

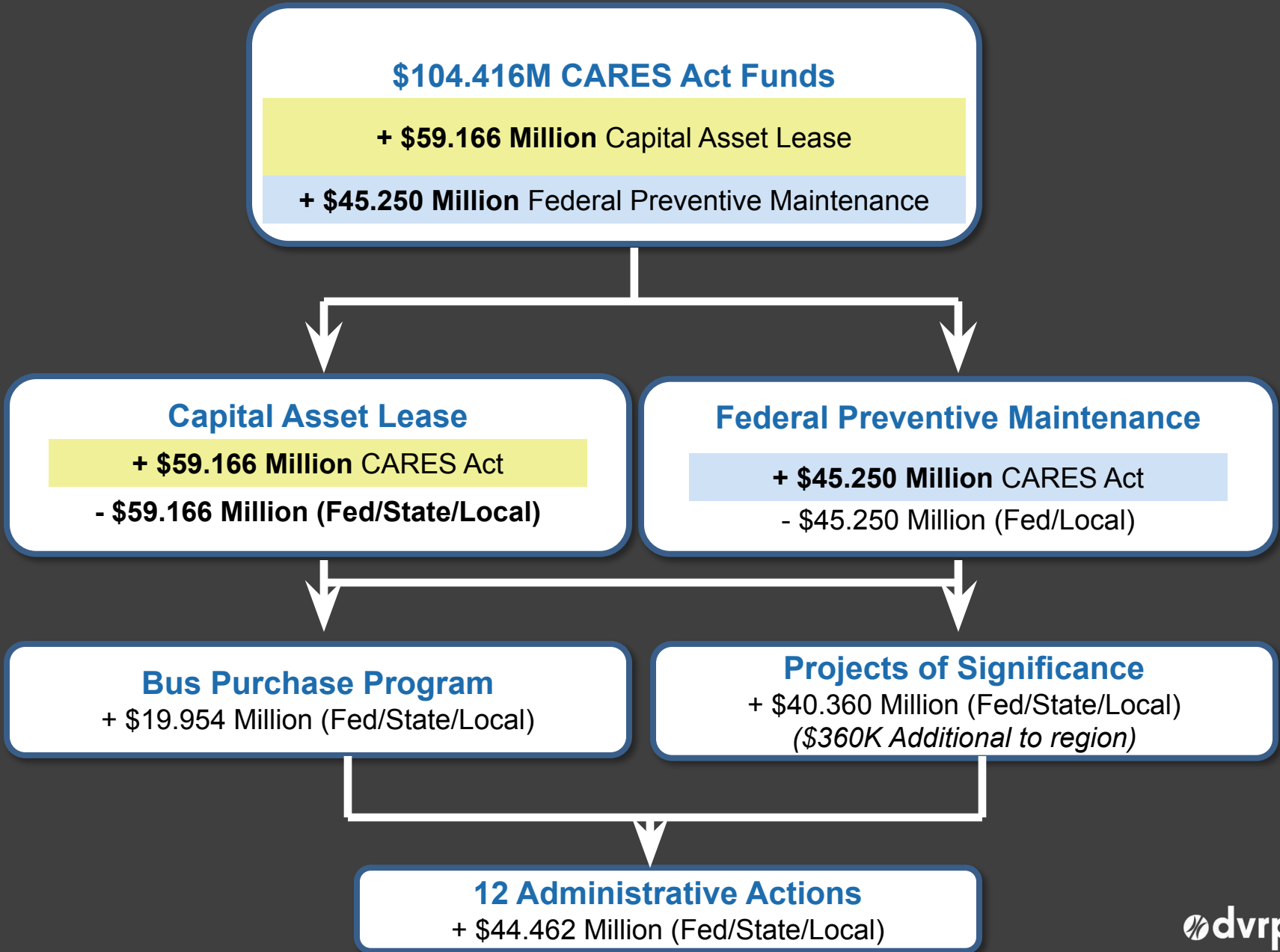


# TIP ACTIONS

Transportation Improvement Program  
New Jersey TIP (FY2020-2023)  
Pennsylvania TIP (FY2021-2024)



# Additional \$104M CARES Act Funds Added to SEPTA Capital Program



# Capital Asset Lease Program

## SEPTA | Add New Federal Funding

- **TIP Amendment**
- **Action:** Add \$59,166,000 of CARES Act, remove \$59,166,000 (\$47,333,000 FTA Section 5337/ \$11,451,000 State 1514/ \$382,000 Local) from FY21 CAL phase.
- **Reason:** Utilizing additional CARES Act funding for capital projects presents opportunities for SEPTA to reprogram FY21 capital funds and priorities.
- **Background:**
  - Due to COVID-19 impacts SEPTA is utilizing \$104,416,000 of its CARES Act funding two projects.

# Capital Asset Lease Program

## SEPTA | Add New Federal Funding

- **Background:**

- This project provides for the lease payments on communications antennas, copiers, and Amtrak trackage.
- SEPTA Amtrak Lease Payments
  - *Trenton, Wilmington/Newark and Paoli/Thorndale Regional Rail service, and portions of the Chestnut Hill West, Media/Elwyn, Airport and Cynwyd Regional Rail Lines.*

# Federal Preventive Maintenance

## SEPTA | Add New Federal Funding

- **TIP Amendment**
- **Action:** Add \$45,250,000 of CARES Act, remove \$45,250,000 (\$36,200,000 FTA Section 5337/ \$9,050,000 Local) from FY21 OP phase.
- **Reason:** Utilizing additional CARES Act funding for capital projects presents opportunities for SEPTA to reprogram FY21 capital funds and priorities.
- **Background:**
  - Due to COVID-19 impacts SEPTA is utilizing utilize \$104,416,000 of its CARES Act funding two projects.

# Federal Preventive Maintenance

## SEPTA | Add New Federal Funding

- **Background:**

- Provides for operating assistance and preventive maintenance expenses pertaining to activities performed on vehicles and facilities.
- Activities include:
- Program administration;
- Repair of buildings, grounds and equipment;
- Operation of electric power facilities;
- Maintenance of vehicle movement control systems, fare collection, counting equipment and structures; and
- Maintenance of general administration buildings, grounds and equipment, and electrical facilities.



# TIP ACTION | Proposed - PA

## Request RTC Recommend Board approval of TIP Amendment

### Capital Asset Lease Program

Add \$59,166,000 of CARES Act, remove \$59,166,000 (\$47,333,000 FTA Section 5337/ \$11,451,000 State 1514/ \$382,000 Local) from FY21 CAL phase.

### Federal Preventive Maintenance

Add \$45,250,000 of CARES Act, remove \$45,250,000 (\$36,200,000 FTA Section 5337/ \$9,050,000 Local) from FY21 OP phase.

CARES Act funds are additional to the region.

# SEPTA Bus Purchase Program

## SEPTA | Increase Funding

- **TIP Amendment**
- **Action:** Adding \$19,954,000 (FY21: \$9,206,000 FTA Section 5339/ \$2,308,000 State 1514/ \$77,000 Local; FY22: \$2,180,000 FTA Section 5307/ \$4,826,000 State 1514/ \$157,000 Local; FY24: \$960,000 FTA Section 5307/ \$232,000 State 1514/ \$8,000 Local) to the PUR phase.
- **Reason:** Extra funding has allowed SEPTA to advance the purchase of 525 40-foot New Flyer Diesel Electric Hybrid buses.
- **Background:**
  - This procurement is fully funded and will be completed this year.



# SEPTA Bus Purchase Program

## SEPTA | Increase Funding

- **Background:**

- Funding being added in years 2 and 4 allow SEPTA to begin procurement of the next set of bus replacements in FY22.
- Provides for the acquisition of different size buses based upon needs and route characteristics.
- Current bus fleet consists of a variety of buses ranging from 60-foot articulated and 40-foot buses for heavy use routes to 30-foot buses for suburban circulator and contracted service routes.



TIP

PA

# TIP ACTION | Proposed - PA

**Request RTC Recommend Board approval of TIP Amendment**

## **SEPTA Bus Purchase Program**

Adding \$19,954,000 (FY21: \$9,206,000 FTA Section 5339/ \$2,308,000 State 1514/ \$77,000 Local; FY22: \$2,180,000 FTA Section 5307/ \$4,826,000 State 1514/ \$157,000 Local; FY24: \$960,000 FTA Section 5307/ \$232,000 State 1514/ \$8,000 Local) to the PUR phase.

# Projects of Significance

## SEPTA | Increase Funding and Add New Project

- **TIP Amendment**
- **Action:** Increase funding by \$40,360,000 (\$36,800,000 FTA Section 5307/ \$360,000 FTA Section 5305/ \$3,096,000 State 1514/ \$104,000 Local) in FY21 for two projects.
- **Reason:** Funding has been freed up by utilizing SEPTA's CARES Act funds for other capital projects; and add new FTA grant project.
- **Background:**
  - KOP Rail Extension 30% Design - \$40M
  - NHSL-KOP Rail Extension Value Capture/Multimodal Accessibility Study - \$360K

# Projects of Significance

## SEPTA | Increase Funding and Add New Project

- **KOP Rail Extension 30% Design - \$40M:**
  - Will extend the existing NHSL four miles into King of Prussia,
  - Provide a high-speed, “one-seat” ride from any station along the NHSL, including the 69th Street Transportation Center in Upper Darby and the Norristown Transportation Center in Norristown.
  - Increase ridership by 6,755 daily trips; less than 40-min. ride from Center City to KOP
  - Jan 8, 2021 SEPTA and FTA signed the combined FEIS/ROD
  - Funding will allow SEPTA to go from 15% Design to 30% Design
  - Design, Construction and acquisition of new rail cars is estimated at \$2 billion.

# Projects of Significance

## SEPTA | Increase Funding and Add New Project

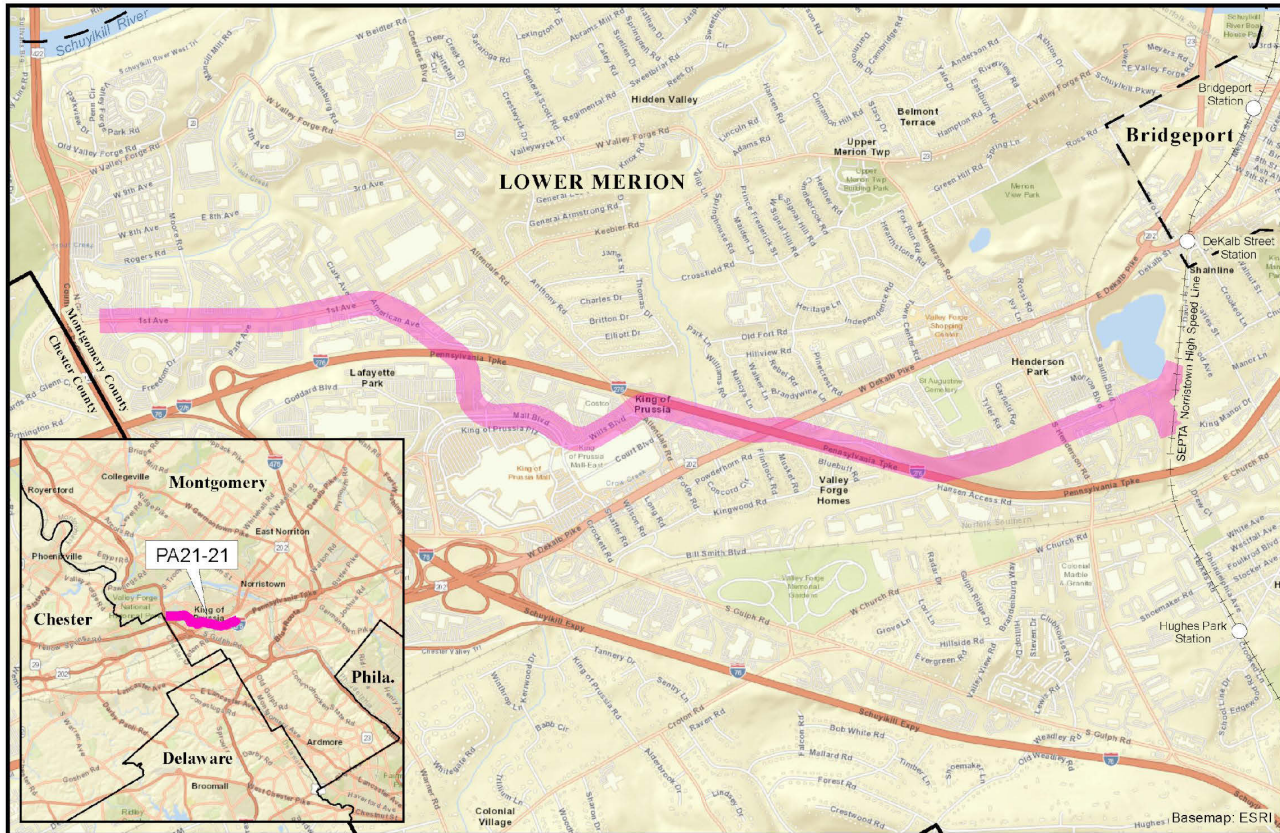
- **Add New NHSL-KOP Rail Extension Value Capture/Multimodal Accessibility Study - \$360K:**

- Dec. 15, 2020 FTA awarded SEPTA \$360K for pilot program for TOD Planning.
- Supports FTA's mission of improving public transportation for America's communities by providing funding to local communities to integrate land use and transportation planning with a new fixed guideway or core capacity transit capital investment.
- Study potential for Value Capture and the recommended multimodal accessibility network for stations.



# Projects of Significance

## PA21-21: Projects of Significance Norristown High Speed Line King of Prussia Rail Extension 30% Design Phase & Value Capture/Multimodal Accessibility Study Project





# TIP ACTION | Proposed - PA

**Request RTC Recommend Board approval of TIP Amendment**

## **Projects of Significance**

Increase funding by \$40,360,000

(\$36,800,000 FTA Section 5307/ \$360,000 FTA Section 5305/ \$3,096,000 State 1514/ \$104,000 Local) in FY21 for two projects.

KOP Rail Extension 30% Design - \$40M.

Add New NHSL-KOP Rail Extension Value Capture/Multimodal Accessibility Study - \$360K – These are additional to the region.

# Safety and Security Improvements

## SEPTA | Add New Project to Program

- **TIP Amendment**
- **Action:** Add a new \$585,000 FTA Section 5312 funded Mass Transit Vehicle Air Ventilation and Purification Technologies Evaluation project to the Safety and Security Improvements program for ERC in FY21; increase the FY21 ERC phase by \$1,000,000 (\$800,000 FTA Section 5307/ \$194,000 State 1514/ \$6,000 Local); and increase FY22 by \$2,947,000 (\$2,851,000 State 1514/\$96,000 Local).
- **Reason:** Develop models, test various mitigation strategies, and synthesize into recommendations for minimizing risk of COVID-19; and adjust programming to meet current needs.



# Safety and Security Improvements

## SEPTA | Add New Project to Program

- **Background:**

- The FTA 5312 funds are additional to the region
- SEPTA partnering with Drexel University to evaluate air ventilation and surface cleaning technologies in preventing the transmission of COVID-19.
- Designed to improve passenger safety and strengthen public confidence to return to mass transit during this public health emergency.
- Increase of regular funds is to meet current program needs.



# TIP ACTION | Proposed - PA

## Request RTC Recommend Board approval of TIP Amendment

### Safety and Security Improvements

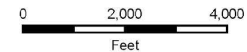
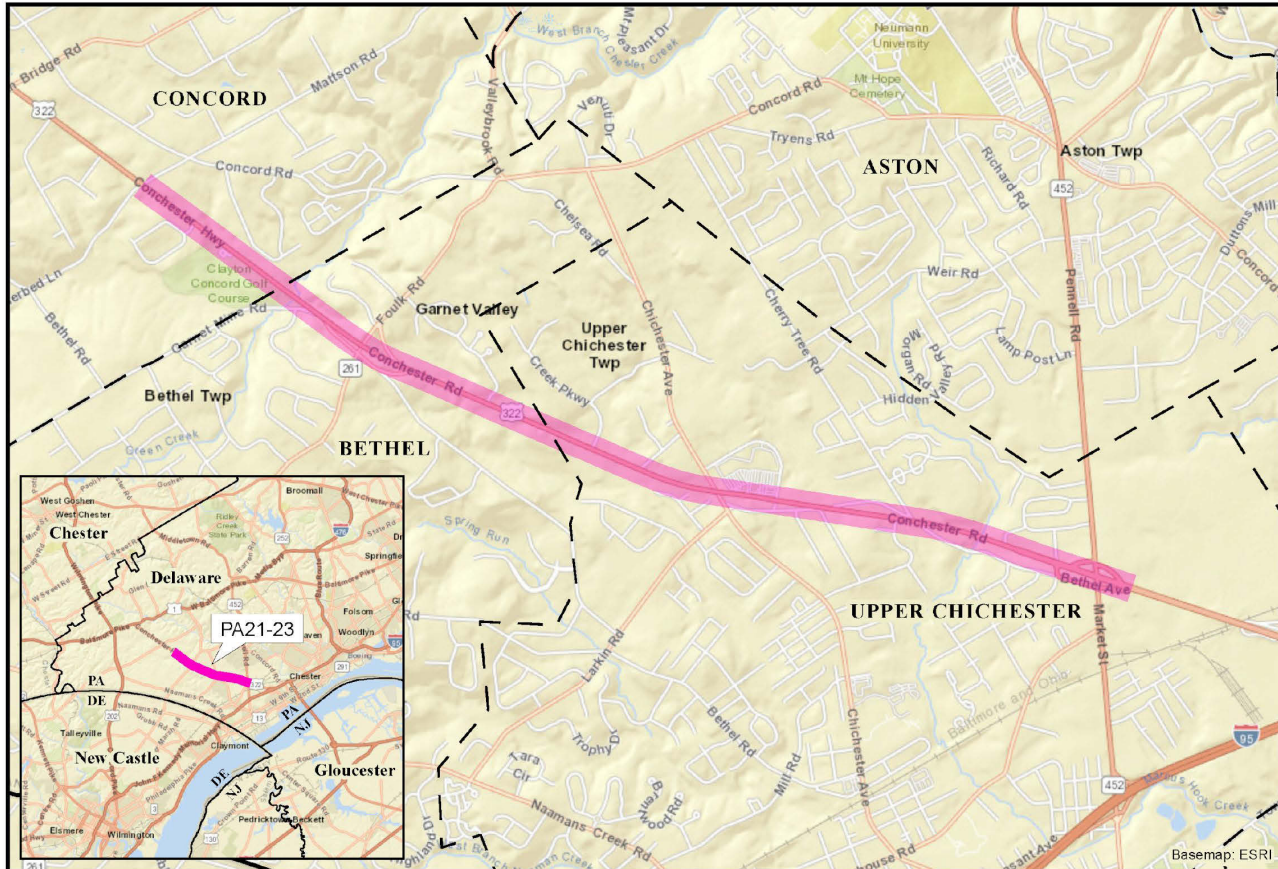
Add a new \$585,000 FTA Section 5312 funded Mass Transit Vehicle Air Ventilation and Purification Technologies Evaluation project to the Safety and Security Improvements program for FY21 ERC; increase the FY21 ERC phase by \$1,000,000 (\$800,000 FTA Section 5307/ \$194,000 State 1514/ \$6,000 Local); and increase FY22 by \$2,947,000 (\$2,851,000 State 1514/\$96,000 Local).

# US 322, Featherbed Lane to I-95 (Section 102)

Delaware County | Add ROW Back in to TIP & Reduce CON

- **TIP Amendment**
- **Action:** Add ROW phase back into TIP and reducing CON phase. ROW phase will increase by \$11,354,000 (\$9,083,000 SXF/\$2,271,000 State 581) in FY21 and CON will be reduced by \$8,422,000 (addition: \$5,912,000 STU; remove: \$12,650,000 SXF/\$1,684,000 State 581) in FY24.
- **Reason:** Change in fair market value cost compared to initial project estimate have led to increase ROW costs. CON cost estimate has been updated.
- **Background:** Additional ROW funding will fully cover ROW costs for Sections 102 & 103 property acquisitions.

## PA21-23: US 322, Featherbed Lane to I-95 (Section 102)



Existing 2-lane will be widened to 4-lanes, with a fifth center turn lane;  
New traffic signal constructed at Garnet Mine Rd & US322 eastbound ramps;  
Existing traffic signal at Bethel Road Connector and left turn lanes on US322 will be reconstructed.



# TIP ACTION | Proposed - PA

**Request RTC Recommend Board approval of TIP Amendment**

**US 322, Featherbed Lane to I-95  
(Section 102)**

Add ROW phase back into TIP and reducing CON phase. ROW phase will increase by \$11,354,000 (\$9,083,000 SXF/\$2,271,000 State 581) in FY21 and CON will be reduced by \$8,422,000 (addition: \$5,912,000 STU; remove: \$12,650,000 SXF/\$1,684,000 State 581) in FY24.



# Thank You

Connect With Us!



[www.dvrpc.org/TIP](http://www.dvrpc.org/TIP)



# EXPO

## EXPERIMENTAL POP-UPS



**Project Update: Wheels on Windsor**  
Regional Technical Committee | February 9, 2021



EXPERIMENTAL POP-UPS

**Inaugural year of a sustaining program to help communities plan and execute pop-up, or demonstration projects (aka tactical urbanism)**

- Placemaking & transportation purpose
- Up to three locations
- Two in PA, one in NJ
- Not advertised or competitive



# Wheels on Windsor

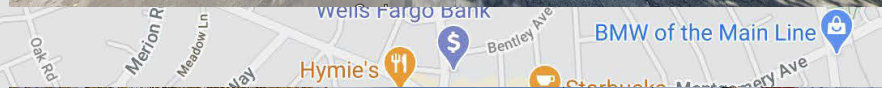
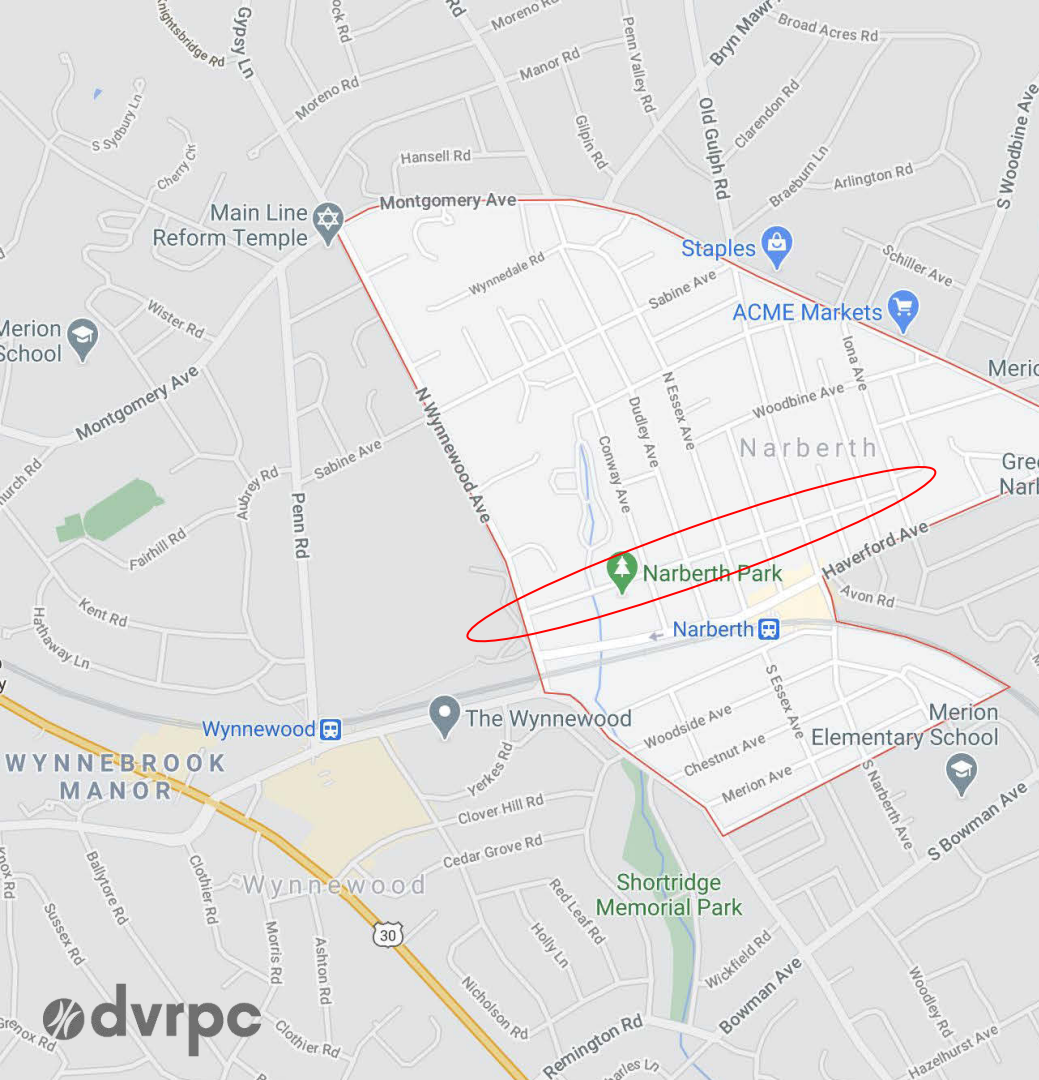
Ten-day Pilot  
November 20-30, 2020

 dvrpc



**"If a picture is worth a thousand words, a prototype is worth a thousand meetings."**

*- Tom & David Kelley*



## WoW Working Group

**Narberth Borough Council:** Project sponsor, funding for materials

**Narberth Borough Staff:** Project set-up and removal by Public Works Department, web page host

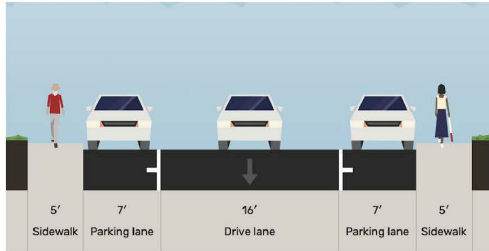
**Narberth Cycling Club:** Communications, ambassadorship during pilot

**Delaware Valley Regional Planning Commission:** Design, travel monitoring, community feedback via project survey

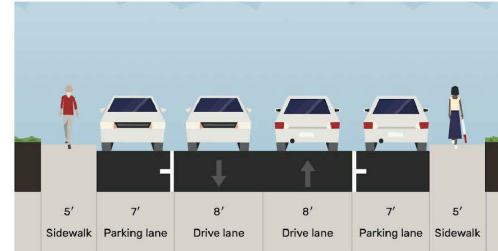
# Existing Windsor Avenue Cross Sections

DRAFT 10/2/2020

One Way Essex Ave to Iona Ave.

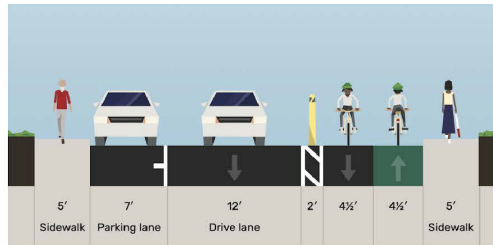


Two Way Wynnewood Ave to Essex Ave.



# Proposed Windsor Avenue Cross Sections

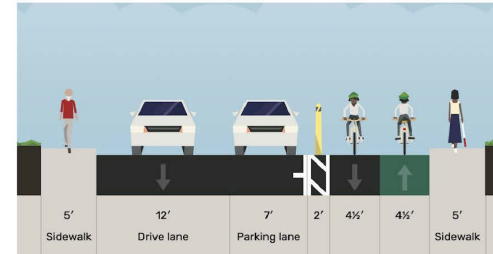
Two-Way Cycle Track



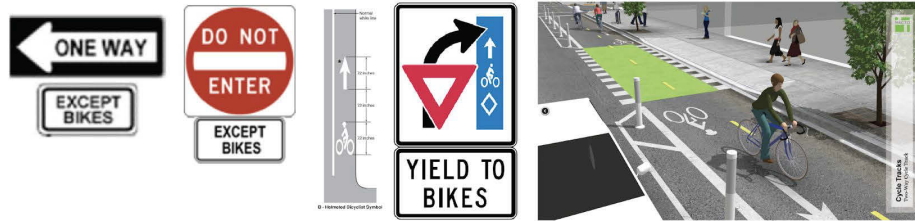
NACTO Recommendations

- 8' - 12' Cycle track width
- 3' Buffer (to prevent dooring)
- Use of bollards, planters or signs for physical protection in buffer
- Dashed yellow line in center
- 30' no parking zone at intersections for visibility
- Clear site triangles: 20' at minor cross streets, 10' at driveways
- "Yield to Bikes" and painted pavement in conflict areas
- Striping through intersections

Two-Way Parking-Protected Cycle Track



Signage and pavement markings



# WHEELS ON WINDSOR

## PAINT AND BUFFER PLAN

### Standard Paint Instructions

#### Solid White Lines

Color: **White**  
Location: 9' from curb and 11' from curb  
Width: 4"  
Do not paint over existing crosswalks or intersection crossing markings.

#### Dashed Yellow Line

Color: **Yellow**  
Location: 4.5' from curb edge  
Width: 4"  
Length: 3'  
Spacing: 12' on-center  
Do not paint over existing crosswalks or intersection crossing markings.

#### Intersection/Driveway Crossing Markings

Color: **Green**  
Width: 9'  
Length: 2'  
Spacing: 5' on-center  
Do not paint over existing crosswalks

### Straw Bale Instructions

#### Straw Bales

Symbol:   
Size: Approx: 1.5' x 3'  
Placement: 15' on-center



### 11/23/20 Design Revisions (noted in purple on plan)

- Add Sharrow to middle of Windsor Avenue travel lane, 20-40' west of crosswalk at Forrest Avenue ⇨⇨
- Paint stop bar on Windsor Ave at Narberth Avenue, just before (west) of "STOP" pavement marking

# WHEELS ON WINDSOR

## PREP AND SIGN PLAN

### 11/23/20 Design Revisions (noted in purple on plan)

- Cut "Turning Vehicles" yellow portion of sign off of yielding signs
- Add small "Stop" signs to hay bales (2) facing westbound cyclists at Narberth and Forrest Avenues and (1) for eastbound cyclists at Narberth Avenue
- Move "Bike Lane Ahead" sign at Forrest Ave from hay bale to existing sign post on northwest corner of intersection

#### Cover parking meters

Using plastic bags or other opaque material, cover the parking meters on the north side of Windsor Ave. between Forrest Ave. and Narberth Ave. to indicate no parking.

#### Place "Except Bikes" sign on existing "Do Not Enter" sign

Existing sign is located at the northwest corner of Windsor Ave. & Narberth Ave.



#### Place Turning Vehicles Yield to Bikes/Peds sign

Must be located on northwest corner of Windsor Ave. & Narberth Ave.



Must be visible to drivers traveling south on Narberth Ave.

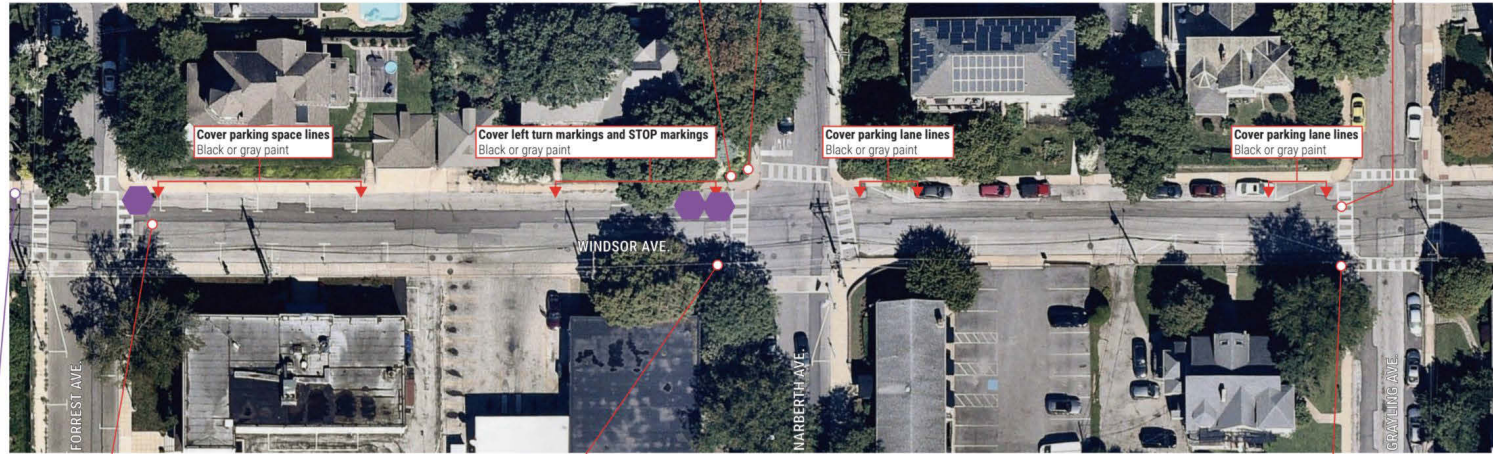
#### Place Bike Lane Ahead sign and Bike Lane Ends sign

Use a straw bale in the bike lane buffer to place signs at beginning/end of bike lane.



Bike Lane Ahead sign must face west.

Bike Lane Ends sign must face east



Cover parking space lines  
Black or gray paint

Cover left turn markings and STOP markings  
Black or gray paint

Cover parking lane lines  
Black or gray paint

Cover parking lane lines  
Black or gray paint

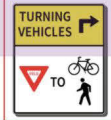


#### Place Bike Lane Ahead sign and Bike Lane Ends sign

Use a straw bale in the bike lane buffer to place signs at beginning/end of bike lane.

Bike Lane Ahead sign must face west.

Bike Lane Ends sign must face east



#### Place Turning Vehicles Yield to Bikes/Peds sign

Located on southwest corner of Windsor Ave. & Narberth Ave.

Must be visible to drivers traveling east on Windsor Ave.

#### Informational signs

There are 2 informational sign designs, and 2 copies of each design. Each printed sign should be placed on a sandwich board. Each block should get one of each sign.

The sandwich boards may be placed either on the sidewalk or in the buffer, but should be oriented to be visible to cyclists and pedestrians.

#### Info. Sign 1



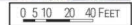
#### Info. Sign 2



#### Place Turning Vehicles Yield to Bikes/Peds sign

Located on southwest corner of Windsor Ave. & Graying Ave.

Must be visible to drivers traveling east on Windsor Ave.



# WHEELS ON WINDSOR

NOV 20-30, 2020  
Bikeway Demonstration

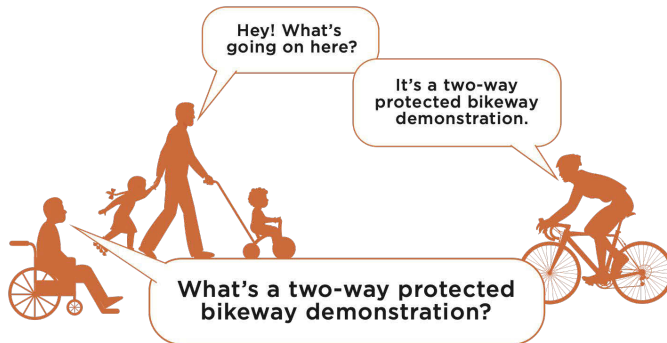


Experience it and  
take the survey!



SCAN ME

Wear a face mask and maintain at least 6' separation from others!



Wheels on Windsor lets us try out temporary roadway improvements for minimal cost and resources while gathering data and feedback.

This bikeway makes the road safer for everyone by separating people on bikes from cars and pedestrians using a buffer with a physical barrier—in this case, straw bales!

So, what do I do?



SCAN ME

Bring your family and friends and experience it in any mode of transportation you want!

Then give feedback by scanning the QR code for an online survey!

\*\* For a hard copy of the survey, please contact Narberth Borough at 610-664-2840.



More info: Visit [www.narberthpa.gov/bike-lanes](http://www.narberthpa.gov/bike-lanes) or email [info@narberthpa.gov](mailto:info@narberthpa.gov)







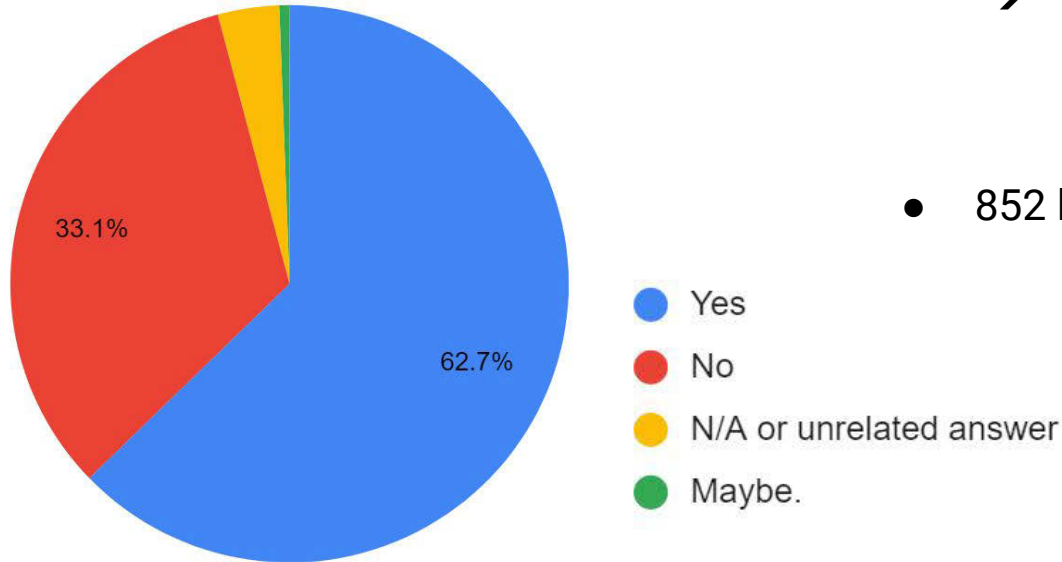






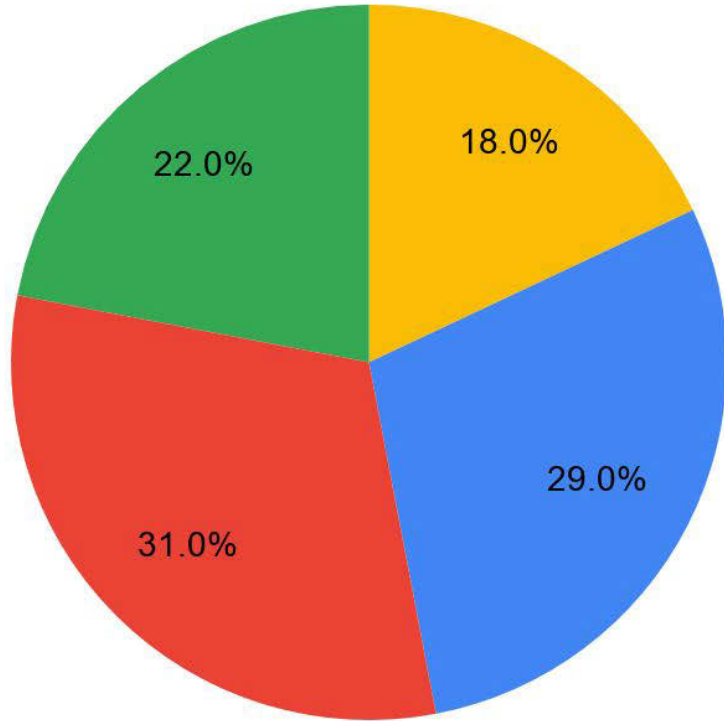
# WoW Project Metrics

Would you like to see more pop-up projects in Narberth?



- ~185 survey responses
  - “It should have been longer”
  - “At the east end, it’s not 100% clear how bikes should turn right or cars should turn left safely.”
- 852 bikes counted during the pop-up

On-street bicycling can feel safe or stressful depending on how a street is designed. Which changes would you support in order to have safer bicycle facilities in Narberth?



- Minor changes only; slow vehicular traffic down and add bicycling signs and striping to pavement to remind motorists of bicyclists' presence on streets.
- Go big on a couple of streets; bicyclists need to have space and protection.
- Don't change a thing; Narberth streets are safe for bicyclists so they should ride in the same lanes as cars.
- Go big everywhere; bicyclists need space and physical protection on almost all Narberth roads. Consider limiting cars from some streets, reduce parking and two-way streets throughout Narberth in order to make

Narberth respondents

## **Lessons Learned**

- Engaged stakeholder(s) with connections in the community
- Financial and time commitment
- A focused objective helps drive decisions
- Expect to maintain and tweak things
- Projects will provoke conversation and energy

# EXPO

EXPERIMENTAL POP-UPS

## Projects in the Pipeline:

### Hatboro, PA

**Proposed conversion of York Road shoulder to a temporary, shared pedestrian & bicycle lane, Borough of Hatboro**

The goal of the project is to reconfigure the 8' shoulders along York Road to include space for pedestrians and bicyclists. The desire for this project grew out of Hatboro's comprehensive plan update, and the improvements are supported by Montgomery County.

*Temporary timeline: ASAP through November 2nd or soon after*

**Existing Conditions:**

- Speed limit: 25 MPH
- Project length: 1/2 mile
- AADT 7,825 NB, 7,685 SB (August, 2016)
- DVRPC traffic count on York Road, just south of Madison Avenue

*Image Source: Brookline Transportation Department*

**Shoulder Reconfiguration**

5' proposed Bikeway lane  
3' proposed buffer  
No change to vehicular lanes  
Painted buffer  
Flexpost delineators  
3.5' Sidewalk  
50' Cartway  
3.5' Sidewalk  
10-40 ft. spacing (FHWA)

**Existing Cartway**

*Image Source: Google Streetview*

**dvrpc**  
8/19/2020

Existing and proposed bus stops require stepping off curbs from ADA compliant; proposed conditions would require passengers to cross five feet of the shared bikeway lane.

### Chester, PA

**New shared space delineated with traffic cones in Brookline, Massachusetts**

*Image Source: Brookline Transportation Department*

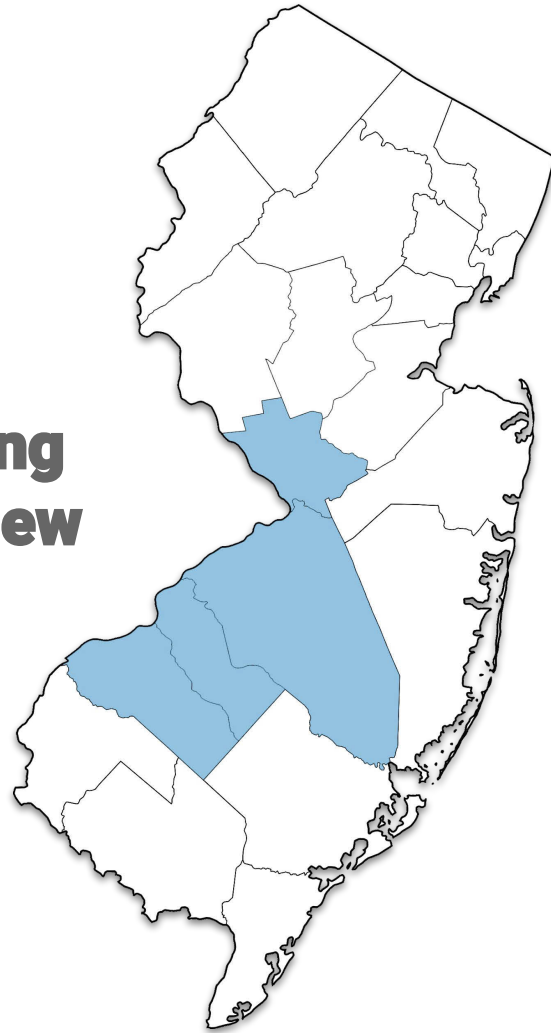
Image capture August 2019. © 2020 Google - United States - Terms - Report a problem

### Newtown Square, PA



**EXPO**  
EXPERIMENTAL POP-UPS

**We're still looking  
for this year's New  
Jersey project.**



# EXPO

EXPERIMENTAL POP-UPS



**Betsy Mastaglio**  
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**Logan Axelson**  
[laxelson@dvrpc.org](mailto:laxelson@dvrpc.org)

**Cassidy Boulan**  
[cboulan@dvrpc.org](mailto:cboulan@dvrpc.org)





# **Public Participation Task Force (PPTF)**

**Shoshana Akins**  
**sakins@dvrpc.org**


*February 9, 2021*

# What is the PPTF?

- x The PPTF is **DVRPC's ongoing forum for public involvement in regional planning**, been around since the 19070's
  - x Previous iteration was the Regional Citizens Committee (RCC), disbanded. Current membership-based version began in 2013
- x Received a **commendation during 2018 federal certification review**



# Goals of PPTF



**Provides ongoing public access to the regional planning process**


Meetings happen every 5-6 weeks and are not dependant on project timelines

**Assists the Commission to implement public outreach strategies**

Public participation is part art, part science; need to test and improve

**Empower residents to get involved in the planning process**

Members can engage with the Commission and bring knowledge back to their communities





# Member selection process



## Targeted Outreach

Underrepresented communities are contacted by DVRPC staff to encourage people to apply

## Selection Committee

PPTF applications are reviewed by non-DVRPC staff, members are selected in a committee meeting

## Regional Diversity

Current members + applicants voluntarily report race, ethnicity, age, gender, + disability information.





**39 members in 2021 cohort**

Representation in every county



**87 regional organizations**

That members are connected to



**10 meetings scheduled**

For 2021 with additional engagement possible

# Member demographics

<b>Race/Ethnicity</b>	<b>2021 PPTF</b>	<b>Region</b>
<b>White</b>	54%	60%
<b>Black or African-American</b>	28%	28%
<b>Asian or Pacific Islander</b>	8%	6%
<b>American Indian or Alaskan Native</b>	0%	0.2%
<b>Hispanic, Spanish Origin</b>	10%	12%



# Member demographics

Age	2021 PPTF	Region
19 and younger	0%	10%
20-24	8%	6%
25-34	28%	18%
35-44	5%	22%
45-54	13%	17%
55-64	30%	15%
65 and older	8%	12%

# PPTF curriculum

- × 9-10 meetings a year
- × Half are members-only meetings, half are open to all
- × Every year host meetings on critical docs: **Long Range Plan, Transportation Improvement Program**, and **Work Program** workshop



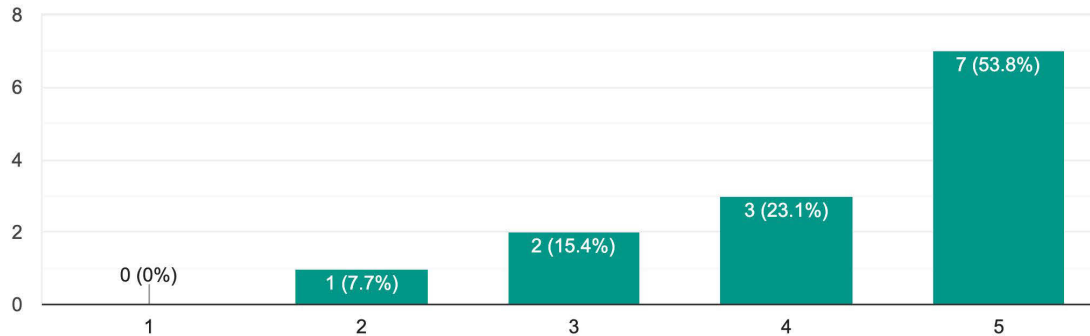
January 2020

# PPTF curriculum

- ✗ The curriculum is evaluated twice per year to gauge member comprehension + interest
- ✗ Most members feel informed about TIP, LRP, + Work Program; repetition is vital

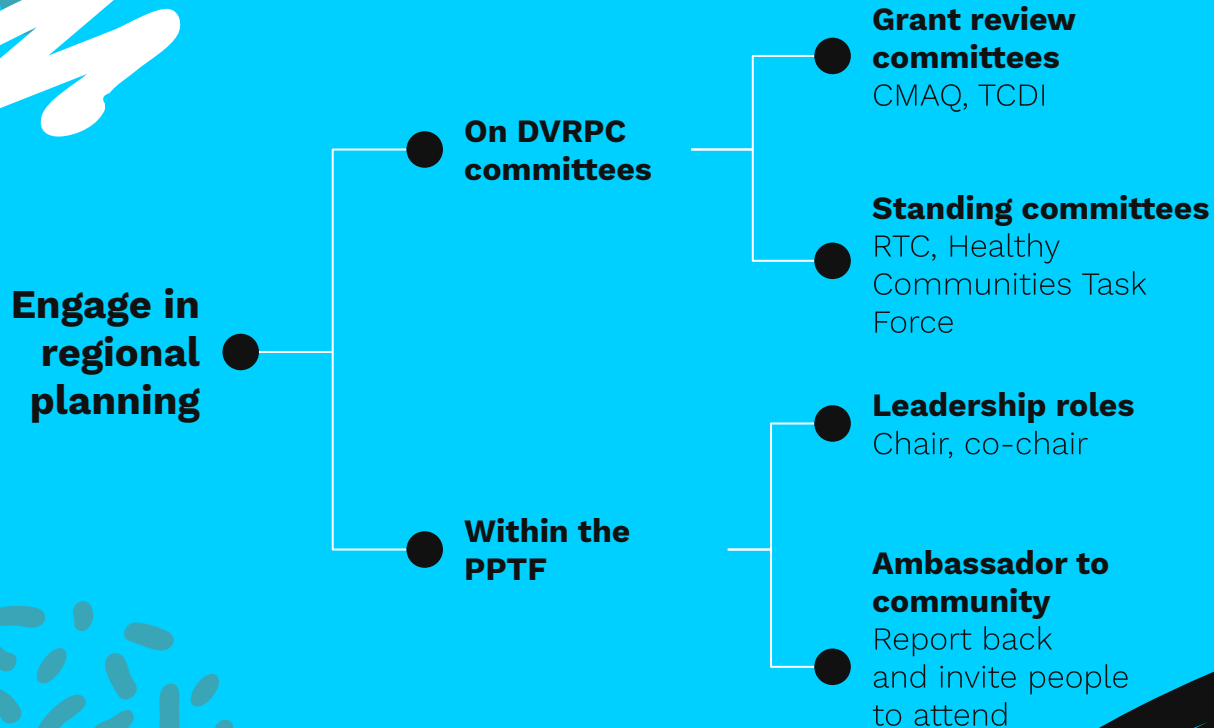
How informed do you feel about the Long-Range Plan (LRP)?

13 responses



**Survey from July 2020**

# Roles for PPTF members





## Opportunities abound

The PPTF is a great resource for DVRPC + partners to create, host, and sustain more meaningful public engagement.





# Thanks!

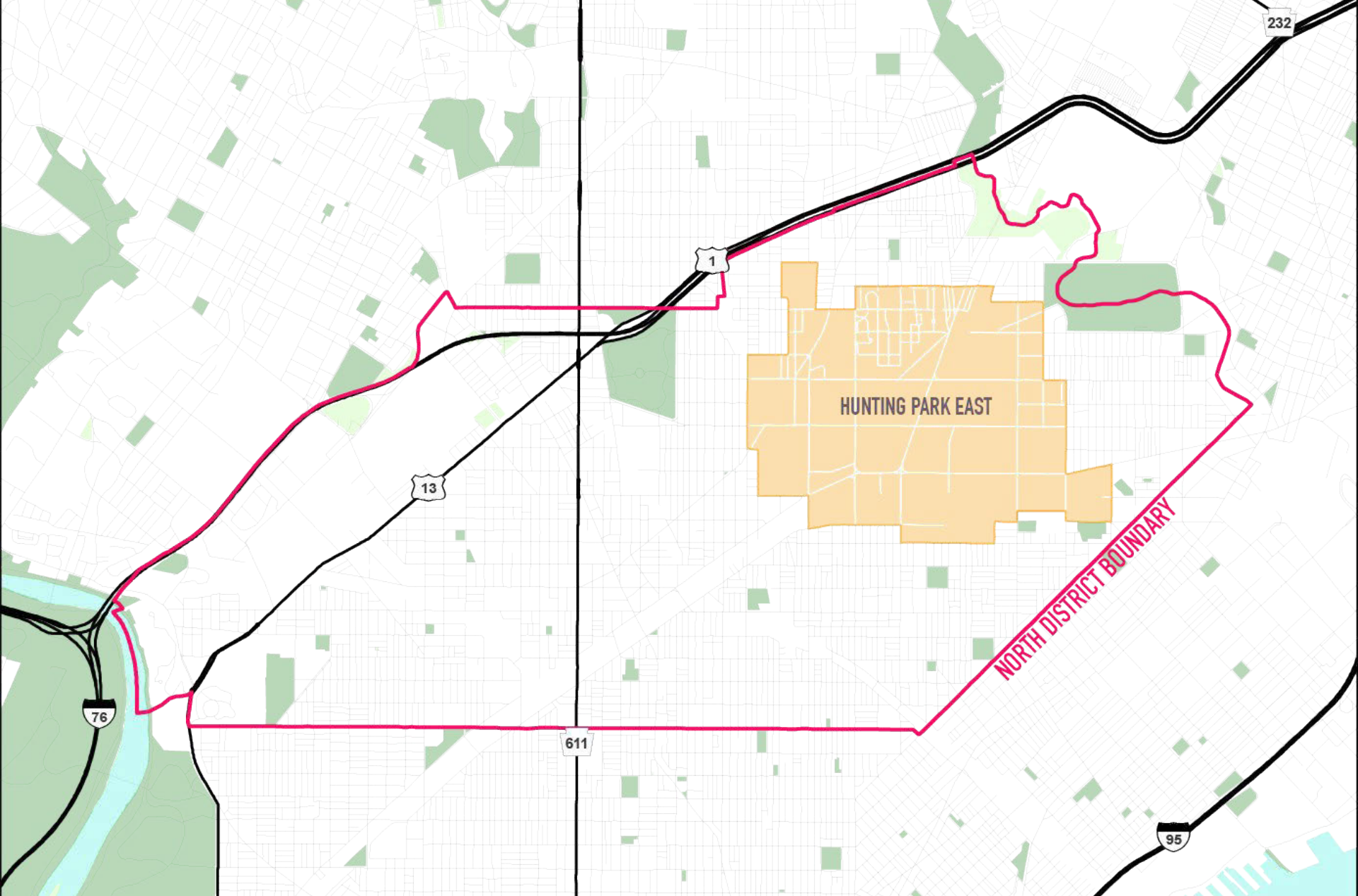
**Shoshana Akins**  
**sakins@dvrpc.org**



# HUNTING PARK EAST FREIGHT ACCESS STUDY



Regional Technical Committee  
February 9, 2021







# Project Objectives

- Understand the current and future industrial uses in the Hunting Park East area;
- Define a draft freight access network for Hunting Park East as an example for implementing a truck route designation citywide; and
- Provide design recommendations that improve the safety of all road users.

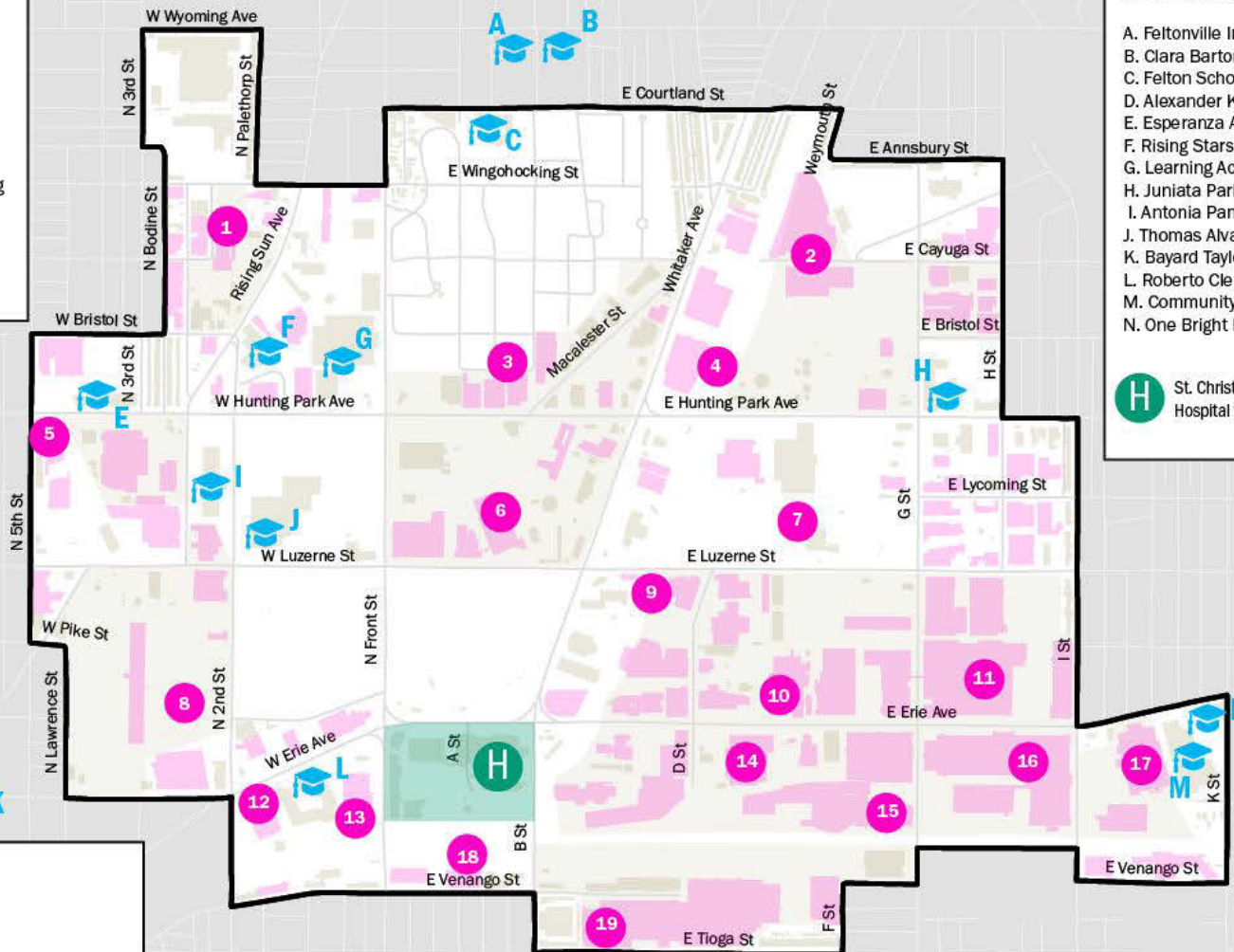
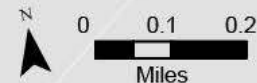
### Freight Generating Businesses

1. Richard Burns Recycling
2. SIMKAR Lighting (Out of Business)
3. Worldwide Windows
4. Boathouse Sports
5. Bentech
6. Julius Silvert
7. PECO
8. Tory DePaul and Son
9. Alliance Surface Technologies
10. Menasha Display Group
11. Coca Cola
12. Verizon
13. Allen Brothers Wholesale
14. Elegant Furniture/ Emes Bedding
15. Purolite Company
16. Shift Capital
17. General Electric
18. G&P Beer Distributor
19. Good Lad Apparel/ Case Paper

### Schools and Hospitals

- A. Feltonville Intermediate School
- B. Clara Barton Elementary School
- C. Felton School of Arts and Sciences
- D. Alexander K. McClure Elementary
- E. Esperanza Academy Charter
- F. Rising Stars Preschool
- G. Learning Academy
- H. Juniata Park Academy
- I. Antonia Pantoja Charter
- J. Thomas Alva Edison High School
- K. Bayard Taylor School
- L. Roberto Clemente Middle School
- M. Community Academy of Philadelphia
- N. One Bright Ray Community HS

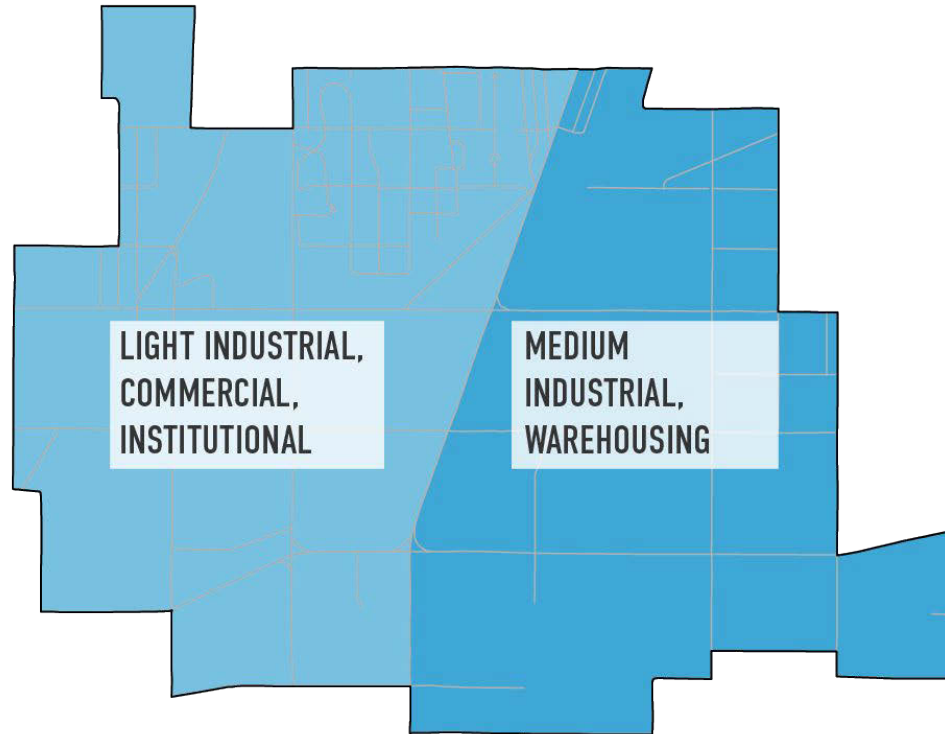
**H** St. Christopher's Hospital for Children



- Industrial Establishment
- Identified Freight Generator

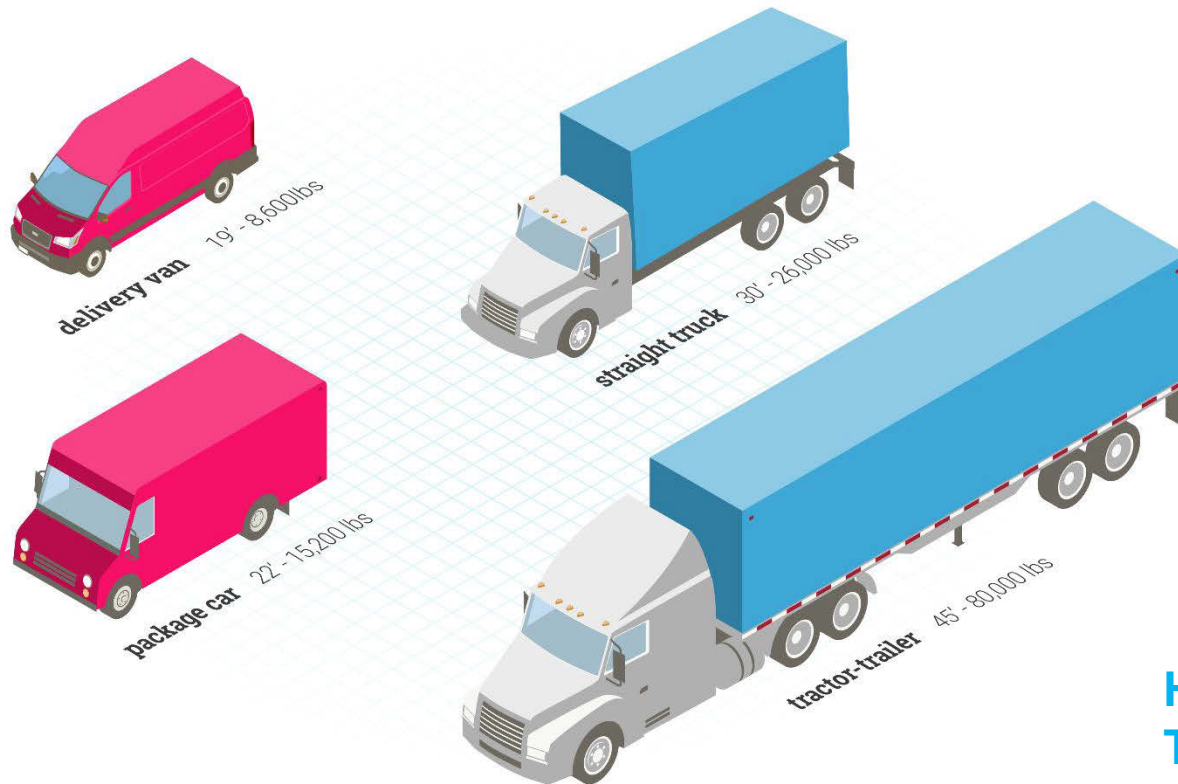
Source: CoStar 2020

# NORTH DISTRICT PLAN INDUSTRIAL LAND RECOMMENDATIONS



# Typical Truck Sizes

## Medium Trucks

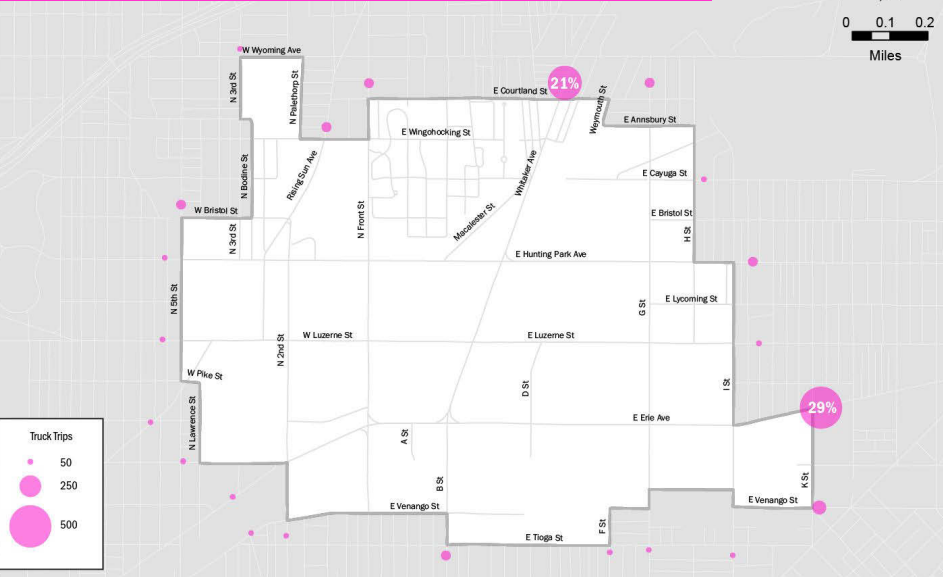
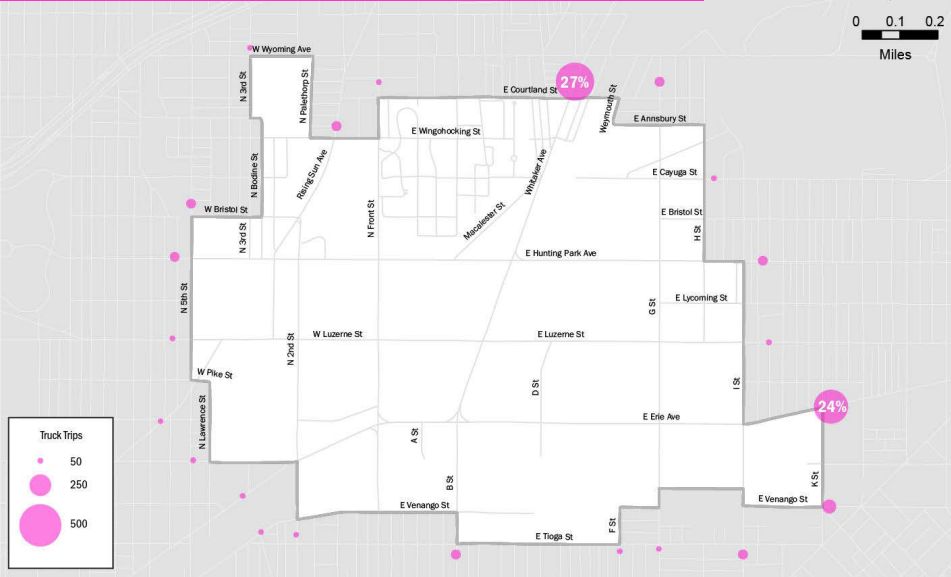


## Heavy Trucks

# INBOUND HEAVY TRUCK TRIPS



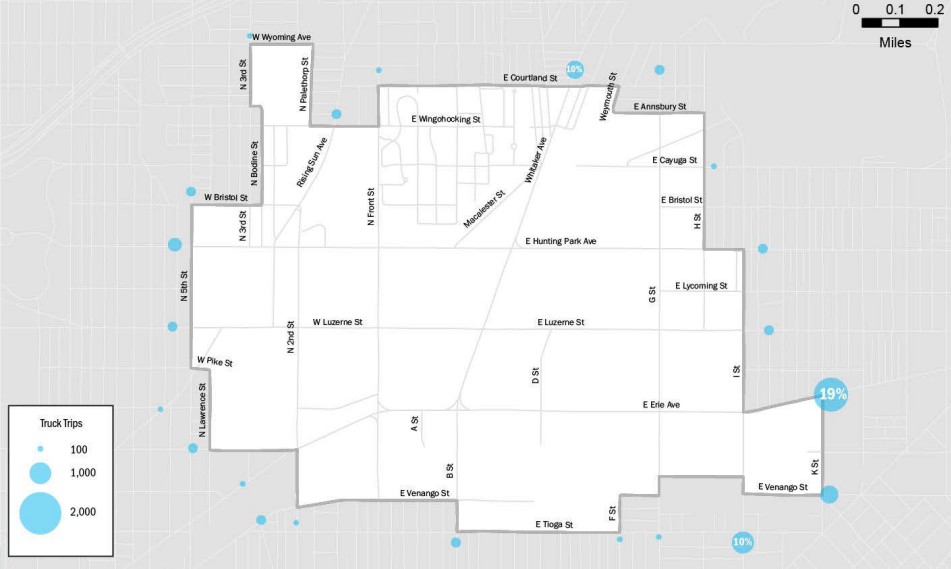
# OUTBOUND HEAVY TRUCK TRIPS



# INBOUND MEDIUM TRUCK TRIPS

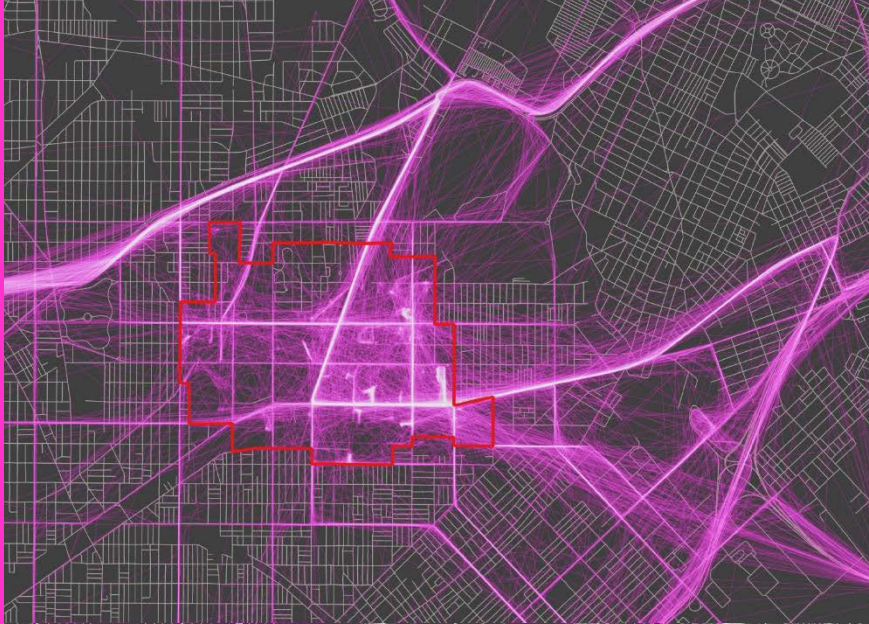


# OUTBOUND MEDIUM TRUCK TRIPS

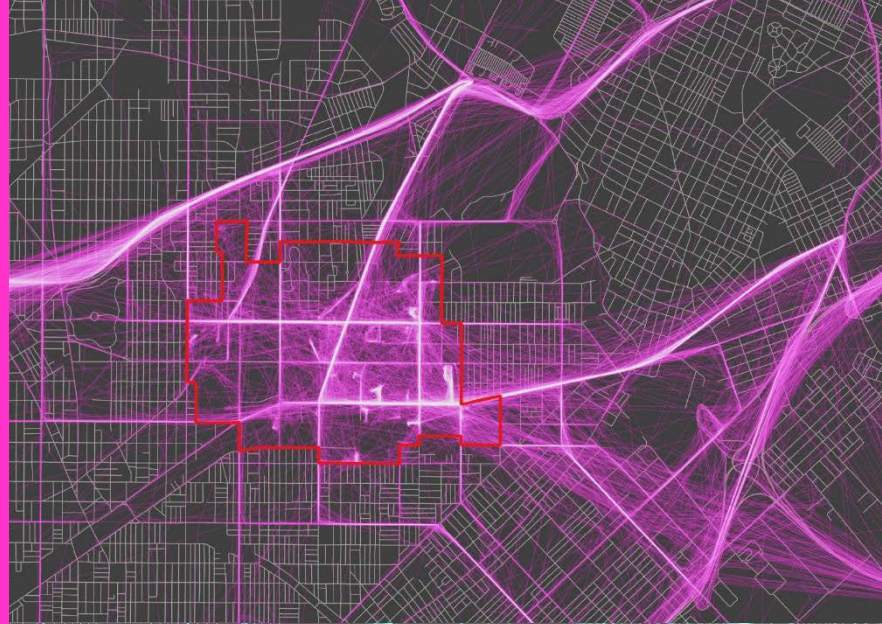


Source: DVRPC analysis of INRIX Trips (4 weeks from 2019)

INBOUND HEAVY TRUCK



OUTBOUND HEAVY TRUCK



INBOUND MEDIUM TRUCK



OUTBOUND MEDIUM TRUCK



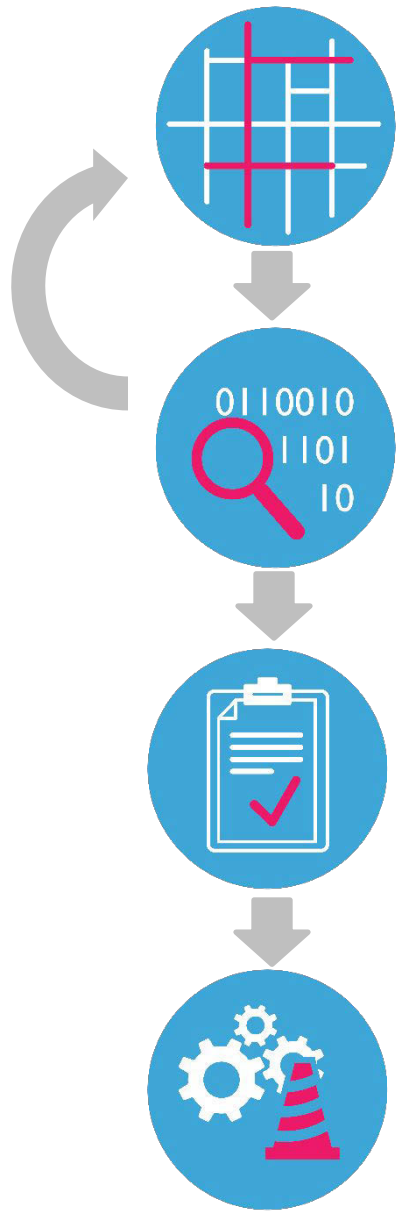
# Truck Route Designation

# Why Designate Truck Routes?

- Forces us to better understand the nature and distribution of truck activity
- Informs investment in the transportation system to ensure safe movement of all users

**Truck route definitions are not for the sole benefit of trucks**





## Preliminary Screening

- Understand primary generators and connectivity.
- Preliminary network matched to existing classification system.

## Data Evaluation

- Quantify route segment activity.
- Confirm route segment role/use.

## Review and Adoption

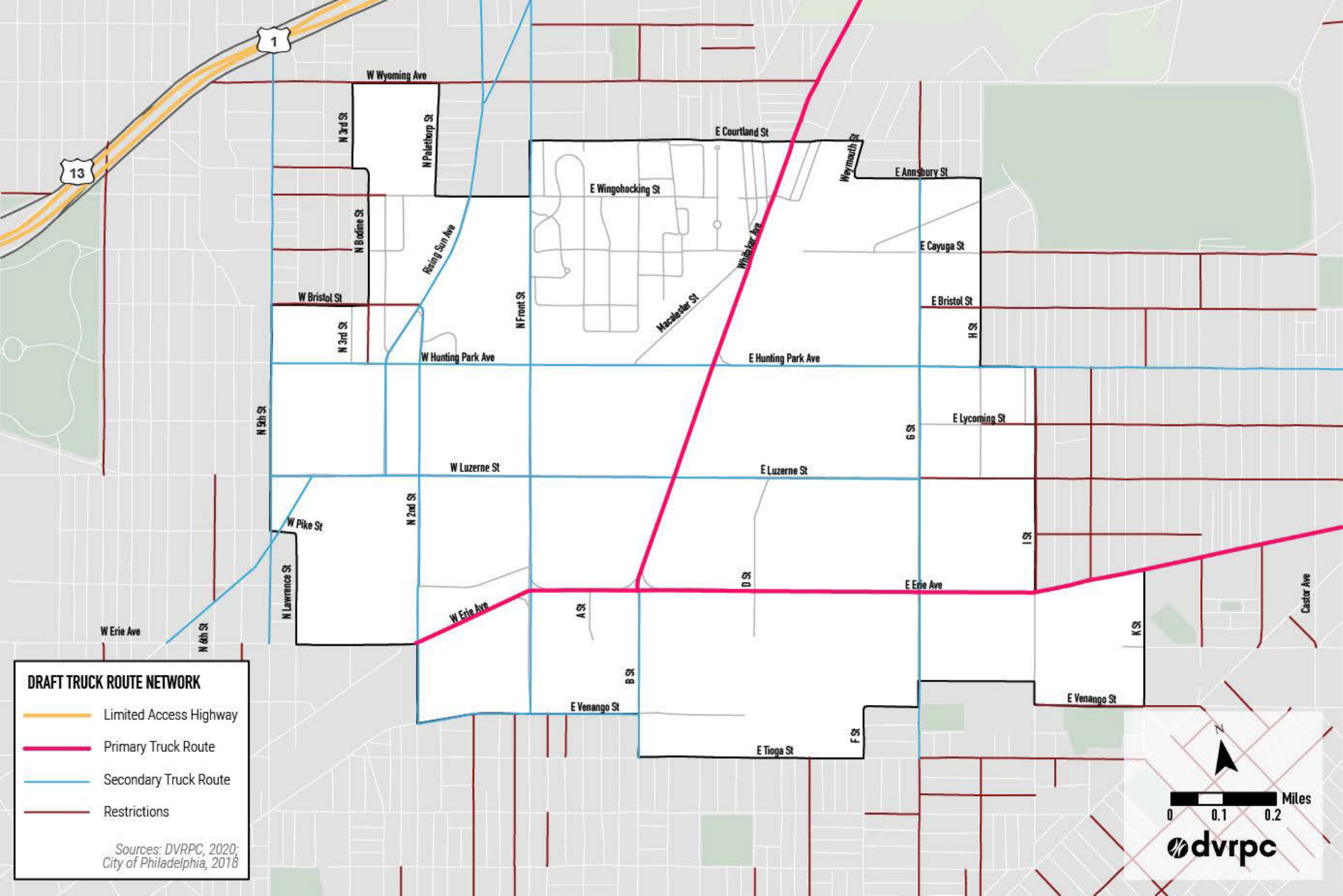
- Educate the public and promote buy-in on route designation.
- Formally adopt the truck route components.

## Application

- Communicate new route designation to key stakeholders.
- Implement improvements for truck freight.

# Truck Network Components

- Truck Restricted Routes
- Truck Appropriate Routes
  - Regional Freight Corridors (Limited Access)
  - Primary Routes
  - Secondary Routes
  - First/Last Mile Connectors

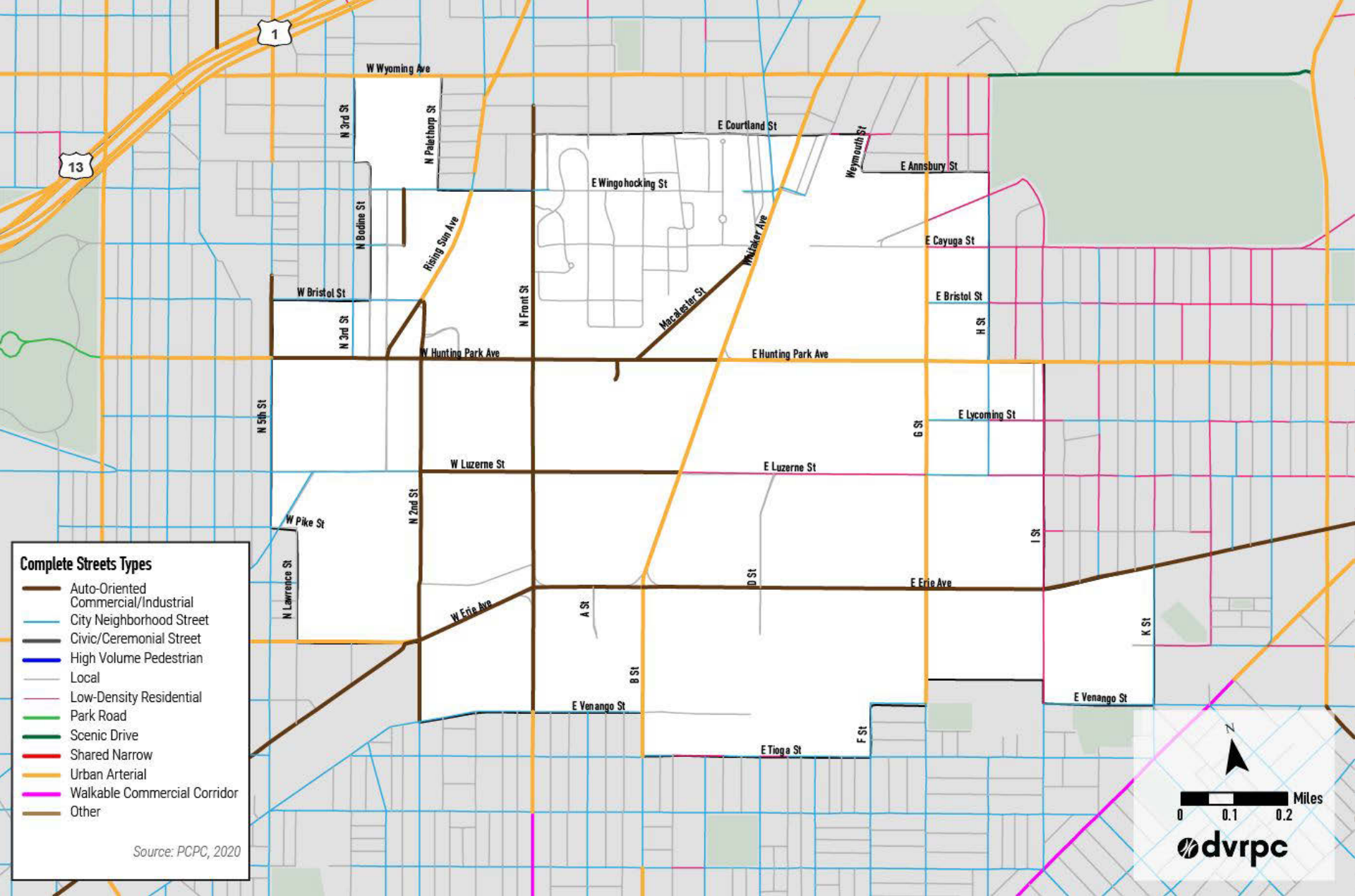


# dvrpc Draft Truck Route Recommendations

# Philadelphia Truck Route Planning Guidebook

# Complete Streets Integration

Truck Route Class	Complete Streets Sub-class
Limited Access Highway	N/A
Primary Truck Route	Auto-Oriented Commercial/Industrial
	Urban Arterial
	Walkable Commercial Corridor
	Civic/ Ceremonial Street
Secondary Truck Route	Auto-Oriented Commercial/Industrial
	Urban Arterial
	Walkable Commercial Corridor
	High-Volume Pedestrian
	City Neighborhood Street
Last Mile Connector	Auto-Oriented Commercial/Industrial
	Urban Arterial

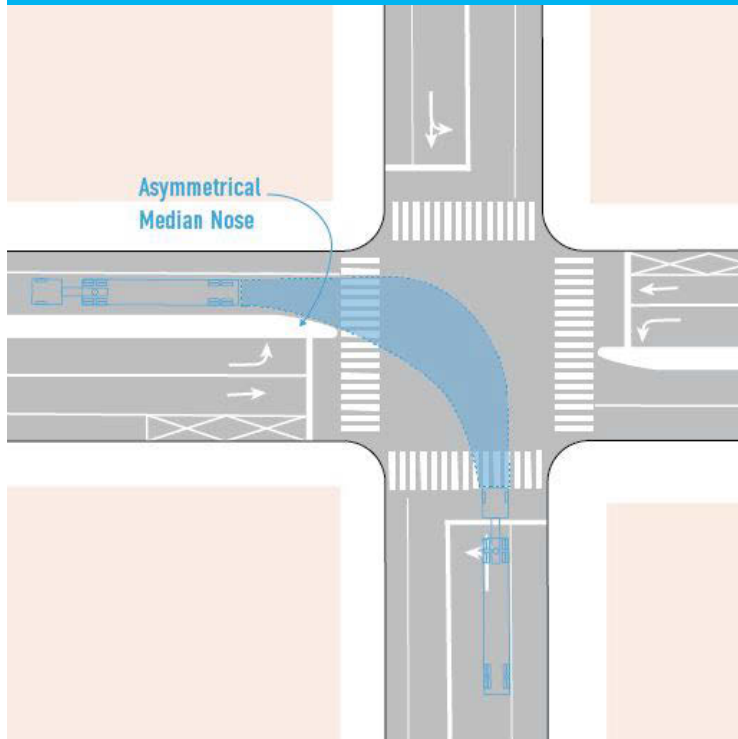


	Primary Truck Routes				Secondary Truck Routes					Last Mile Connector	
	Auto-Oriented Commercial/Industrial	Urban Arterial	Walkable Commercial Corridor	Civic/Ceremonial Street	Auto-Oriented Commercial/Industrial	Urban Arterial	Walkable Commercial Corridor	High-Volume Pedestrian	City Neighborhood Street	Auto-Oriented Commercial/Industrial	Urban Arterial
<b>Road Design Considerations</b>											
<b>4.10 Truck Turning Movement (New)</b>											
4.10.1 Parking Restrictions at Intersections	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority
4.10.2 Alternative Median Nose	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	Appropriate in Limited Circumstances	Appropriate in Limited Circumstances
4.10.3 Recessed Stop Lines	Appropriate in Limited Circumstances	Appropriate in Limited Circumstances	Appropriate in Limited Circumstances	Appropriate in Limited Circumstances	Appropriate in Limited Circumstances	Appropriate in Limited Circumstances	High Priority	High Priority	High Priority	Appropriate in Limited Circumstances	Appropriate in Limited Circumstances
4.10.4 Mountable Curbs	-	-	Appropriate in Limited Circumstances	Appropriate in Limited Circumstances	-	-	High Priority	High Priority	High Priority	Appropriate in Limited Circumstances	Appropriate in Limited Circumstances
4.10.5 Delineated Conflict Areas	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority	High Priority

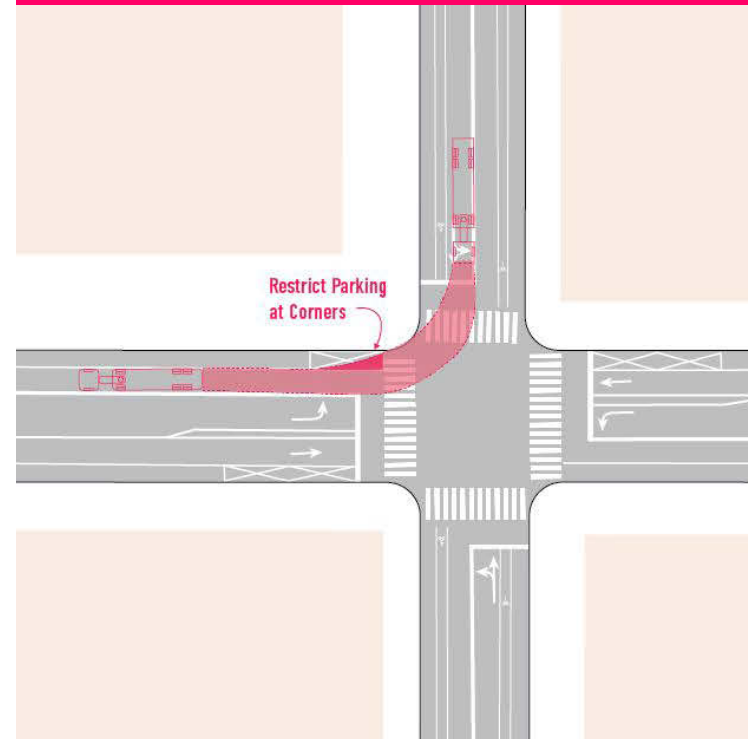
- High Priority
  - Low Priority
  - Appropriate in Limited Circumstances
  - Not recommended
- Change from Philadelphia Complete Streets Handbook Design Matrix

# Design Considerations

Alternative Median Nose



Restricted Parking at Intersections





**Thank You**

**Kristen Scudder**  
Senior Transportation Planner  
Office of Freight and Aviation

# Other Study Recommendations

- Review the location of truck wayfinding signage
- Truck parking/queueing



# Direct Bus Expansion Feasibility

Regional Technical Committee  
February 9, 2021



# Project Background

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SEPTA is considering expanding **Direct Bus** service as part of its planned systemwide bus network reconsideration.

DVRPC has identified corridors within the SEPTA service area where future limited stop service would be valuable and **scored them based on how successful we would expect them to be.**



Photo Source: SEPTA

# What Makes Direct Bus Service Successful?

---

Frequent Service

Limited Stops at Clear Nodes of Activity

Overlaid with Local Service

Ability to Pass Local Service

Rail Station or Transportation Center Feeder

Complementary Land Uses

TOD Potential

Municipal and County Cooperation

Economic Momentum For New Service

Possibility to Scale Up to BRT

# What Can We Quantify and Rank?

---

*Frequent Service*

**Limited Stops at Clear Nodes of Activity**

**Overlaid with Local Service**

**Ability to Pass Local Service**

**Rail Station or Transportation Center Feeder**

*Complementary Land Uses*

*TOD Potential*

**Municipal and County Cooperation**

*Economic Momentum For New Service*

**Possibility to Scale Up to BRT**

# Summary of Analysis

- 15 corridors including portions of 31 SEPTA routes, selected by the steering committee.
- 3 weighting schemes where higher value is placed on varied metrics:
  - *Operations*
  - *Roadway Characteristics*
  - *Reverse Commute*
- Data collected in half-mile segments, then averaged to score each corridor.



Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

# Datasets Used for Corridor Scoring



<b>Demographics</b>	<b>Population</b>	American Community Survey (ACS): population by tract
	<b>Proxies for Transit Riders</b>	Census Transportation Planning Products (CTPP): <ul style="list-style-type: none"><li>• Means of transportation by tract for tract 0-1 car households by tract</li></ul>
	<b>Employment</b>	National Establishment Time Series (NETS): Number of employees by tract
	<b>Major Destinations</b>	NETS: employers with 200+ employees
<b>Transit</b>	<b>Total Ridership</b>	SEPTA Automated Passenger Counter (APC) Spring 2019: boards + alights by stop
	<b>Reliability</b>	DVRPC Surface Transit Reliability Score: composite of on-time performance, scheduled transit speeds, and the ratio of peak-period vs. free-flow travel time.
<b>Physical Characteristics</b>	<b>Walkability</b>	PennDOT: Intersection density within $\frac{1}{2}$ mile of a bus stop DVRPC: Sidewalk density within $\frac{1}{4}$ mile of a bus stop
	<b>Roadway</b>	PennDOT: Traffic signals per-mile along a bus route PennDOT: Lane count by road segment and aerial imagery



# Weighting Scheme: Operations



Population by tract (ACS)	1
Work in a Tract Along a Bus Corridor and (CTPP): Travel from Home to Work on Transit & 0-1 car households by tract	0.25/0.25
Live in a Tract Along a Bus Corridor and (CTPP): Travel from Home to Work on Transit & 0-1 car households by tract	0.25/0.25
National Establishment Time Series (NETS): # of employees by tract	0.5
NETS: employers with 200+ employees	0.5
<b>APC 2019: boards + alights by stop</b>	<b>2.0</b>
<b>DVRPC Surface Transit Reliability Score</b>	<b>2.0</b>
PennDOT: Intersection density within ½ mile of a bus stop	0.5
DVRPC: Sidewalk density within ¼ mile of a bus stop	1.0
PennDOT: Traffic signals per-mile along a bus route	0.5
PennDOT and Aerial Imagery: Lane count by road segment	1.0

The Operations weighting scheme emphasizes transit demand using ridership data and transit reliability using DVRPC's Surface Transit Reliability Score.

# Weighting Scheme: Reverse Commute



Population by tract (ACS)	0.5
<b>Work in a Tract Along a Bus Corridor and (CTPP): Travel from Home to Work on Transit &amp; 0-1 car households by tract</b>	<b>1.25/1.25</b>
<b>Live in a Tract Along a Bus Corridor and (CTPP): Travel from Home to Work on Transit &amp; 0-1 car households by tract</b>	<b>1.25/1.25</b>
<b>National Establishment Time Series (NETS): # of employees by tract</b>	<b>1.25</b>
<b>NETS: employers with 200+ employees</b>	<b>1.25</b>
APC 2019: boards + alights by stop	0.5
DVRPC Surface Transit Reliability Score	0.5
PennDOT: Intersection density within ½ mile of a bus stop	0.25
DVRPC: Sidewalk density within ¼ mile of a bus stop	0.25
PennDOT: Traffic signals per-mile along a bus route	0.25
PennDOT and Aerial Imagery: Lane count by road segment	0.25

The Reverse Commute weighting scheme emphasizes routes serving major employment destinations and transit dependence using Census data on 0-1 car households.

# Weighting Scheme: Roadway Characteristics



Population by tract (ACS)	1.0
Work in a Tract Along a Bus Corridor and (CTPP): Travel from Home to Work on Transit & 0-1 car households by tract	0.25/0.25
Live in a Tract Along a Bus Corridor and (CTPP): Travel from Home to Work on Transit & 0-1 car households by tract	0.25/0.25
National Establishment Time Series (NETS): # of employees by tract	0.25
NETS: employers with 200+ employees	0.25
APC 2019: boards + alights by stop	0.5
DVRPC Surface Transit Reliability Score	1.0
PennDOT: Intersection density within ½ mile of a bus stop	2.0
DVRPC: Sidewalk density within ¼ mile of a bus stop	0.5
<b>PennDOT: Traffic signals per-mile along a bus route</b>	<b>1.0</b>
<b>PennDOT and Aerial Imagery: Lane count by road segment</b>	<b>2.5</b>

The Roadway Characteristics weighting scheme emphasizes routes that are more likely to be able to pass local buses or other traffic because they travel on multilane roads with signalized intersections.

# Corridor Scores: Part 1



Corridor	Scores by Weighting Scheme		
	Operations	Reverse Commute	Roadway Characteristics
Rising Sun and Ogontz Aves.	1	1	1
Erie and Torresdale Aves.	2	2	2
Frankford Ave.	3	6	4
Bustleton Ave.	4	5	3
City Ave. to Wissahickon TC and 69th Street TC	5	3	7
City and Montgomery Aves. to WTC and Ardmore	6	4	6
Old York Road	7	8	5
MacDade Boulevard	8	7	9

# Corridor Scores: **Part 2**

Corridor	Scores by Weighting Scheme		
	Operations	Reverse Commute	Roadway Characteristics
69th Street TC to Chester	9	9	8
Stenton Ave. and Germantown Pk. to Plymouth Mtg.	10	10	11
Ridge Pk.	11	11	10
Lancaster Pk.	12	12	12
US-202/Dekalb Pk.	13	13	14
West Chester Pk.	14	14	13
Conshohocken to Plymouth Meeting	15	15	15

# Findings

- List of rankings, not a list of corridors to implement at this time
- Refine analysis: frequency, activity nodes, stops, segmentation



# Next Steps

- Direct Bus Standing Committee
  - Qualitative metrics
  - Work with all counties to “prepare” their municipalities and corridors for future Direct Bus service



# Next Steps

- Complete report
  - This analysis links to the working map
  - Corridors without bus routes
- Direct Bus working group moving forward
  - Do you want to be involved?
  - Qualitative metrics
  - Work with municipalities to “prepare” their corridors for future Direct Bus service
  - Other?



# Questions we've received

**When will this list be implemented?**

**Is there an absolute score threshold that will determine where Direct Bus routes are implemented?**

- This is an analysis.
- The rankings on the list may predict what corridors may have the best return on investment for SEPTA.
- Not a numbered list of corridors to be implemented. Not yet.
- More consensus is needed and analysis prior to implementation of another Direct Bus route.

# Questions we've received

Is there dedicated SEPTA funding for Direct Bus route implementation?

- Not at this time
- More detailed analysis will need to be done on a specific corridor prior to any next steps for dedicated funding to be allocated.

# Questions we've received

For the final report will there be two separate ranking lists: suburban and urban?

- No, we intend to keep the three lists as-is in the final report.
- The corridors bridge urban and suburban areas.
- There isn't a perfect rule-of-thumb to identify urban or suburban routes. (i.e. - Parts of northwest Philadelphia are more suburban than Norristown.)

# Questions we've received

Are we going to address corridor segmentation in this report?

- Not at this time for this project.
- More detailed analysis will need to be done on a specific corridor (stops, frequency, identify the type of rider) to determine the length and routing.

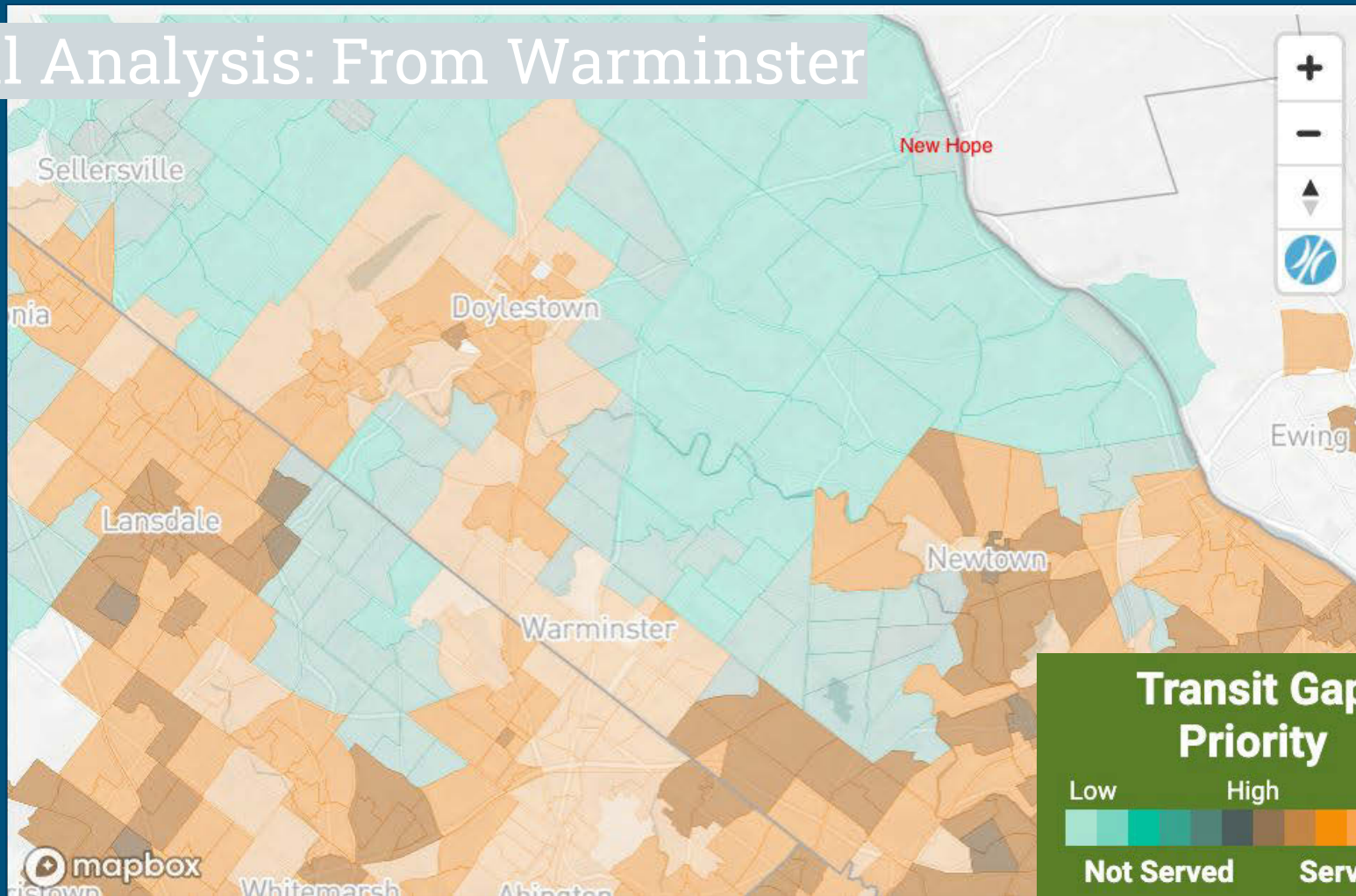
# Questions we've received

Can we put more emphasis on the physical characteristics and run the analysis again?

- There is a lot of weight in this analysis on metrics that emphasize density.
- This is due to the fact that public transit thrives in denser locations.
- At this time we aren't running anymore analyses while we understand that it might be interesting to see the results.

What are your questions?

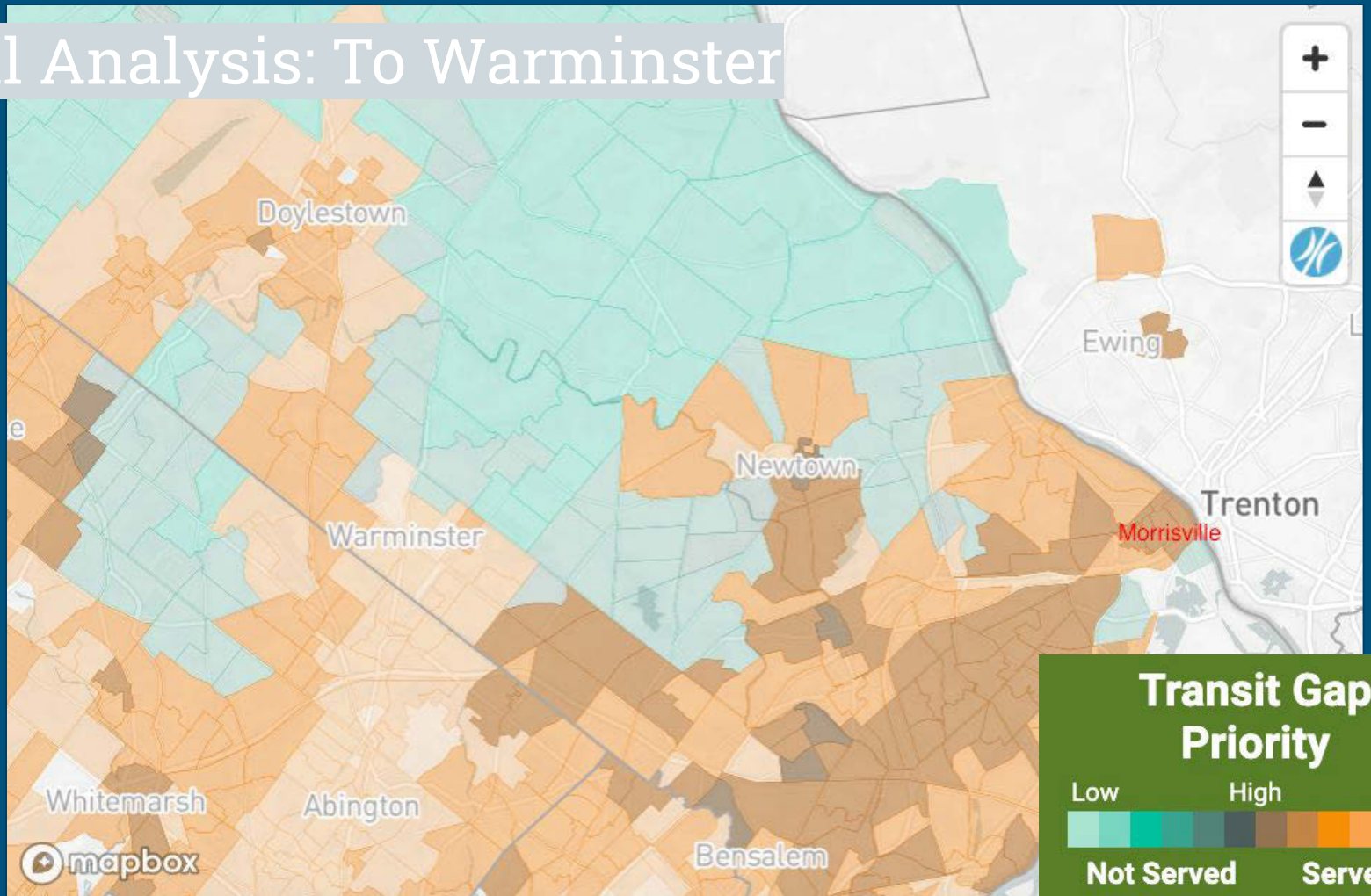
# Local Analysis: From Warminster



## Transit Gap Priority

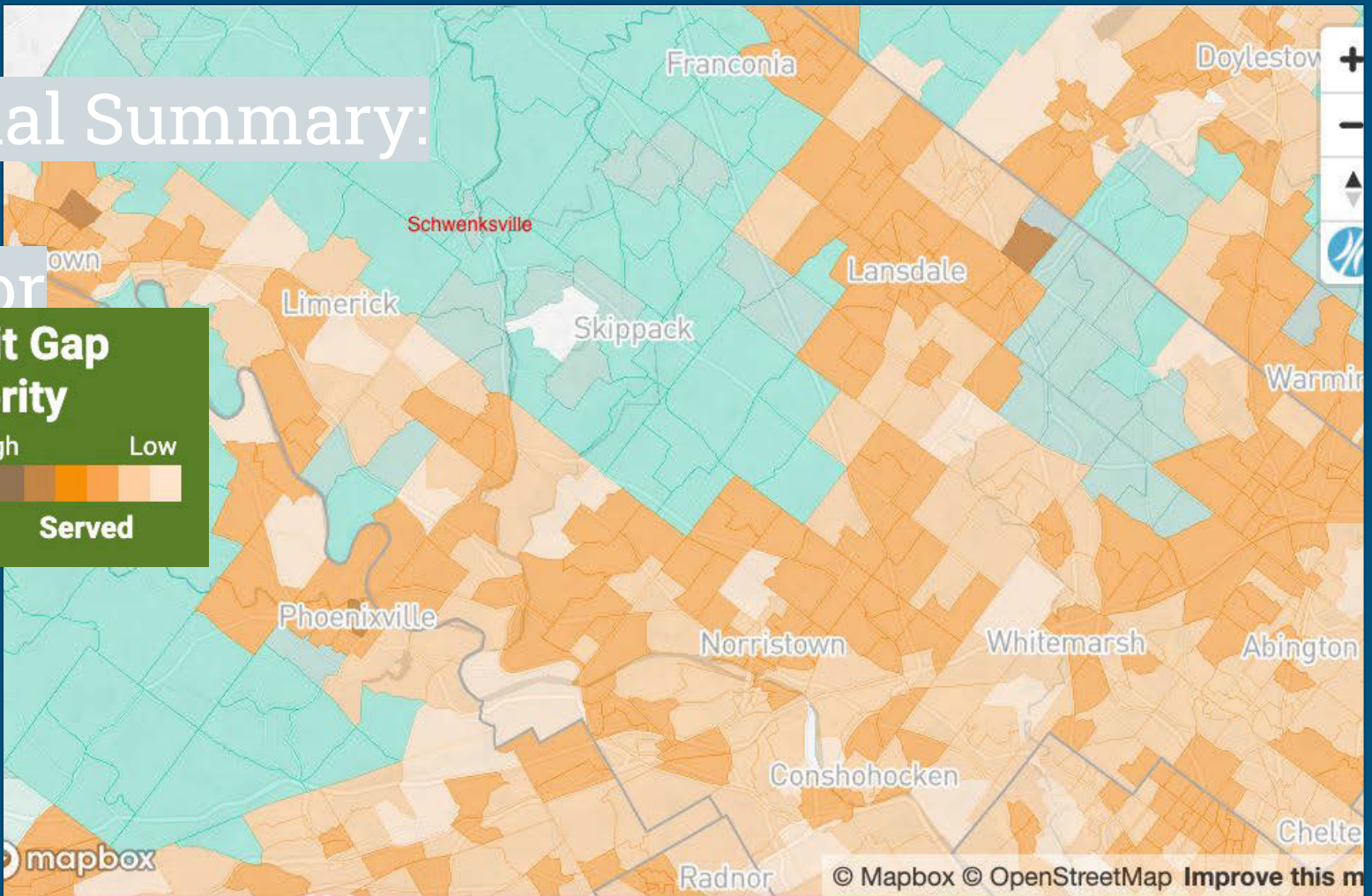
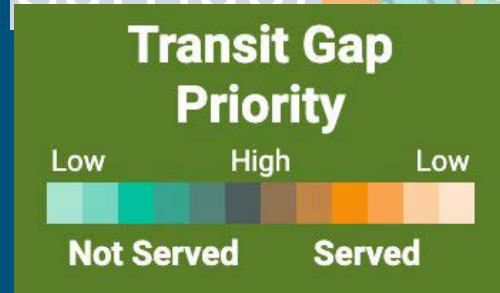


# Local Analysis: To Warminster

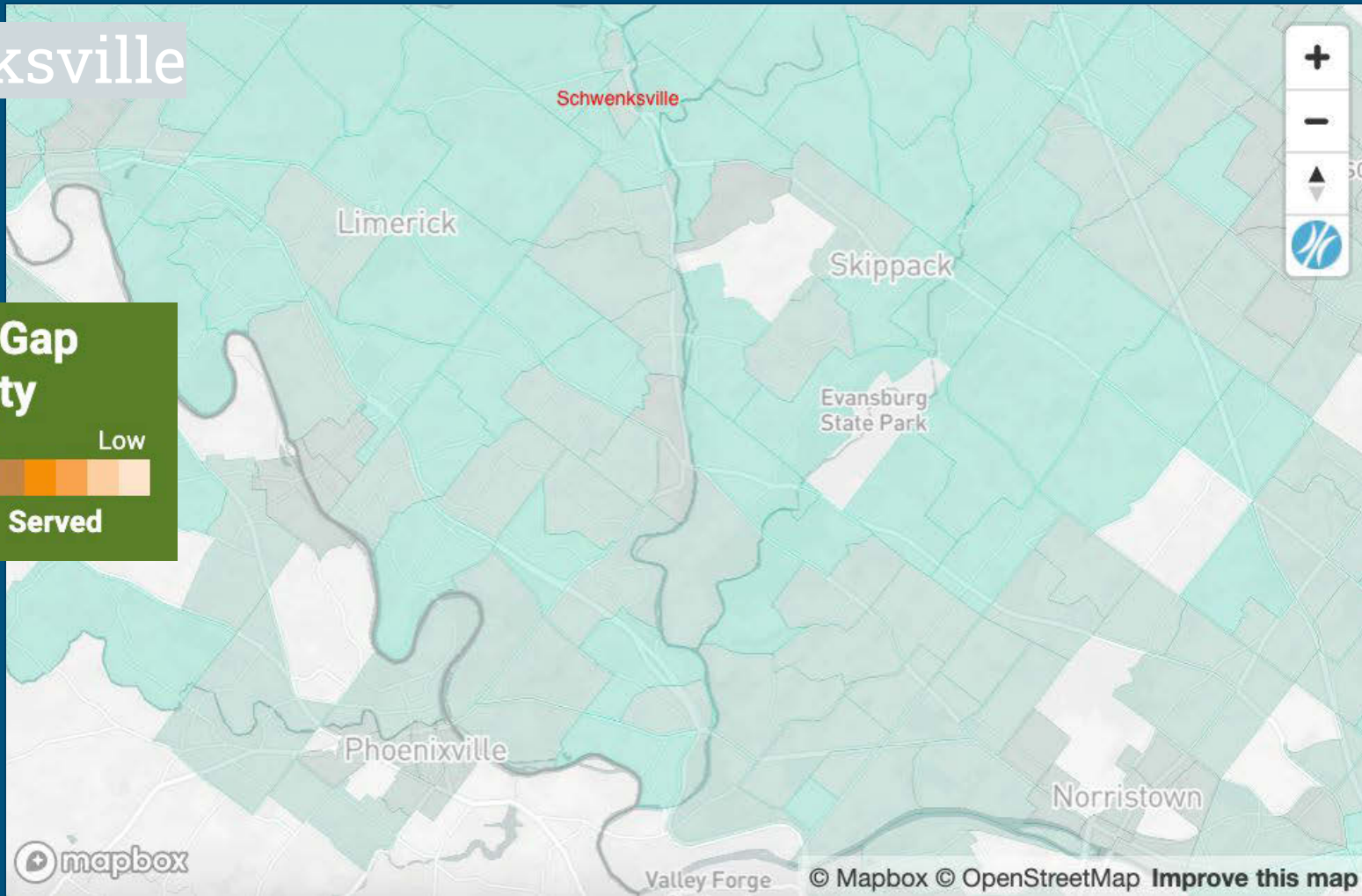




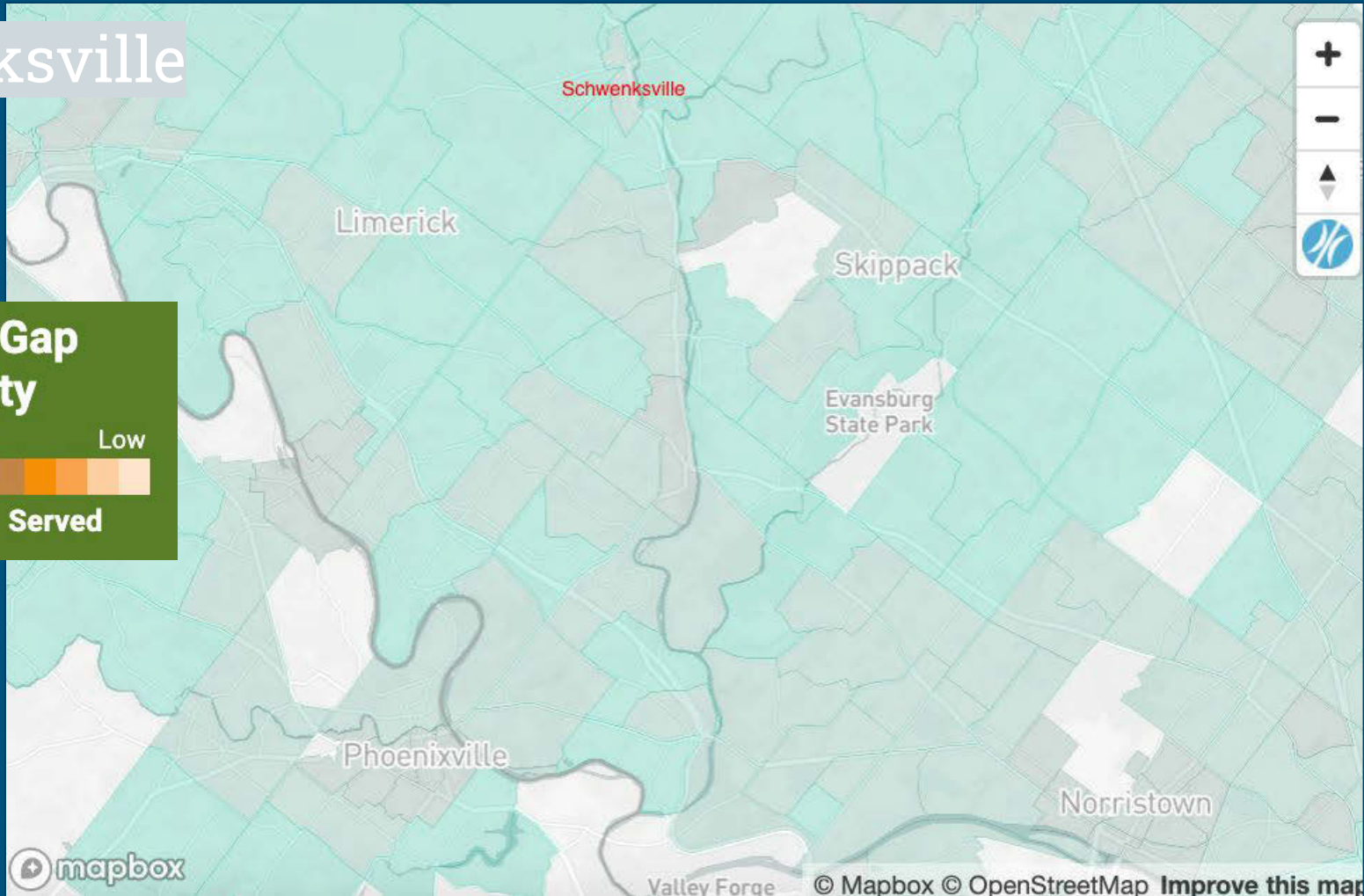
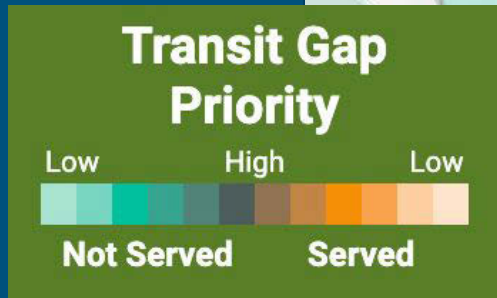
# Regional Summary: PA-29 Corridor



# From Schwenksville



# Schwenksville



# Next Steps

- **Finish all corridors**
- **Qualitative analysis**
  - Average Trip Distance by Route along a Bus Corridor
  - Roadway Ownership Along a Segment
- **Shuffling of rankings based on qualitative analysis**

## Next fiscal year

- Average Distance between Stops with High Ridership along a Bus Corridor
- Passenger Loads along a Bus Corridor

# Choose a Direction...

Choose a single weighting scheme today and use it for analysis.

Present findings for minimal feedback to stakeholder committee.

Use all three weighting schemes for corridor level scoring.

Present findings for stakeholder committee input.

Other ideas?

# Next Steps in any Alternative

Item 1



Item 2

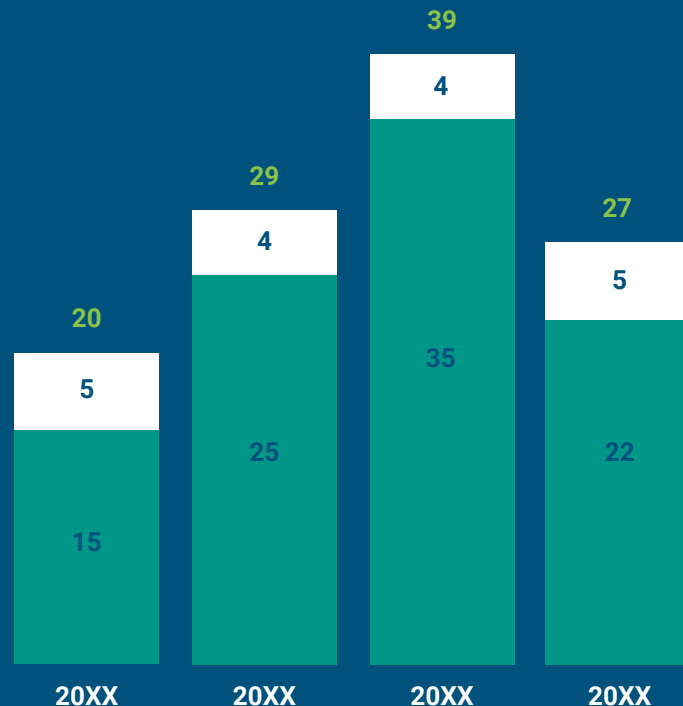


## Findings

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor

### Client Implications:

- Incididunt ut labore et dolore
- Consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore



**Link between this project and City Transit Plan:** Direct Bus treatments are strategies that could be recommended by the City Transit Plan.

# Analysis

---

- **Each corridor mapped into ½ mile road segments**
- **All quantitative and some qualitative data mapped**
- **Realized some data couldn't be broken down so moved to quantitative side**

## Interesting Trends

- Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor
- **Client Implications:**
- Incididunt ut labore et dolore
- Consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore



# Up Next: Corridor Weighting and Scoring

---

- **First quantitative outputs**
- **Still need to address qualitative side**
- 

## **Trend 2**

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor

### **Client Implications:**

- Incididunt ut labore et dolore
- Consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore

# Review of last meeting

---

# To better everyone's experience:

---

- Use Tools bar at bottom for controls
- Please mute your microphone unless speaking
- Click on Participants tool on the right to see who is attending
- If you have a question, you can use the Chat Box to message everyone or specific individuals
- We will be monitoring the chat box for questions

# Boulevard Direct Takeaways

**Direct Bus implementation is a team effort.**

**SEPTA must balance Direct and local service.**

**Total ridership is not the only way to measure success.**

**New service should compliment SEPTA's existing and future network.**

# Proposed Corridors with no or limited Transit: Compared using DVRPC's Regional Transit Screening Priority (RTSP) Transit Network Gap Analyzer Tool

- PA-29 to Schwenksville
- Warminster to New Hope
- Morrisville to Warminster
- Trenton to Newtown
- Quakertown to Philadelphia
- US-422

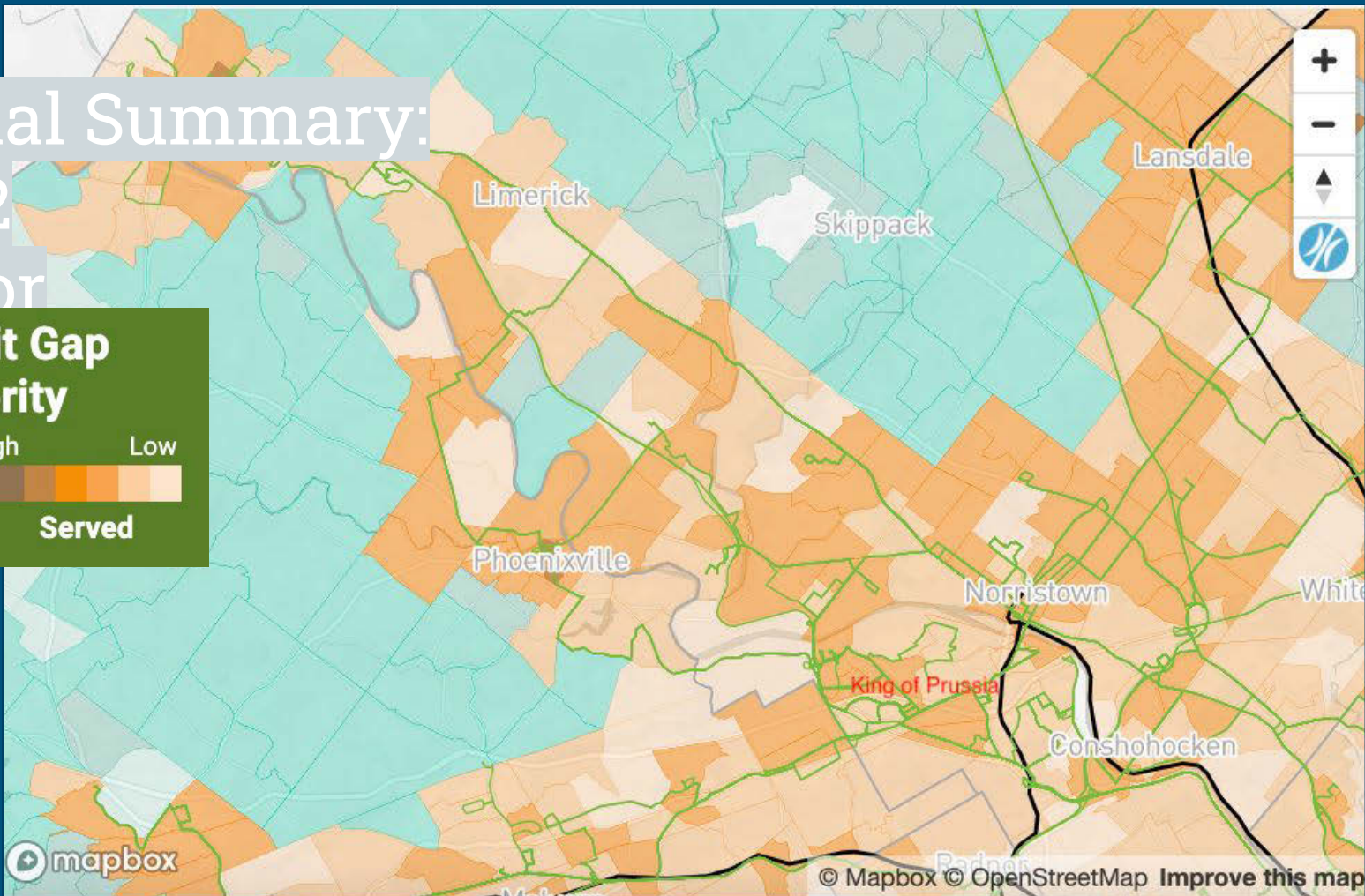
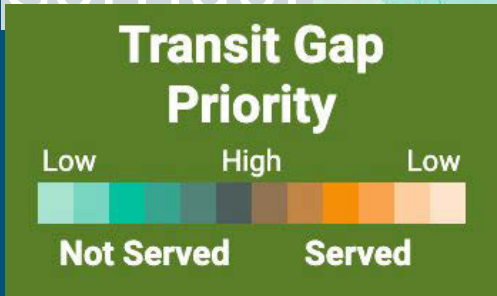
# What we've done

---

# Proposed Corridors With no or limited Transit: Compared using DVRPC's RTSP Transit Network Gap Analyzer Tool

- PA-29 to Schwenksville
- Warminster to New Hope
- Morrisville to Warminster
- **From Newtown and To Trenton**
- **From Quakertown to Philadelphia**
- **US-422 - Regional**

# Regional Summary: US-422 Corridor

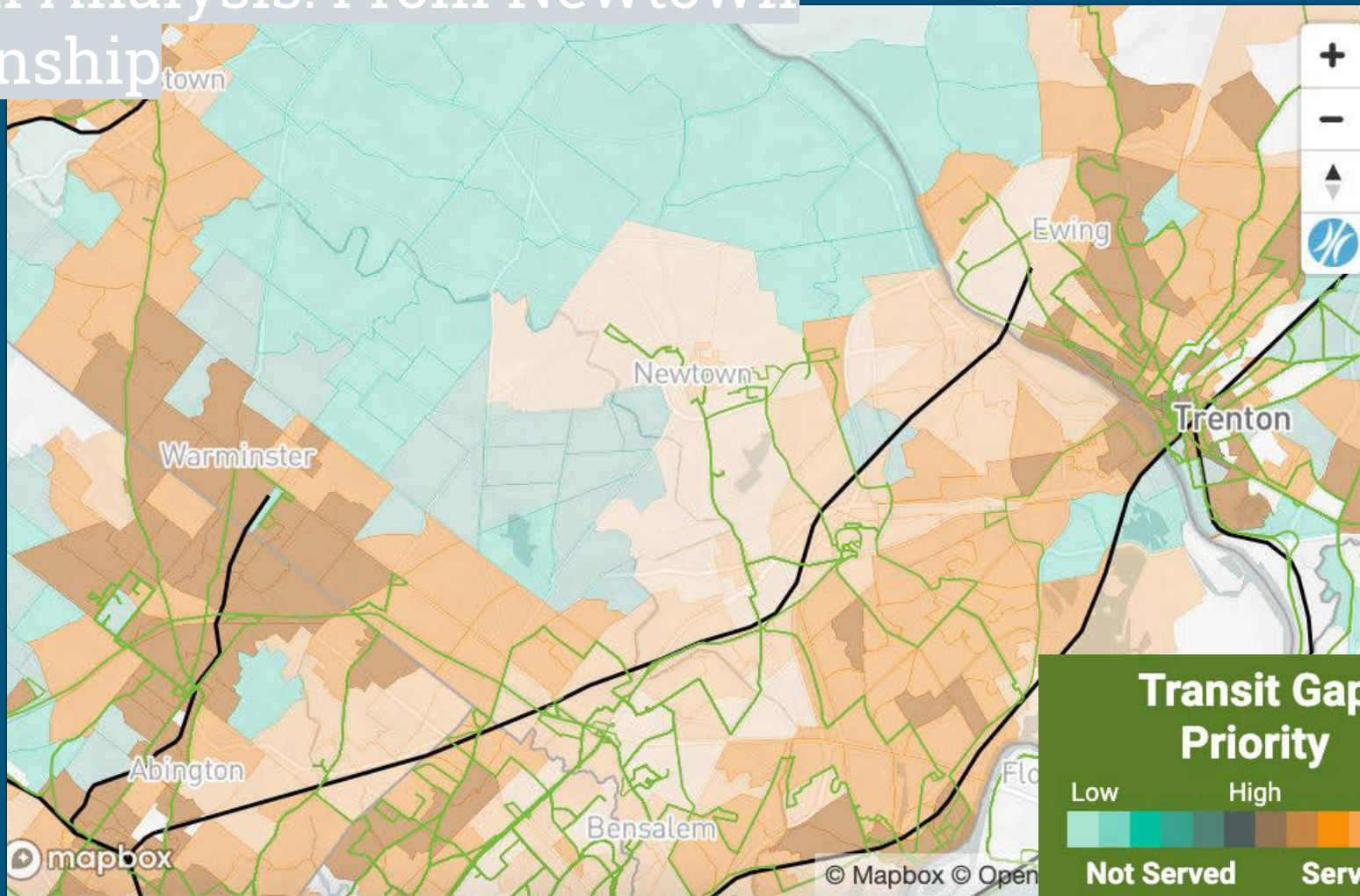


mapbox

© Mapbox © OpenStreetMap Improve this map



# Local Analysis: From Newtown Township

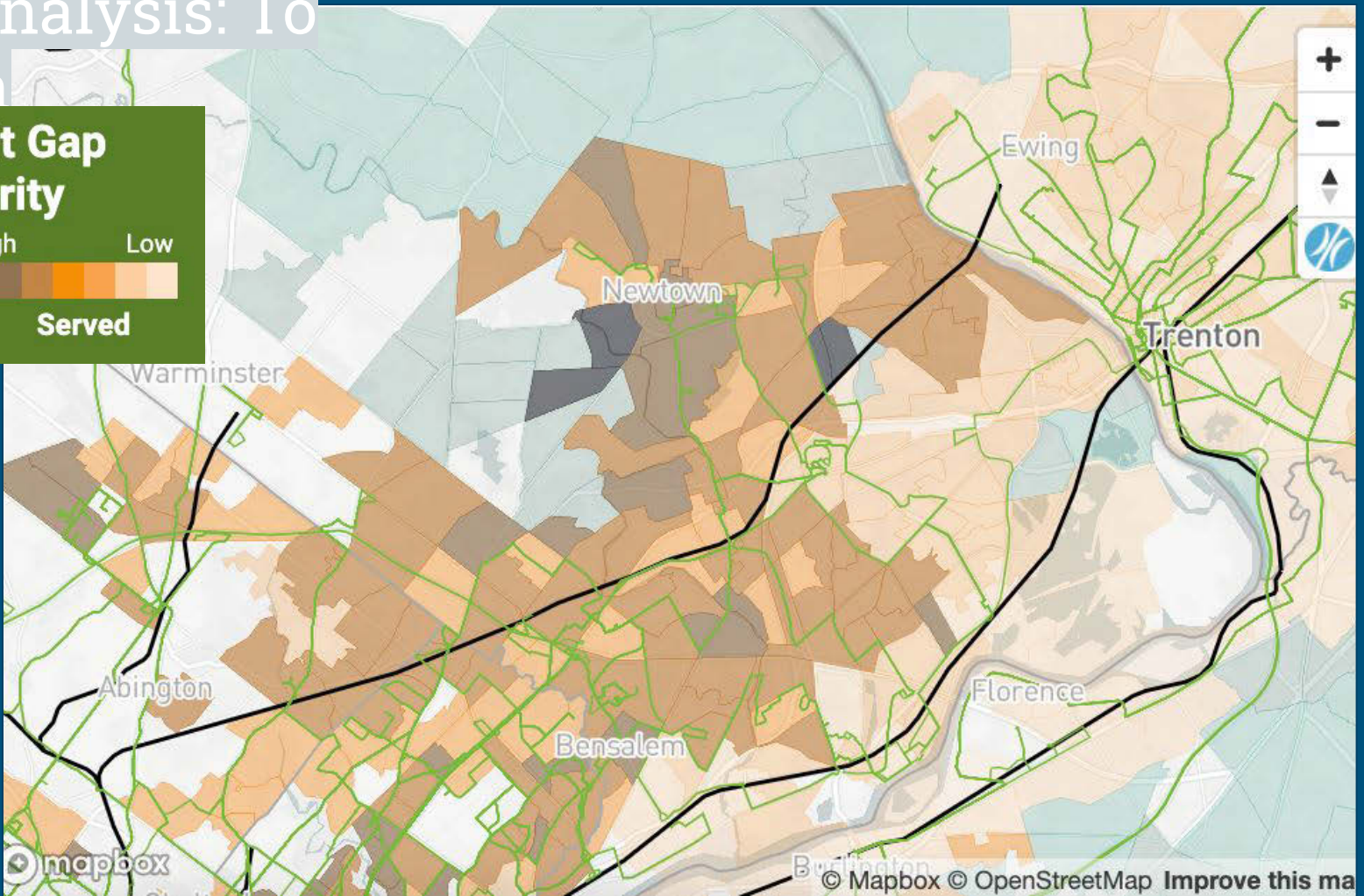


**Transit Gap Priority**

Low High Low

Not Served Served

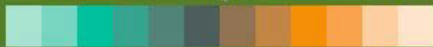
# Local Analysis: To Trenton



# Local Analysis: From Quakertown

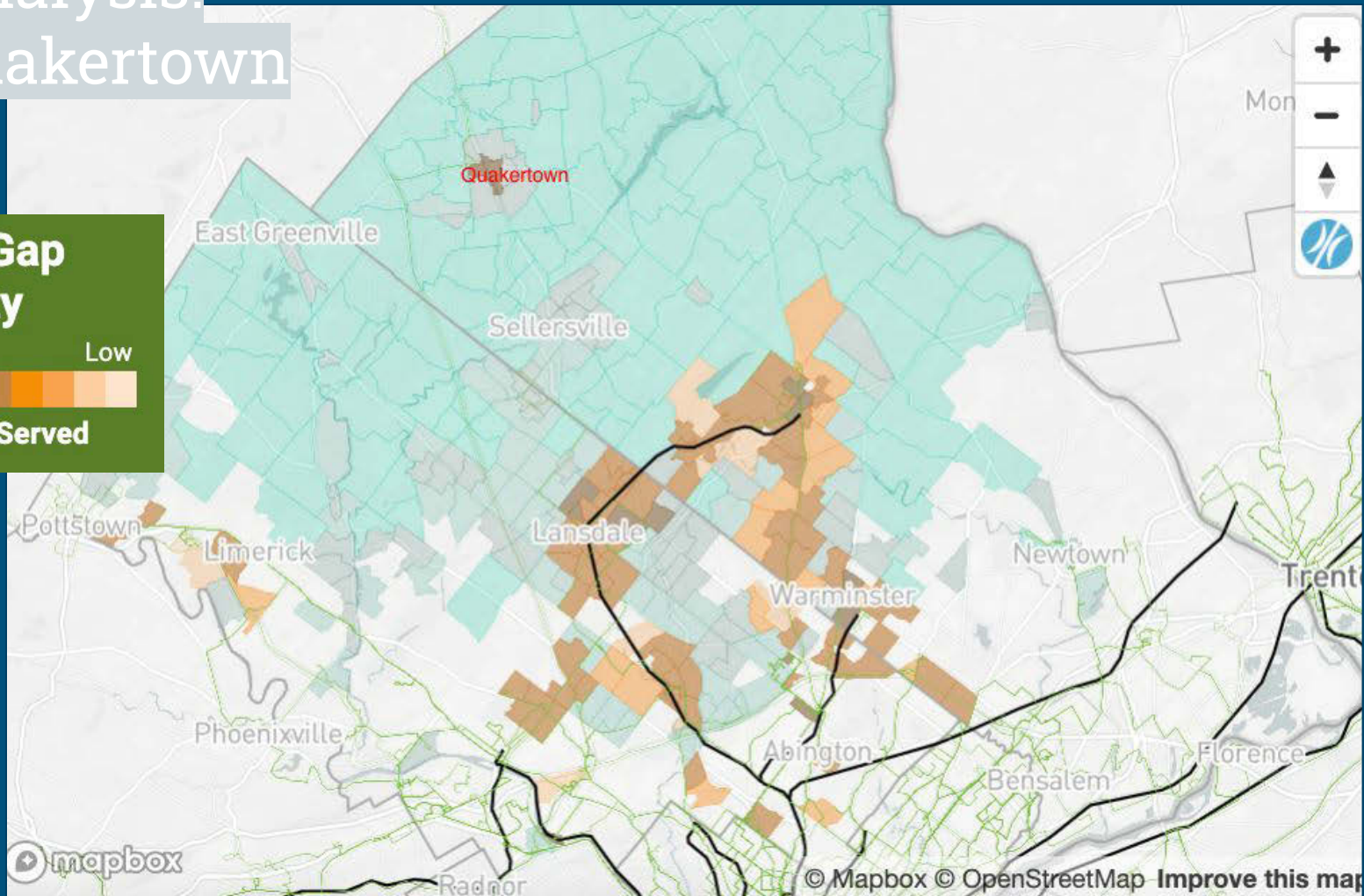
## Transit Gap Priority

Low High Low



Not Served

Served



Mon



© Mapbox © OpenStreetMap Improve this map

# Weighting Schemes at a glance

	Weighted higher in scheme to left	
<b>Reverse Commute</b>	<b>Proxies for Transit Riders</b>	Census Transportation Planning Products (CTPP): <ul style="list-style-type: none"><li>• Means of transportation by tract for tract 0-1 car households by tract</li></ul>
	<b>Employment</b>	National Establishment Time Series (NETS): Number of employees by tract
	<b>Major Destinations</b>	NETS: employers with 200+ employees
<b>Operations</b>	<b>Total Ridership</b>	SEPTA Automated Passenger Counter (APC) Spring 2019: boards + alights by stop
	<b>Reliability</b>	DVRPC Surface Transit Reliability Score
<b>Roadway Characteristics</b>	<b>Intersection Density</b>	PennDOT: Density within $\frac{1}{2}$ mile of a bus stop
	<b>Sidewalk Density</b>	DVRPC: Density within $\frac{1}{4}$ mile of a bus stop
	<b>Signal Density</b>	PennDOT: Traffic signals per-mile along a bus route

# Proposed Corridors and Routes

Route 58

- Bustleton Avenue

Route 96

- US - 202 (Dekalb Pike)

Routes 113 & 114

- Either MacDade Blvd. or Chester Pk.

Route 65

- City Avenue

Routes 6 & 18

- Existing Rising Sun/Olney/ Chew
- Reoriented to Ogontz or Cheltenham Aves.

# Proposed Corridors and Routes

Route 56

Route 44

Route 66

Routes 105 & 106

Route 95

Route 109

# Proposed Corridors and Routes

Route 9, 27, 35, 60, 61, 93

- Ridge Ave./Ridge Pike

Route L & 97

- Germantown Pike/Stenton Ave. to Plymouth Meeting

Routes 104, 112, 115,  
120, 123, & 126

- West Chester Pike

Routes 22 & 55

- PA-611

# Direct Bus Core Attributes

---

1. Frequent Service
  - Too specific for regional analysis
2. Limited Stop with or stops at clear nodes of activity
  - > 200 persons NETS data
3. Overlay Local Service
  - Using existing bus routes as starting point
4. Ability to Pass Local Service - 2 lanes in each direction
  - Lane count data
5. Rail Station or Transportation Center Feeder
  - Ridership & employment data



# Direct Bus Secondary Attributes

1. Complementary Land Uses
  - Too specific for regional analysis
2. TOD Potential
  - Too specific for regional analysis
3. Municipal and County cooperation for transportation improvements
  - (Incorporated in roadway ownership & Next fiscal year)
4. Economic momentum to support new service
  - Too specific for regional analysis
5. Environment of roadway would allow for BRT in the future
  - Incorporated in lane width

# Higher Scoring Corridors

Corridor	Operations	Reverse Commute	Roadway Characteristics
Rising Sun and Ogontz Aves.	1	2	1
Erie and Torresdale Avenues	2	3	2
Frankford Avenue	3	1	4
Bustleton Avenue	4	6	5
City Avenue to WTC and 69th Street	5	5	3
City, Montgomery, and Lancaster Avenues	6	4	7
Old York Road	7	8	6
MacDade Boulevard	8	7	9

# Lower Scoring Corridors

Corridor	Ops	PC	RC
Stenton Ave & Germantown Pike	10	10	11
Ridge Ave/ Henry Ave (Including WTC & NTC)	11	11	10
Lancaster Pike	12	12	12
Dekalb Pike (US 202)	13	13	14
West Chester Pike	14	15	13
Plymouth Meeting to Conshohocken Mall	15	14	15