

November 12, 2019 RTC



TIP ACTIONS

Transportation Improvement Program

New Jersey TIP (FY2018-2021)

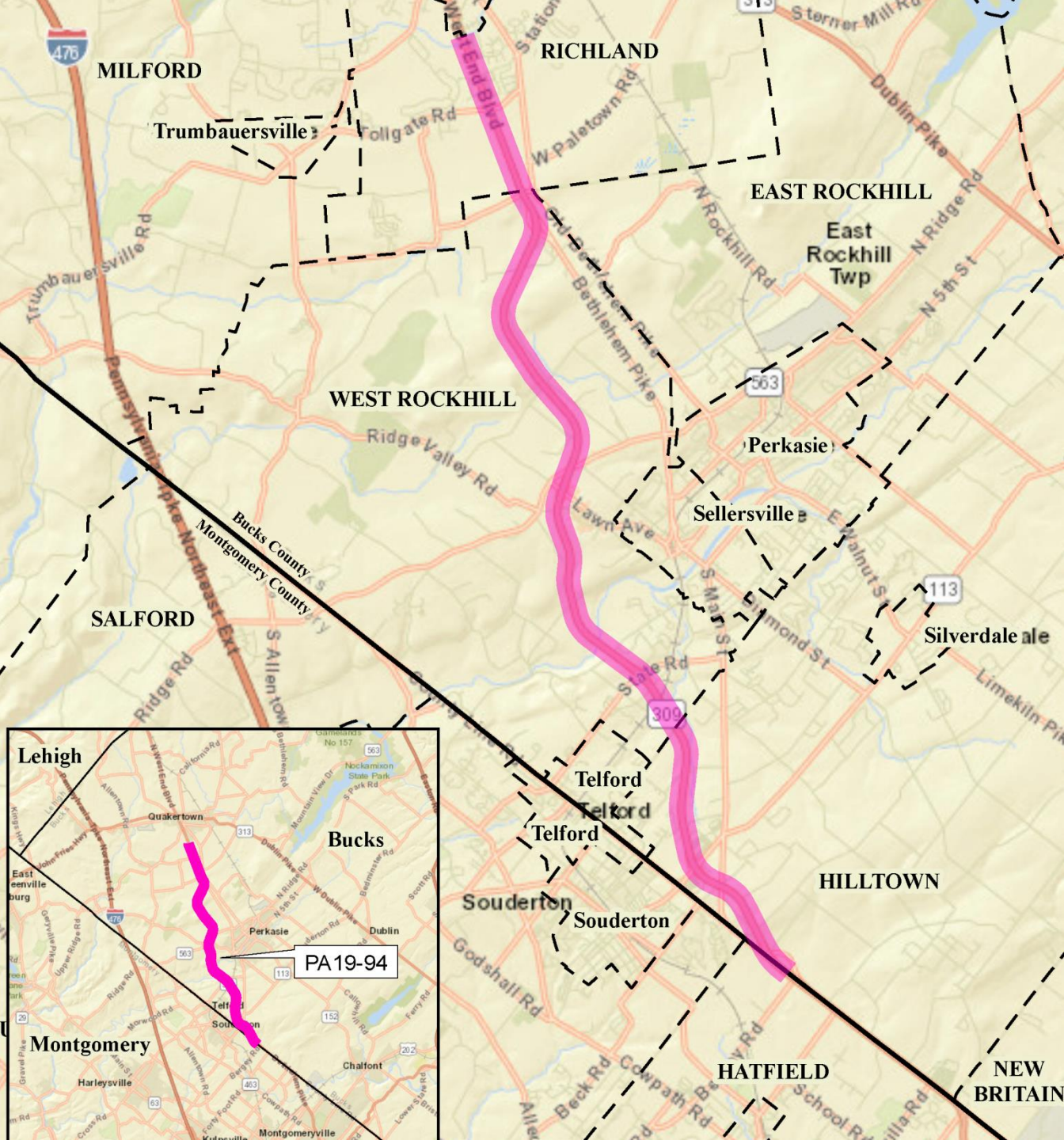
Pennsylvania TIP (FY2019-2022)



PA 309, Sellersville Bypass, Resurfacing

Bucks County | Low Bid Cost Decrease

- **TIP Amendment**
- **Action:** Decrease CON in Later FY26 by \$21.533 million (M) from an overall \$81 M to \$59.5 M.
- **Reason:** Low bid cost savings
- **Background:**
 - *Total Construction Cost: ~\$59 M.*
 - *No scope change.*
 - *No impact to First Four Years (FY19-22).*



Resurfaces ~17.34 miles on PA 309 (Sellersville Bypass) including:

- **guiderail upgrades**
- **milepost sign repair/replacement**
- **pavement marker**
- **concrete patching**
- **drainage and safety signage**

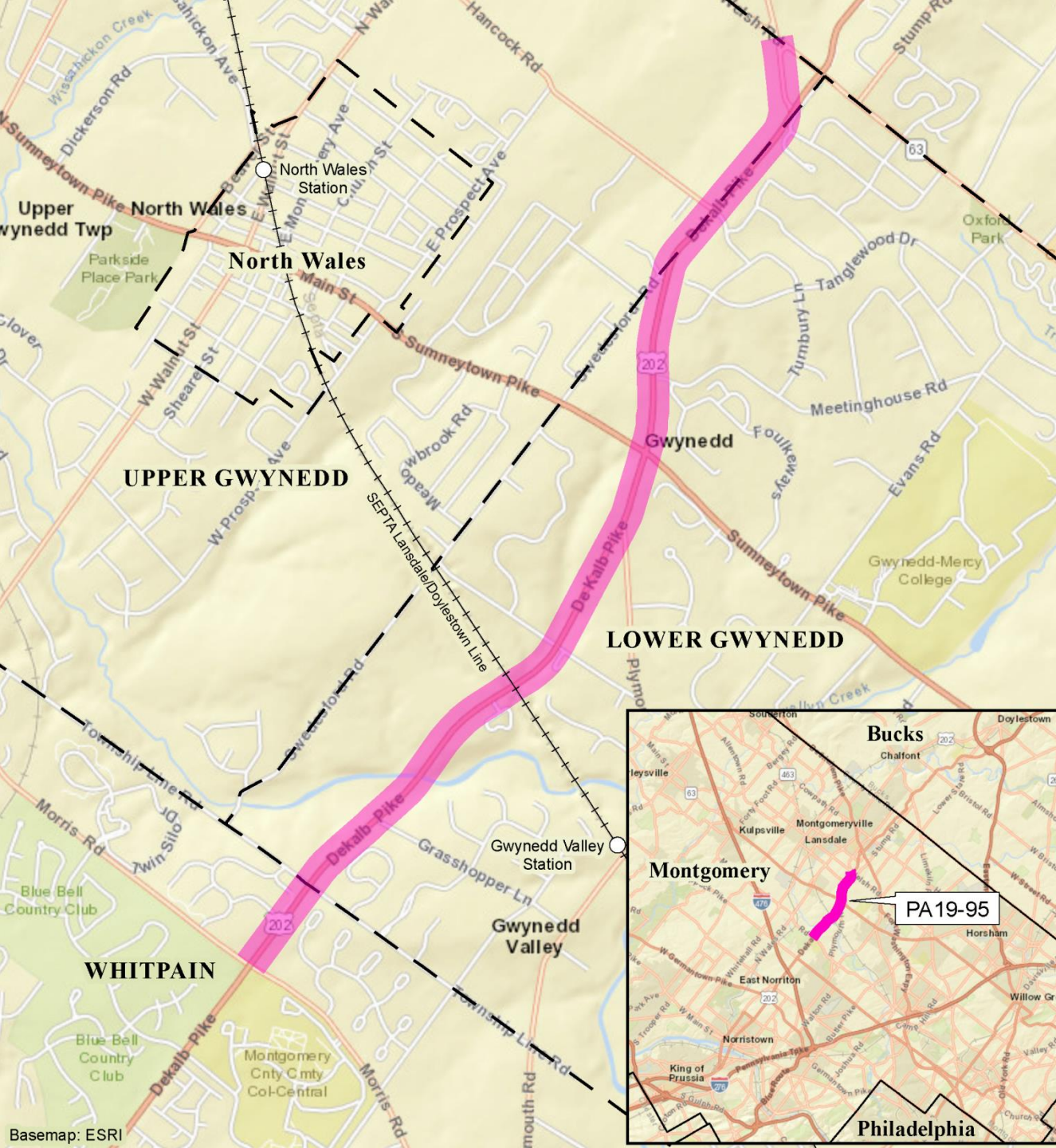


for PA

US 202, Morris Road to Swedesford Road

Montgomery County | Low Bid Cost Decrease

- **TIP Amendment**
- **Action:** Decrease CON by \$24.468 M in Later FY24 and FY25 from an overall \$71.4 M to ~\$47 M.
- **Reason:** Low bid cost savings
- **Background:**
 - *Total Construction Cost: \$42.4 M*
 - *No scope change.*
 - *No impact to First Four Years (FY19-22).*



- **Widen US 202 from 2 to 5 lanes between Morris Road and Swedesford Road**
- **Intersection improvements at Morris Road, Sunnyside Pike, & Swedesford Road**
- **ITS and traffic signal operating system integration**
- **Add bike lanes in both directions**



for PA



TIP ACTIONS | Proposed - PA

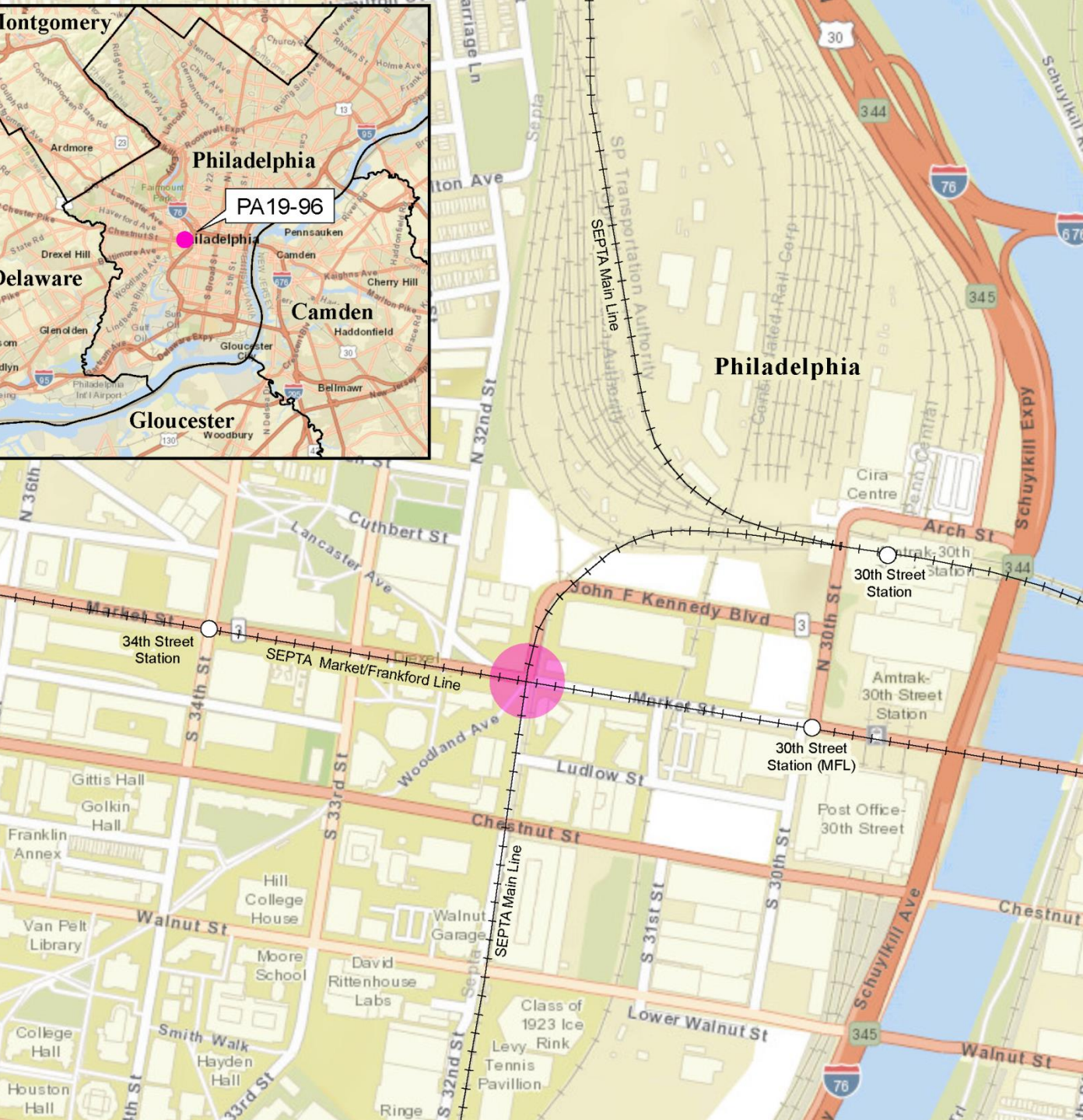
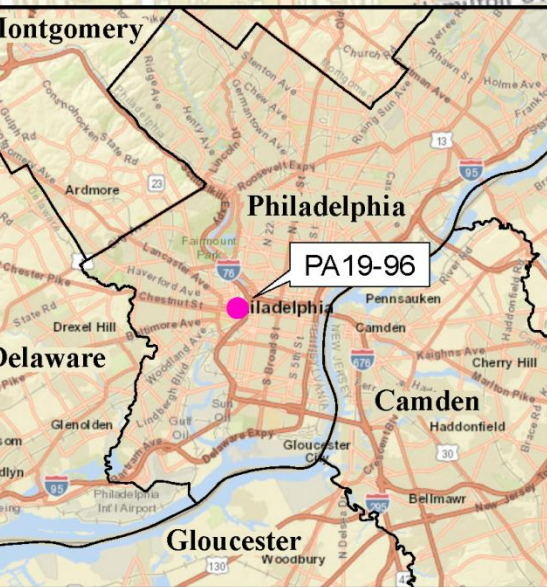
Recommend Board approval of TIP Amendments:

- **PA 309, Sellersville Bypass, Resurfacing**
Decrease CON in Later FY26 by \$21.533 M
- **US 202, Morris Road to Swedesford Road**
Decrease CON by \$24.468 M in Later FY24 and FY25

JFK Boulevard at 32nd Street over SEPTA (30th Street Station) (Bridge)

City of Philadelphia | Cost Increase

- **TIP Amendment**
- **Action:**
 - Increase UTL by **\$21.908 M** in FY20, FY21, & FY23 from \$1.093 M to \$23.001 M; and
 - Removes \$874,000 NHPP funds in FY20 UTL + adds total \$15.559 M State 185 and \$7.223 M State 581 funds*
- **Result:** Overall project increase from \$22.7 M to ~\$45 M.
- **Reason:** Encumber agreement with SEPTA; requires 3 rail line outages (“SEPTA Phase”), thus regional rail service adjustments, and to perform UTL work



- Bridge Rehab
- “Poor Condition”
- Bridge part of 395’ tunnel over two electrified SEPTA regional rail tracks west of 30th St. Station
- 3 commuter lines use structure
- Sept. 2020 “SEPTA Phase”: SEPTA rehabs tunnel (3 week rail line outage)
- Subsequent “PennDOT Phase” let date: Mar. 2021



TIP ACTION | Proposed - PA

Recommend Board approval of
TIP Amendment:

- **JFK Boulevard at 32nd Street over SEPTA (30th Street Station) (Bridge)**

Increase UTL by **\$21.908 M** in FY20, FY21, & FY23 from \$1.093 M to \$23.001 M; and

Removes \$874,000 NHPP funds in FY20 UTL + adds total \$15.559 M State 185 and \$7.223 M State 581 funds



Thank You

Connect With Us!



www.dvrpc.org/TIP



EQUITY ← THROUGH → ACCESS

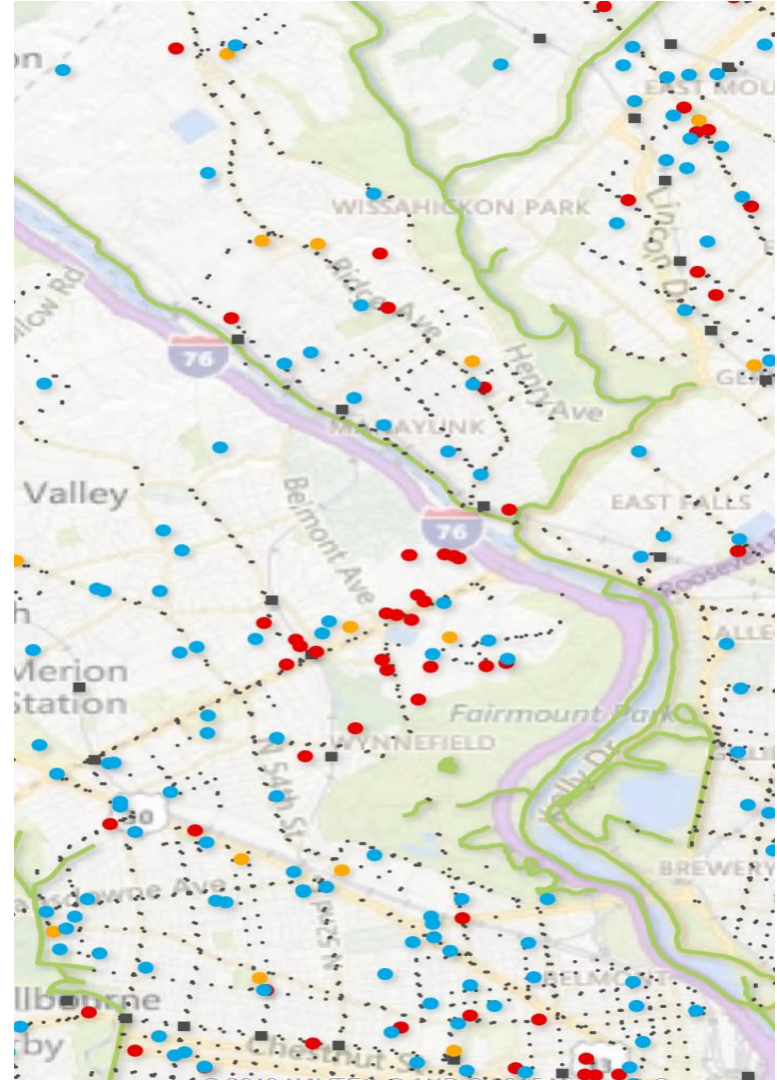
2020 Coordinated Plan Update for the DVRPC Region



What is Equity Through Access?

Federally required Coordinated Human Services Transportation Plan (CHSTP) under FTA Section 5310 that:

*“...identifies **the transportation needs of individuals with disabilities, seniors and people with low incomes**, provides strategies for meeting those needs, and prioritizes transportation services for funding and implementation.”*



Project Goal

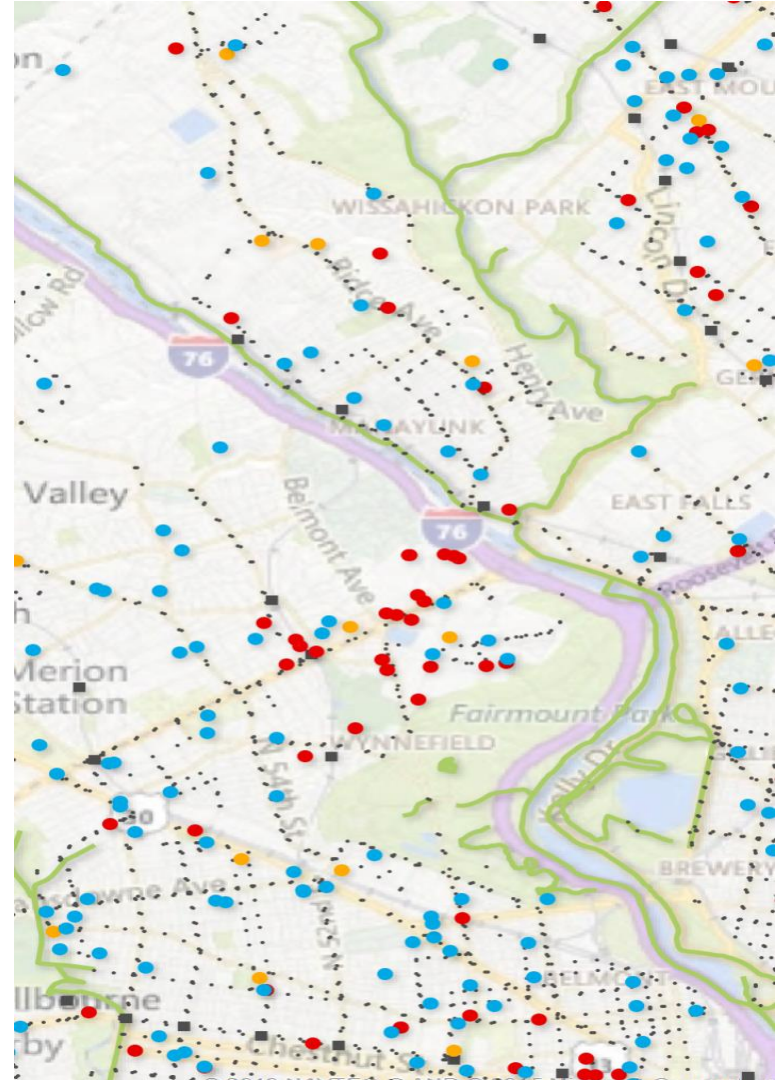
Encourage strategies that will provide more dignified access to opportunity and **essential services** for our region's most **vulnerable populations**.

Essential services:

- Places of employment, grocery stores, schools, medical care facilities, recreation/open space, senior centers, and centers for the developmentally disabled.

Vulnerable populations:

- Elderly (65+), HHs in poverty, disabled



Coordinated Plan

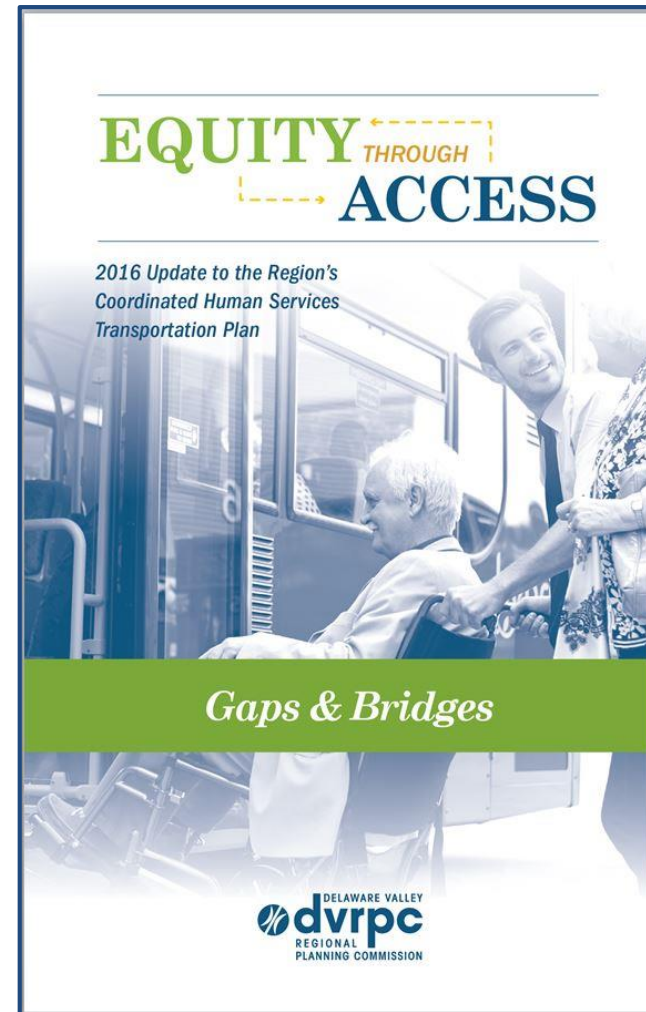
The 2016 Coordinated Plan document “Gaps & Bridges” identified priority issues and strategies that can be cited by those seeking funding for traditional CHSTP programs, and from other sources.

Gaps:

Factors that constrain transportation access to opportunity for vulnerable populations.

Bridges:

Strategies that would improve regional mobility for those most in need.



Outreach

- 50 / 50 split of outreach to providers and users
- Roadshows:
 - Coatesville Areas Senior Center
 - Mercer County Coalition for Coordinated Transportation
 - Association of the Blind and Visually Impaired
 - Inglis House
 - Bucks Mont Collaborative
 - NJ Transit Senior Citizen and Disabled Residents Transportation Advisory Committee
 - Bucks County Senior Advisory Council
- Steering Committee

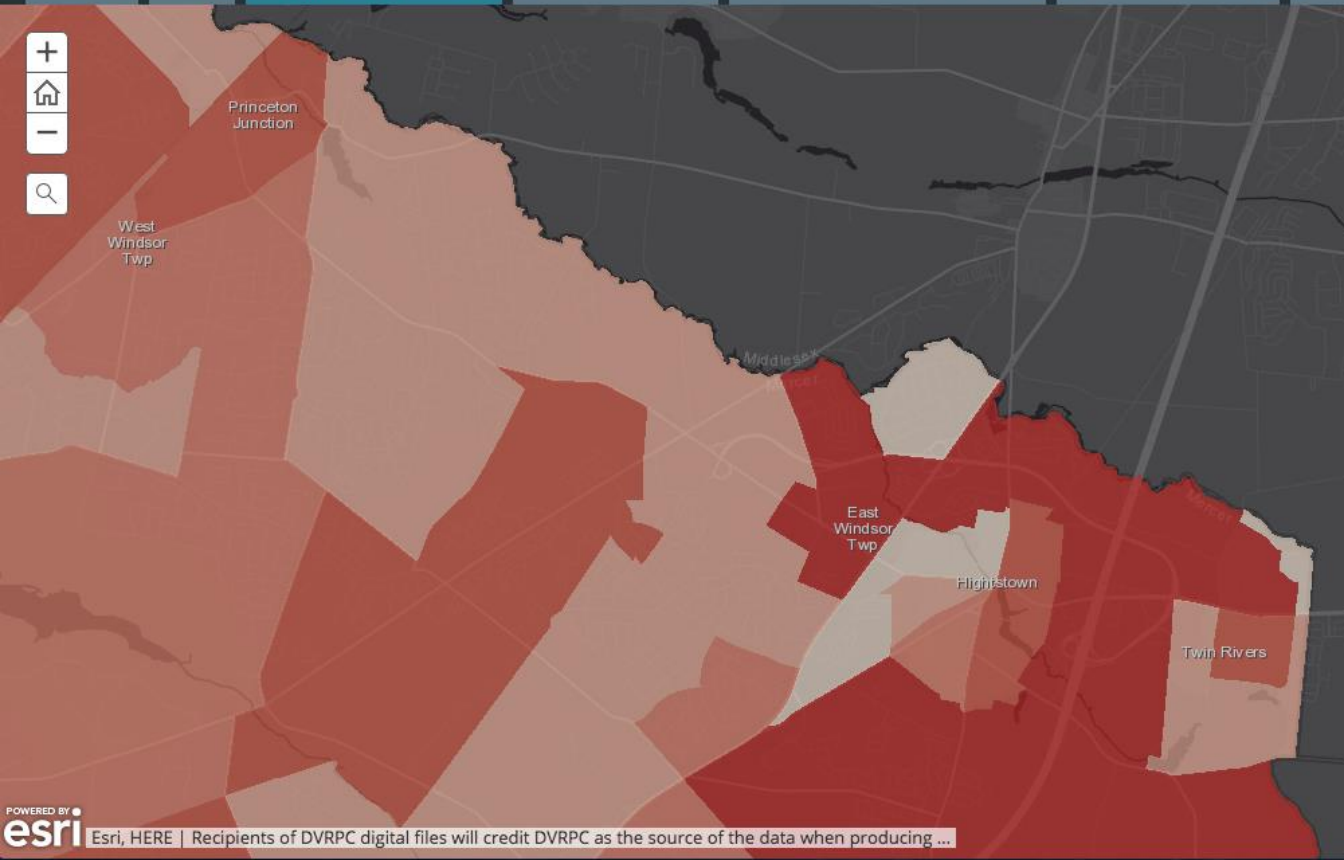


ETA Map Toolkit

DVRPC's Equity Through Access Map Toolkit



- Welcome
- About
- 1. Vulnerable Populations
- 2. Essential Services
- 3. Population-Services Mismatch
- 4. Transit Accessibility
- 5. Priority Score



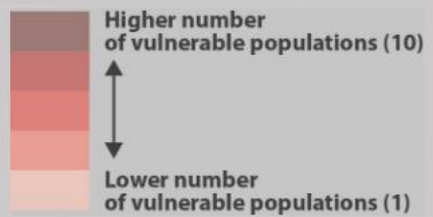
Purpose: To highlight areas of need (higher number of vulnerable populations)

Some demographic groups face greater mobility challenges and are therefore more affected by changes in the built environment than others. To better understand the spatial distribution and overall needs of these populations, locations of vulnerable populations are mapped here. Based on stakeholder interviews and input during the course of the project, three primary vulnerable populations were identified:

- Households that include One or More Disabled Person(s)
- Households in Poverty
- People Aged 65 and Over

Using American Community Survey (ACS) data at the block group level, the three characteristics were combined and ranked 1 through 10. Lower values were assigned to areas with lower numbers of vulnerable populations and higher values were assigned to areas with higher numbers of vulnerable populations. Click on an area of interest on the map to view the detailed data.

Source: US Census Bureau ACS 2014 5-year estimates



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Activity Centers for Seniors or Disabled	0
Grocery Stores	0
Health Care Facilities	1
Number of Educational Institutions	1
Parks/OS Present (1 for yes, 0 for no)	1
Trails	0
Jobs	6,473
Essential Services Rank	7

each of the layers.

Sources: CoStar, DVRPC, HRSA, NCES, NETS

Note: Zoom in to display essential service features*

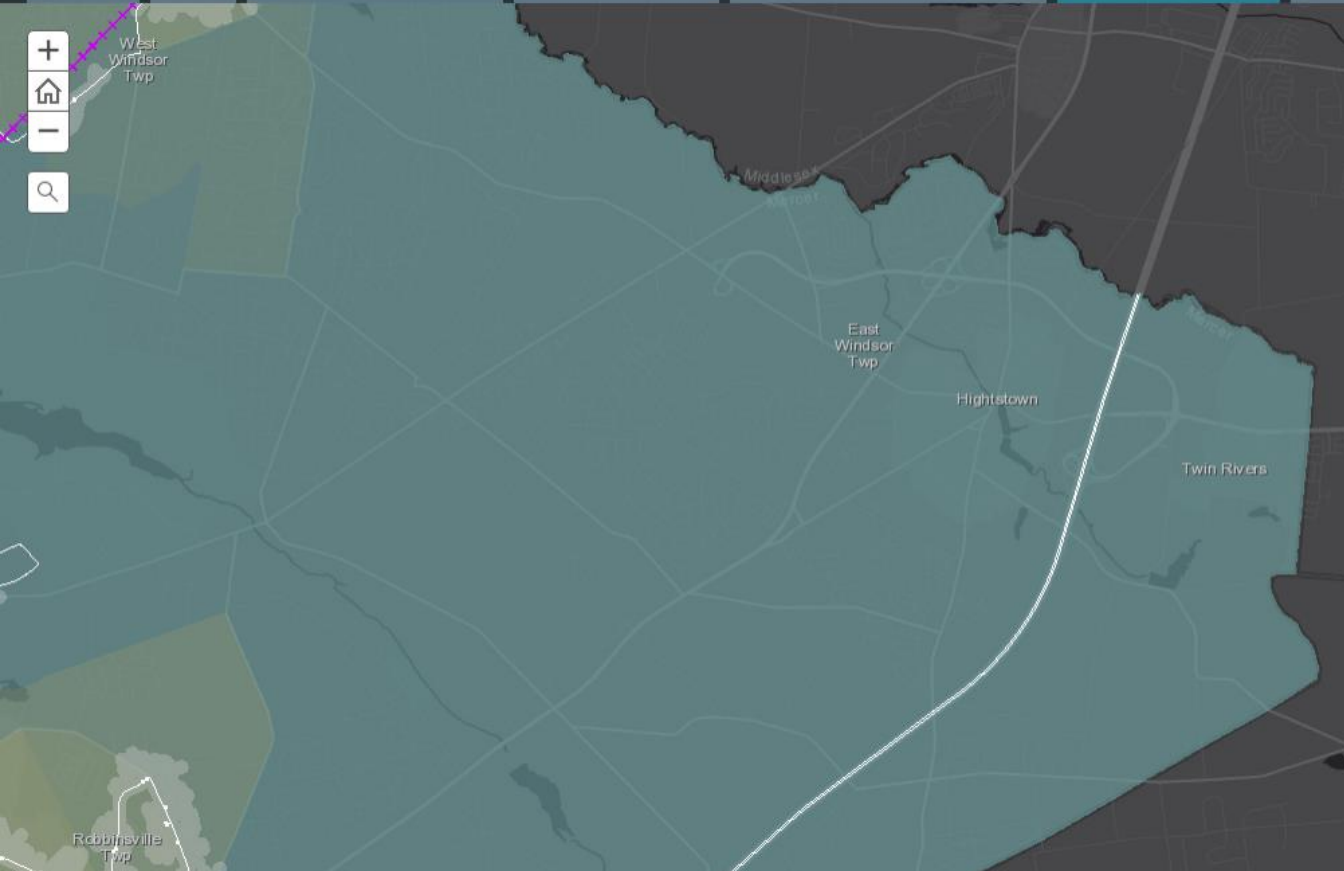
- Activity Center for Seniors or Disabled
- Grocery Store
- Health Care Facility
- School
- Multiuse Trail
- Park/Open Space

Essential Services

*Location of jobs are not shown on map, but are reflected in the Essential Services layer. Click this layer to view number of jobs by block group.

ETA Map Toolkit

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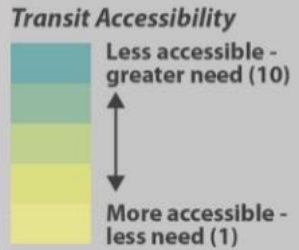


Using accessibility data at the block group level, the four characteristics were combined and ranked 1 through 10. Higher values were assigned to areas that are less accessible by transit and lower values were assigned to areas that are more accessible by transit. Click on an area of interest on the map to view the detailed data.

Sources: DVRPC, NJ Transit, SEPTA
Accessibility data was derived from DVRPC's transit journey time skim matrix at the TAZ-level and assigned to its related block group.

Note: Zoom in to display transit* and walkshed data

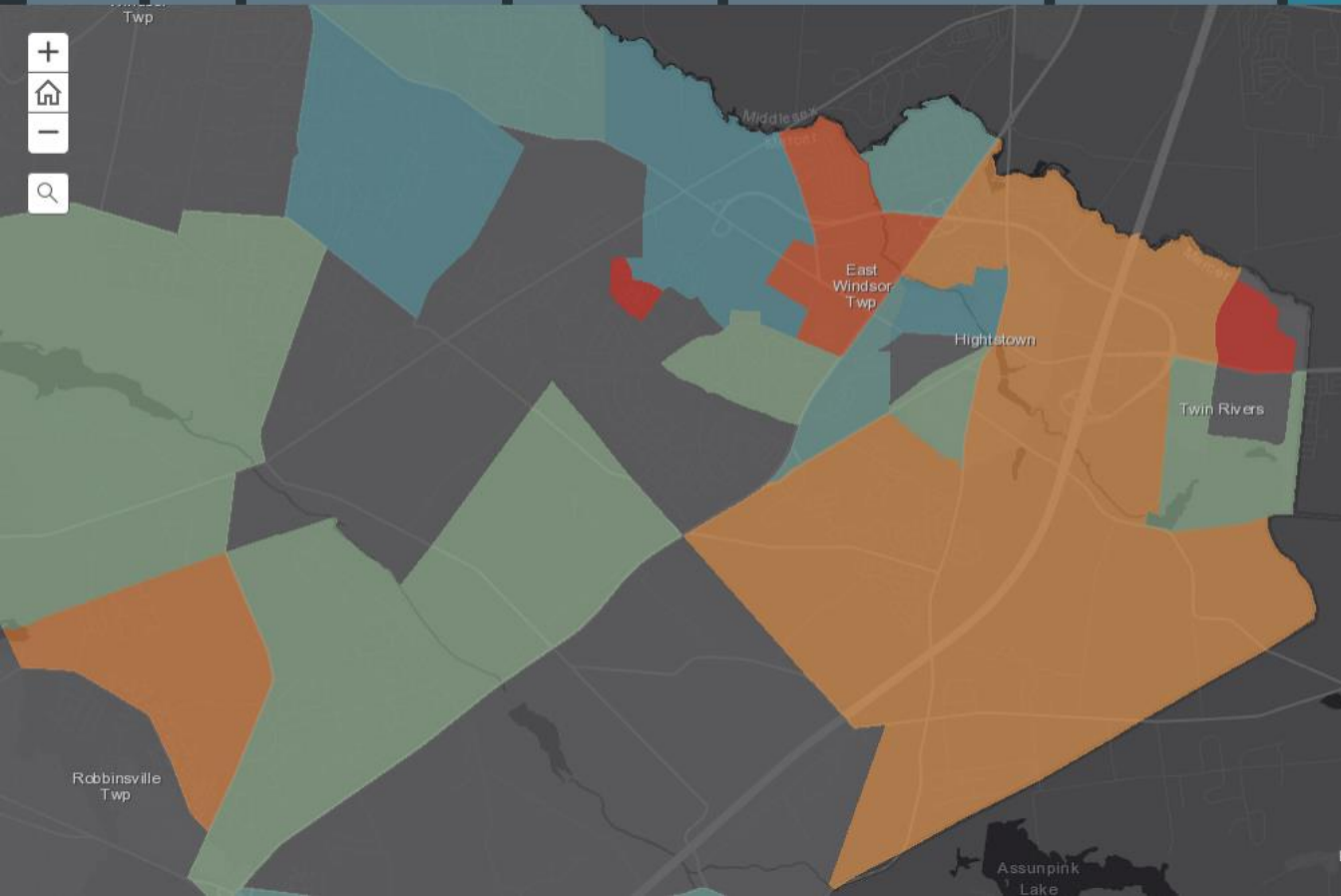
- Bus route
- Passenger rail
- Bus and rail walksheds
(5 minute walk to bus stop or a 15 minute walk to rail station)



*Shuttle routes are not shown, but service is reflected in underlying Transit Accessibility layer

ETA Map Toolkit

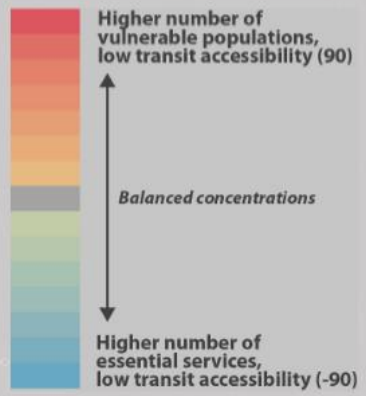
- Welcome
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Purpose: To highlight areas with high numbers of vulnerable populations or essential services, but low transit accessibility

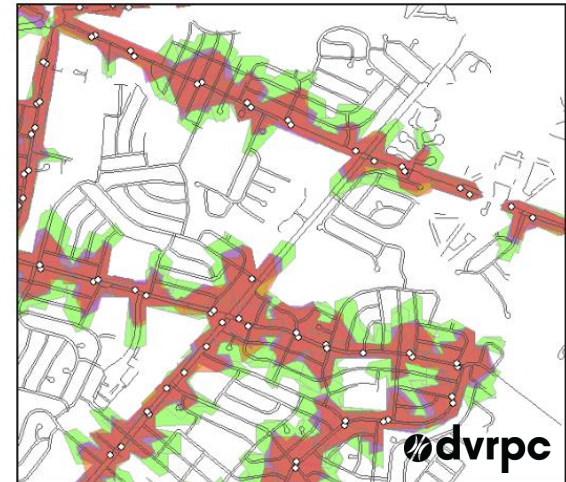
Combining maps (3) and (4) helps us visualize the locations in our region that have a relatively high level of spatial mismatch, combined with relatively poor regional transit connectivity. Areas with a higher divergence represent access gaps, and help suggest new public transit connections that could be made, changed, or improved to bridge these gaps in the future.

Values from the Population-Services Mismatch layer were multiplied by the Transit Accessibility layer to identify access gaps. A low negative value represents areas where there is a higher number of essential services with low transit accessibility and high positive number indicates areas where there is a higher number of vulnerable populations with low transit accessibility.



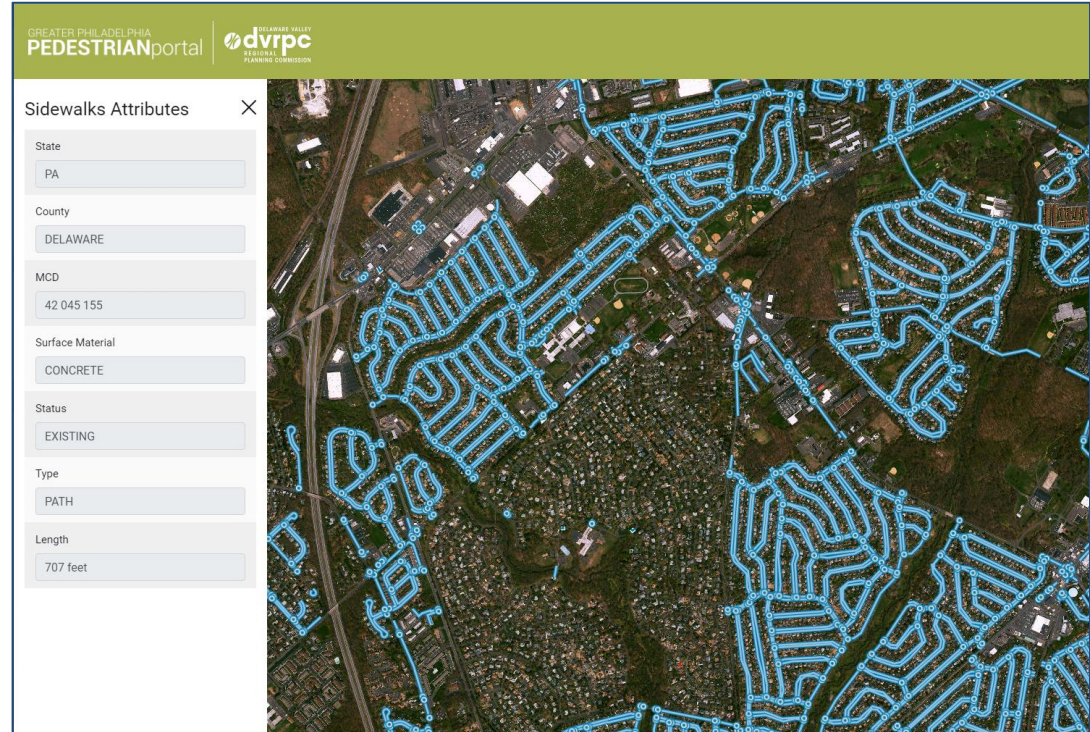
Mapping Updates

1. New Census and NETS Data
2. New Access Map using sidewalk network data.



PROJECTS SINCE LAST ETA UPDATE

1. Sidewalk inventory
1. Regional Transit Priority Setting
1. Road to Health Workshop



The screenshot displays the 'Greater Philadelphia Pedestrian Portal' interface. At the top, the logos for 'Greater Philadelphia Pedestrian Portal' and 'Delaware Valley Regional Planning Commission (dvrpc)' are visible. The main content area is split into two parts: a filter sidebar on the left and a map on the right. The sidebar, titled 'Sidewalks Attributes', contains several filter fields: 'State' (PA), 'County' (DELAWARE), 'MCD' (42 045 155), 'Surface Material' (CONCRETE), 'Status' (EXISTING), 'Type' (PATH), and 'Length' (707 feet). The map on the right shows an aerial view of a residential area with a network of blue lines representing sidewalks overlaid on the terrain.

PROJECT TIMELINE

Fall / Winter 2019:

- Research and project development
- Convene Steering Committee
- Roadshows and surveys

Spring 2020:

- Analysis of outreach and updates to Gaps and Bridges Document
- Updates to Map Toolkit

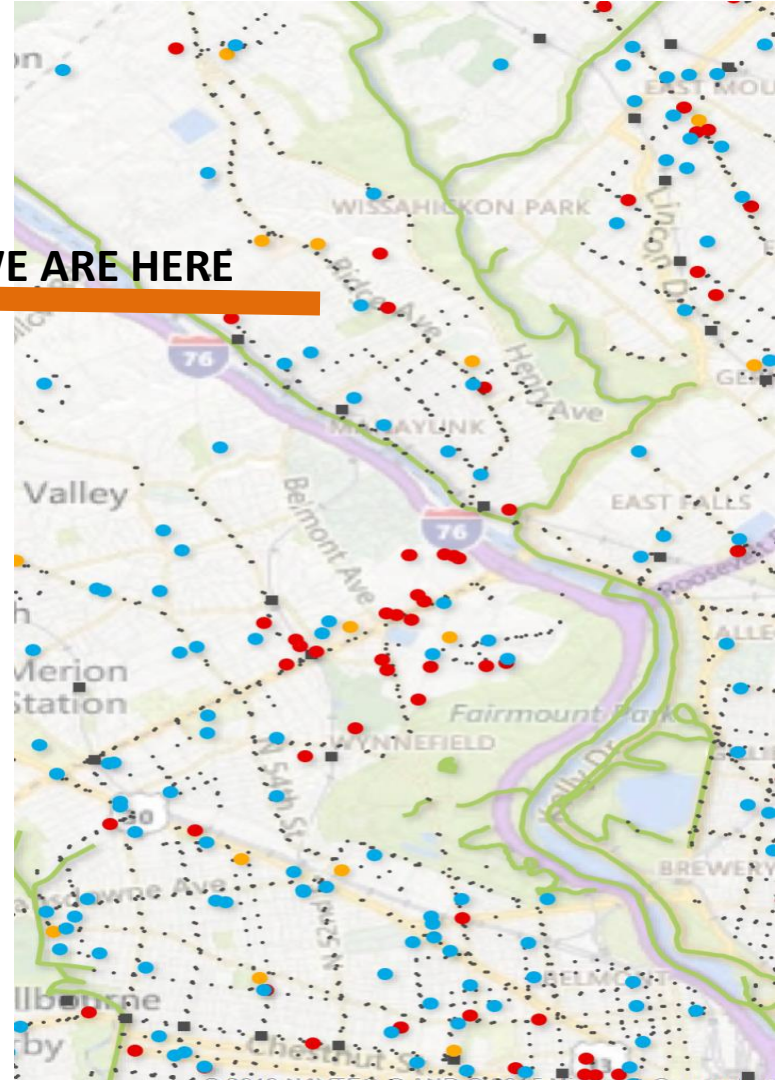
Summer 2020:

- Develop draft plan document for Steering Committee review
- Publication Review

Fall 2020:

- Plan acceptance by DVRPC Board

WE ARE HERE

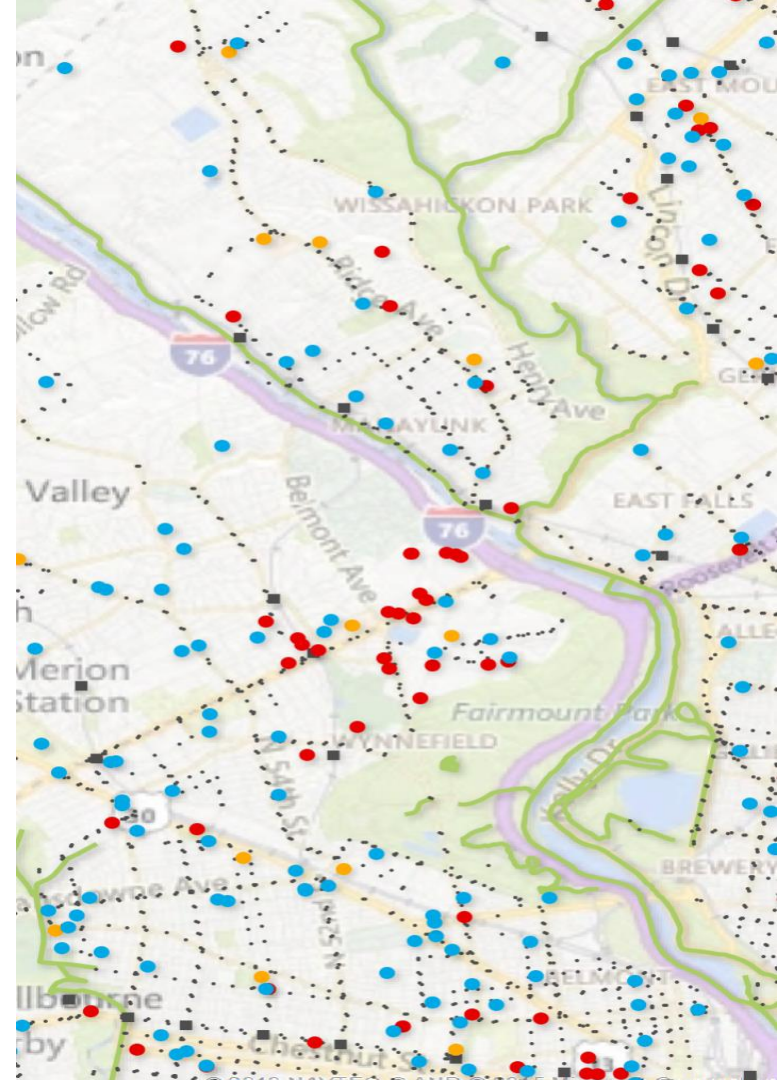


EQUITY ← THROUGH → ACCESS

To follow along or to get involved:

www.dvrpc.org/ETA

Thom Stead, *Senior Transportation Planner*
tstead@dvrpc.org





BIKE-FRIENDLY RESURFACING PROGRAM

Presentation to the
Regional Technical
Committee

Presented by: Sarah Moran & Jesse Buerk
Delaware Valley Regional Planning Commission

11/12/19

Program Partners



PennDOT



Suburban
Counties



Bicycle
Coalition

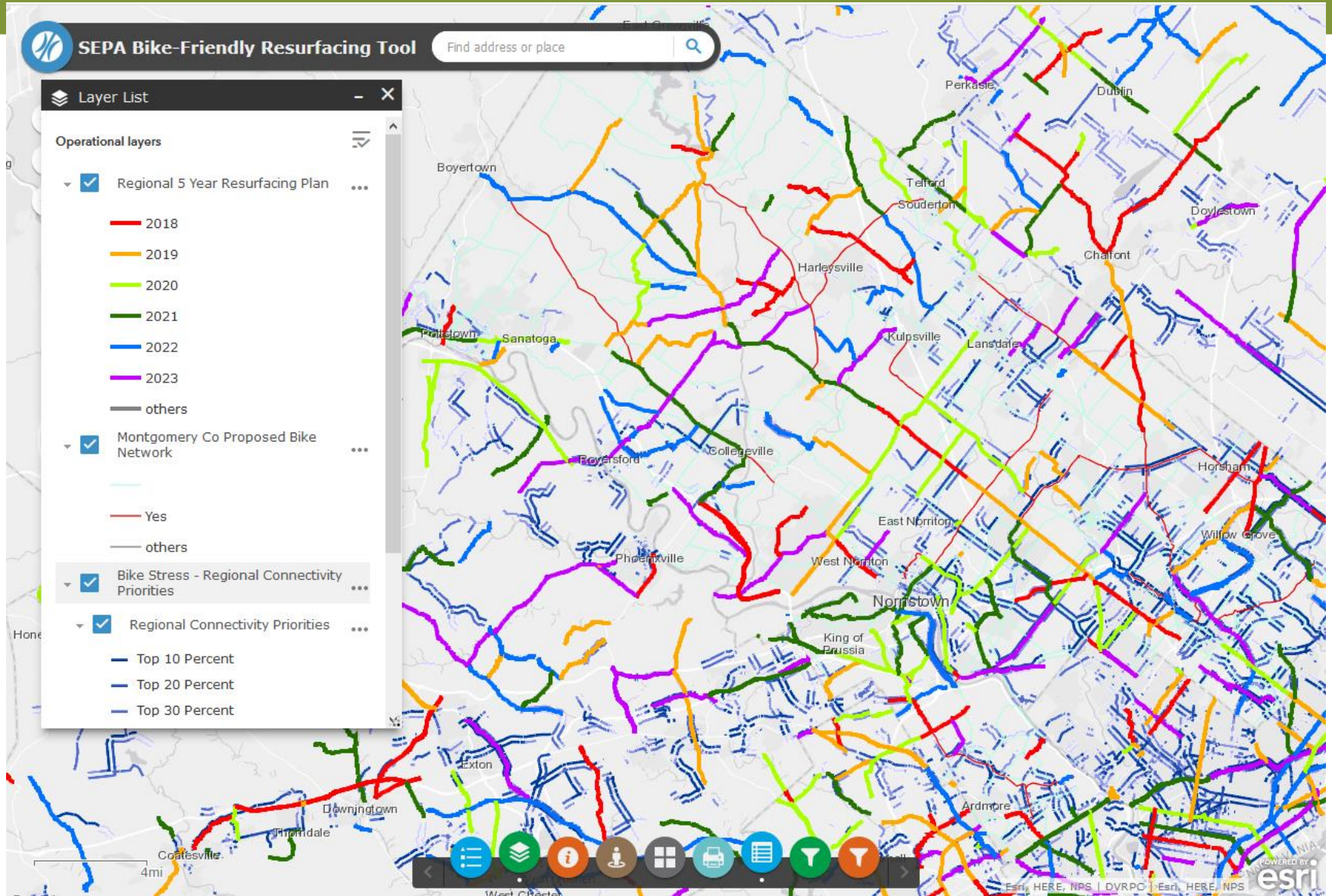


DVRPC

Tools

- Map with 5-year resurfacing plan
- Tracking Database
- Bike LTS and Connectivity Analysis
- FAQ for municipalities
- Municipal request template letter

Tools – Web map

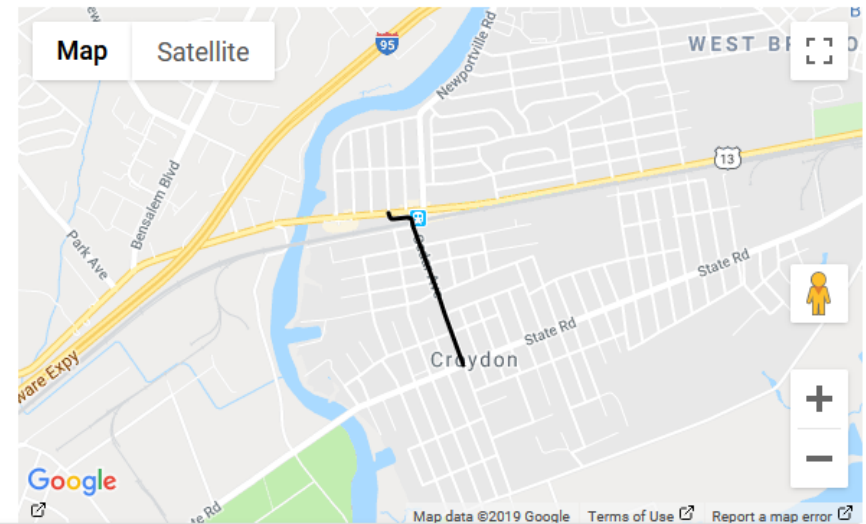


Tools - Database

Bike-Friendly Resurfacing Program Detail

Location Identifiers

year: 2020	county: Bucks	is active: Yes
state route: 2011	road name: CEDAR AV	mileage: 0.57
intersection from: State Rd / SR 2002	segment from: 0010	offset from: 0
intersection to: Bristol Pk / SR 0013	Segment to: 0010	offset to: 2986
municipality 1: BRISTOL	municipality 2:	municipality 3:



Initial Priority Screening

[Edit](#)

is the segment identified as a regional priority (top 50%)? Yes
LTS priority: 30

is this segment a priority in your county? Yes

is this segment a public priority? Yes

Preliminary Feasibility Screening

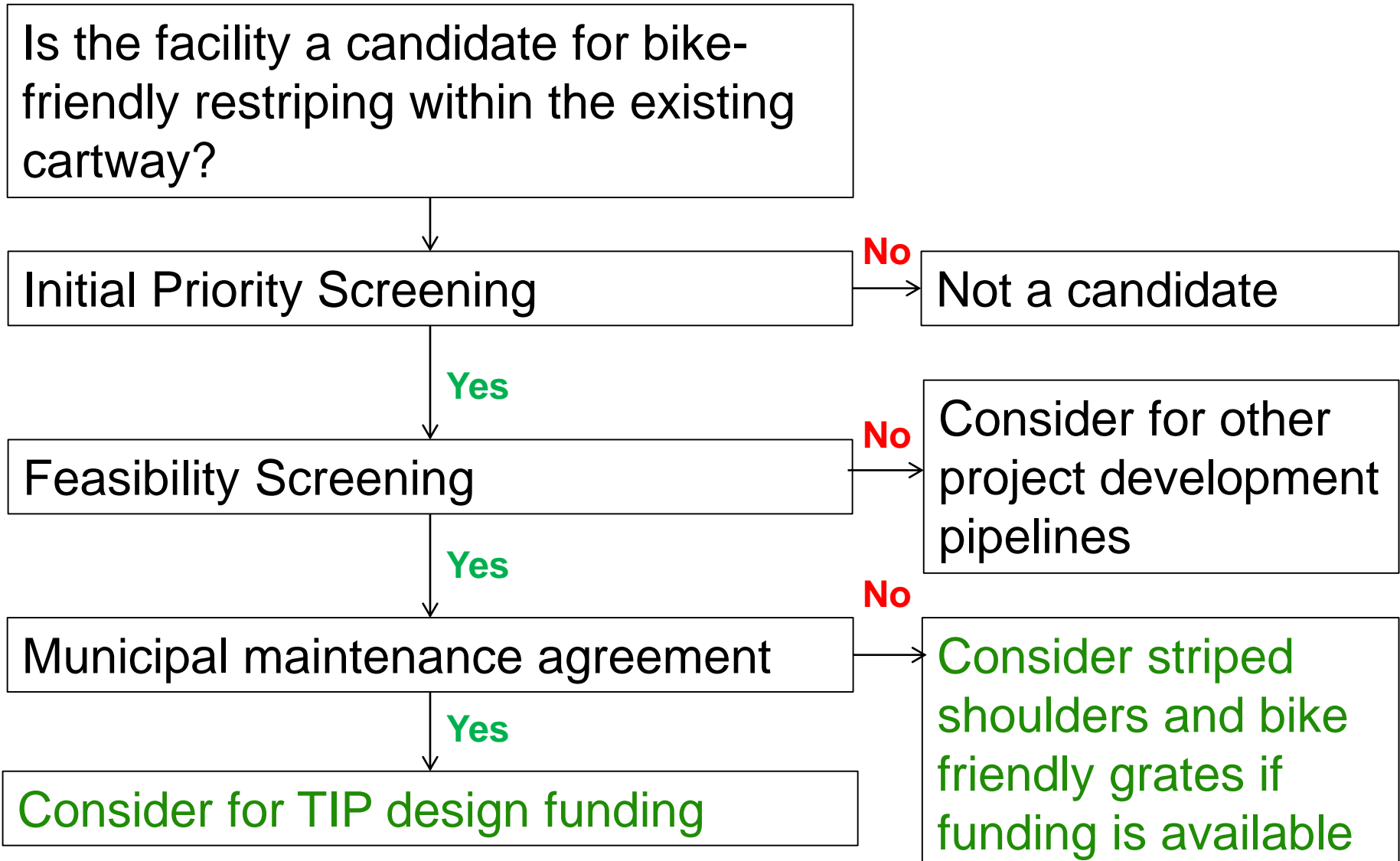
[Edit](#)

is a facility improvement feasible on this segment? Yes

primary bike treatment(s) proposed: N/A

bike treatment details/notes: 5-6'-wide bike lanes in both directions appear to be feasible in the existing shoulders between State Road and the Croydon Regional Rail Station. I would recommend striping both the inner and outer lines of the bike lane (rather than simply painting a bike legend in the shoulder) as several properties on this street have un-curbed parking lots.

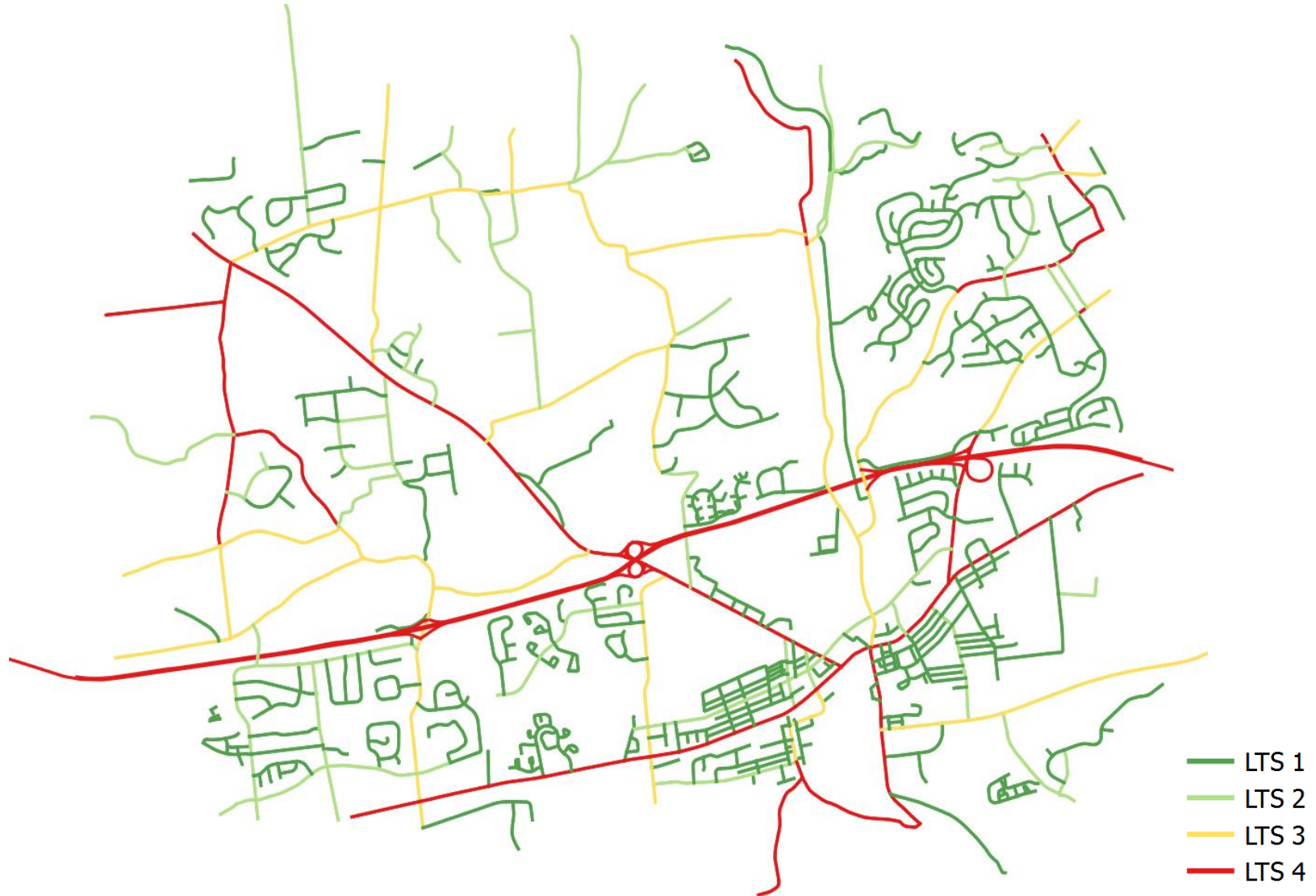
Process



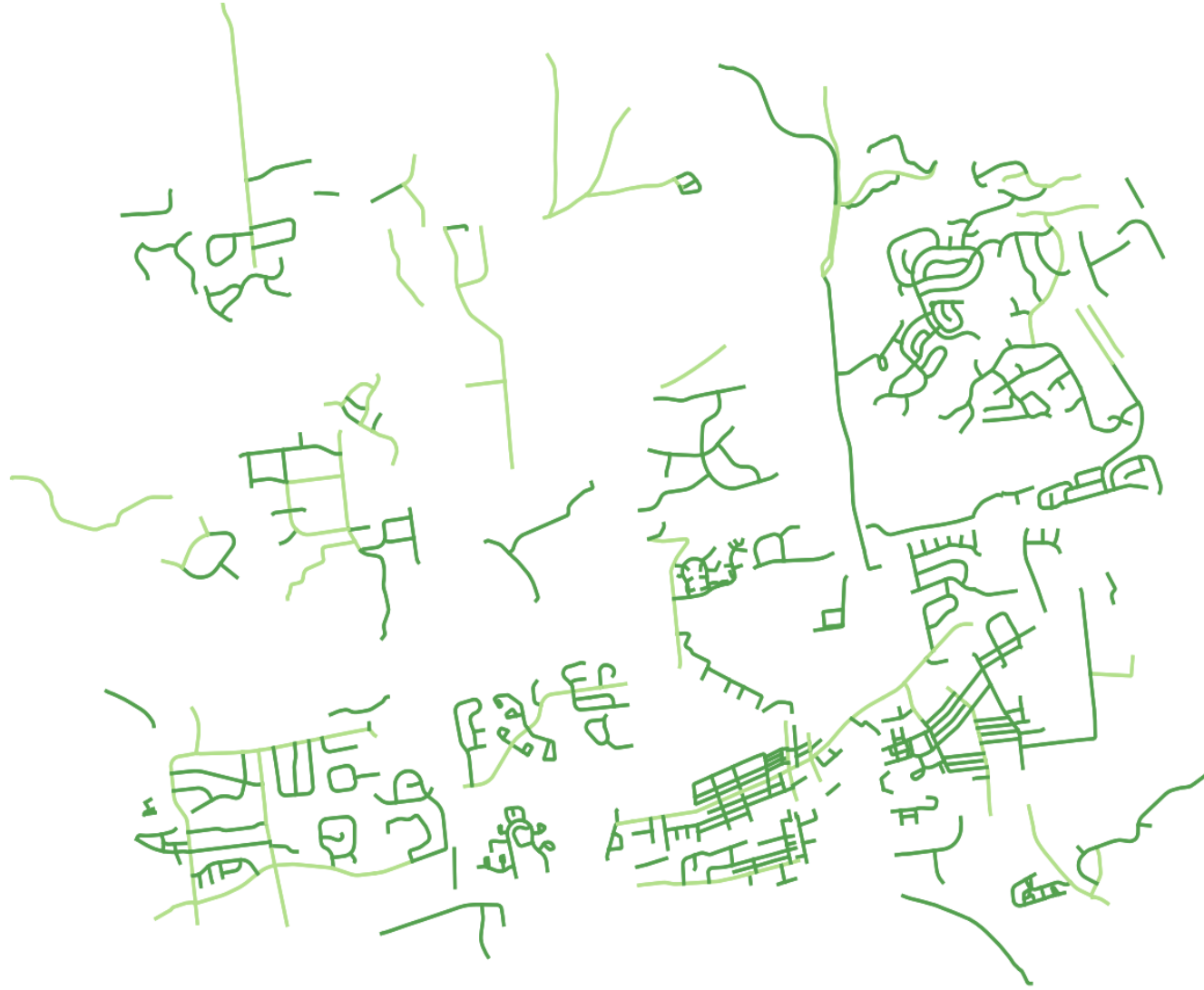
Level of Traffic Stress (LTS)

LTS	Comfortable Enough For (Cyclist Type)	Characteristics
1	Most People	Lowest stress Comfortable for most ages and abilities
2	Interested, but Concerned	Suitable for most adults Presenting little traffic stress
3	Enthused and Confident	Moderate traffic stress Comfortable for those already biking in American cities
4	Strong and Fearless	High traffic stress Multilane, fast moving traffic

Network



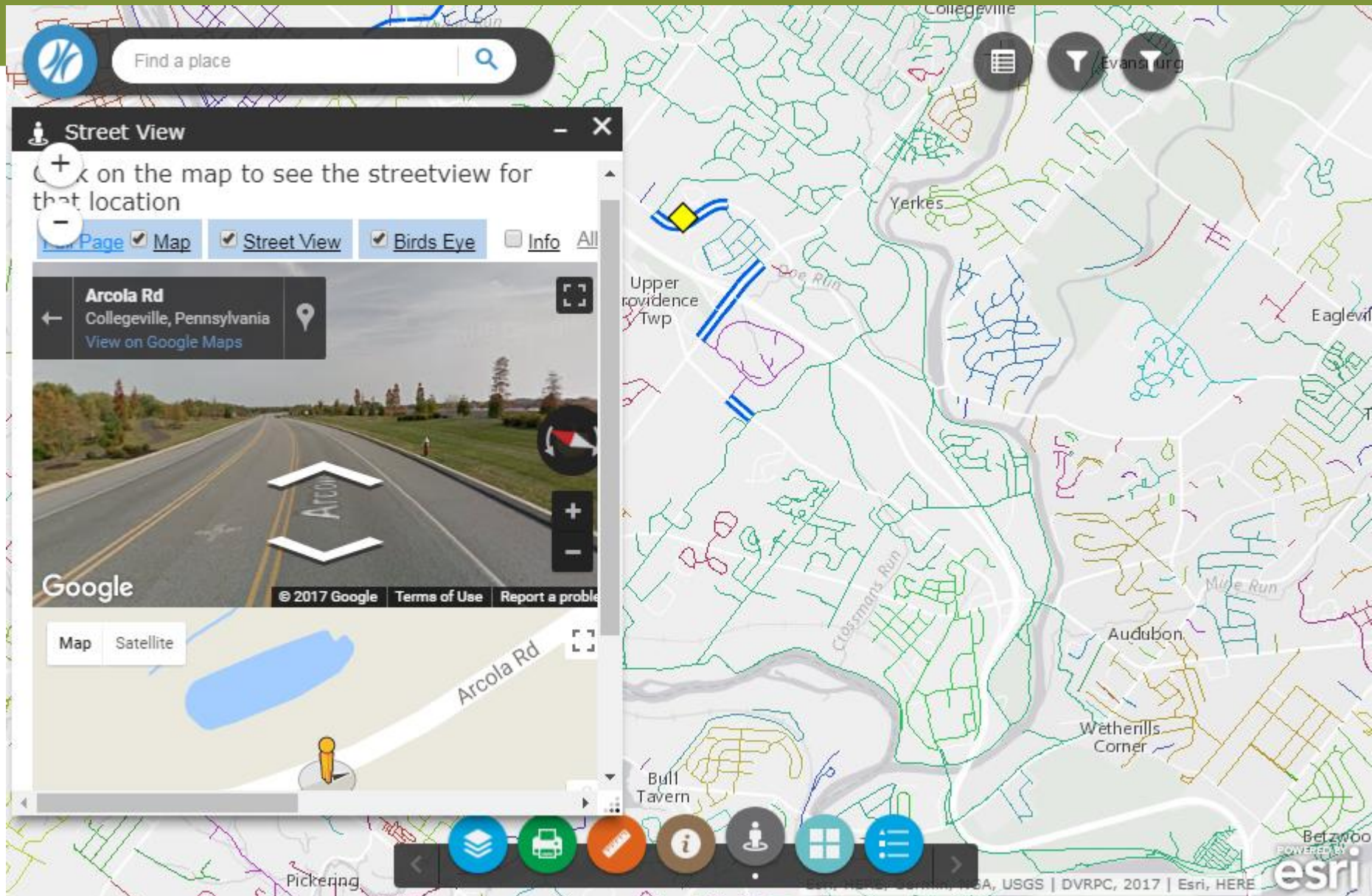
LTS 1 & 2 Islands



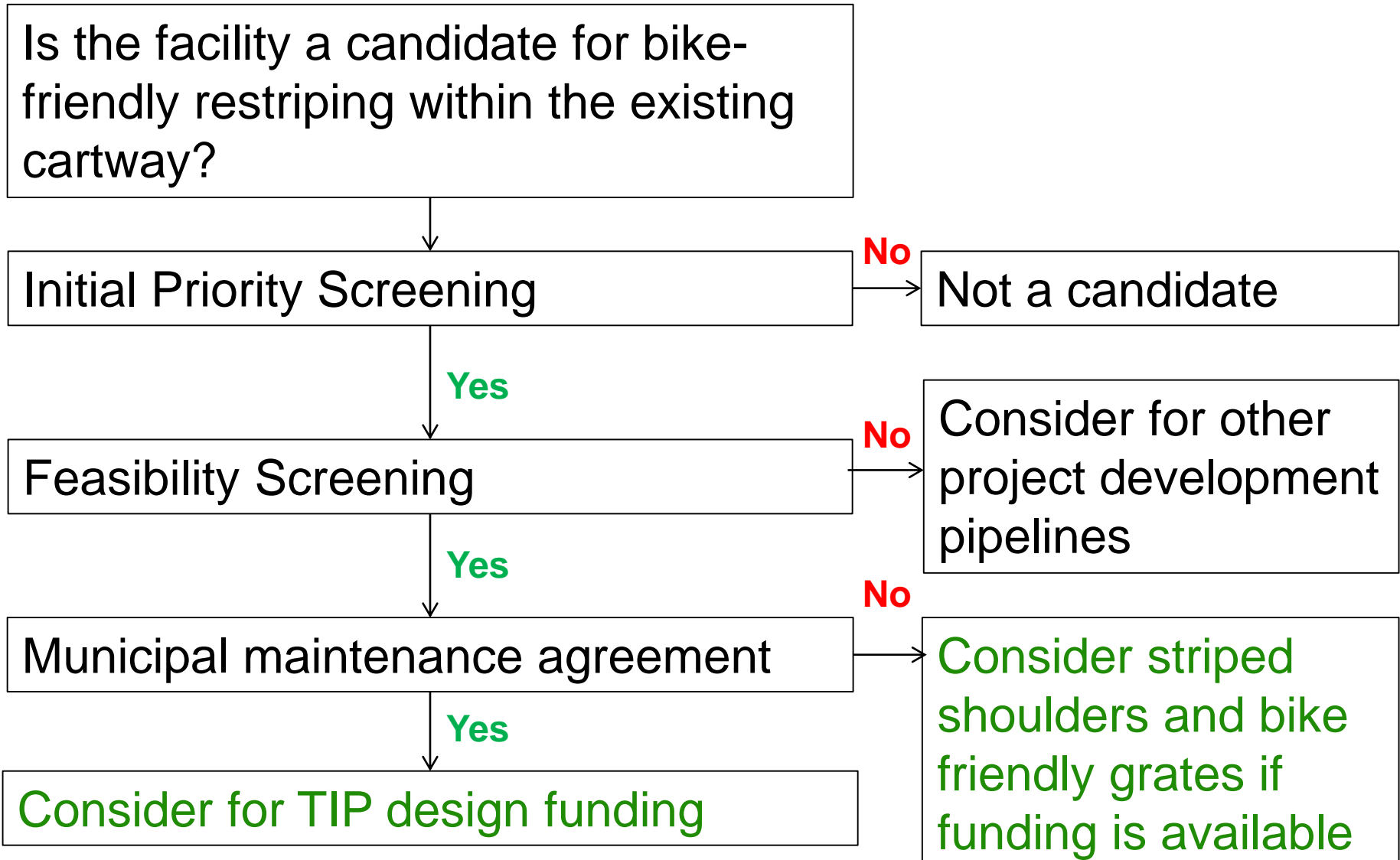
LTS 1, 2, & 3



Tool – Bike LTS and Connectivity Analysis



Process



Outreach Tools – Municipal FAQ



BIKE-FRIENDLY RESURFACING PROGRAM: MUNICIPAL FAQs

What is the Bike Friendly Resurfacing Program?

The Bike Friendly Resurfacing Program is a new effort to identify roads for potential investment in bike friendly improvements as part of regularly scheduled PennDOT resurfacing projects.

This effort is being coordinated between the Delaware Valley Regional Planning Commission (DVRPC), PennDOT District 6, the four suburban counties in the Philadelphia region (Bucks, Chester, Delaware, and Montgomery counties), and the Bicycle Coalition of Greater Philadelphia with the goal of identifying roads that are good candidates for bicycle facilities.

How was my road identified?

Roads listed in PennDOT District 6's 5-year Resurfacing plan are screened as follows:

- County planning staff identify opportunities in local and county bicycle plans;
- DVRPC evaluates local and regional connectivity opportunities identified in the regional Bicycle Level of Traffic Stress (LTS) and Connectivity analysis;
 - ◆ For more on Bicycle LTS, see: www.dvrpc.org/webmaps/bikestress
- The Bicycle Coalition of Greater Philadelphia provides input from members of the public regarding specific locations for improvement;
- PennDOT and DVRPC collaborate to evaluate which opportunities would be feasible to implement in the context of a resurfacing project;
- DVRPC and County staff reach out to municipalities with feasible opportunities to discuss implementation.

Where can I learn more about bicycle facilities?

Brief descriptions of bicycle facility types can be found here: www.pedbikeinfo.org/planning/facilities.cfm

What is the municipality's responsibility?

- If the municipality is interested in bicycle facility improvements, they must agree to maintain any bicycle pavement markings between resurfacings, if such maintenance proves to be necessary.
- The region has set aside funding to design these improvements, so the new roadway design will not cost the municipality anything.
- PennDOT will cover installation of these facilities when the street is resurfaced as part of its maintenance project.
- PennDOT will also remove snow from in-street bike lanes and/or shared roadways, and perform other routine roadway maintenance such as sweeping and vegetation trimming, in accordance with normal maintenance operations.

How much will it cost to maintain bicycle pavement markings?

Maintenance costs depend on a variety of factors such as:

- the bicycle facility type,
- the length of the bicycle facility,
- spacing between bicycle pavement markings (typically 250-500 ft),
- the pavement type,



- traffic,
- weather,
- and the materials used for the bicycle pavement markings.

PennDOT uses thermoplastic for the initial bicycle markings. Waterborne paint markings cost less than thermoplastic, but tend to show wear more easily and may require more frequent maintenance. The cost of re-applying a bike symbol is dependent on the material used and availability of equipment and staff. A single pavement marking typically ranges between \$250 and \$500.

What do I need to do next?

If the municipality is interested in the proposed improvements, and agrees to any associated pavement marking maintenance, PennDOT requires that you submit a formal bicycle facility request letter. **This letter can be obtained from the County planning department or by emailing the DVRPC contacts listed at the bottom of this sheet.** The signee is at your discretion. Repaving projects move quickly, so please contact DVRPC for more information. If the municipality has developed local bicycle plans, it is also recommended to share those with County planning staff and DVRPC to help inform future opportunities.

What is PennDOT Connects?

PennDOT Connects is a new approach to project planning and development that **engages local partners before project scopes are developed.**

PennDOT Connects aims to transform capital and maintenance project development by **ensuring that community collaboration happens early, and that each project is considered in a holistic way for opportunities to improve safety, mobility, access, and environmental outcomes for all modes and local contexts.** Earlier collaboration will ensure that projects meet current and projected needs as much as possible, and can reduce costly changes further in the project development process.

Learn more: www.penndot.gov/ProjectAndPrograms/Planning/Pages/PennDOT-Connects.aspx


DVRPC Contacts:

Sarah Moran smoran@dvrpc.org Jesse Buerk jbuerk@dvrpc.org

The Delaware Valley Regional Planning Commission (DVRPC) fully complies with Title VI of the Civil Rights Act of 1964 and related nondiscrimination statutes in all activities. For more information, visit www.dvrpc.org/GetInvolved/TitleVI.



Tools – Municipal Request Template

<p>HORSHAM TOWNSHIP</p> <hr style="border: 1px solid black;"/> <p>WWW.HORSHAM.ORG COUNCIL GREGORY S. NESBITT, Esq., PRESIDENT MARK McCOUCH, VICE PRESIDENT WILLIAM GALLAGHER VERONICA HILL-MILBOURNE W. WILLIAM WHITESIDE, III</p>		<p>1025 HORSHAM ROAD</p> <hr style="border: 1px solid black;"/> <p>HORSHAM, PA 19044 215-643-3131 PHONE 215-643-0448 FAX WILLIAM T. WALKER TOWNSHIP MANAGER MARK L. HUDSON DIRECTOR OF ADMINISTRATION</p>
<p>April 23, 2018</p>		
<p>Kevin Herdin- Sr. Highway Maintenance Manager 7000 Geerdes Blvd King of Prussia, PA 19406</p>		
<p>Subject: Municipal Request to Incorporate Bicycle Facilities into Resurfacing Project</p>		
<p>Montgomery County Horsham Township SR 0152/Limekiln Pike</p>		
<p>Dear Kevin:</p>		
<p>As part of the upcoming PennDOT resurfacing project MD7, and in concert with the PennDOT Connects Initiative, Horsham Township would like to request the incorporation of bicycle facilities on SR 0152/Limekiln Pike, with PennDOT to coordinate the necessary design activities. The proposed bicycle facilities are described below:</p>		
<ul style="list-style-type: none"> • <u>Location</u>: Limekiln Pike (SR 0152) from Tennis Avenue to Horsham Road • <u>Bicycle Facilities Requested</u>: Stripe shoulder as bike lane in both directions; mark sharrows as necessary (for example, at bridge locations where striping the shoulder as a bike lane is not feasible). 		

Striping Plan



MPMS# 63406 *Retrofit for Bike Lanes and Shoulders*

LIMITS Regionwide

No Let Date

IMPROVEMENT Bicycle/Pedestrian Improvement

MUNICIPALITIES: Various

FC:

AQ Code:NRS

PLAN CENTER:

IPD:

PROJECT MANAGER: Jonathan Korus

CMP: Not SOV Capacity Adding

PennDOT Class: Bicycle/Pedestrian

PennDOT Improvement: Bicycle/Pedestrian

NHPP:

The purposes of this project are to (1) place an engineering consultant on retainer to undertake the necessary design work to retrofit bike lanes and bicycle-friendly shoulders where appropriate, coincident with resurfacing projects and (2) maintain existing and future bicycle facilities, including installation, maintenance, and replacement of striping and damaged and missing signs. Work would include bike lanes, edge line striping, signs, and revising traffic signal permit drawings to continue edge line revisions through signalized intersections. Work would be limited to Bucks, Chester, Delaware, Montgomery counties, and the City of Philadelphia.

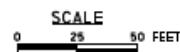
There is a collaborative process in place with the four counties, PennDOT District 6-0, DVRPC, and the Bicycle Coalition of Greater Philadelphia which has developed potential projects in corridors with bicycling activity or where there is a latent demand for bicycling if bicycle-friendly facilities were provided. Continuation of this process will permit this funding to be used on the projects already developed or other projects that the group may develop.

TIP Program Years (\$ 000)

Phase	Fund	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	
PE	CAQ	500												
		0	500	0	0	0	0	0	0	0	0	0	0	
		Total FY2019-2022			500	Total FY2023-2026				0	Total FY2027-2030			0

TYPE B

Y/4"	SOLID YELLOW LINE/WIDTH
DY/4"	DOUBLE SOLID YELLOW LINE/WIDTH
DDW/4"	DASHED DOTTED WHITE LINE/WIDTH
BY/4"	BROKEN WHITE LINE/WIDTH
W/24"	SOLID WHITE LINE/WIDTH
Y/24"	SOLID YELLOW LINE/WIDTH

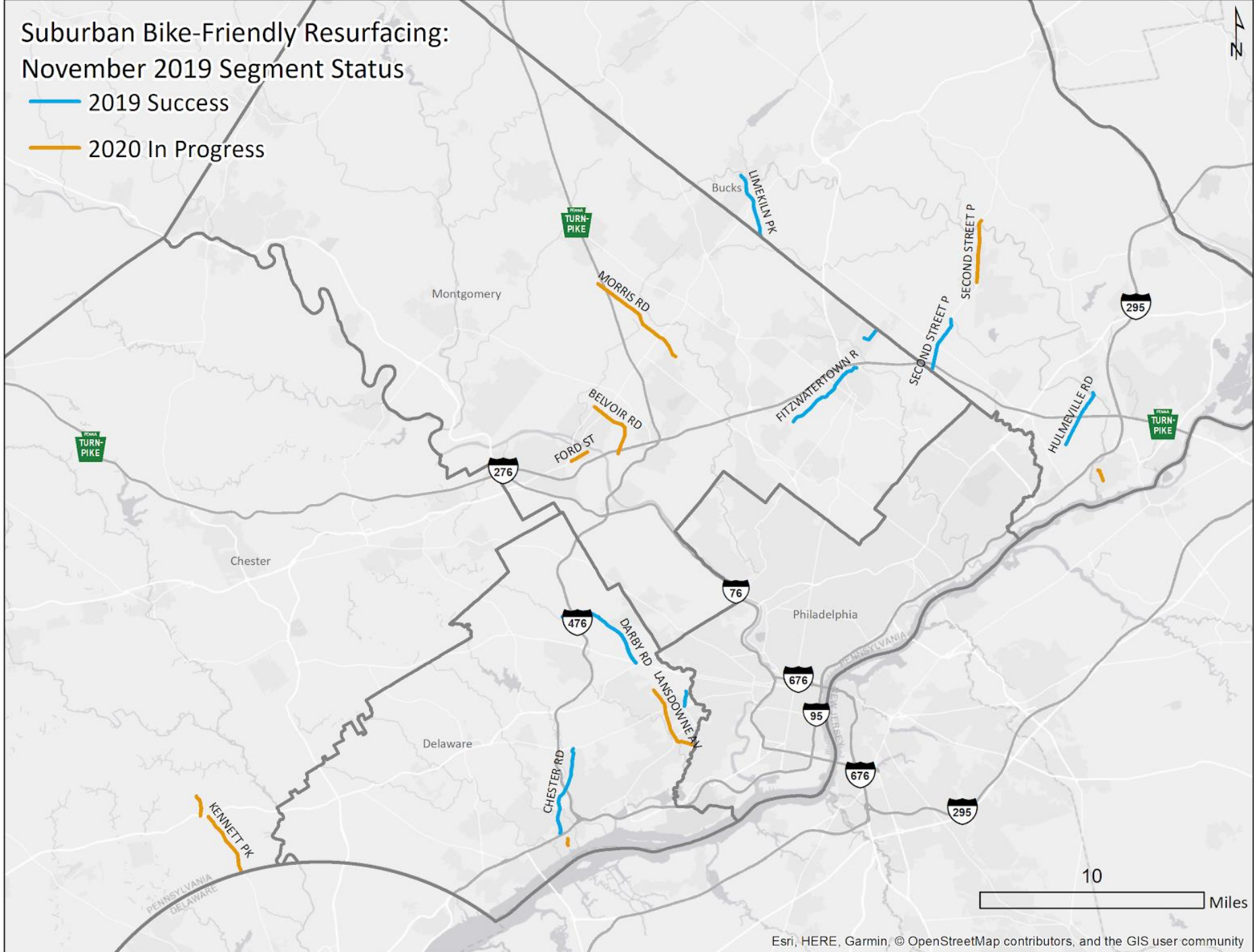


2019 Successes

County	Road Name	Municipalities	Facility Type	Mileage
Bucks	Hulmeville Road (SR 513)	Penndel, Hulmeville, Middletown	Bike lane / striped shoulders	1.1 miles
Bucks	Second Street Pike (SR 232)	Upper Southampton	Buffered bike lanes	1.2 miles
Delaware	Madison St / Chester Rd/ Providence Ave (SR 320)	Swarthmore, Chester City, Springfield	Bike lanes /sharrows / signage	4.5 miles
Delaware	Darby Road (SR 2005)	Haverford, Lansdowne, Darby	Striped shoulders	1.5 miles
Montgomery	Montgomery Ave / Jacksonville Rd (SR 322)	Hatboro	Bike lanes (along Jacksonville)	0.5 miles
Montgomery	Fitzwatertown Rd (SR 2038)	Upper Moreland, Upper Dublin, Abington	Buffered bike lanes	2.2 miles
Total				11 miles

Suburban Bike-Friendly Resurfacing: November 2019 Segment Status

- 2019 Success
- 2020 In Progress



PA 663 – King Street (Pottstown, Montgomery County)



PA 152 – Main Street (Chalfont Borough, Bucks County)



Darby Road – **BEFORE** (Haverford Township, Delaware County)



Google

Darby Road – AFTER (Haverford Township, Delaware County)



Madison Street – **BEFORE** (Chester City, Delaware County)



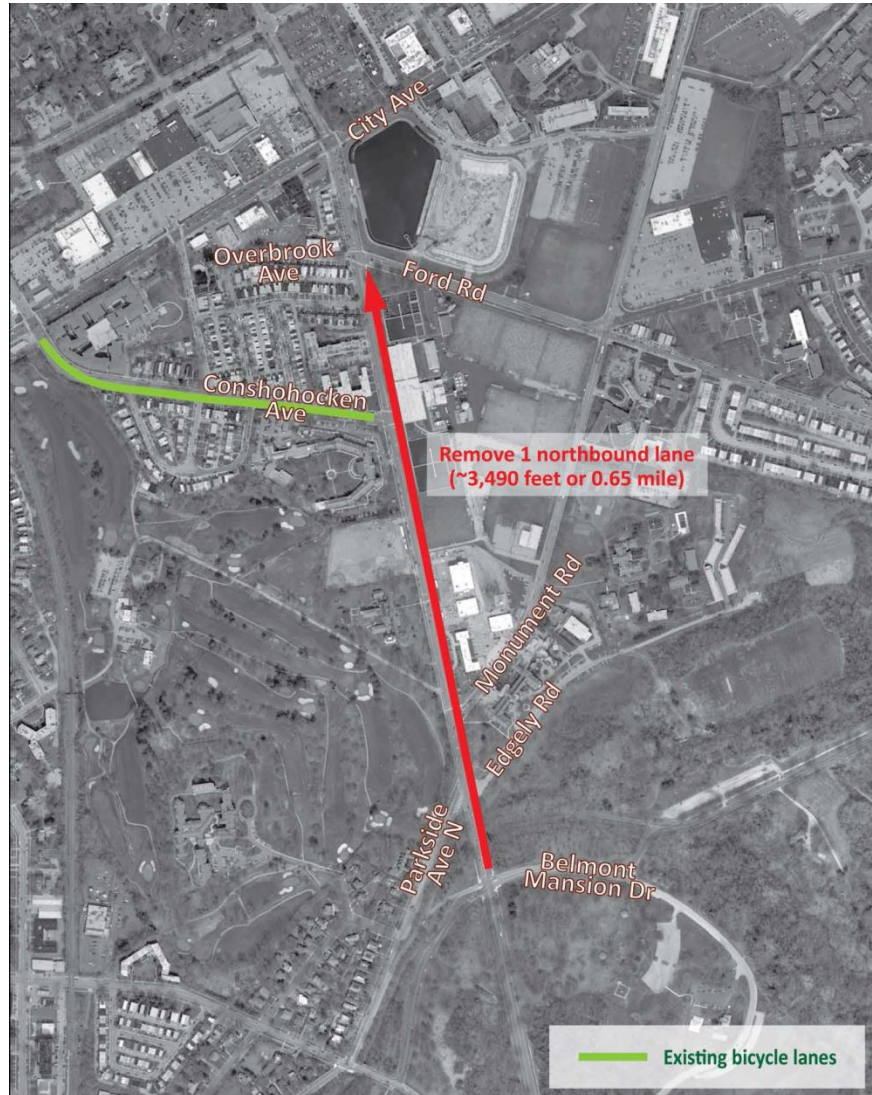
Madison Street – AFTER (Chester City, Delaware County)



Next Steps

- 2020 project screening complete
 - Already received 2 requests (3 municipalities)
 - Outreach to municipalities ongoing
- Keep working to get ahead
- Future enhancements:
 - Improve PennDOT Connects outreach to all municipalities with resurfacing projects
 - Work program project to conduct road diet analyses
 - Before/after bicycle counts

Enhanced Analysis – Road Diets



4a: Belmont Ave, Existing



4b: Belmont Ave between City Ave and Edgely Road, Proposed, near-term resurfacing



4c: Belmont Ave between City Ave and Edgely Road, Proposed, long-term facility configuration



4d: Belmont Ave between Montgomery Ave and Ave of the States, Proposed, near-term resurfacing



Enhanced Analysis – Road Diets

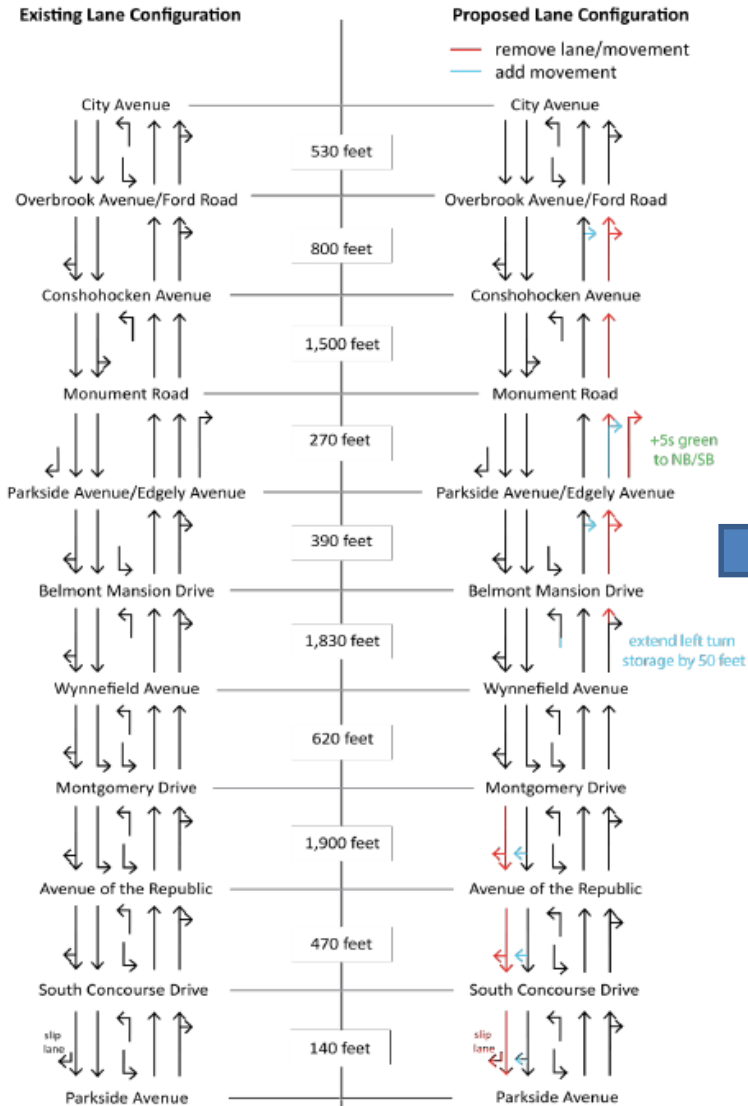


Table 2: AM Peak Delay, Existing and Build, by intersection and movement

	Vehicle Volume	EXISTING AM LOS	EXISTING AM Delay (s)	BUILD AM LOS	BUILD AM Delay (s)
City Ave		D	35.9	D	34.3
NBL	172	C	23.4	C	33.8
NBT	638	C	24.4	B	16.3
NBR	85	B	14.3	C	20.1
Overbrook/Ford Rd		B	11.7	B	15.6
NBT	698	B	10.6	B	18.5
NBR	56	A	4.9	A	5.9
SBL	128	C	28.8	D	36.8
SBT	317	A	4.6	A	6.7
Conshohocken Ave		B	18.6	C	21.4
NBL	297	C	23.7	C	21.8
NBT	681	B	10.5	B	12.8
SBT	364	C	27.3	C	31.4
SBR	29	D	46.7	D	54.7
Monument Rd		B	18.0	B	18.7
NBT	984	B	16.2	C	24.3
NBR	430	A	5.3	A	8.3
SBL	13	D	48.4	D	46.7
SBT	892	C	20.8	B	18.1
Belmont Mansion Dr		B	19.8	C	24.1
NBL	8	C	30.6	D	37.1
NBT	923	A	4.7	A	9.3
NBR	79	A	2.2	A	3.4
SBL	50	C	29.0	C	24.6
SBT	1222	B	18.2	B	17.2
SBR	29	B	20.0	B	19.6
Wynnefield Ave		D	40.2	D	46.0
NBL	364	B	15.1	B	19.2
NBT	1010	A	2.6	A	2.9
SBT	1667	E	57.3	E	72.0
SBR	7	E	53.5	D	42.2
Montgomery Dr		D	43.8	D	52.8
NBL	2	D	49.0	F	83.0
NBT	840	C	26.7	D	36.0
NBR	125	C	26.9	C	24.2
SBL	1044	E	61.7	F	95.4
SBT	598	B	14.1	B	13.0
SBR	27	B	18.8	A	4.2
Ave of the Republic		A	7.1	A	8.0
NBL	10	B	11.3	B	19.8
NBT	965	A	7.9	A	8.2
NBR	10	A	6.5	A	8.2
SBL	10	A	8.8	A	0.0
SBT	898	A	4.9	A	8.2
SBR	10	B	10.3	A	1.4
South Concourse Dr		D	41.9	C	29.8
NBL	5	A	8.0	B	13.9
NBT	930	B	12.9	B	11.0
NBR	15	A	3.1	A	9.0

PENNDOT CONGRATULATED FOR 'BICYCLE FRIENDLY RESURFACING PROGRAM' IN SOUTHEASTERN PA

Tags: [Bicycles](#), [District 6](#), [DOTcom](#), [Community Relations](#)

October 22, 2019 12:00 AM

By: Jan Huzvar



[PennDOT District 6](#) developed a multi-agency partnership in alignment with [PennDOT Connects](#) that the [Delaware Valley Regional Planning Commission](#) [↗](#) (DVRCP) calls the "Bicycle Friendly Resurfacing Program."

Upon elimination of the Bicycle Occupancy Permit, PennDOT now uses Letters



QUESTIONS?

THANK YOU



Connect With Us!



New Jersey Signal Optimization Program

Regional Technical
Committee Meeting

November 12, 2019



Project Development/History



- Based on successful PennDOT 6-0 contract, now in its second iteration (first contract TWT, second Albeck Gerken)
- DVRPC Contracts, TIP, CMP, LRP at table from beginning
- TIP Line Item
- Concept discussed for years
- Collaboration with Burlington, Camden, Gloucester and Mercer Counties to initiate development
- Aware of NJDOT optimization contracts, focused solely on County Highways

Financial Support



- **DVRPC's *Connections 2040* Long Range Plan**
 - Transportation Investment Priorities
 - Preserve and maintain existing transportation system and rights of way
 - Improve the operation of existing transportation facilities
 - Increase the capacity of existing multimodal transportation system, limiting the addition of through travel lanes
- **100% CMAQ funded through the TIP**
- **Contract through DVRPC**
 - Open Ended, set up for multiple years
 - \$350,000 a year for four years
 - Flexible scope to meet needs of each corridor

Team Partners



- **Traffic Signal Timing Initiative Team Partners:**

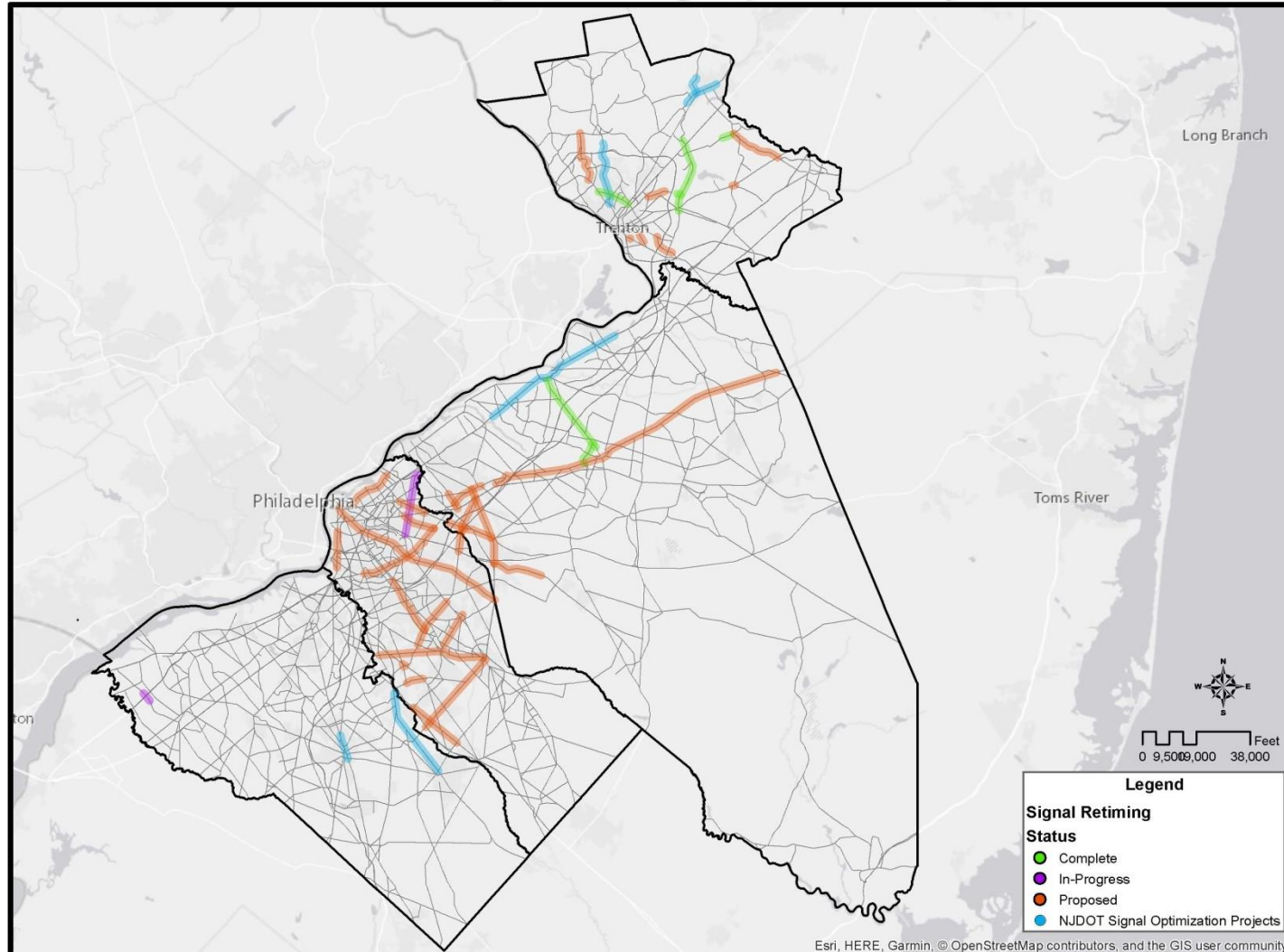


- **Consultant Team:**



Project Locations

DVRPC Signal Retiming Map - New Jersey



Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Burlington County

- 10 Proposed Corridors

Mercer County

- 11 Proposed Corridors

Camden County

- 17 Proposed Corridors

Gloucester County

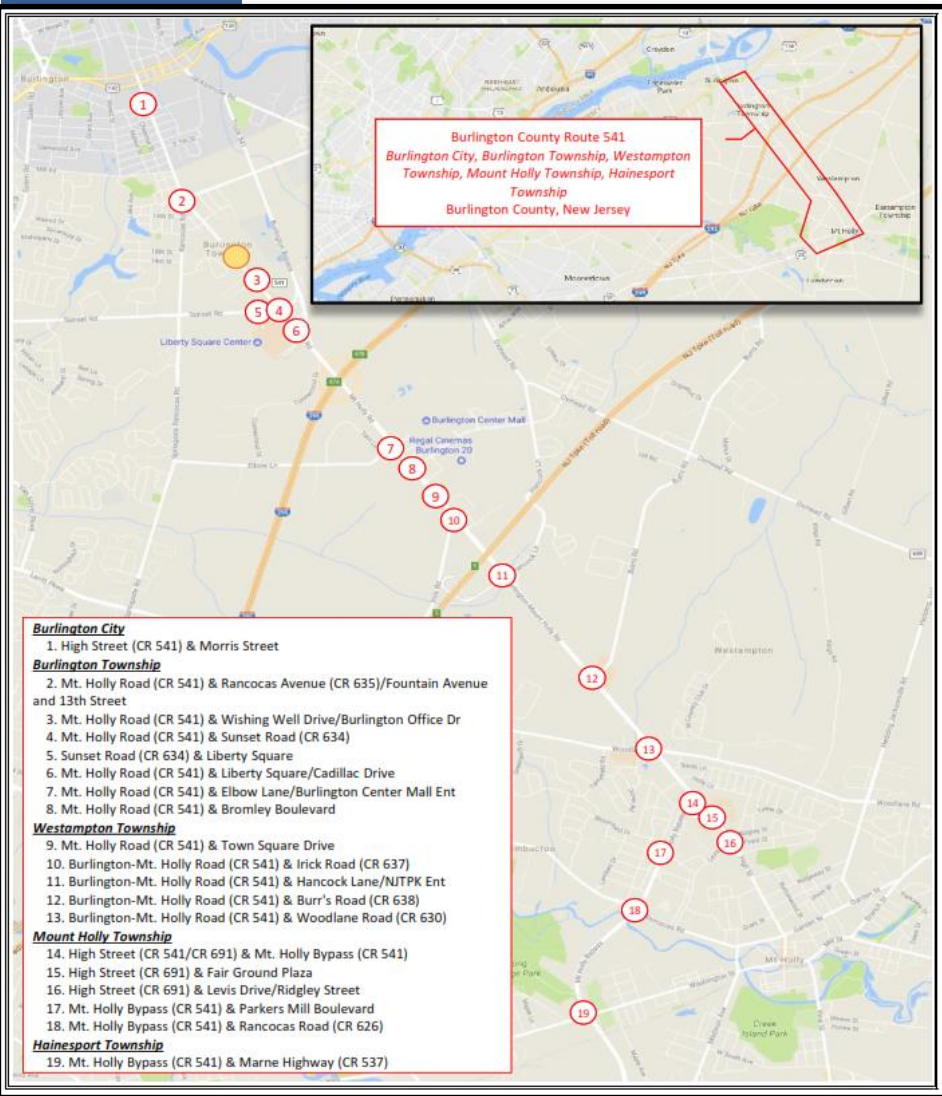
- 1 Proposed Corridors

Project Accomplishments to Date



- Consultant team met with each County to identify candidate corridors.
- Each corridor/intersection quickly assessed for operational issues (communication, detection, controller time clock)
- Consultant team had second meetings to rank candidate corridors and begin actual design/implementation of new timings.
 - Managing expectations, identifying constraints
- First corridor implementation completed August 2018
 - Burlington (CR 541), 19 intersections
 - 20% improvement in travel time, delay, stops

County Route 541 Corridor



- 19 total intersections
- Roadway character changes from 2-lane roadway to 6-lane roadway.
- Connects US Route 130 to the North with NJTPK, I-295 and Mt. Holly Bypass.
- Speed limit changes
- Project controlled by Burlington County central system (Econolite CENTRACS)
- Dealt with operational issues for the intersection of CR 541 and CR 635 to provide link between change in traffic characteristics and improvement in metrics (stops, delays, travel time)
- Concerns over impact of I-295 and NJ Turnpike
- Burlington City High School impacts on corridor.
- Corridor has optically-based emergency preemption.

The Signal Timing Process



• Minimize Delays

• Reduce Emissions

• Manage Queues

Determine Project Goals, Define Success, Determine Schedule

• Reduce Stops

• Reduce Complaints

Increase
Throughput

The Signal Timing Process



- Met with County to identify candidate corridors
- Rapid field assessment
 - Controller heartbeat, detection (pedestrian and vehicular), communication check. Existing controller information uploaded from CENTRACS.
 - Only two minor maintenance concerns identified, quickly resolved by Burlington County maintenance.
- Extensive data collection
- Custom programs developed for AM ramp-up, AM Peak, Mid-Day Peak, PM peak, PM Late night, Weekend Programs.
- Consultant team, working with Burlington County and Signal Control Products, downloaded new timings from Burlington County TOC
- Fine Tuning in the Field
- Final reports, measures of effectiveness.

Six-Step Signal Timing Process



Data Collection and Analysis

Pe
E

Fine-Tune Field Operations

Deploy Signal Timing Plans

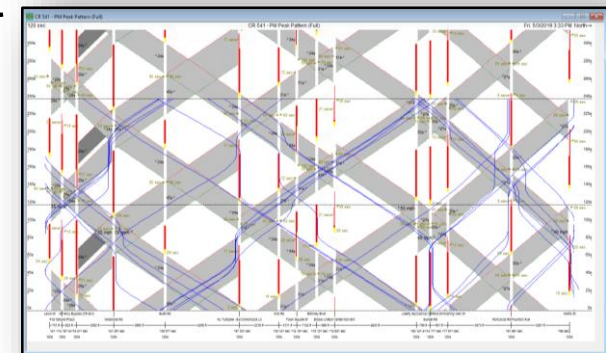
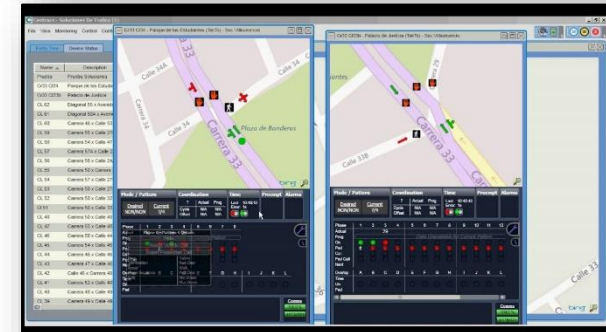
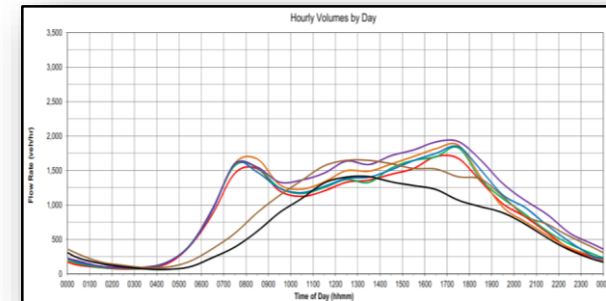
Develop Signal Timing Plans



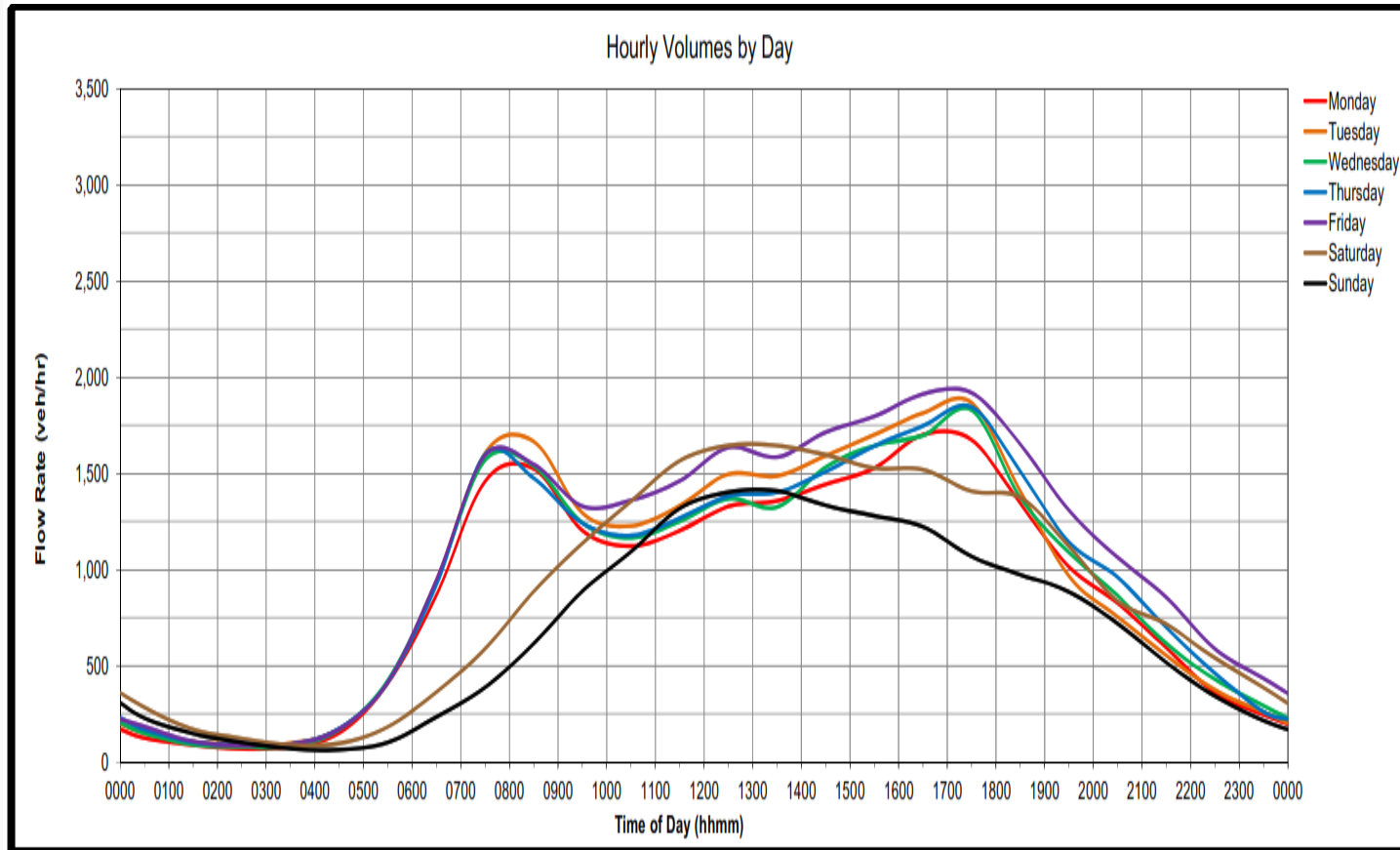
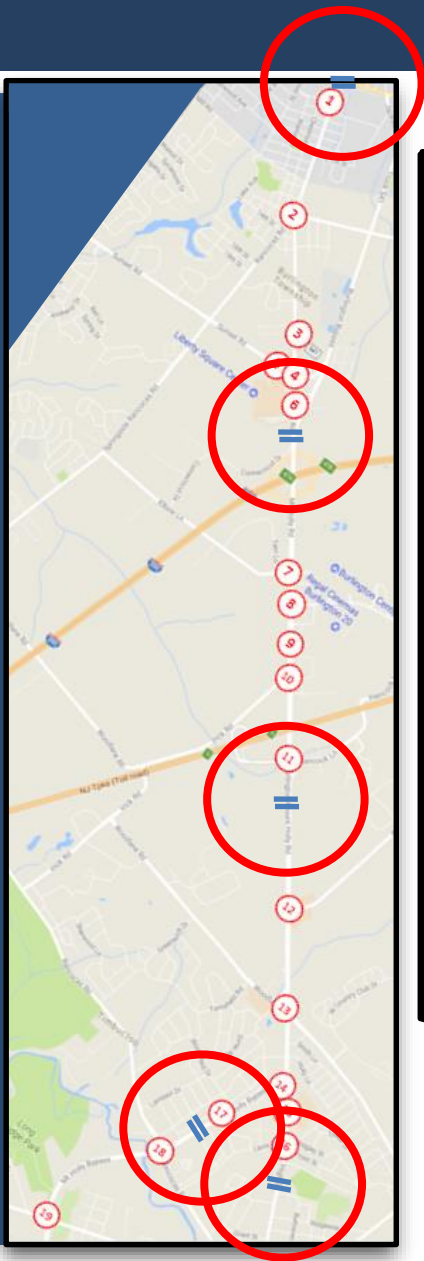
Data Collection



- 24-Hr Weekly Volume Profiles
- Turning Movement Counts
 - Miovision SCOUT units deployed
- Travel Time Runs
 - Tru-Traffic w/ Video
- Signal System/Field Intersection Inventory
 - Link lengths
 - Lane widths and types
 - Controller Type
 - Condition of Signal Equipment
 - Existing Communication Equipment
 - Detection Devices
 - Existing Timings and Phasing
 - Status of time clock?

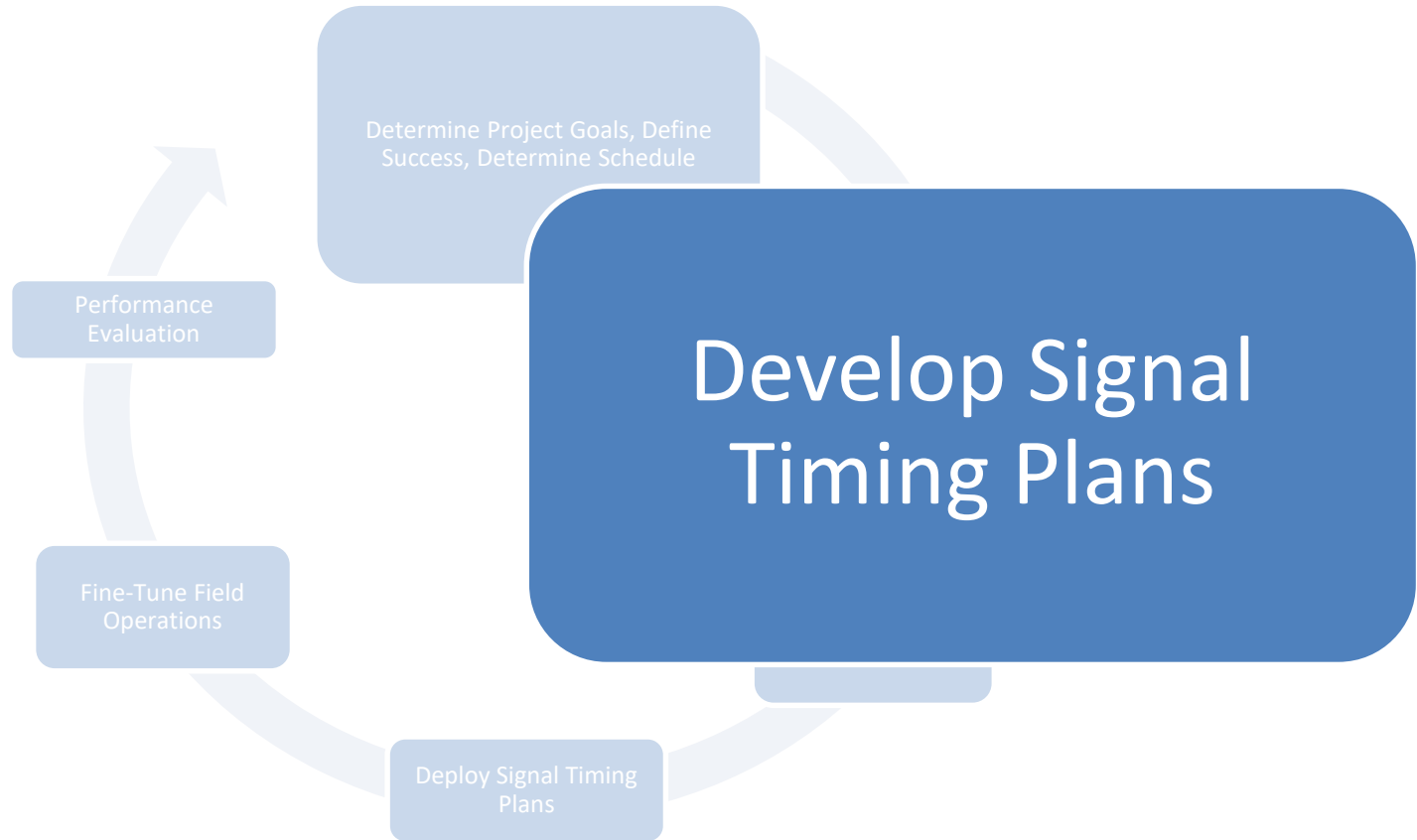


Data Collection

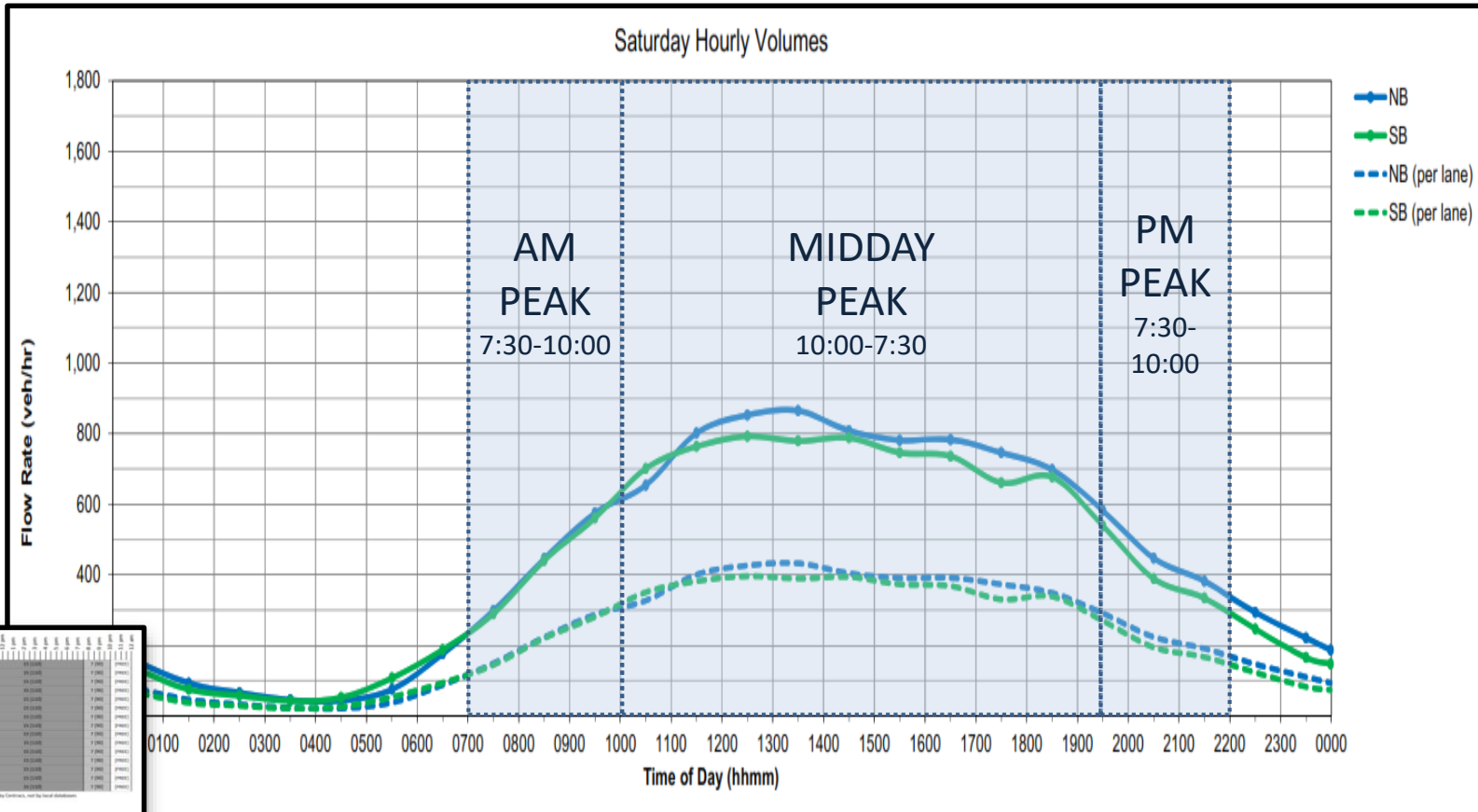
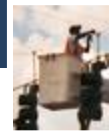


CR 541, Average Daily Traffic

Six-Step Signal Timing Process



Saturday Timing Plans



IMPLEMENTED SCHEDULES
SATURDAY
High St/PM Holly Rd (CR 541)

Location	Start	End	Phase
1. Main St	07:00	07:30	PHASE 1
2. Ramoth Rd/Fountain Ave	07:00	07:30	PHASE 1
3. Office Cr/Walshing Well Dr	07:00	07:30	PHASE 1
4. Sunset Rd	07:00	07:30	PHASE 1
5. Liberty Sq/Cadillac Dr	07:00	07:30	PHASE 1
6. Freedom/Highway Center Blvd	07:00	07:30	PHASE 1
7. Freedom/Highway Center Blvd	07:00	07:30	PHASE 1
8. Broadway Blvd	07:00	07:30	PHASE 1
9. Town Square Dr	07:00	07:30	PHASE 1
10. Dick Rd	07:00	07:30	PHASE 1
11. N. Turnpike - Exit 1/Howard Ln	07:00	07:30	PHASE 1
12. Burns Rd	07:00	07:30	PHASE 1
13. Woodbine Rd	07:00	07:30	PHASE 1
14. Mt Holly Rd (CR 541)	07:00	07:30	PHASE 1
15. Fair Ground Plaza	07:00	07:30	PHASE 1
16. Lewis Dr/Walgrave St	07:00	07:30	PHASE 1

General Note: Greenhills for all other times controlled by Traffic and Signal Controller.

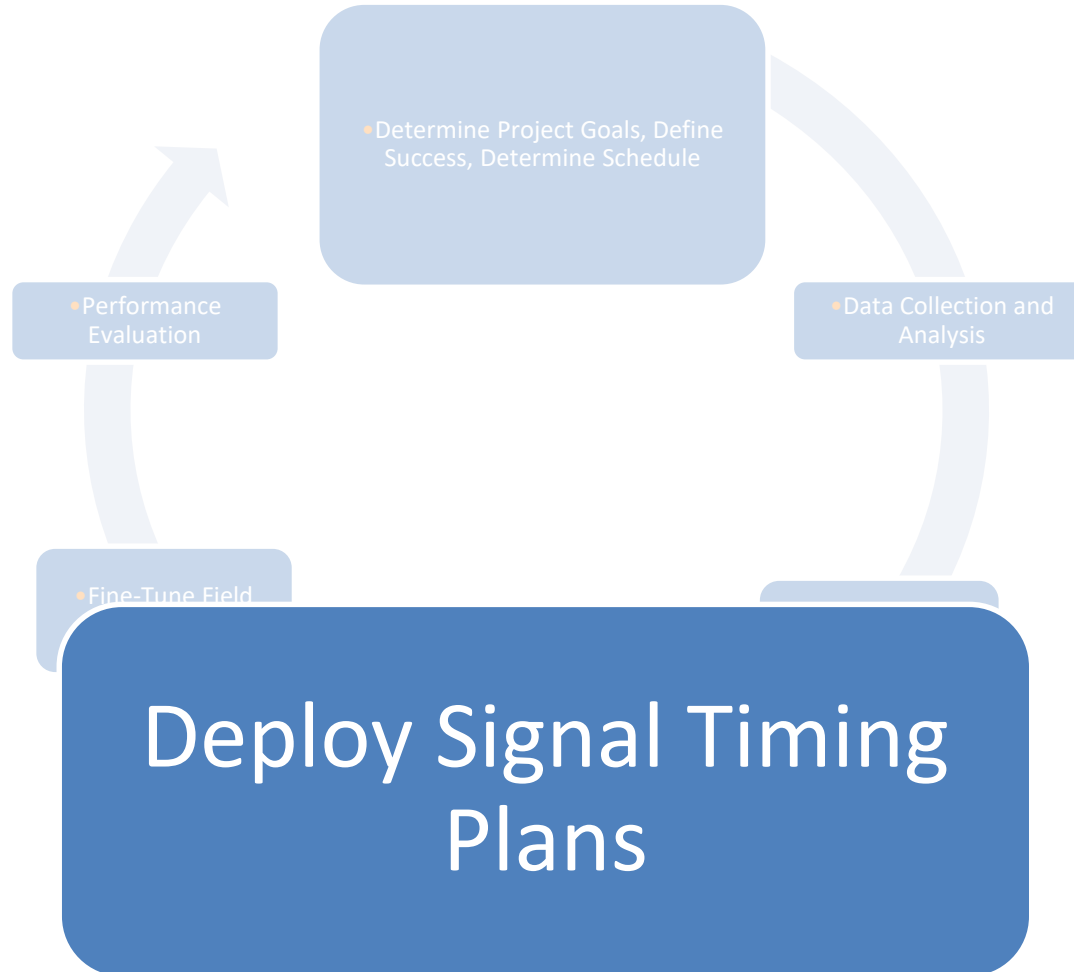
IMPLEMENTED SCHEDULES
SATURDAY
Mt Holly Rd (CR 541)

Location	Start	End	Phase
17. Parkers Mill Blvd	07:00	07:30	PHASE 1
18. Ramoth Rd	07:00	07:30	PHASE 1
19. Main Hwy	07:00	07:30	PHASE 1

IMPLEMENTED SCHEDULES
SATURDAY
Sunset Rd

Location	Start	End	Phase
20. Liberty Rd	07:00	07:30	PHASE 1
21. Mt Holly Rd (CR 541)	07:00	07:30	PHASE 1

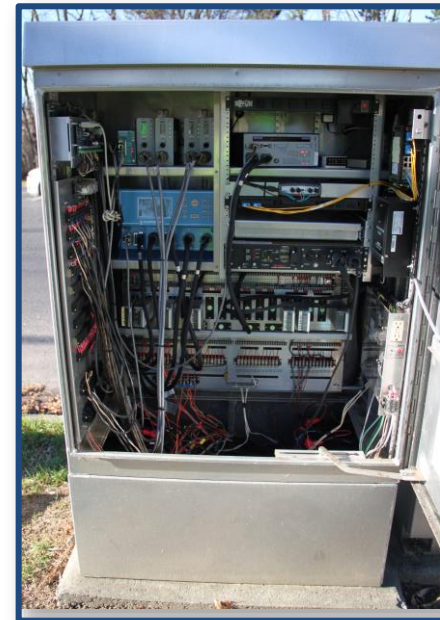
Six-Step Signal Timing Process



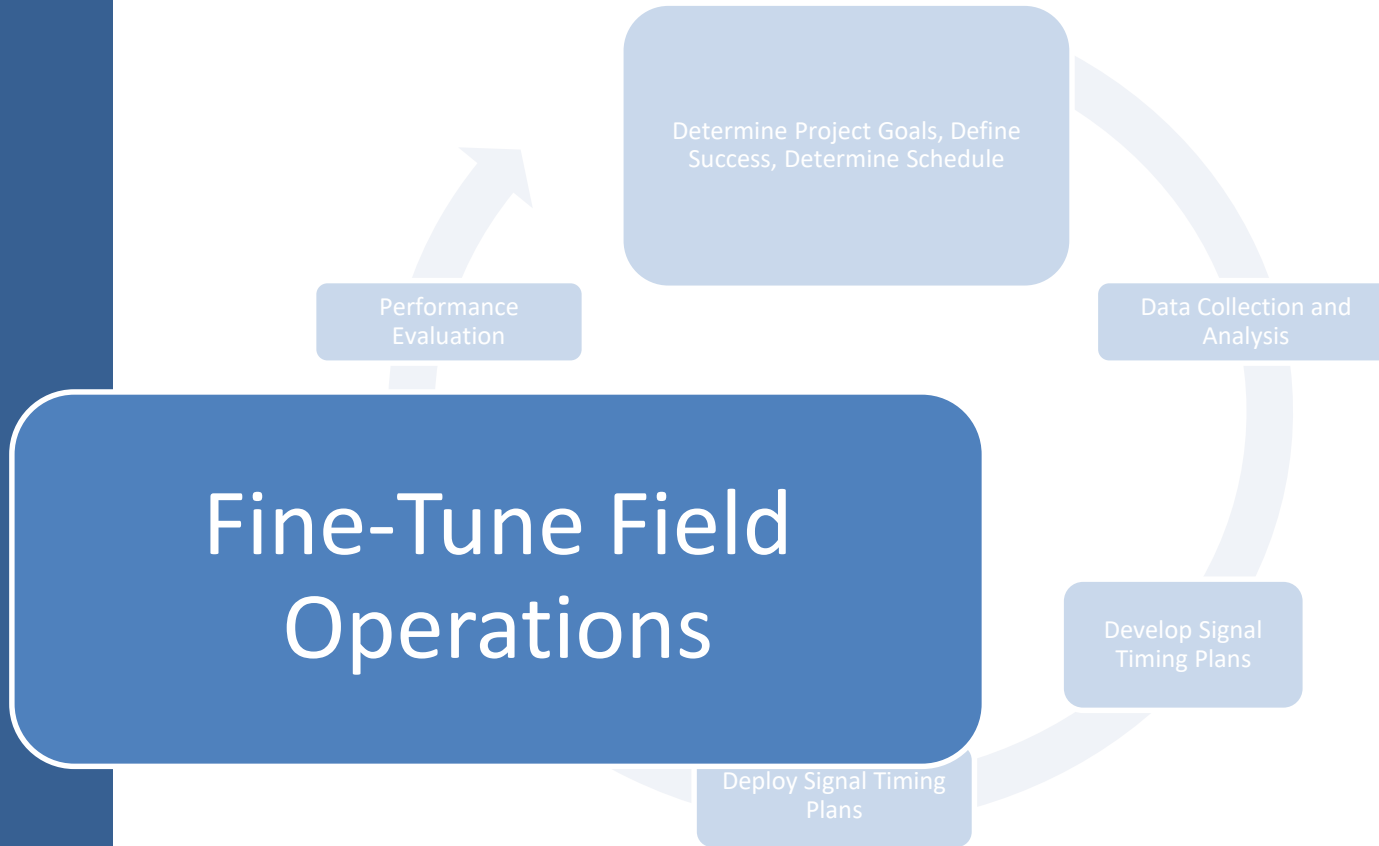
Signal Timing Deployment Process



- Submit proposed directives for review, made adjustments as necessary
- Upload databases prior to programming, compare to previous upload and reconcile any differences. Archive existing file.
- Used checklist to program databases settings
- Download plans via Econolite CENTRACS with team at local intersection.
- Ensure correct time, programming and detection at each controller.
- Observe system using Tru-Traffic to determine if timings are functioning as desired
- Burlington County assisted and observed total corridor from TOC using cameras.



Six-Step Signal Timing Process



Fine-Tune Field Operations

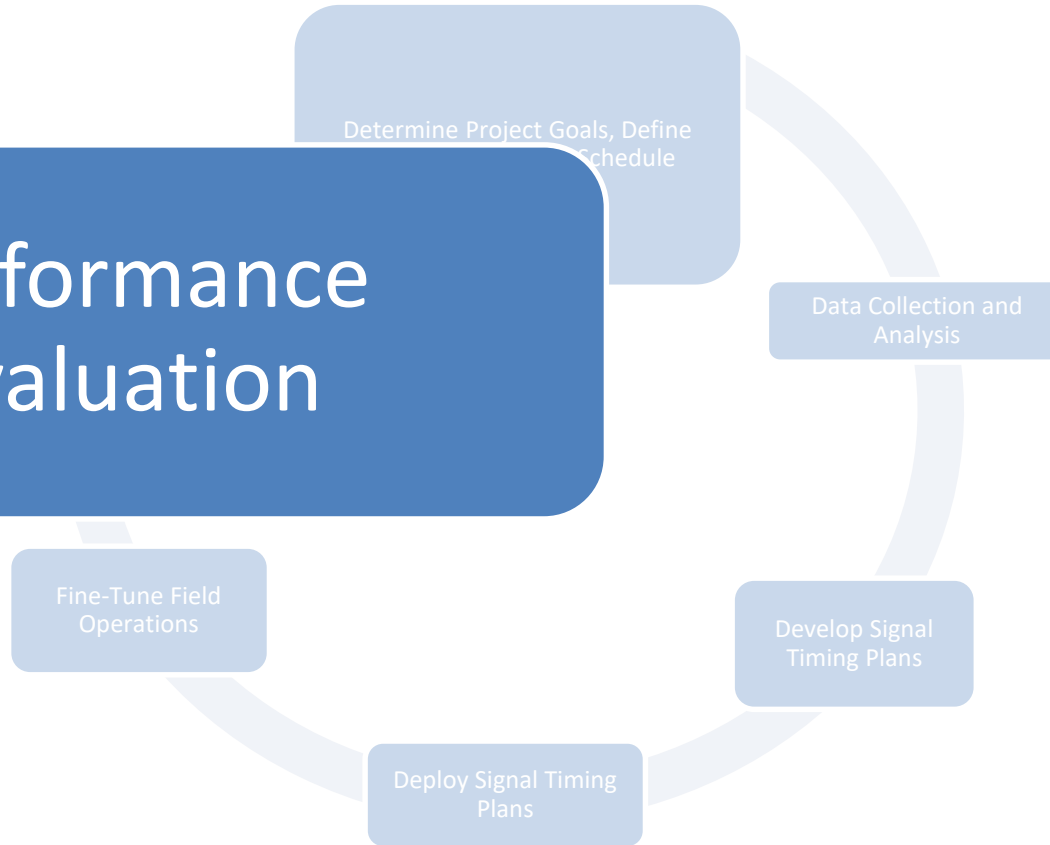


- Never allow pattern to operate unobserved the first time scheduled
- Monitor critical intersections, drive the corridor using Tru-Traffic adjusting necessary settings to achieve goals
 - More than just Cycle / Offset / Split
 - Every system unique, knowing controller capabilities can support the timing plans
- Changes were made in field and documented by project team.
- At the end of implementation, CENTRACS database rectified (upload/download)
- Long days, but the team did not leave until it's right!

Six-Step Signal Timing Process



Performance Evaluation



Performance Measures



• Synchro Network Wide Performance Measures

PM Peak Hour Period Weekday (1600 to 1800)	Travel Time (seconds)	Delay (seconds)	Number of Stops	Fuel Cons (gal)
Existing	919	469	31,502	1,383
Implemented (w lead/lag)	771	394	25,075	1,148
% Difference	-16.1%	-16.0%	-20.4%	-17.0%

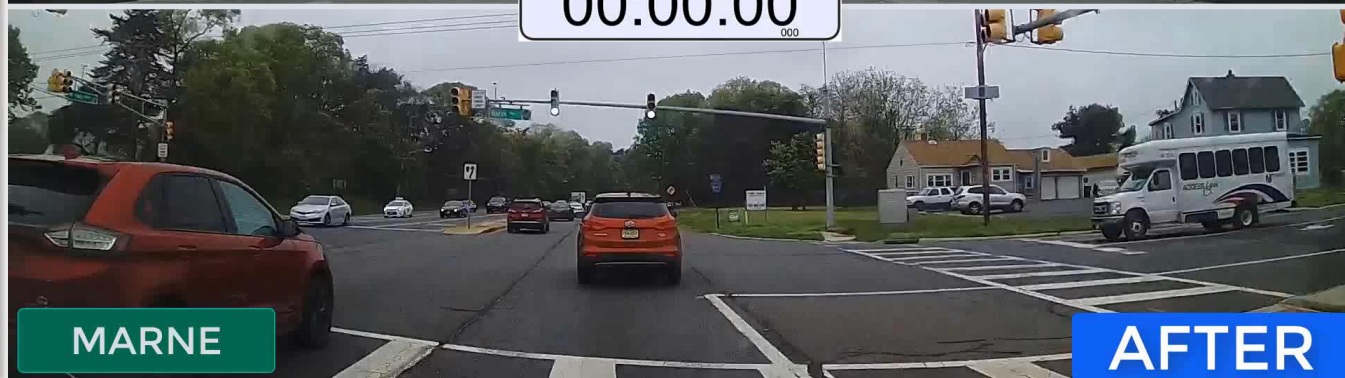
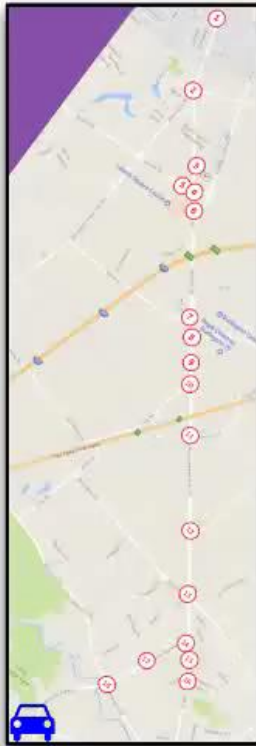
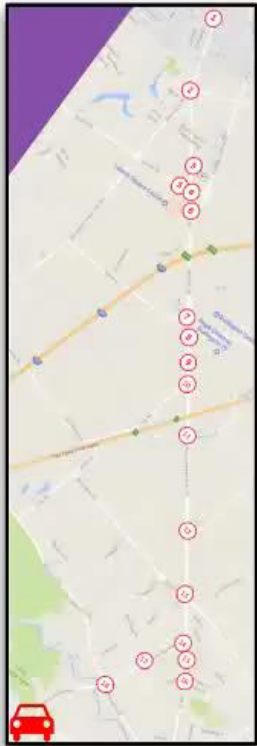
• NB Field Performance Measures

PM Peak Hour Period Weekday (1600 to 1800)	Travel Time (seconds)	Delay (seconds)	Number of Stops	Speed (mph)
Before	768	306	7.4	26.1
After	605	143	3.2	33.2
% Difference	-21.2%	-53.3%	-56.8%	27.2%

• SB Field Performance Measures

PM Peak Hour Period Weekday (1600 to 1800)	Travel Time (seconds)	Delay (seconds)	Number of Stops	Speed (mph)
Before	689	232	6.4	29.0
After	529	72	2.6	38.1
% Difference	-23.2%	-69.0%	-59.4%	31.4%

County Route 541 Before vs. After



County Route 541 Signal Retiming Project Summary



- **Traffic signal operations can be improved by simple retiming initiatives—with returns similar to that of adaptive.**
- **Success depends on collaboration, cooperation, coordination, and consensus building**

Questions



Paul Carafides
pcarafides@dvrpc.org

Senior Transportation Planner
Office of Transportation Operations
Management





National Traffic Incident Response Awareness Week

Regional Technical Committee | 11/12/19

Justin Neff | Transportation Planner | jneff@dvrpc.org





National Traffic Incident Response Awareness Week

- National Campaign Endorsed by FHWA
- Promote and Educate on the Move Over Laws
- DVRPC holding a social media campaign and photo contest

TEAM Stands For Traffic Emergency Actions Matter
SAFETY IS A TEAM EFFORT!



NATIONAL TRAFFIC INCIDENT RESPONSE

AWARENESS WEEK

NOVEMBER 10-16, 2019








Move Over Laws

- Laws in place for both New Jersey and Pennsylvania
- If conditions permit, driver must move over one lane, or slow down when approaching an emergency vehicle

STATE LAW: MOVE OVER
for ALL Emergency Vehicles

 YELLOW LIGHTS Work Trucks & Tow Trucks	 RED/BLUE LIGHTS Police	 RED LIGHTS Ambulance & Fire Trucks
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PENALTIES

\$250 FINE – not slowing down or moving over for flashing light vehicle.

90 DAY LICENSE SUSPENSION – driver causes bodily injury by not slowing down or moving over.





Social Media Campaign

#MoveOver Photo Contest

Show us your reason to #MoveOver

Use #MoveOver and tag @DVRPC on your (or your organization's) social media to be entered into the giveaway.

Photo submissions will be entered into a random drawing for one of eight \$25 Dunkin Donuts gift cards. Winners will be randomly selected on November 18, 2019. Click [here](#) for giveaway details.





First Responder Line of Duty Deaths

- Fire: Second leading cause of death
- Police: 15 fatalities in 2019
- Towers: Roughly one fatality per week
- Five fatalities in the last week
- **129% increase from 2018**

*ResponderSafety.com/FHWA





First Responder Struck-bys

- Rear-end crashes: 47% of drivers took no evasive action
*National Highway Traffic Safety Administration





Delaware Valley Line of Duty Deaths

Michael House

K&S Towing

Sean Cullen

New Jersey State Police

William McGuigan

Pennsylvania Turnpike Commission

Michael SanFelice

Pennsylvania Turnpike Commission

Marc Castellano

New Jersey State Police

Christopher Milito

Delaware River Port Authority Police Department

Joe Kealy

New Jersey Department of Transportation

Christopher Jones

Middletown Township Police Department

Timothy Simpson

Philadelphia Police Department

Robert Janaitis

South Philly Towing

James Jr. Williams

Pennsylvania Department of Transportation

Jose M. Ortiz

Philadelphia Police Department

Walter Vaughan

Warminster Fire Department



National Traffic Incident Response Awareness Week





Working together makes us better prepared.

Thank you! | Justin Neff
jneff@dvrpc | 215.238.2834

