

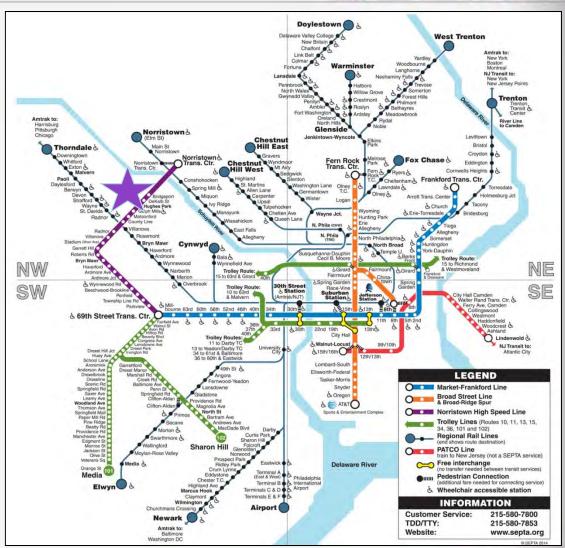


Project Background



King of Prussia not directly served by rail

- Paoli-Thorndale & Norristown Regional Rail lines, as well as Norristown High Speed Line come within 3 miles of KOP
- Served by 6 bus routes with high ridership, but low ontime performance



Project Background





Project Need



25 million Mall visitors

1.7 million VF Park visitors

KOP IS THE LARGEST

57,100 jobs in Upper Merion

EMPLOYMENT CENTER

OUTSIDE OF PHILADELPHIA

\$43B in consumer expenditures within 30 minutes

19,000 jobs in Office Park jobs by Mall

Project Need



KOP IS GROWING ...

Mall expanding by 155,000 sqft

Business park re-zoned for mixed use

Village at Valley Forge

1.5 M sqft office500 hotel rooms2,000 residential units

... IT NEEDS BETTER TRANSIT

Lower rate of licensed drivers

Six bus routes 5,600 riders 65% on-time

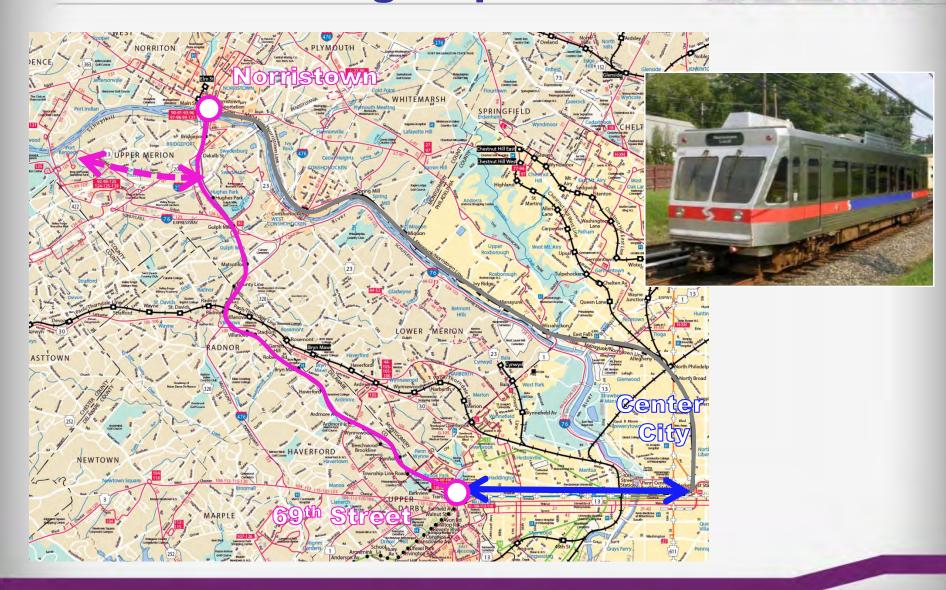




NHSL
99% on-time
No Schuylkill
traffic

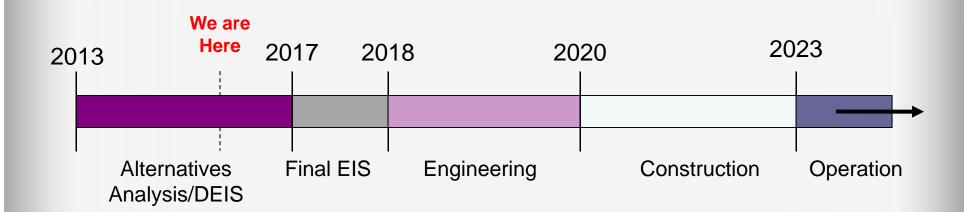
Norristown High Speed Line King of Prussia





Project Schedule





Planning Process



Alternatives Analysis

A process to work with the public and project stakeholders to determine the best routing (Alternative) for the project, looking at various factors including costs, benefits, and impacts.

Draft Environmental Impact Statement (DEIS)

The purpose of the EIS is to provide full and open evaluation of environmental issues and alternatives, and to inform decision-makers and the public of reasonable ways to avoid or minimize negative impacts and enhance the quality of the environment.

DEIS



- Compare Build Alternatives (Action Alternatives) and a No Action Alternative
- Consider public and stakeholder input
- Assess environmental effects
- Analyze transportation effects
- Identify minimization and mitigation strategies
- Scheduled release: December 2016

Public Involvement



Key Part of Project

Public Meetings

- Pre-Scoping (January 2013)
- Scoping Hearing (July 2013)
- Tier 1 Alternatives (January 2014)
- Tier 2 Alternatives (Fall 2014)
- Tier 3 Alternatives (Spring 2015)
- Preliminary Locally Preferred Alternative (Spring 2016)
- Future DEIS Public Hearing
 Stakeholder Coordination

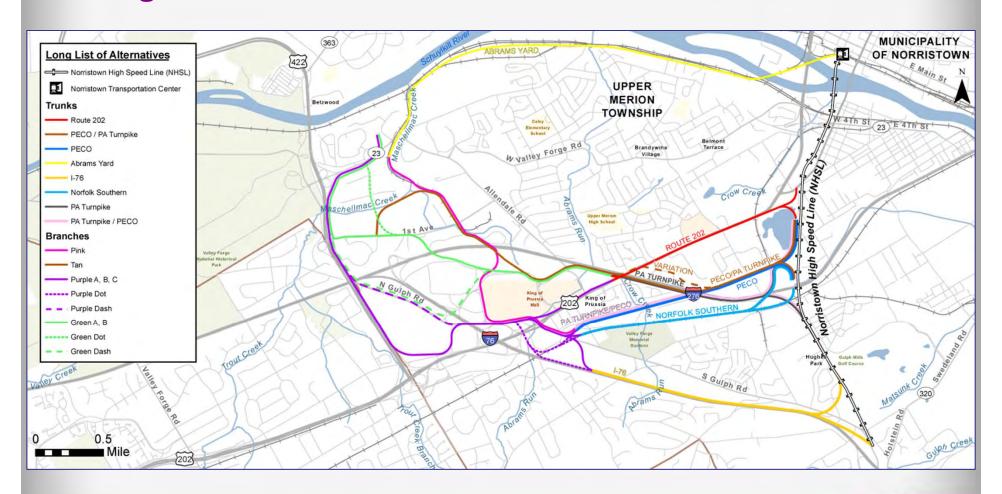




Alternatives Development



Long List of Alternatives



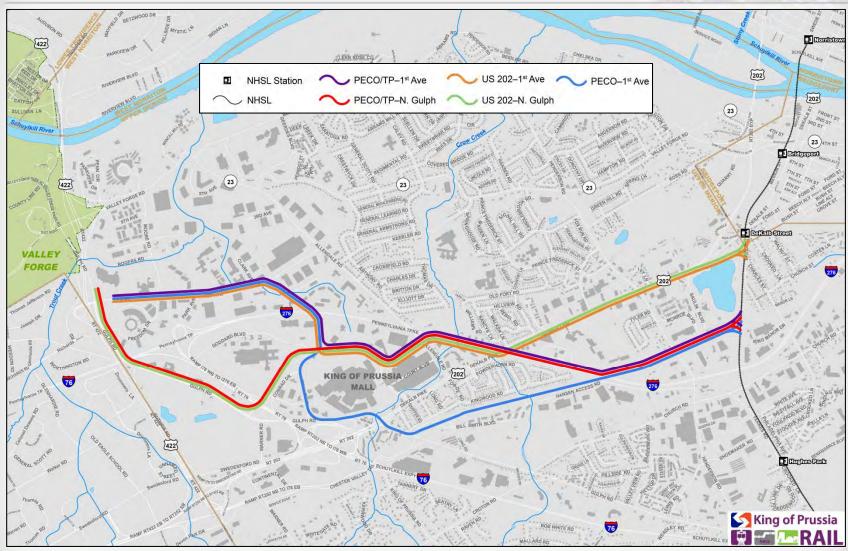
Alternatives Screening





Build Alternatives





Tier 3 Screening



Tier 3 Screening

Tier 3 Criteria

- Refined Ridership Forecast
- Refined Costs
- Costs Per Rider
- Financial Feasibility
- Economic & Land Use Analysis
- Quantification & Evaluation of Impacts & Benefits

Locally Preferred Alternative

Tier 3 Screening Categories King of Prussia



- Combination of public comments, stakeholder input and technical data
- Some factors focused primarily on residential areas, others more on business areas of the study area Quality and Energy
 - Cost
 - Hazardous Materials
 - Historic and Archaeological Resources
 - Land Use and Economic Development
 - Natural Resources

- Neighborhoods and **Community Facilities**
- Noise and Vibration
- Parks, Recreational Land and Open Space
- Property Acquisitions and Displacements
- Ridership
- Utilities

Recommended LPA



Workshop held with:

- Montgomery County
- Upper Merion Township
- Delaware Valley Regional Planning Commission (DVRPC)
- King of Prussia Business Improvement District
- Greater Valley Forge Transportation Management Association (GVFTMA)
- SEPTA

Residential Factors



Priority Factors - Impacts

- Reducing number of full residential acquisitions
- Reduce potential for visual impacts
- Minimize capital costs and operations and maintenance (O&M) costs

Priority Factors - Benefits

- Parking capacity for residents unable to walk or bike to stations
- Higher ridership
- Broad acceptance by Key Stakeholders/Political Leaders

Employment Area Factors



Priority factors

- More stations within rezoned mixed use area
- Redevelopment potential
- Ease of new zoning
- Increased access to jobs
- Higher ridership
- Minimize capital and operations and maintenance (O&M) costs
- Broad acceptance by Key Stakeholders/Political Leaders

Non-Distinguishing Factors King of Prussia

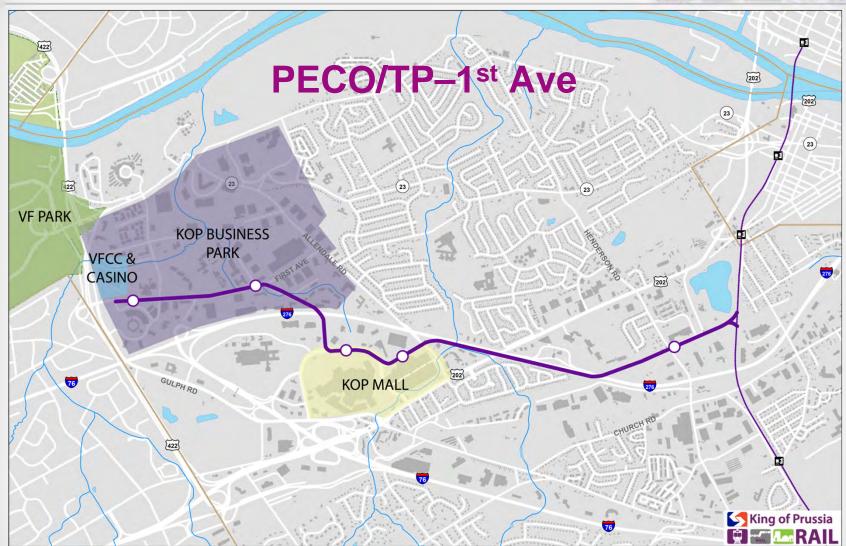


The following factors had similar results for all alternatives

- Potential for Noise/Vibration Impacts
- ADA Accessibility / Senior-friendly
- Cost
- Community facilities impacts (0 each)
- Commercial acquisitions
- Consistency with local and regional plans and broad land use patterns
- Waterways and Floodplains Impacted

Recommended LPA





PECO/TP-1st Ave





PECO/TP-1st Ave





PECO/TP-1st Ave



Project Facts		
Capital Cost	\$1.1B	
Increased O&M Cost	\$4.9M	
Ridership	9,500	
69th St to Business Park (local)	36 min	
69th St to Business Park (express)	22 min	
NTC to Business Park (local)	16 min	

Economic Benefits



- World Class Greater Philadelphia Infrastructure
- Report on regional economic impacts of KOP Rail
 - Local benefits from construction spending
 - Benefits of increased transit connectivity
 - Travel time savings
 - Increased development
 - New businesses and residents

Economic Benefits



Key Findings:

Benefits of the King of Prussia Rail Project

- 1 The estimated total project cost of \$1.0 billion to \$1.2 billion is anticipated to generate between \$1.1 and \$1.3 billion in local economic activity.3
- Transit travel time savings to King of Prussia are projected at 30+ minutes from Center City, 20+ minutes from Norristown, and 10+ minutes from Upper Darby.
- **Drivers switching to transit** as a result of the King of Prussia Rail Project would result in an annual reduction of up to 18 million vehicle miles traveled.
- 4 King of Prussia Rail is projected to stimulate an average of approximately 310,000 square feet of new real estate development in King of Prussia per year.
- 5 New office space and residential development spurred by the rail extension would accommodate an additional 1,200 employees and 400 new residents per year.



GREATER PHILADELPHIA

Benefits of Transit Investment



Construction spending that spurs economic activity and supports jobs.



Travel time savings for drivers and transit users in the region



Reduced congestion and pollution



Increased development and property values due to additional connectivity



lob growth due to employees working in new office and retail space



New residents attracted by the convenience of location

Next Steps



- Increased Public Involvement Effort
 - Neighborhood Meetings
 - Backyard Visits
 - -Citizens Working Group



Next Steps



- DEIS released in December 2016
- Select LPA after DEIS public comment period
- Potential for LPA adoption by SEPTA, County, Township and DVRPC in early 2017
- FEIS begins in early 2017
 - Will only consider selected LPA
 - Will commit to minimization and mitigation
- Potential New Starts application, request to enter engineering in 2018



An Extension of the Norristown High Speed Line



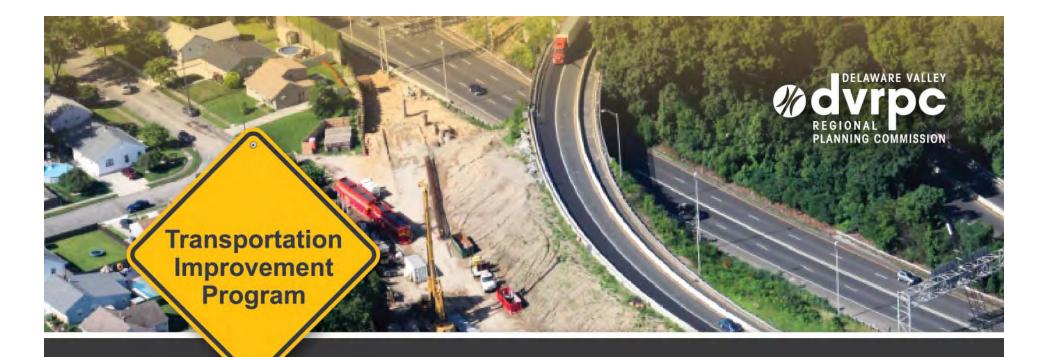






Thank You!

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

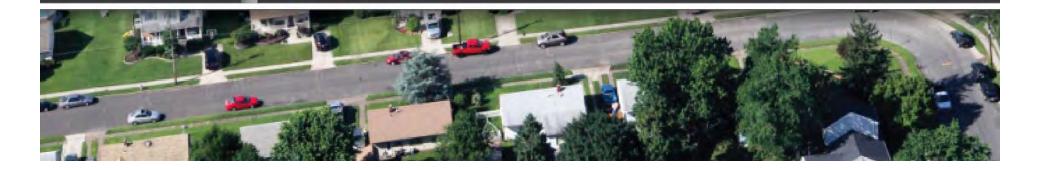




TIP Actions

Transportation Improvement ProgramNew Jersey TIP (FY2016-2019)

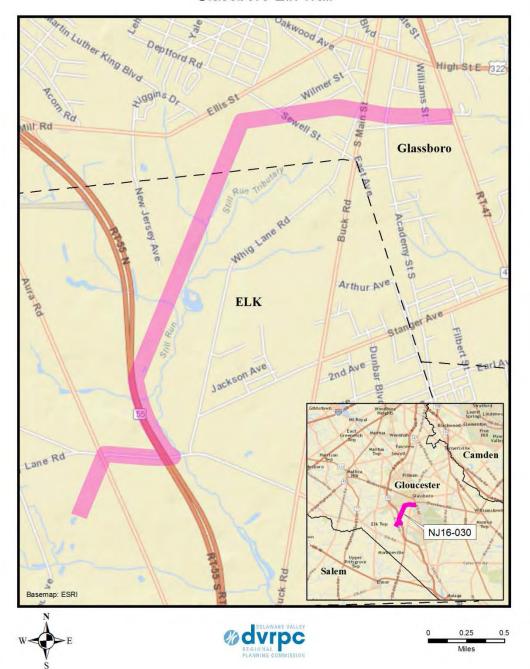
May 2016



Gloucester County Multi-Purpose Trail Extension – Glassboro Elk Trail Gloucester County | Add and Delay Phases

- ► Modify the NJ TIP for the Gloucester County Multi-Purpose Trail Extension Glassboro Elk Trail, accordingly:
 - Add a \$1,000,000 FY15 STATE-DVRPC funded Right-of-Way (ROW) phase in FY16
 - Delay Construction from FY16 to FY17
- ROW was on the previous FY2014 TIP with the same cost for advancement in FY15, but the project did not encumber ROW funds in time.

NJ16-030: Gloucester County Multi-Purpose Trail Extension - Glassboro Elk Trail





Proposed TIP Action | NJ Modify the NJ TIP for the following project:

- ▶ Gloucester County Multi-Purpose Trail Extension Glassboro Elk Trail, Gloucester County
 - Add a \$1,000,000 FY15 STATE-DVRPC funded Right-of-Way (ROW) phase in FY16
 - Delay Construction from FY16 to FY17.



Streetscape Improvements along Clements Bridge Road (NJ 41), Phase 4

Barrington Borough (Camden County) I Add and Delay Phases

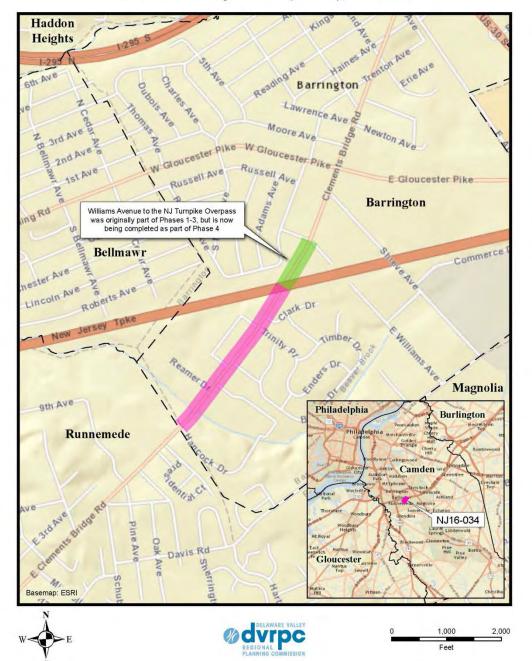
Amend the NJ TIP by adding a new break-out project, Streetscape Improvements along Clements Bridge Road (NJ 41), Phase 4, into the TIP for FY16 Construction with \$180,000 (\$163,000 DEMO/\$17,000 Local).

Note: \$750,824 FY2014 TAP funds for this project are reflected in NJDOT's Statewide TAP line item. Total Construction cost is \$930,141.

- Construction is ready for authorization and further delay in authorization will risk the de-obligation of FY2014 TAP funds.
- Streetscape improvements will be provided along Clements Bridge Road (NJ 41) from Williams Avenue to Hancock Drive.



NJ16-034: Streetscape Improvements along Clements Bridge Road (NJ 41), Phase 4







Proposed TIP Action | NJ Amend the NJ TIP for the following project:

- Streetscape Improvements along Clements Bridge Road (NJ 41), Phase 4, Barrington Borough (Camden County)
 - Add this new break-out project into the TIP for FY16 Construction with \$180,000 (\$163,000 DEMO/ \$17,000 Local)

Note:

- \$750,824 FY2014 TAP funds for this project are reflected in NJDOT's Statewide TAP line item.
- Total Construction cost is \$930,141.







Federal Performance Measures







Regional Technical Committee

May 10, 2016



Federal MAP-21 Performance Measures

Safety

Infrastructure Condition

System Performance

CMAQ

* Greenhouse Gas Emissions

In Public Comment Period



Why Measure Performance?

Are investments helping achieve goals?

Transparency

Improve decision making

Compare across regions / states

Move toward standardized measures



Safety

- (1) Number of fatalities
- (2) Rate of fatalities
- (3) Number of serious injuries
- (4) Rate of serious injuries
- (5) Number of non-motorized fatalities and serious injuries



Source: FWHA



Infrastructure Condition - Pavement

- 1) % of Interstate pavements in good condition
- 2) % of Interstate pavements in poor condition
- 3) % of non-Interstate pavements in good condition
- 4) % of non-Interstate NHS pavements in poor condition

Minimum Condition:

No more than 5% of Interstate lane miles in poor condition

Penalty (if minimum condition not met over one four-year period):

State must obligate NHPP & transfer STP funds



Source: NJDOT



Determining Pavement Condition

			Good	Fair	Poor	
	Concrete	IRI (inches/mile)	<95	95-170 95-220*	>170 >220*	
oined Concrete	Continuous (Cracking (%)	<5	5-10	>10	
Asphalt & Joined		Rutting (inches)	<0.20	0.20-0.40	>0.40	\
		Faulting (inches)	<0.05	0.05-0.15	>0.15	

*Population >1M

Source: FWHA



Infrastructure Condition - Bridges

- 1) Percent of NHS bridges in good condition
- 2) Percent of NHS bridges in poor condition

Minimum Condition:

No more than 10 percent of NHS bridges in poor condition

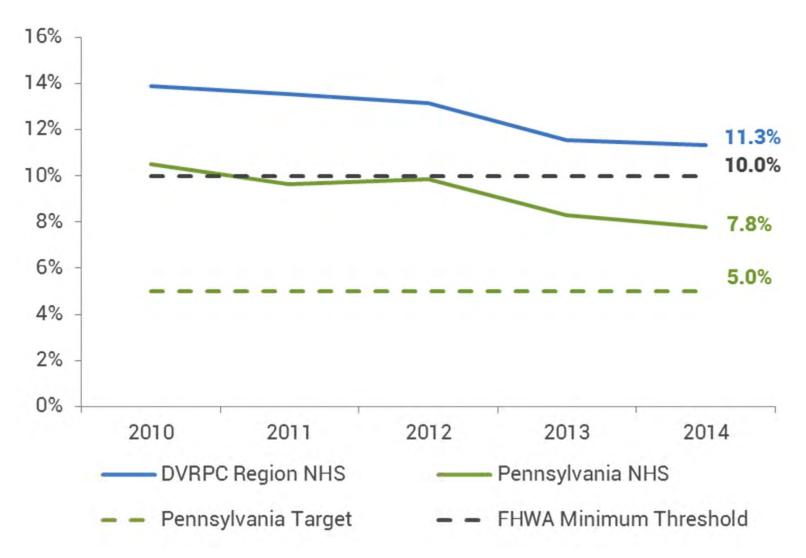
Penalty (if minimum condition not met over one four-year period):

State must obligate NHPP & transfer STP funds





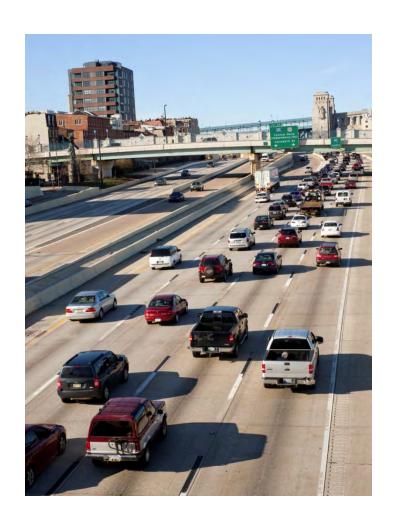
Percent NHS Bridges in Poor Condition





Performance of the National Highway System

- (1) Percent of the Interstate System providing for Reliable Travel Times
- (2) " " non-Interstate NHS " "
- (3) Percent of the Interstate System where **Peak Hour Travel Times** meet expectations,
- (4) " " non-Interstate NHS " "





Measures for Assessing the CMAQ Program

(1) Traffic Congestion

Annual Hours of Excessive Delay Per Capita

(2) On-Road Mobile Source Emissions

Total Emission Reductions



Source: FWHA



Freight Movement on the Interstate System

- (1) Percent of the Interstate System Mileage providing for Reliable Truck Travel Times
- (2) Percent of the Interstate System Mileage Uncongested



Source: Penn Live



Conclusion

Understanding these performance measures is complicated but important

Next steps include setting targets

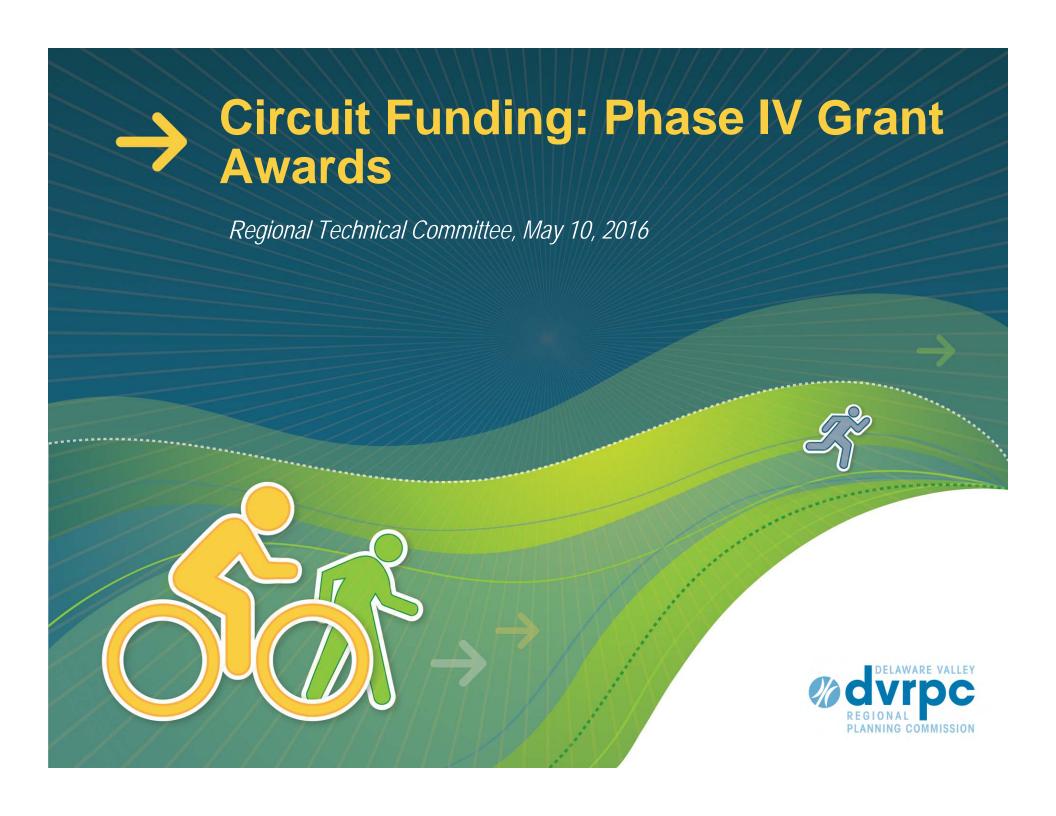
Some of the key issues are

- data availability or which data source to use
- geographic boundary complexities

We have a great history of collaboration and will build on it to do these measures

Questions?





Grant Awards

- 1. Reconstruction of the Martin Luther King Drive Trail \$500,000 grant to be matched by \$500,000 from DCNR (pending) and \$500,000 from Philadelphia Parks and Recreation
- 2. Design and Engineering of Phase II of the Chester Creek Trail \$208,907 grant to be matched by \$208,907 from PA DCNR (pending)

Chester Ck Trail Phase 2 Design



MLK Trail Reconstruction

