



SolSmart National Recognition Program "Fast Track" Funding for SolSmart Advisor

Presented to DVRPC's Regional Technical Committee
Liz Compitello
April 11, 2017

SolSmart

SolSmart: a national recognition and a no-cost technical assistance program for local governments designed to drive greater solar deployment and help make it possible for even more American homes and businesses to access affordable and renewable solar energy to meet their electricity needs.

SolSmart funding will support DVRPC staff to provide this free technical assistance to eight municipalities in the region towards achieving designation.

Funding Amount: \$40,000 (D.O.E. SunShot-funded program managed by The Solar Foundation).

Timeframe: May1, 2017- October 30, 2017 (This overlaps with our current funding from January – July 2017)



SolSmart Advisor

- Municipalities committed to achieve designation:
 - Two committed municipalities in PA
 - At least three municipalities in NJ in coordination with Sustainable Jersey

Technical assistance from DVRPC will include

- Review and recommendation of improvements to zoning codes, planning documents, and permitting processes to be more supportive of solar photovoltaic.
- Research and coordinating training or engagement opportunities on Inspection, Construction Codes, Solar Rights, Utility Engagement, Community Engagement, and Market Development and Finance.
- Documentation and support towards designation.



Requested Action

The RTC recommends that the Board approve this work program amendment to receive \$40,000 of funding from the U. S. DOE through The Solar Foundation to provide technical assistance to municipalities to achieve designation under SolSmart and to be more supportive of solar photovoltaic.

Networking Transportation







Digital Transportation



Digital Transportation Services







Spinlister
Peapod













































goPuff

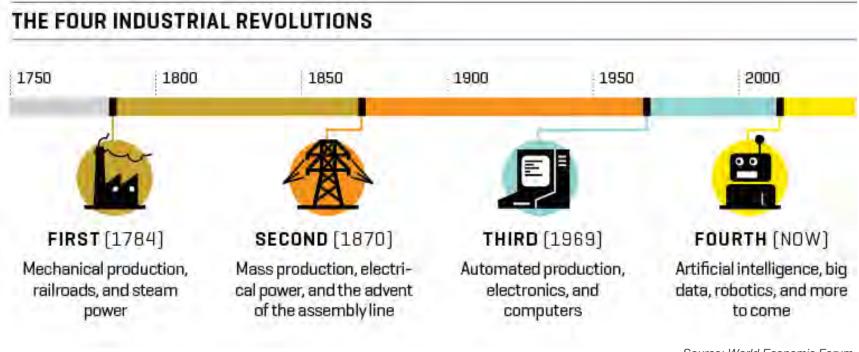








The Digital Revolution



Source: World Economic Forum



"In lieu of large civil infrastructure projects, transportation systems are increasingly being augmented with a range of information technologies that make them smarter, safer, more efficient, more integrated."

- Anthony Townsend, PhD

RE-PROGRAMMING MOBILITY: The Digital Transformation of Transportation in the United States (New York: Rudin Center for Transportation Policy & Management).



Space Efficiency



Source: cyclingpromotion.org



Multimodal

- Apps & Payment Options
- Transportation Hubs
- Complete Streets







Source: www.completestreetsprince.org



Pick-up / Drop-off Zones

Truck Delivery Areas









Reduce Parking Minimums

Retrofit Office Parks & Malls into Mixed-Use Centers







Digital Information Kiosks

Internet Connected Infrastructure (V-2-V / V-2-I)







Make Transit More Competitive

- Transit signal priority
- Dedicated bus lanes
- Off-board fare payment
- Incorporate on-demand and automated technology





Other Digital Implications

Build Partnerships

Changing Governmental Roles



Digital Equity Implications

- New Options Can Improve Access to Jobs & Services
 - Provide Subsidies Based on Need?
- Ensure Digital Providers Serve Low-Income Areas
- Prepaid or Digital Banking Options
- On-Demand Rides by:
 - Concierge / Corner Store / Phone Call / Kiosk
- Use Technology to Enhance Paratransit



AN INTEGRATED, MULTIMODAL TRANSPORTATION NETWORK

Real-time info lets people figure out the best way to get around Big transportation data is becoming abundant

Digitization reinforces agglomeration economies & the need for walkable communities

Digital transportation technologies promote safety & efficiency

Digitization
is unleashing
creative & entrepreneurial
solutions to transportation
issues

Cybersecurity is a critical new transportation need PHYSICAL AND VIRTUAL WORLDS ARE MERGING

Digital communications can enrich community engagement and services



Questions?



Full Networking Transportation Report Available Online

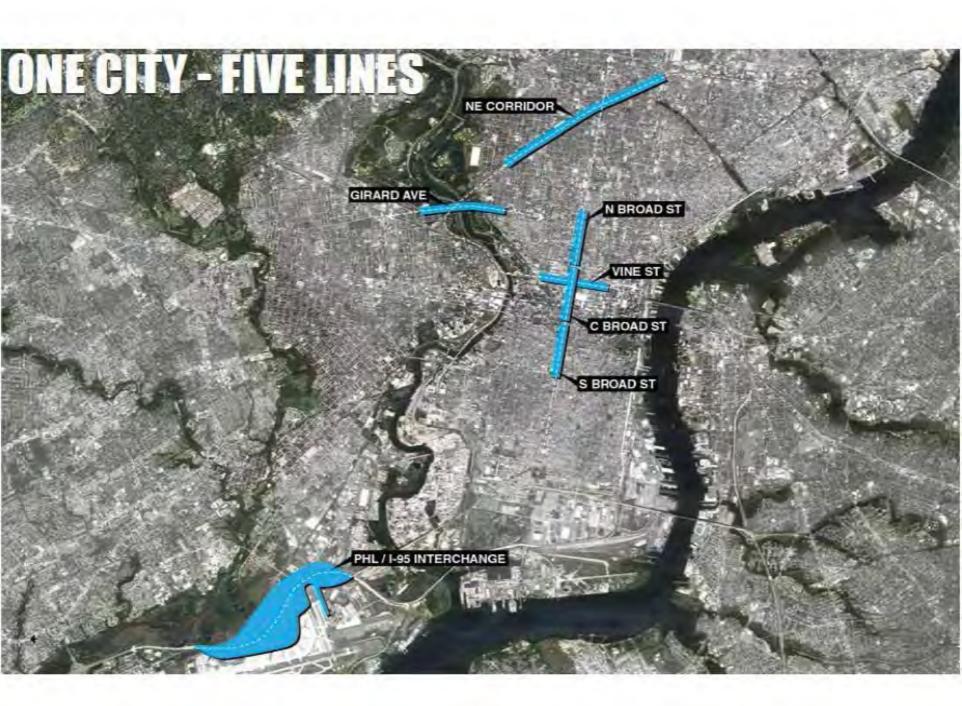
May 1, 2017 – Futures Group Meeting

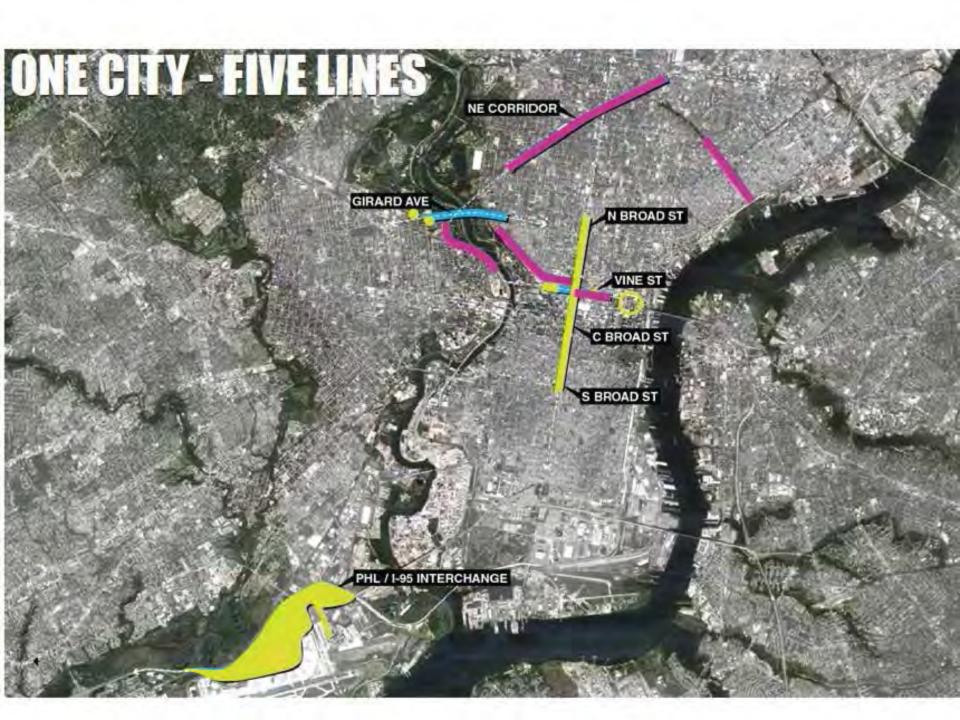
www.dvrpc.org/connections2045





Urban Design







VETERAN'S TRIANGLE

VINE St - 10th St and Monument plazas

CASTOR AVENUE

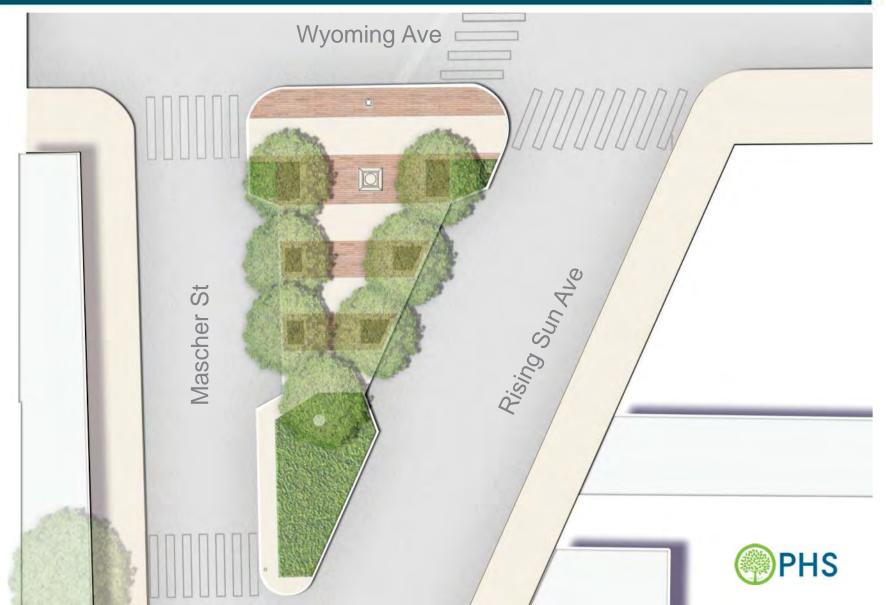
PHL "IMAGE MAKER"

Veteran's Triangle

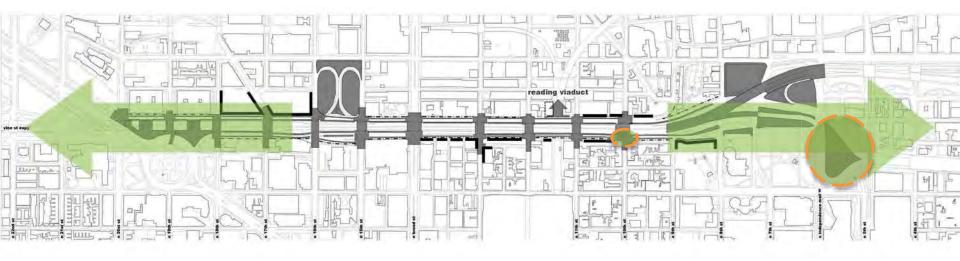
Rising Sun, Mascher & Wyoming Nueva Esperanza



Veteran's Triangle



Vine Street

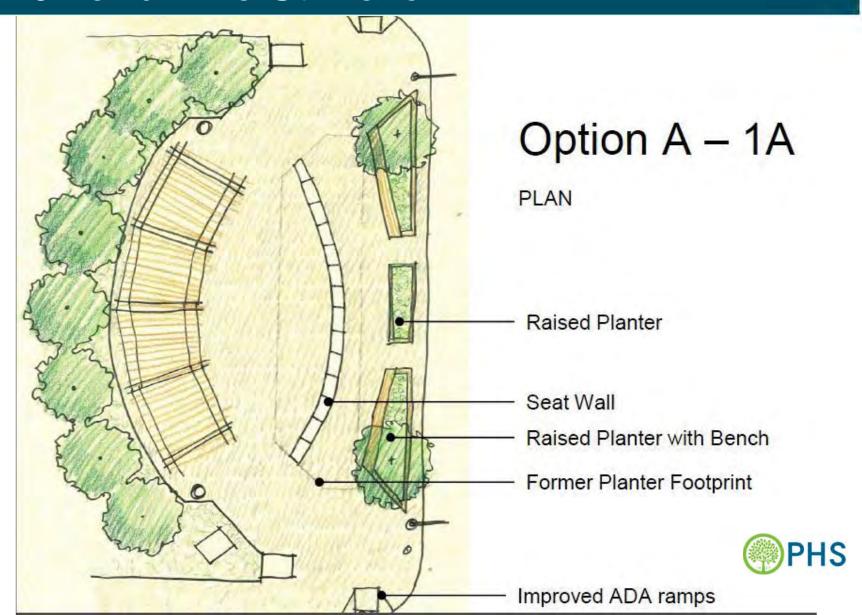


10th and Vine St Plaza

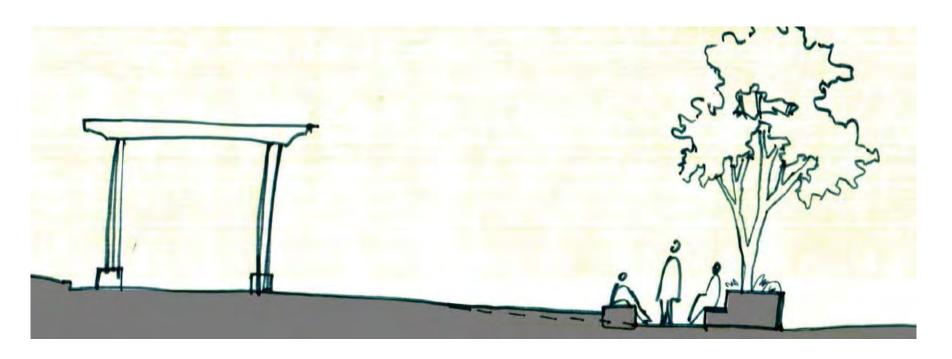
Philadelphia Chinatown CDC



10th and Vine St Plaza

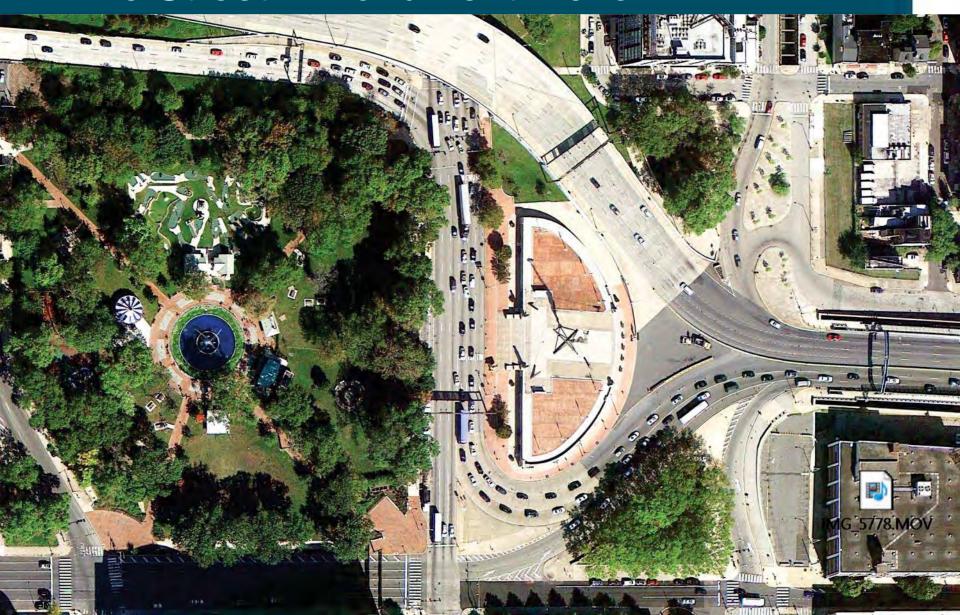


10th and Vine St Plaza





Vine Street – Monument Plaza



Vine Street – Monument Plaza



Castor Ave Streetscape



Castor Ave Streetscape



Castor Ave Streetscape





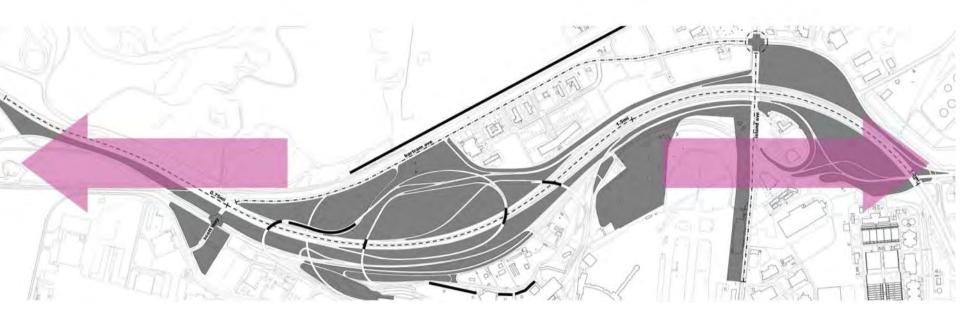


Aramingo to Gaul



PHL "Image Maker" Design Competition









PHL "Image Maker" Design Competition





Urban Design Team

Leigh Ann Campbell , PLA, ASLA Director lcampbell@pennhort.org

Tammy Leigh DeMent
Associate Director
tdement@pennhort.org

Sarah DiPietro, ASLA Project Manager sdipietro@pennhort.org





April 2017

TIP Actions

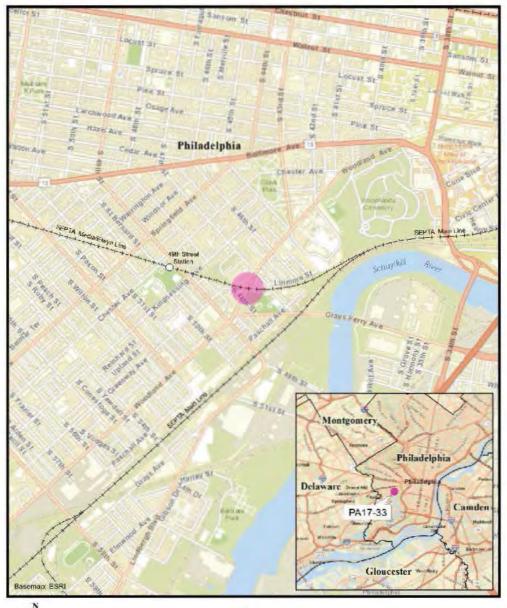
Transportation Improvement Program
New Jersey TIP (FY2016-2019)
Pennsylvania TIP (FY2017-2020)

Woodland Avenue over SEPTA City of Philadelphia | Add Back into TIP & Cost Increase

- ► Action Type: TIP Amendment
- ▶ **Action:** Add back into TIP and increase CON phase, in FY18, by \$7,000,000 (\$3,500,000 STP/\$3,500,000 Local).
- **Reasons:**
 - Restricted work windows.
 - Need to limit impacts to transit service and SEPTA customers.
 - Timed to coincide with a planned summer 2018 outage
 Scheduled for Media/Elwyn Regional Rail line.

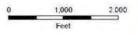


PA17-33: Woodland Avenue over SEPTA













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

a. Woodland Avenue over SEPTA, City of Philadelphia

Amend the TIP by adding Woodland Avenue over SEPTA back into TIP and increase the CON phase, in FY18, by \$7,000,000 (\$3,500,000 STP/\$3,500,000 Local).



PA 663 Traffic Study, I-476 to PA 309 Bucks County | Add New Study to the TIP

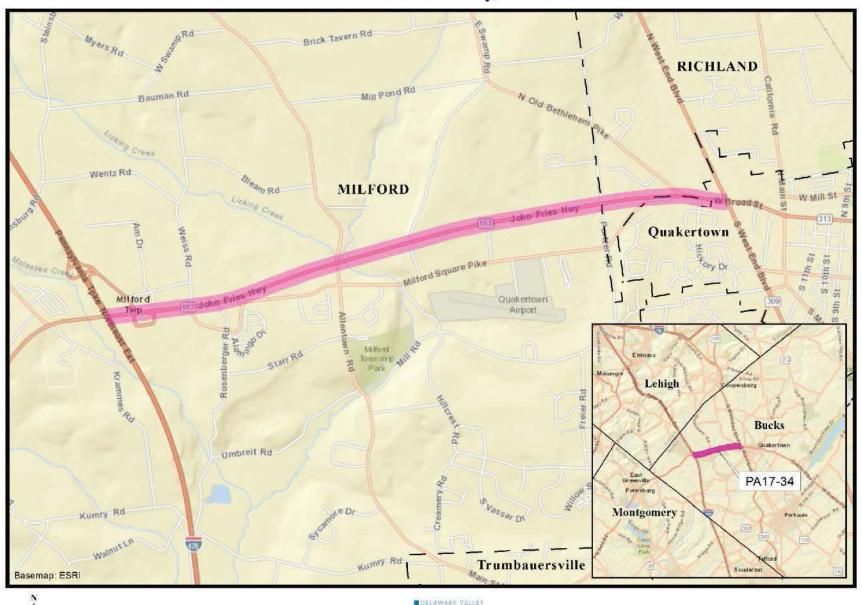
- ► Action Type: TIP Amendment
- Action: Add new \$100,000 State 581 funded study to TIP in FY19.

Reasons:

- Significant private development is anticipated along the corridor
- Evaluate transportation facility improvements in PA 663 corridor in Milford and Richland Twps.
- Investigate anticipated traffic growth
- Identify estimated timeframes and costs



PA17-34: PA 663 Traffic Study, I-476 to PA 309









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

b. PA 663 Traffic Study, I-476 to PA 309, Bucks County

Amend the TIP by adding a new \$100,000 State 581 funded study to the TIP in FY19.



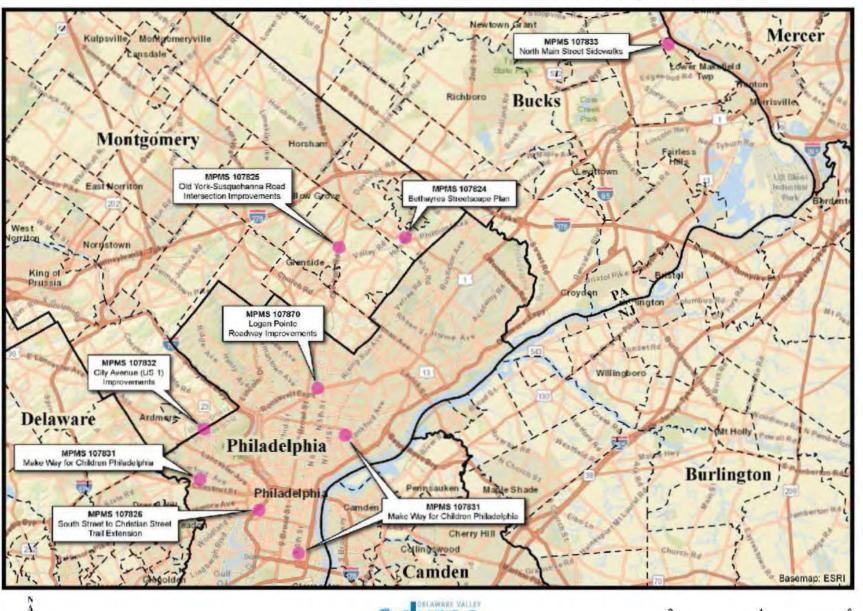
PennDOT Multimodal Transportation Fund Projects Various Counties | Add Projects to the TIP

- ► Action Type: TIP Amendment
- ▶ Action: Approve list of recommended projects and add seven selected projects to TIP using \$5,865,000 Statewide Multimodal Funds (State 411)

Background:

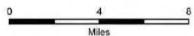
- Competitive statewide program established by Act 89
- Ensures safe & reliable system of transportation is available residents
- PennDOT made \$40M available for 37 projects statewide
- DVRPC region received \$5.8M for 7 projects

PA17-35: PennDOT Multimodal Transportation Fund Projects (2016)









| County | Project Sponsor | Title | Statewide Award |
|--------------|--|---|-----------------|
| Bucks | Yardley Borough | North Main Street Sidewalks | \$454,000 |
| Montgomery | Abington Twp | Old York- Susquehanna Rd Intersection Improvements | \$588,000 |
| | Lower Moreland Twp | Bethayres Streetscape Plan | \$209,000 |
| Philadelphia | City Avenue Special Services District | City Avenue (US 1) Improvements | \$890,000 |
| | Logan West Associates, LP | Logan Pointe Roadway Improvements | \$2,000,000 |
| | Schuylkill River Development Corporation | South Street to Christian Street Trail Extension | \$912,000 |
| | Streets Department of Philadelphia | Make Way for Children Philadelphia | \$812,000 |
| | | TOTAL | \$5,865,000 |

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

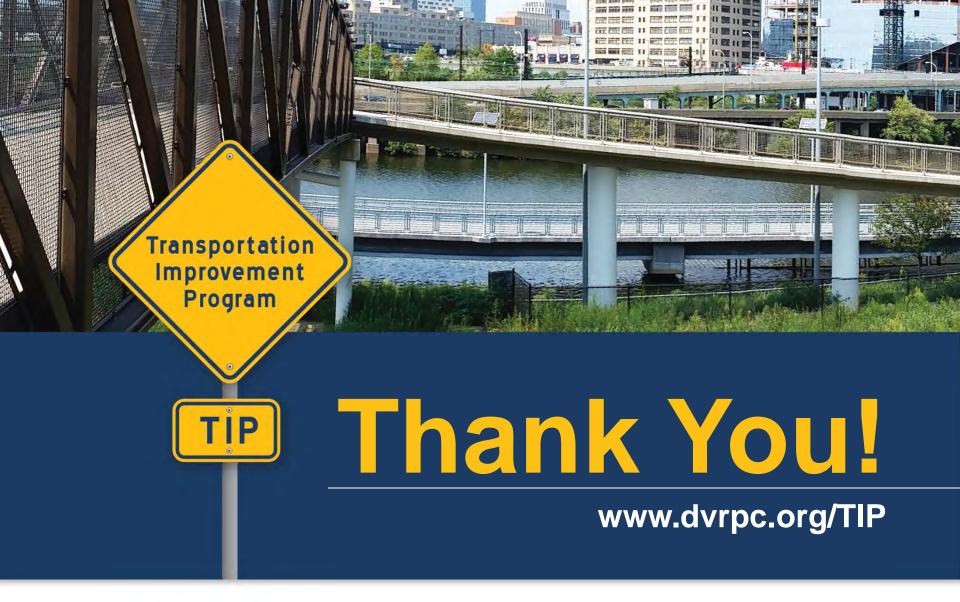
c. PennDOT Multimodal Transportation Fund Projects

Amend the TIP by approving the list of recommended projects and adding seven selected projects to the TIP using \$5,865,000 Statewide Multimodal Funds (State 411).

- ➤ North Main Street Sidewalks \$454,000
- Old York-Susquehanna Rd. Intersection Improvements \$588,000
- ➤ Bethayres Streetscape Plan \$209,000
- City Avenue (US 1) Improvements \$890,000
- Logan Pointe Roadway Improvements \$2,000,000
- > South St. to Christian St. trail extension \$912,000
- Make Way for Children Philadelphia \$812,000

These are additional funds to the region







BUILDING SUR STRENGTHS



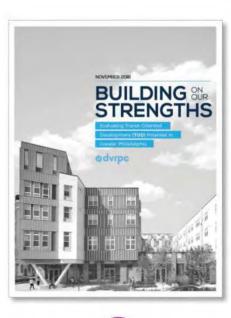
BUILDING SUR STRENGTHS

Evaluating Transit-Oriented

Development (TOD) Opportunities

in Greater Philadelphia





2016/17

BUILDING SUR STRENGTHS

Evaluating Transit-Oriented

Development (TOD) Opportunities

in Greater Philadelphia

TOPICS

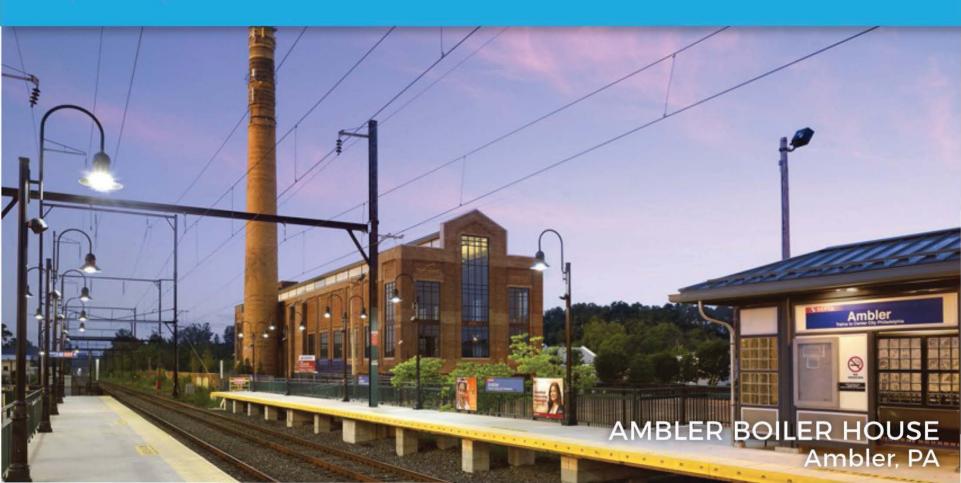
- Regional Perspectives on TOD
- Evaluating TOD Opportunities
- 3 Developing a Strategy

WHAT IS TOD?

Transit-Oriented Development is a way of building vibrant neighborhoods around high quality transit stations.

WHAT IS TOD?

Transit-Oriented Development is a way of building vibrant neighborhoods around high quality transit stations.















Business - Commercial Real Estate













Updated: MARCH 18, 2017 - 5:28 AM EDT



SPAGNOLO GROUP ARCHITECTURE

Artist's rendering of proposed North Station District development, as seen from corner of Broad Street and Indiana Avenue.









- Get the land uses right
- 2 Create compact development patterns
- 3 Promote density
- Make walking easy

- 5 Design for pedestrians
- 6 Manage parking
- 7 create distinctive places

Why is TOD right for our region?



Continued growth

Our region continues to grow



Changing demographics

Growing demand for less car-dependent lifestyles



Economic growth

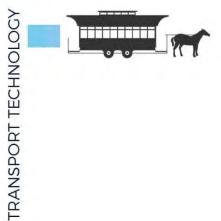
Compact, walkable development is good for the bottom line

A TRANSIT-ORIENTED REGION

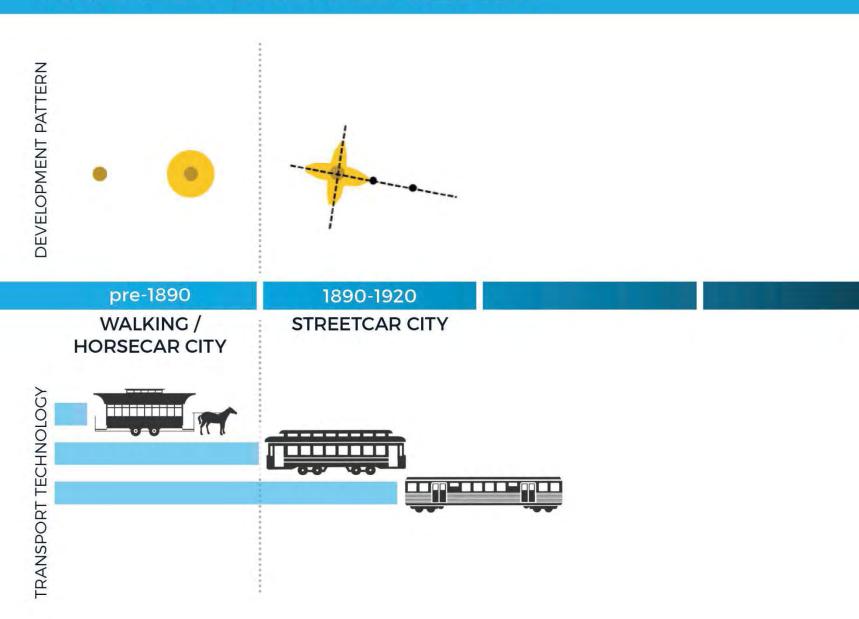


pre-1890

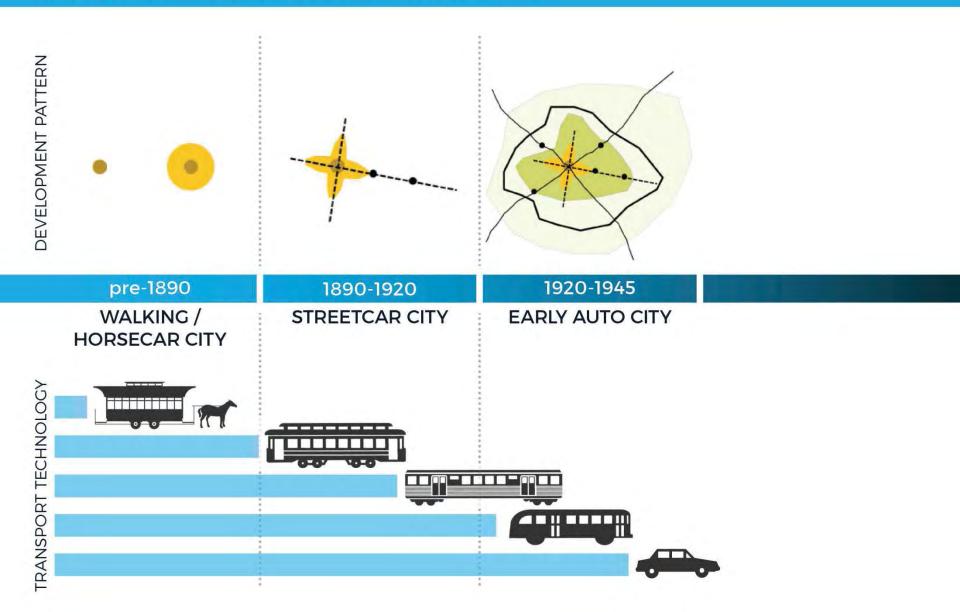
WALKING / HORSECAR CITY



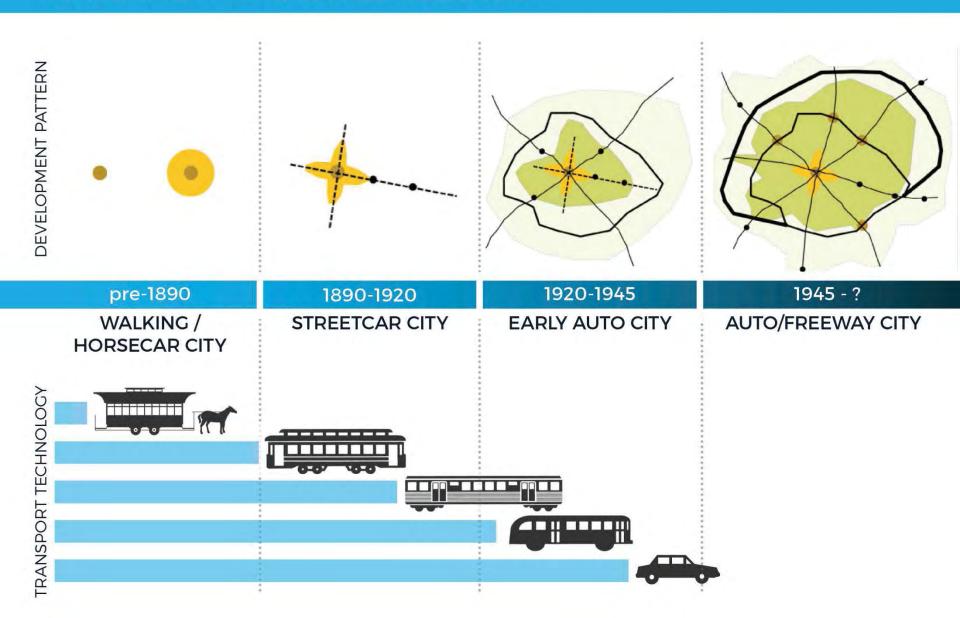
A TRANSIT-ORIENTED REGION



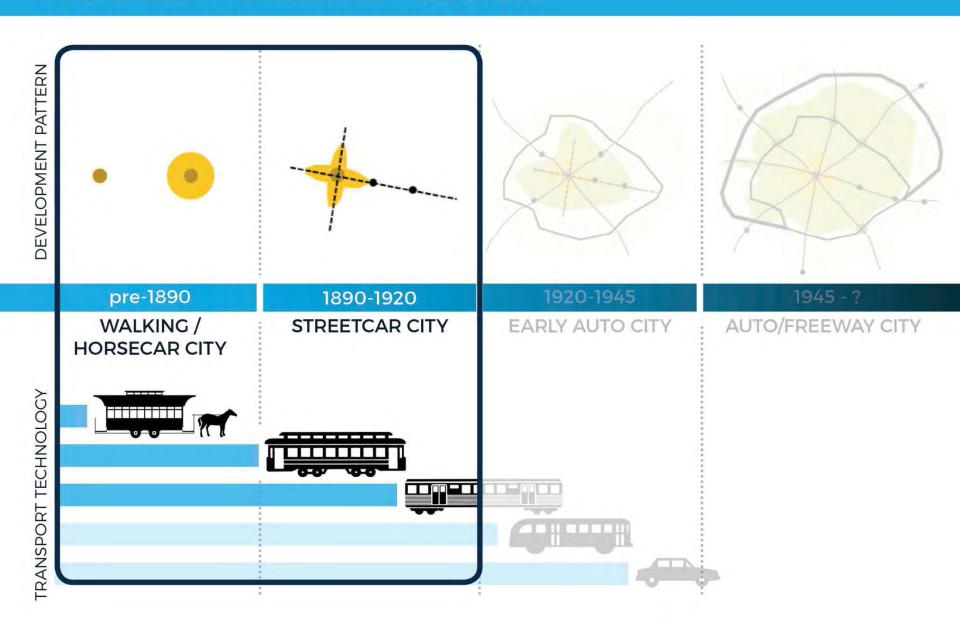
A TRANSIT-ORIENTED REGION



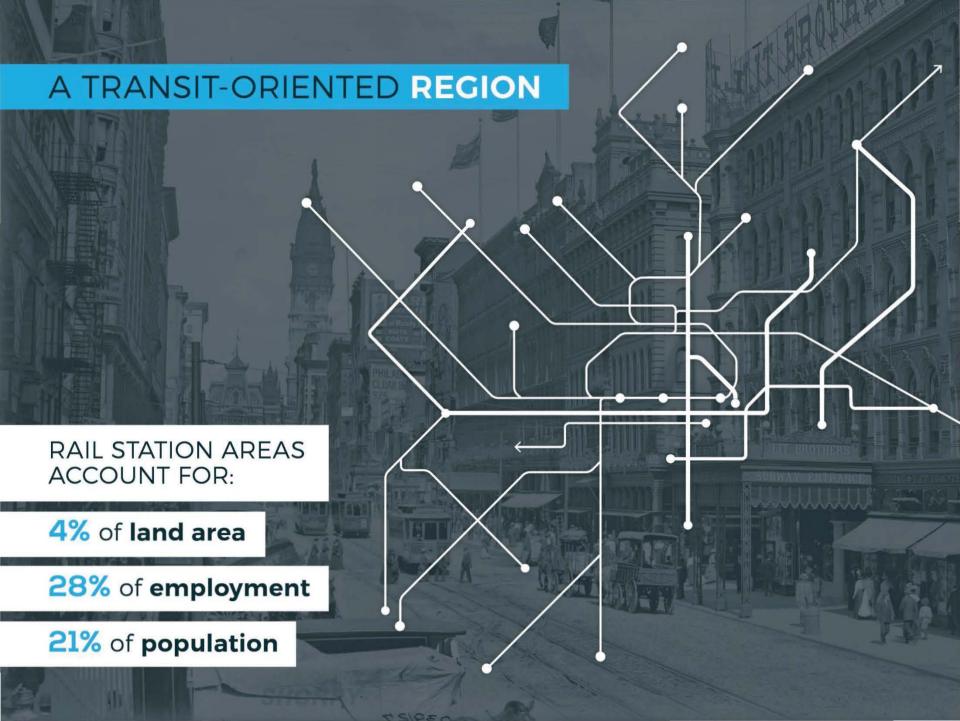
A TRANSIT-ORIENTED REGION



A TRANSIT-ORIENTED REGION









The Unquirer

NEWS

ORTS E

USINESS

TH ENTERTAINMEN

NT FO

OPINIO

News

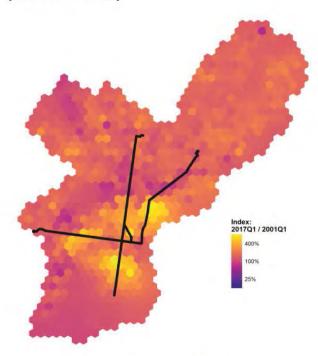
How the overworked, unstable El just might be saving Philadelphia

Updated: MARCH 27, 2017 - 7:14 AM EDT



Change in Philadelphia Housing Index

(2001-2017)



Source: Econsult Solutions, Inc.

HOW CAN WE GROW RESPONSIBLY?

Manage growth and development while protecting our natural resources.

Our region is home to breathtaking beauty, but sprawling development patterns threaten our region's natural landscapes and resources. Our land is a source of local food, jobs, and outdoor recreational opportunities. It also saves us money by naturally cleaning our air and water, mitigating flooding, improving our health, and enhancing our quality of life.

Connections 2040 outlines strategies to preserve an additional 450,000 acres of farmland and open space by 2040 to help reach a goal of one million permanently protected acres in our region. Greater Philadelphia has already made progress having preserved more than 75,000 acres over the past five years. The Plan's land use vision continues this progress.

Metropolitan Subcenter Suburban Center Town Center Planned Town Center **Rural Center** Infill and Redevelopment **Emerging Growth** Greenspace Network Rural Resource Lands Philadelphia Burlington Gloucester



BALANCING GROWTH WITH PRESERVATION.

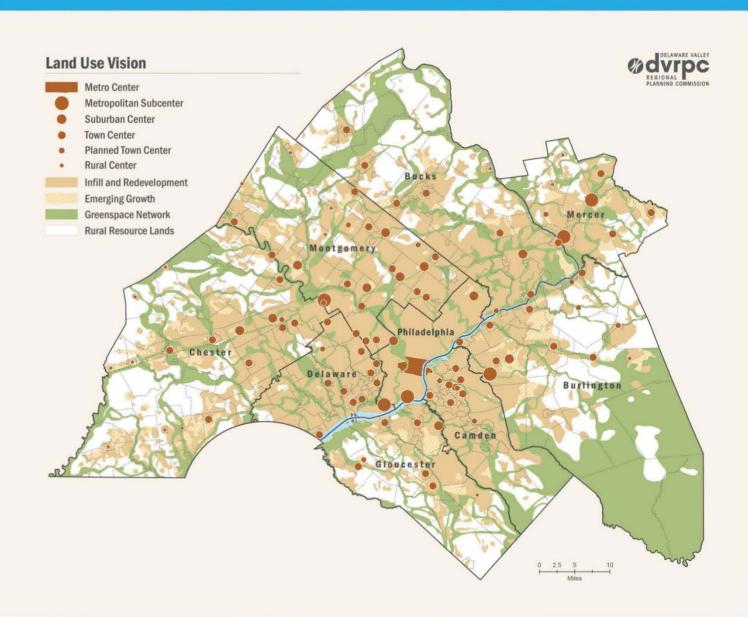
Development and environmental protection must be balanced. Growth should be encouraged where infrastructure already exists to limit the cost of new transportation facilities and reduce energy use and environmental impacts.

The Land Use Vision Map defines areas for open space preservation (Rural Resource Lands and Greenspace Network) as well as development (Centers, Infill and Redevelopment, and Emerging Growth).

LAND USE VISION

Metro Center

WHY TOD MAKES SENSE FOR OUR REGION



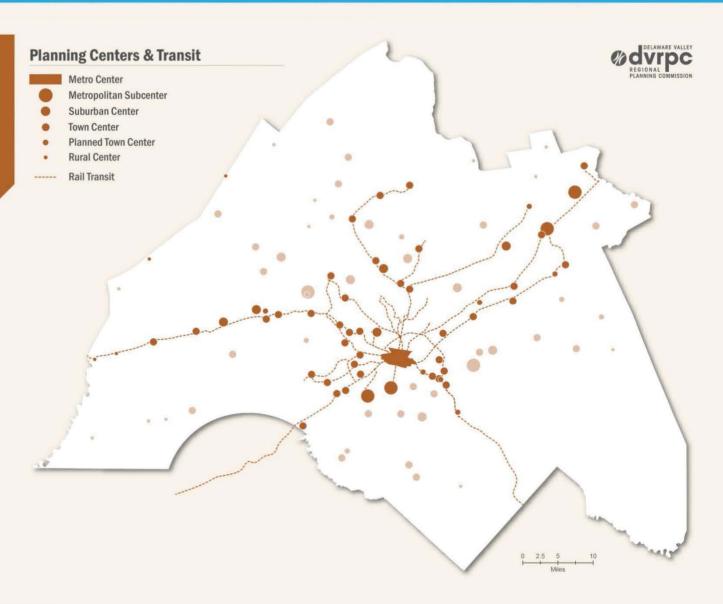
WHY TOD MAKES SENSE FOR OUR REGION

NEARLY

50%

OF CENTERS ARE

SERVED BY RAIL

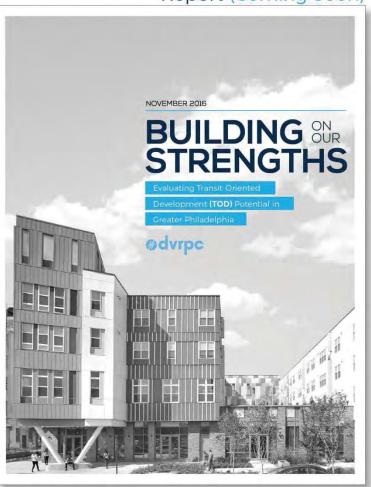


Overview

Method

Findings

Report (Coming Soon)



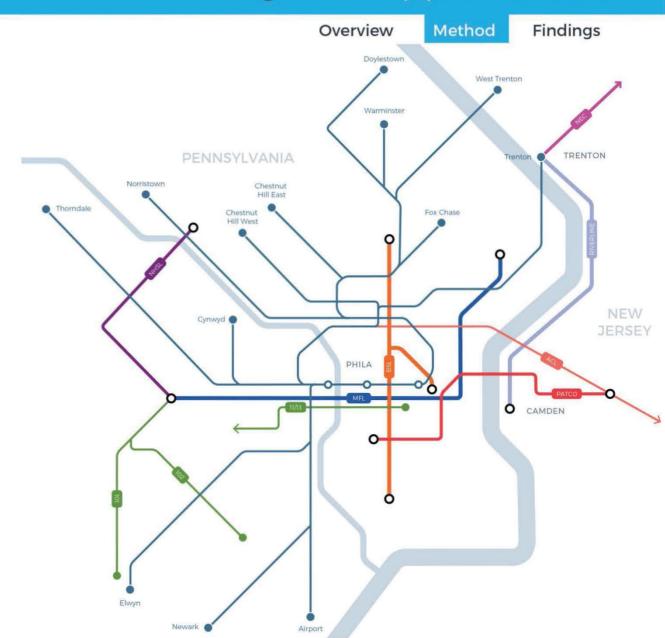
INPUTS

Demographic, social, physical, & market data

OUTCOMES

A useful comparison of the relative strengths and weaknesses of individual station areas

GROWTH AND INVESTMENT TO
RAIL STATIONS WHERE IT CAN BE
LEVERAGED FOR MAXIMUM IMPACT



SELECTINGSTATION AREAS

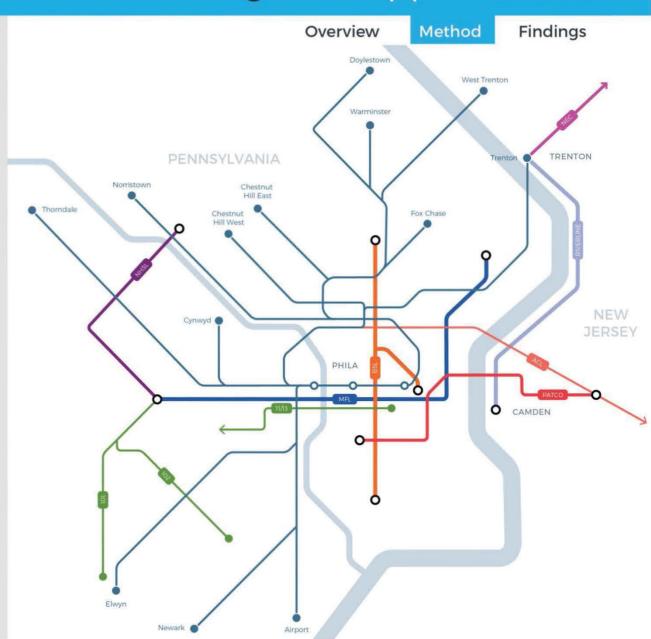
Number of stations evaluated by transit line



A total of 7 stations are served by multiple transit lines: Multiple transit lines (NJ): 3 Multiple transit lines (PA): 4

Number of stations evaluated by county

| Philadelphia | | 66 |
|--------------|----|----|
| Delaware | 3 | 8 |
| Montgomery | 28 | |
| Camden | 12 | |
| Bucks | 5 | |
| Chester | 5 | |
| Mercer | 5 | |
| Burlington | 3 | |



Background

Method

Findings

SUCCESS FACTORS

= TOD Opportunities

Background

Method

Findings

EVALUATION CRITERIA

Demographics + Physical + Transit Context

Market + Community
Strength Context

0

TOD ORIENTATION

- 1. Transit Service Quality
 - 2. Job Access
 - 3. Travel Time
 - 4. Intensity
 - 5. Car Ownership
 - 6. Non-Car Commuters
 - 7. Walkability



Background

Method

Findings

EVALUATION CRITERIA

Demographics + Physical Environment + Transit Context

Market + Community
Strength Context



TOD POTENTIAL

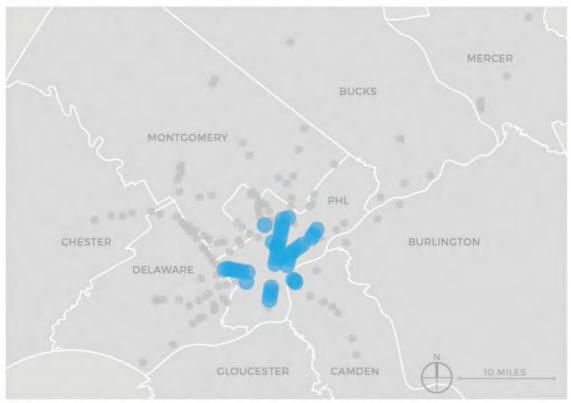
- 1. Development Activity
- 2. Commercial Market
- 3. Residential Market
- 4. Available Land
- 5. Planning Context

Background

Method

Findings

Highest-Rated Station Areas: TOD Orientation

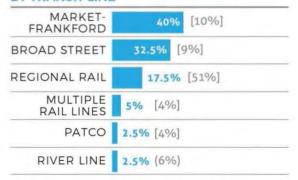


- Station area scoring highest in the Existing Transit Orientation category
- Other station areas included in this study

HIGHEST-RATED STATION AREAS BY COUNTY

| PHILADELPHIA | 87.5% | [41% |
|--------------|-----------|------|
| CAMDEN | 7.5% [7%] | |
| DELAWARE | 5% [23%] | |

HIGHEST-RATED STATION AREAS BY TRANSIT LINE



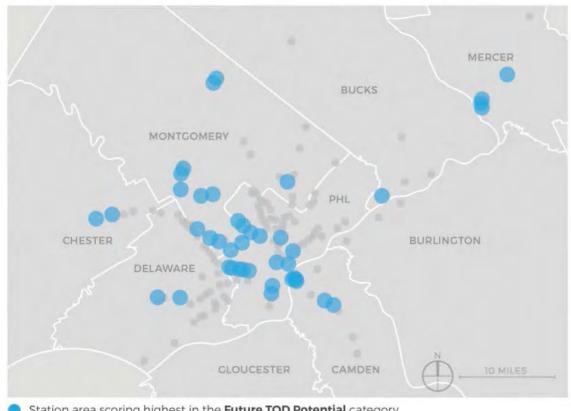
The numbers in brackets reflect the overall percentage of station areas included in this study in each of these categories.

Background

Method

Findings

Highest-Rated Station Areas: TOD Potential

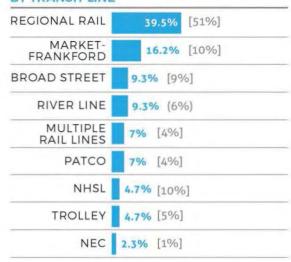


- Station area scoring highest in the Future TOD Potential category
- Other station areas included in this study

HIGHEST-RATED STATION AREAS BY COUNTY

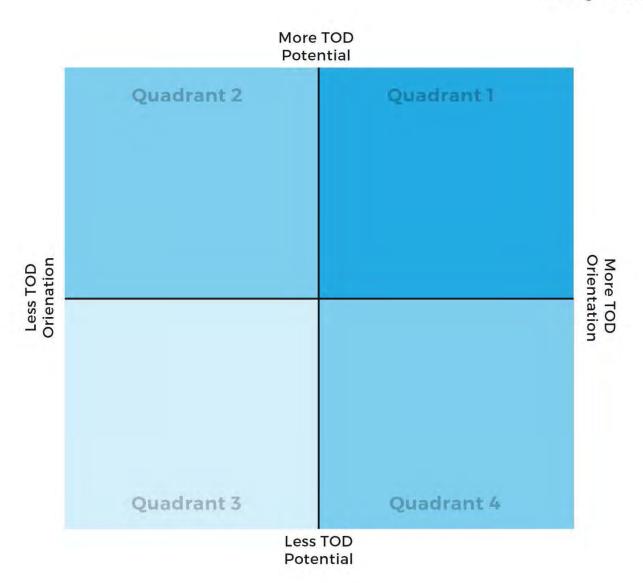
| PHILADELPHIA | 34.9% [41%] |
|--------------|-------------|
| MONTGOMERY | 27.9% [17%] |
| CAMDEN | 13.9% [7%] |
| MERCER | 9.3% [3%] |
| DELAWARE | 7% [23%] |
| CHESTER | 4.7% [3%] |
| BUCKS | 2.3% [3%] |

HIGHEST-RATED STATION AREAS BY TRANSIT LINE



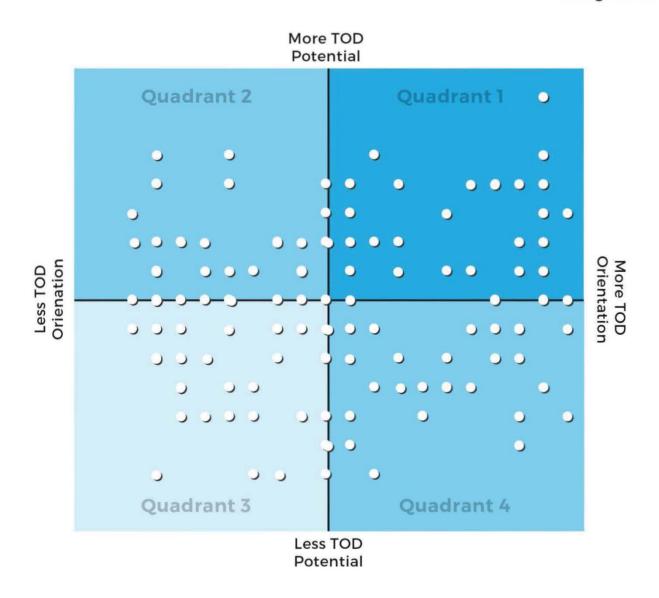
Background

Method



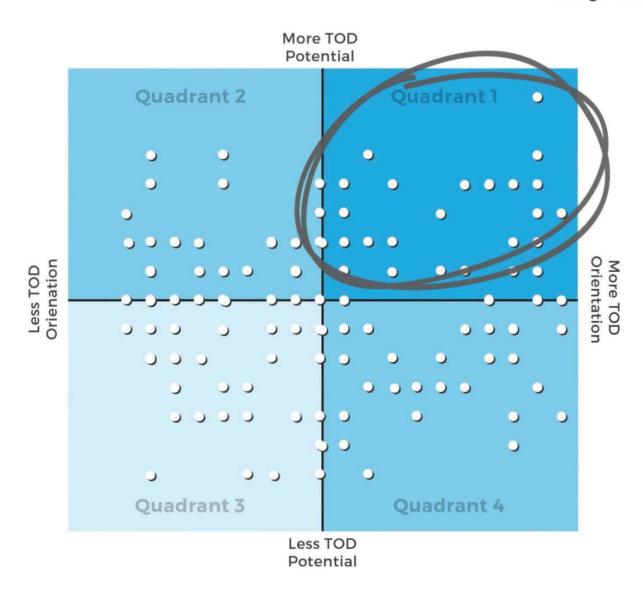
Background

Method

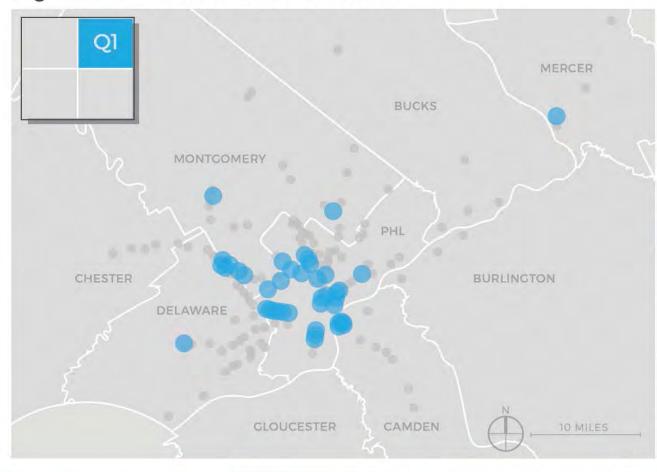


Background

Method



Highest-Rated Station Areas: Overall



Transit Centers

- Walter Rand Transportation Center/ Broadway
- Norristown Transportation Center
- Trenton Transportation Center

PATCO

· City Hall

River Line

- Aquarium
- Cooper Street/Rutgers Univ.
- · Entertainment Center

Broad Street Line

- · Cecil B Moore
- Ellsworth-Federal
- Erie
- Girard
- Snyder
- Tasker-Morris

Market-Frankford Line

- 46th Street
- 52nd Street
- 56th Street
- · 60th Street
- 63rd Street
- Berks
- Church
- Girard
- Huntingdon
- Millbourne
- · York-Dauphin

Regional Rail

- Allegheny
- Ardmore
- Bala
- · Bryn Mawr
- Chelten Avenue
- East Falls
- Haverford
- · Jenkintown-Wyncote
- Manayunk
- Overbrook
- · Queen Lane
- Rosemont
- · Temple University
- Tulpehocken
- Wissahickon

Norristown High Speed Line

- Bryn Mawr
- Roberts Road

Trolle

Orange Street

USING THE TOD OPPORTUNITY RATINGS

All station areas in our region present opportunities for **transit-supportive** investments.



The Unquirer

HEALTH ENTERTAINMENT FOOD OPINION REAL ESTATE



Business - Commercial Real Estate









Philly Council members propose plan to boost development near transit stops

Updated: FEBRUARY 23, 2017 - 12:33 PM EST



The area around the 40th Street Trolley Portal is being improved with a landscaped seating area and a two-story Trolley Car Diner café designed by Group G for developer Ken Weinstein.



USING THE TOD OPPORTUNITY RATINGS

All station areas in our region present opportunities for **transit-supportive** investments.

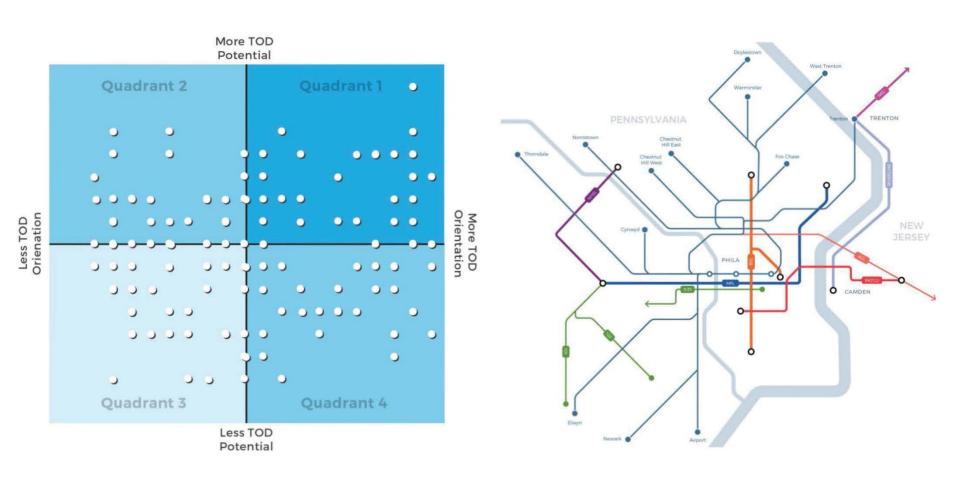
POTENTIAL APPLICATIONS

- Access to transit
- Station area planning
- 3 Economic development planning
- Oevelopment review
- Site selection
- Transit planning and operations
- Equitable TOD

Station Analysis Example Ivy Ridge

Background

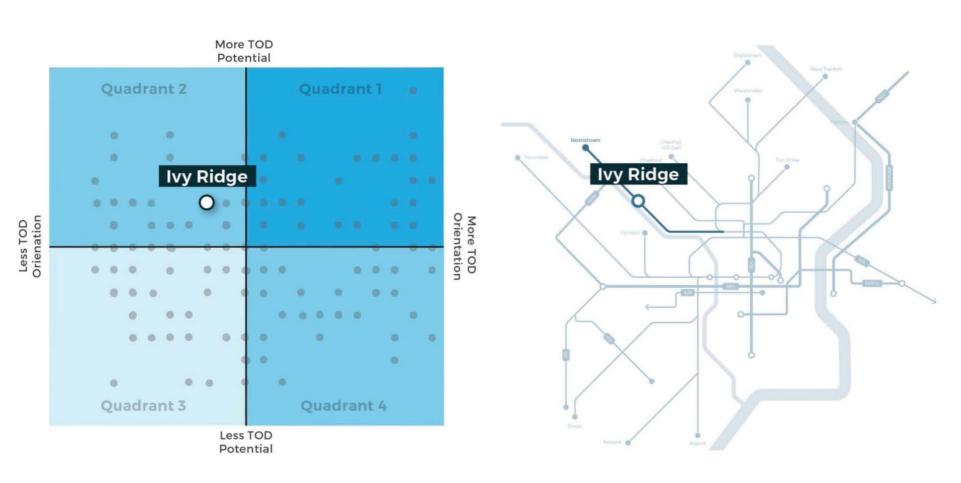
Method



Station Analysis Example Ivy Ridge

Background

Method

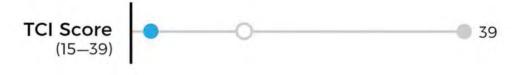


Background

Method

Findings

Comparing Existing TOD Orientation

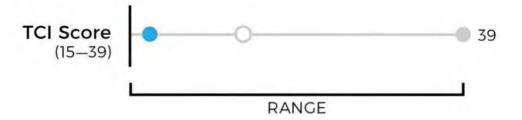


Background

Method

Findings

Comparing Existing TOD Orientation



Background

Method

Findings

Comparing Existing TOD Orientation

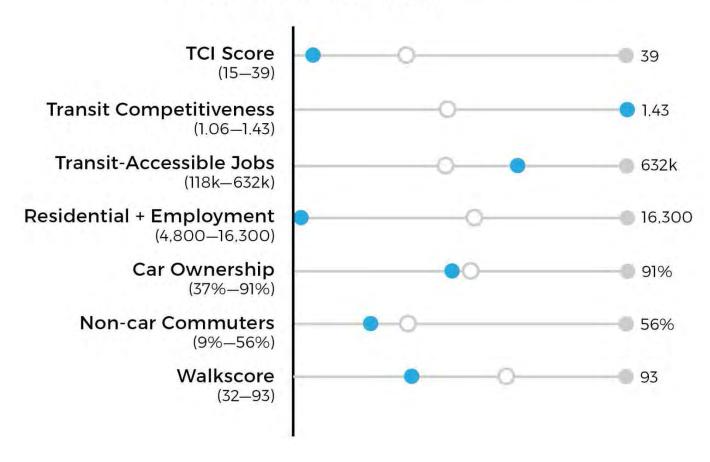


Background

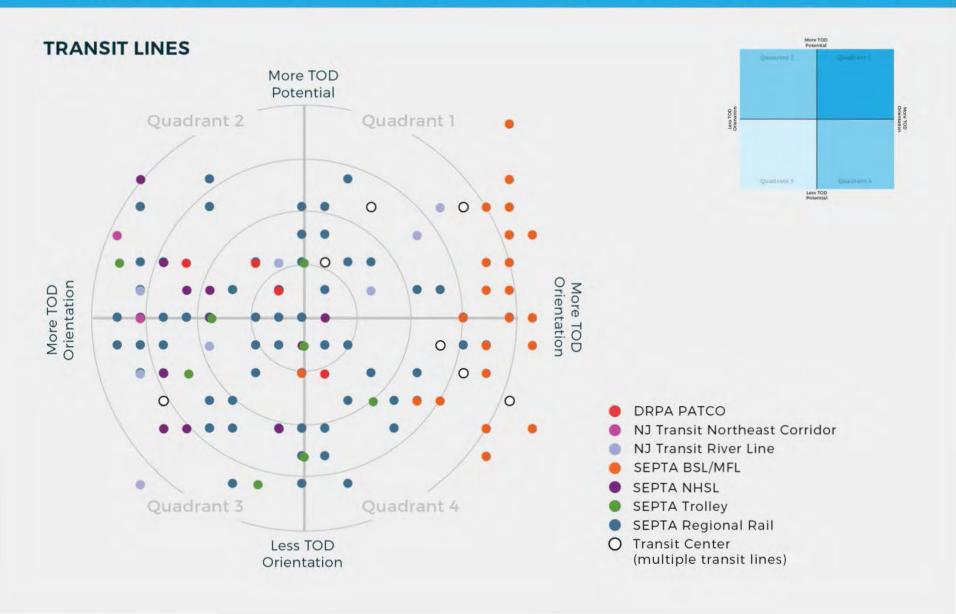
Method

Findings

Comparing Existing TOD Orientation



DEVELOPING A TOD STRATEGY UNDERSTANDING CONTEXT

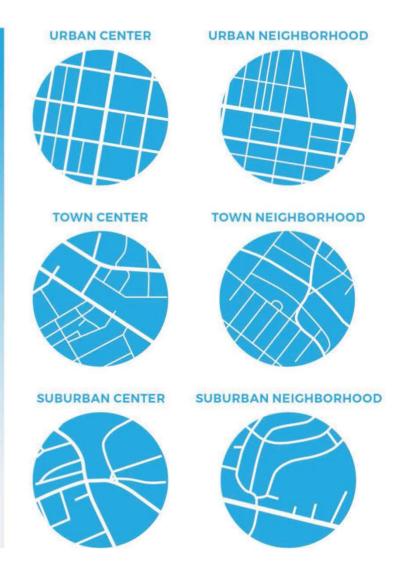


DEVELOPING A TOD STRATEGY UNDERSTANDING CONTEXT

URBAN

DEFININGSTATION TYPES

- 1. Land use mix
- 2. Street & block pattern
- 3. Building placement
- 4. Building height
- 5. Mobility options

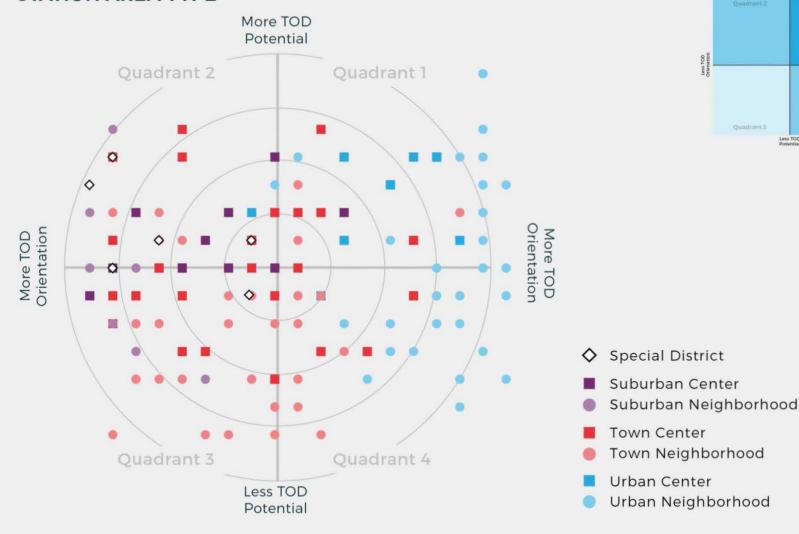


SUBURBAN

DEVELOPING A TOD STRATEGY UNDERSTANDING CONTEXT

Less TOD





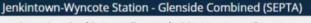


ONLINE RESOURCE: www.dvrpc.org/webmaps/tod

ome TOD in the Region



Evaluating Transit-Oriented Development (TOD) Opportunities in Greater Philadelphia

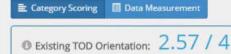


Location: Jenkintown Borough, Montgomery County

Station Area Type: Suburban Center

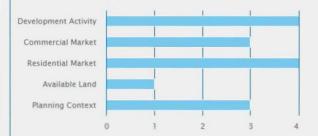
Planning Area Context: Developed Community

Select a scoring method:













ONLINE RESOURCE: www.dvrpc.org/webmaps/tod

PLANNING FOR TOD

OBSTACLES & CHALLENGES

- 1 Higher costs/ financial complexity
- ② Difficulty with land assembly
- 3 Lack of developer knowledge
- Regulatory barriers
- 5 Public opposition





BUILDING SUR STRENGTHS

Evaluating Transit-Oriented

Development (TOD) Opportunities

in Greater Philadelphia



Andrew Svekla, AICP Office of Smart Growth asvekla@dvrpc.org (215) 238-2810

www.dvrpc.org/webmaps/TOD www.dvrpc.org/webmaps/SGPD

Volkswagen Mitigation Settlement Implications for the Region



Sean Greene *Manager, Air Quality Programs*

April 11, 2017 Regional Technical Committee



Background

- Partial Settlement reached between U.S.
 & VW. (June 2016)
 - VW violated CAA by selling > 500,000, 2.0 L diesel fueled vehicles with emissions "cheat" devices (2010-2015).
 - Settlement has three components
 - Buyback or recall 80% of subject vehicles.
 - 2. Establish \$2.7B mitigation fund
 - Invest \$2B in ZEV vehicles and infrastructure



Mitigation Fund – Appendix D

- States, tribes, etc. are eligible to become beneficiaries of settlement.
 - Federal Gov't appoints fund Trustee.
 - States must follow mandatory procedures to become beneficiaries.
- Funds apportioned based on number of subject vehicles registered in jurisdiction.
 - PA \$110M
 - NJ \$65M
 - DE \$9M



Eligible Projects

- Cost effective diesel vehicle replacement projects.
 - HDDV
 - Port Equipment
 - Ferries and Tugs
 - Locomotives
 - MDDV
 - Buses (school, transit, shuttle)
 - Diesel Emissions Reduction Act (DERA) Eligible Projects
 - EV infrastructure (15% of allocation)
 - Complete list available on table



Eligible Funding Amounts

Appendix D-2 of Settlement

- For Government recipients 100%
- For Non-government recipients:
 - Repowers 40%, Electric repower 75%
 - Replacement 25%, Electric replacement 75%
- Up to 15% of allocation for EV infrastructure.
- Can be used for voluntary match to State DERA allocations.
 - Not explicit, but assumed cannot be used for mandatory match for other federal funds.



Timeline

Timeline is based on Trust Effective Date (TED), to be established, but any day now.

- States have TED+ 60 to apply to be Beneficiary.
 - Must name responsible agency
 - Must agree to forgo future sanctions related to court action
- Trustee has 60 days or TED + 120 to designate beneficiaries.
- Beneficiaries have 90 days to submit mitigation plan.
 - Must submit publically available mitigation plan
 - Describe NOx reductions and eligible project categories
 - Detail benefits to EJ communities and public input plan
- Funds must be spent within 15 years.



What We Know

- Mitigation plan must:
 - show cost-effective mitigation of NOx emissions,
 - estimate NOx reduction from plan,
 - show benefits to populations disproportionately impacted by air pollution,
 - allow opportunity for public input.
- Attractive projects
 - show cross jurisdictional cooperation,
 - benefit EJ communities in areas with AQ issues,
 - are of a scale to reduce administrative burden.



DVRPC Strategy

- DVRPC would like to facilitate applications to the Beneficiaries for comprehensive mitigation projects.
- What does this mean?
 - help partner governments and agencies identify eligible vehicles and equipment.
 - assist with NOx reduction calculations.
 - combine request to present a regional and cross jurisdictional request (within each state).
 - coordinate project implementation to reduce administration costs.



Potential Partners

- Member Governments
- Port facilities
- Transit Agencies









What Can You do to Prepare?

- Contact DVRPC to state interest.
- Prepare for the application
 - Assemble vehicle lists.
 - 1992-2009 diesel vehicles.
 - older tier diesel equipment.
 - Collect or estimate usage characteristics.
 - Estimate replacement costs.
- Once mitigation plan is announced, collaborate to submit best possible proposal.



Thank You! Questions? Comments?



Sean Greene
Manager, Air Quality
Programs
215.238.2860
sgreene@dvrpc.org

For more information please visit, http://www.epa.gov

