



Walk & Bike Pottstown

Pottstown: Community Profile

- Population 22,377
- Median household income of \$40,467
- 11% of Borough population below poverty level
- 13% of population 65+
- 65% of Pottstown School District are economically disadvantaged
 - Economic disadvantages linked to health outcomes:
 - Pottstown Area Health and Wellness Foundation – Needs Assessment (2008), *“Pottstown Borough residents are more likely to be obese, less likely to engage in vigorous exercise, and their school aged children are twice as likely to be overweight than in the outer Pottstown area.”*
- 5.2 square miles
- Historic, urban, high density of housing and development
- Pottstown has lost jobs, residents, and industry since its manufacturing heyday in the 1950's, strong efforts of Borough and community groups to promote economic development



Project Team



Borough of Pottstown



Pottstown School District



Traffic Planning and Design

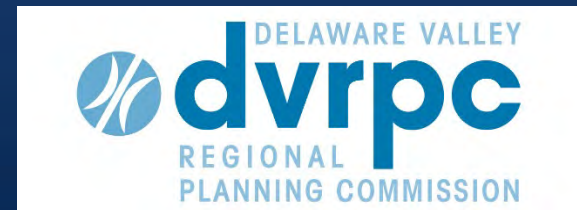


**Simone Collins Landscape
Architecture**



Project Funding

- Pottstown Health and Wellness Foundation
- Federal Transportation Alternatives Program (TAP)
- PennDOT
- supported by DVRPC; Montgomery County Commissioners and staff; legislators; and other partners



Building on Existing Assets

- Historic town with a compact and walkable layout
- Prime location on Schuylkill River Trail
- Successful bike share
- Neighborhood schools
- Walking School Bus



Project Goals

- Create a network of bicycle and pedestrian friendly routes through Pottstown
- Provide safe routes to schools and other destinations throughout Pottstown
- Strengthen connections between Pottstown and the regional trail network



Designing for All Users



Portland, OR
Photo: Dave Roth

The bicycle network improvements should be designed for a wide range of potential users.



Bicycle Networks

Case Studies in Delivering Safe, Comfortable,
and Connected Pedestrian and Bicycle Networks



"A well-connected pedestrian and bicyclist network recognizes that trips vary in purpose and nature."

Bicycle Network Principles

- **Cohesion** – How connected is the network in terms of its concentration of destinations and routes?
- **Directness** – Does the network provide direct and convenient access to destinations?
- **Accessibility** – How well does the network accommodate travel for all users, regardless of age or ability?
- **Alternatives** – Are there a number of different route choices available within the network?
- **Safety and Security** – Does the network provide routes that minimize risk of injury, danger, and crime?
- **Comfort** – Does the network appeal to a broad range of age and ability levels and is consideration given to user amenities?





Pottstown Street Network

Walk & Bike Pottstown

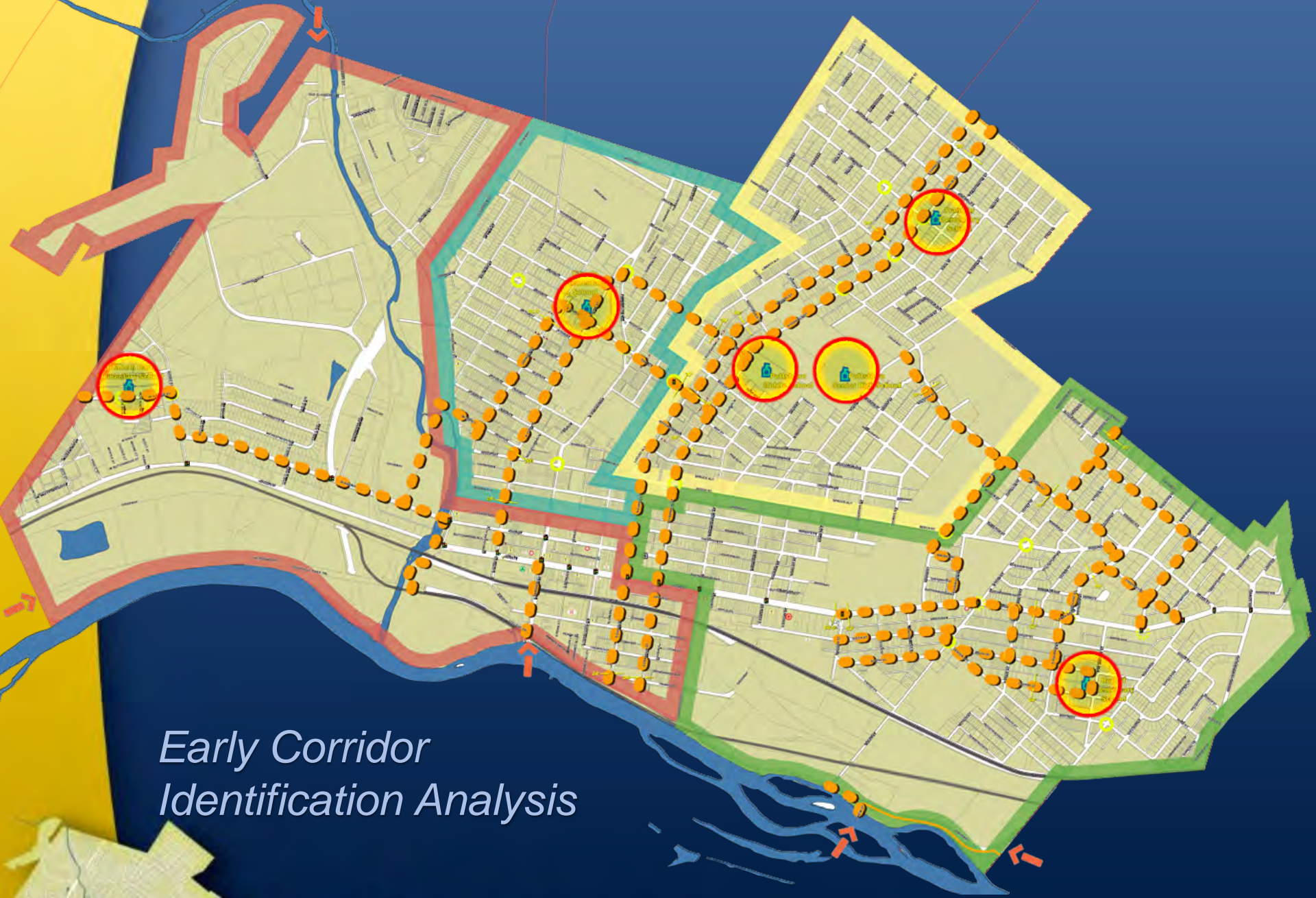


Neighborhood Schools

Walk & Bike Pottstown



Existing Bicycle Connections



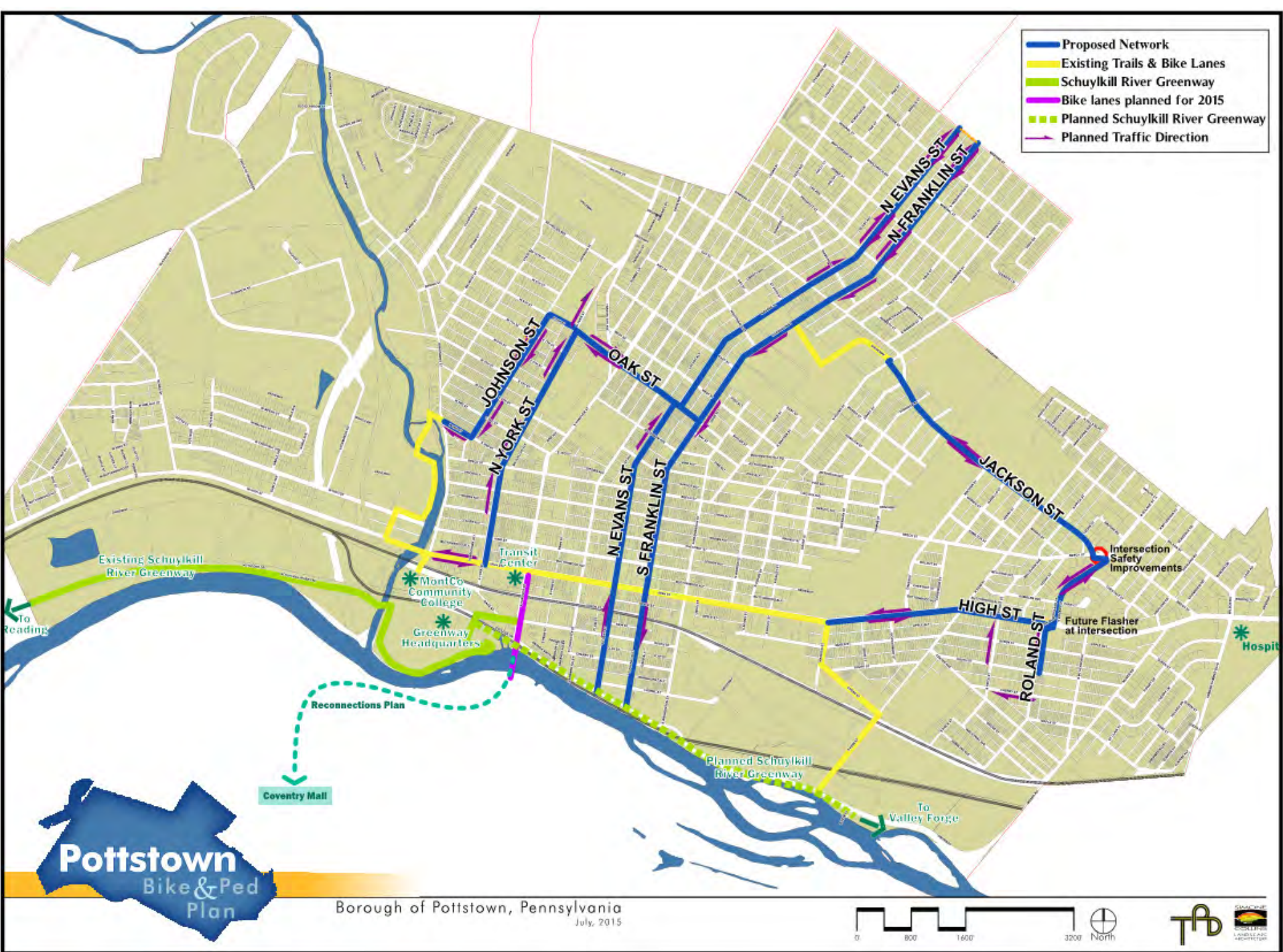
*Early Corridor
Identification Analysis*

Walk & Bike Pottstown



*Preliminary
Route Identification*

Walk & Bike Pottstown



Guide for the Development of Bicycle Facilities

2012 • Fourth Edition



Federal Highway Administration

SEPARATED BIKE LANE PLANNING AND DESIGN GUIDE

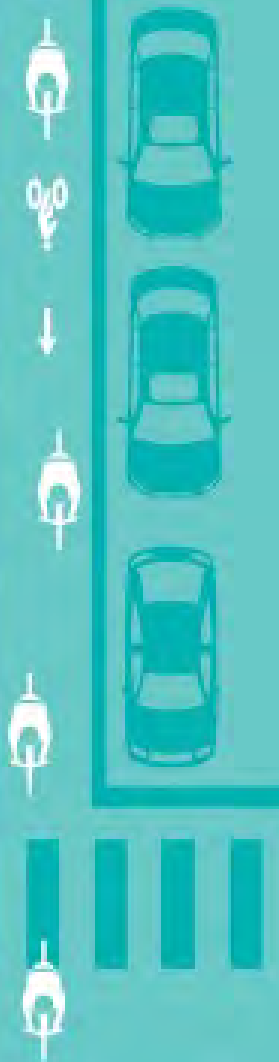


Walk & Bike Pottstown

Urban Bikeway Design Guide

National Association of
City Transportation Officials

Second Edition



SMART TRANSPORTATION GUIDEBOOK

*Planning and Designing Highways and Streets
that Support Sustainable and Livable Communities*



New Jersey Department
of Transportation



Pennsylvania Department
of Transportation

MARCH 2008



Walk & Bike Pottstown

Conventional Bike Lanes



Existing High Street Bike Lanes

Separated Bike Lanes



Panther Hollow Road – Pittsburgh, PA
Photo by John Heller/Pittsburgh Post-Gazette



Shared Lane Markings

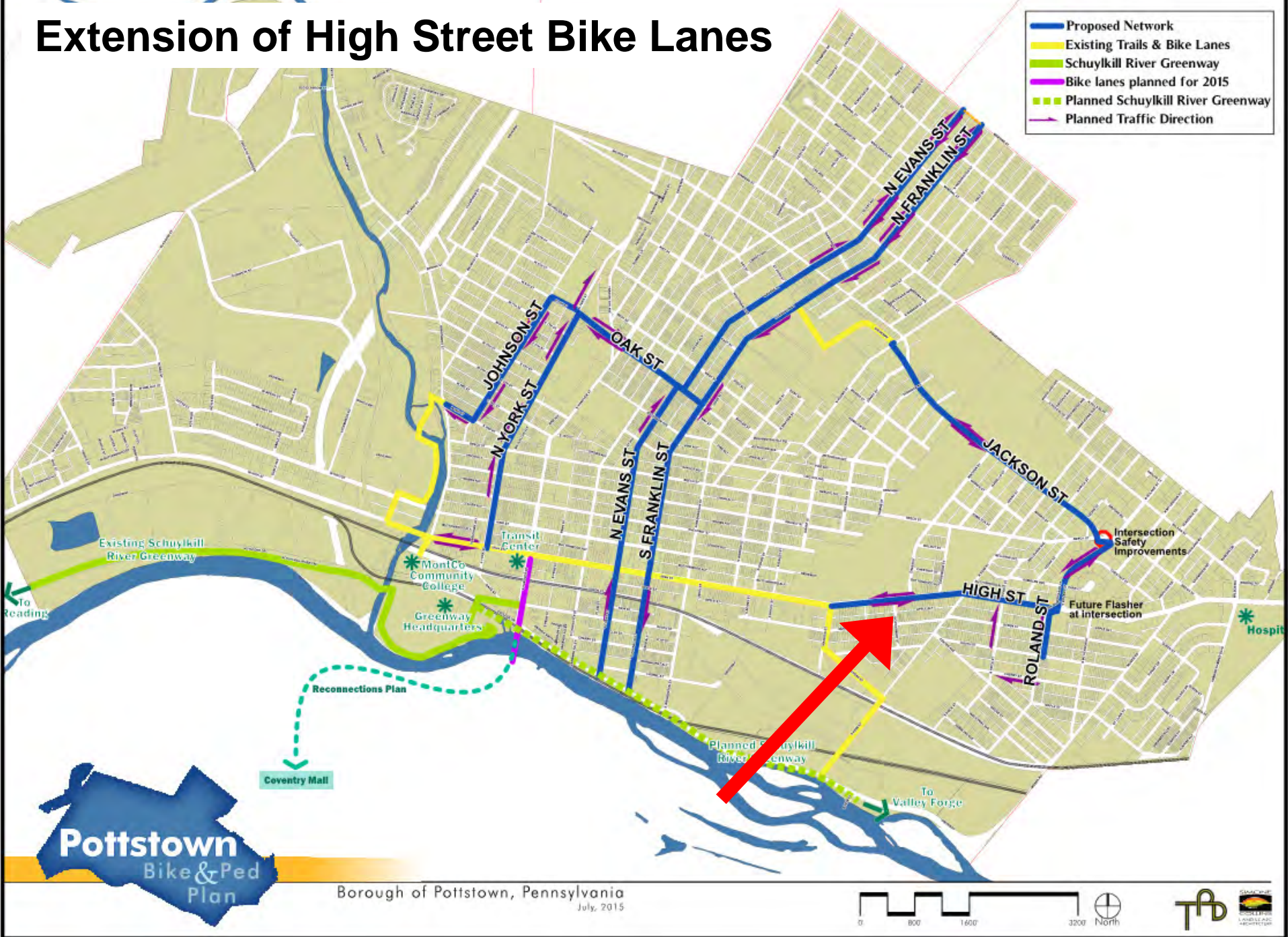


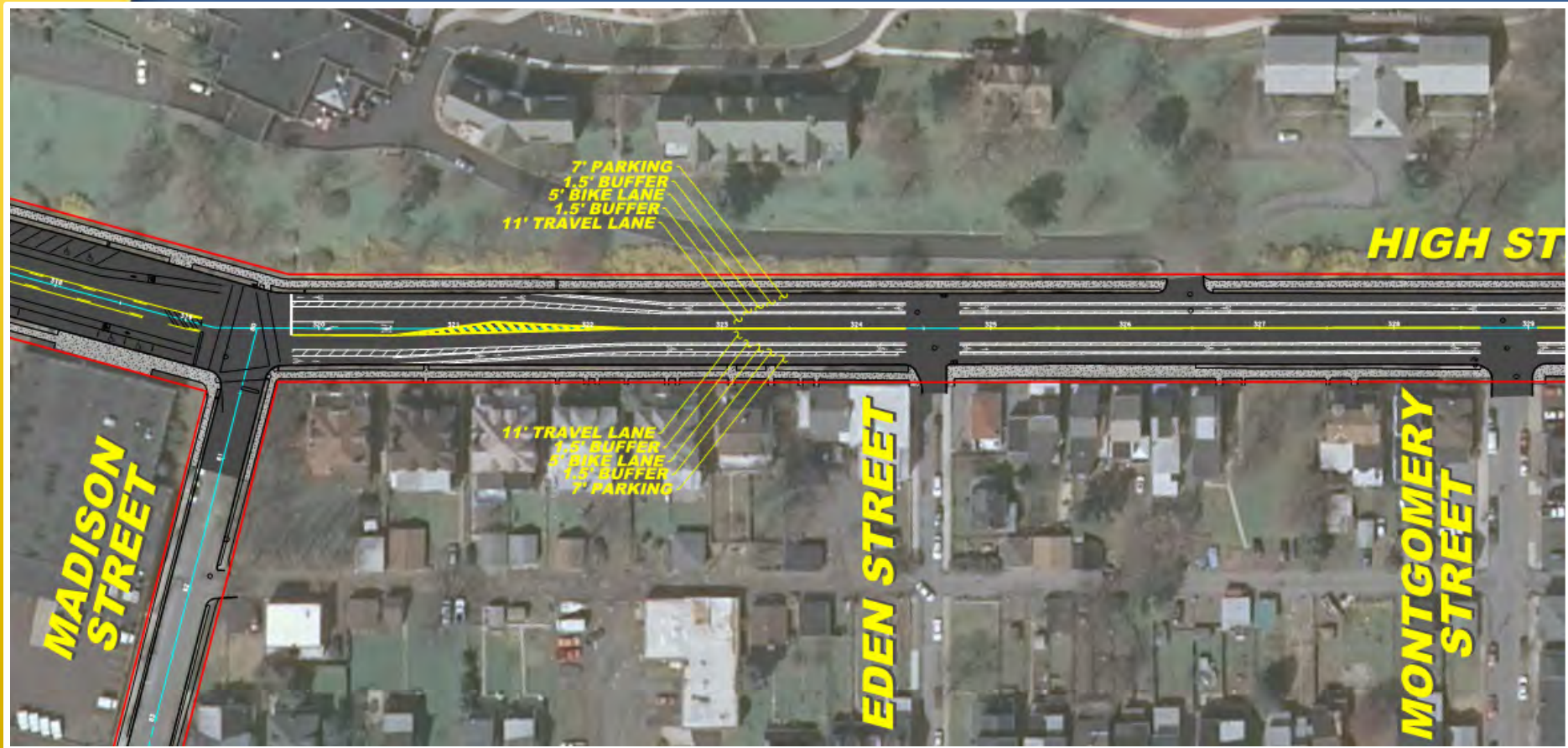
Photo via Seattle Department of Transportation



Walk & Bike Pottstown

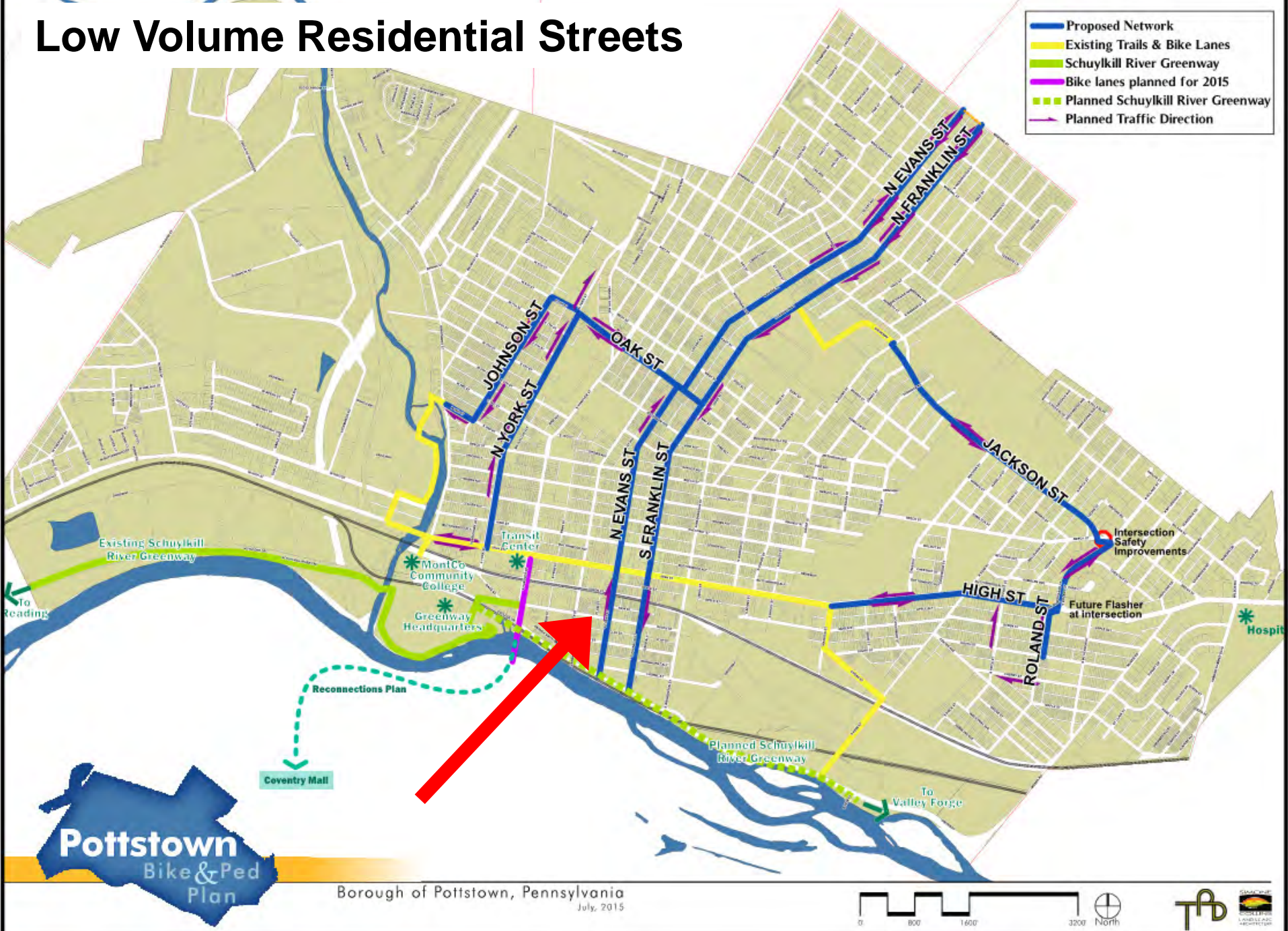
Extension of High Street Bike Lanes





Extension of High Street Bike Lanes

Low Volume Residential Streets



Low Volume Residential Streets

- Network includes six miles of low volume residential streets
- Minimize loss of on-street parking spaces
- Considered bike lanes or shared lane markings



Google



Franklin Street



Walk & Bike Pottstown



Bike Lane Alternative



Walk & Bike Pottstown



For 28-foot wide street:

- 7-foot parking lane
- 5-foot bike lane
- 9-foot travel lane
- 7-foot parking lane

Bike Lane Alternative





Portland, OR
Photo: Dave Roth

Shared Lane Alternative



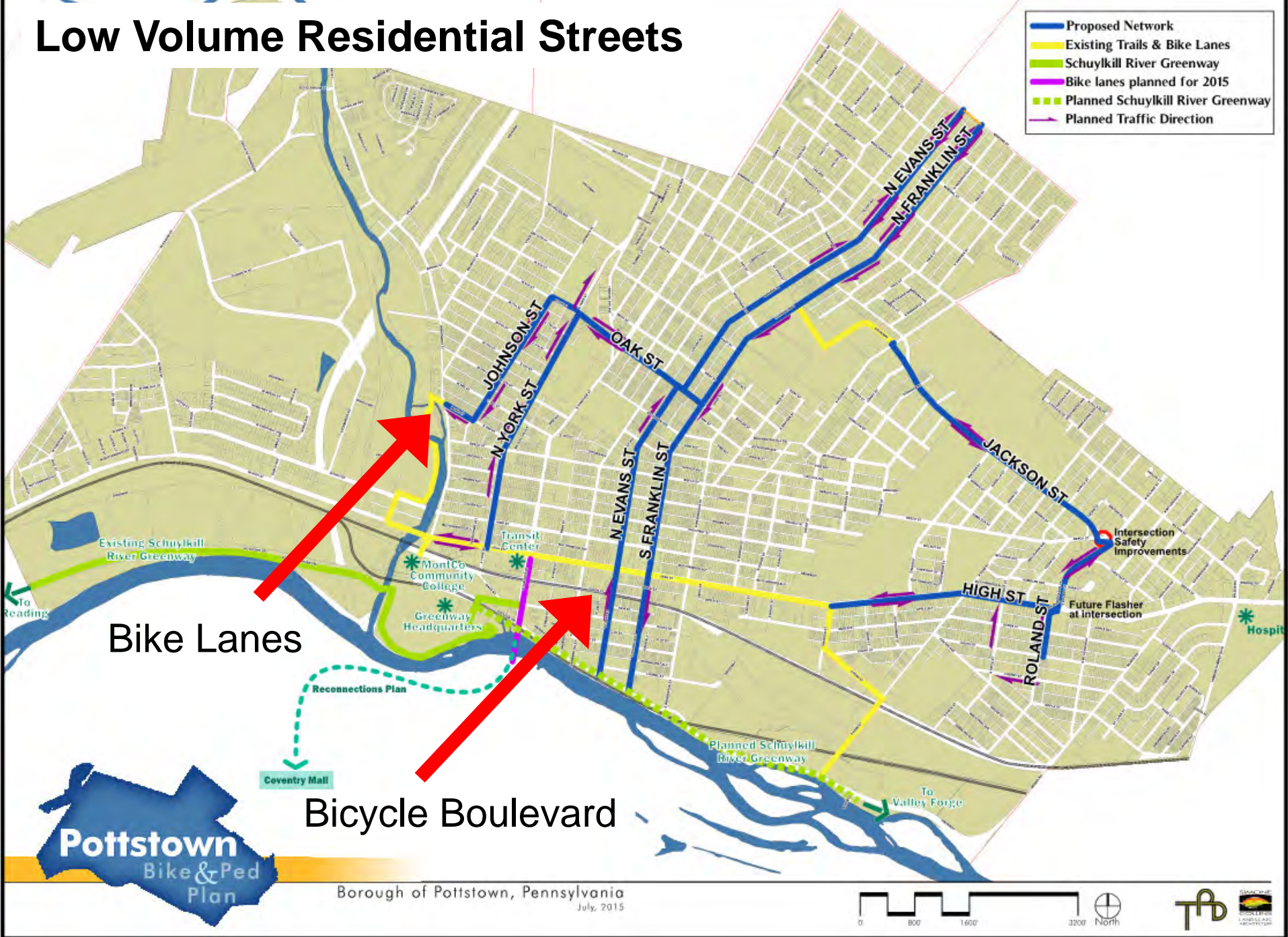
Walk & Bike Pottstown

Bicycle Boulevards

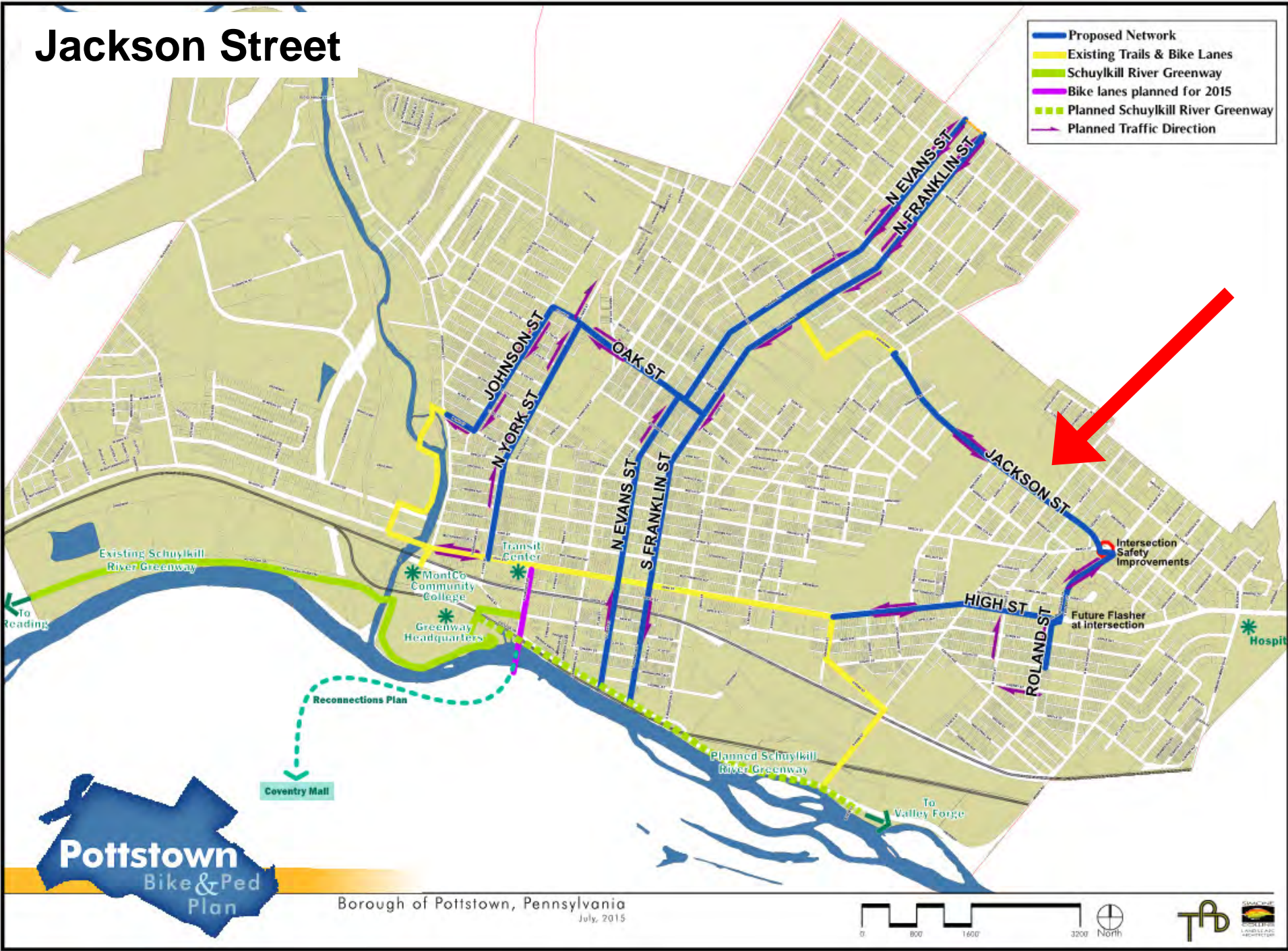
- Low-speed streets designed to give bicycle travel priority
- Maximum posted speed of 25 mph
- Traffic volumes under 1,500 vehicles/day
- Also known as neighborhood greenway



Low Volume Residential Streets



Jackson Street





Jackson Street



Walk & Bike Pottstown



Two-Way Separated Bike Lane (Cycle Track)

Walk & Bike Pottstown



Two-Way Separated Bike Lane

- Provides separation from traffic
- Traffic calming benefit
- Minimal number of intersection conflicts on Jackson Street



Bluebonnet Lane – Austin, TX
Photo via peopleforbikes.org

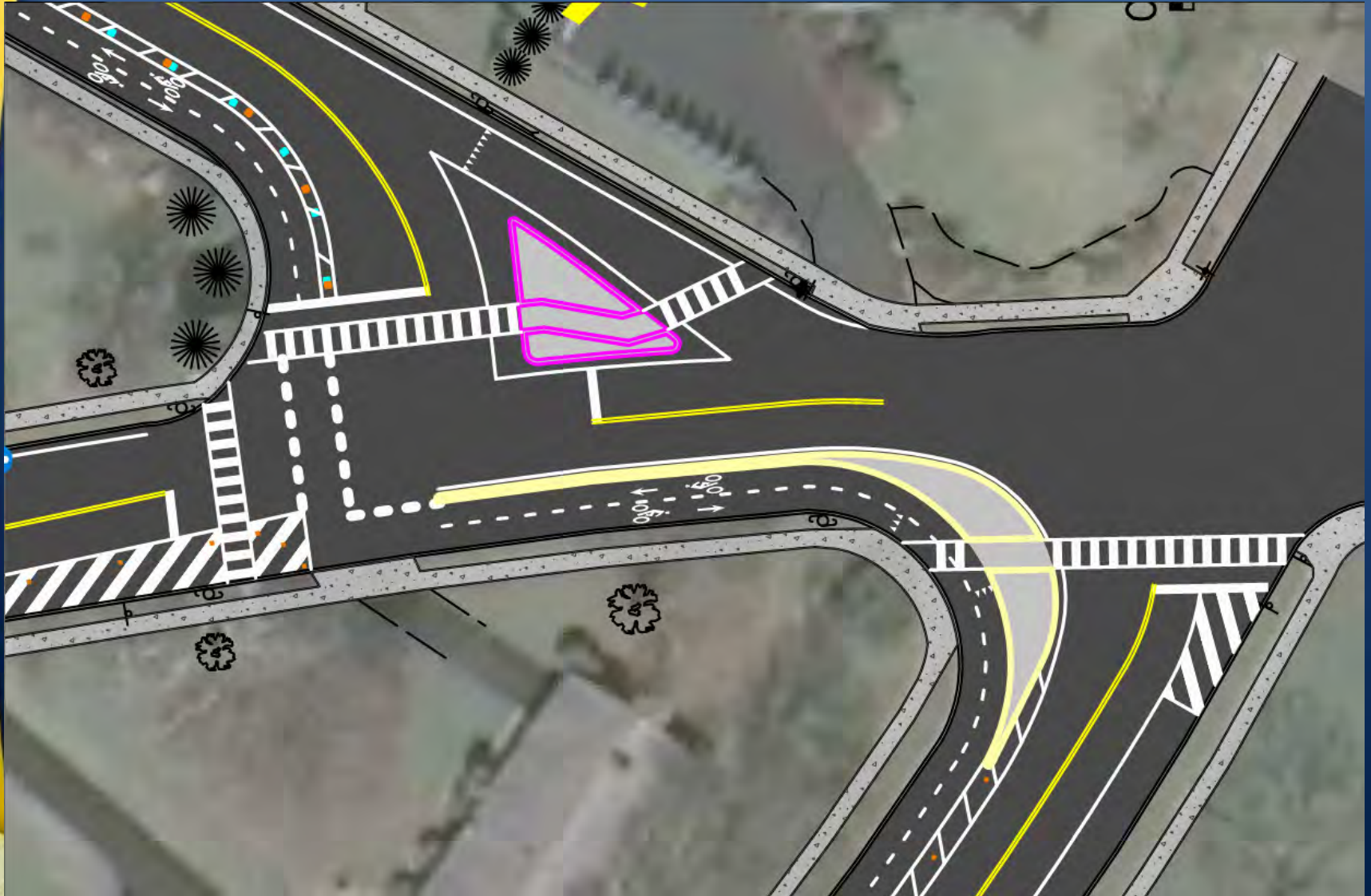


Intersection Conflicts



Walk & Bike Pottstown

Intersection Conflicts



Walk & Bike Pottstown

Maintenance Challenges

- Snow removal from separated bike lane
- Potential thaw/refreeze issues
- Delineator replacement
- Street sweeping/debris removal

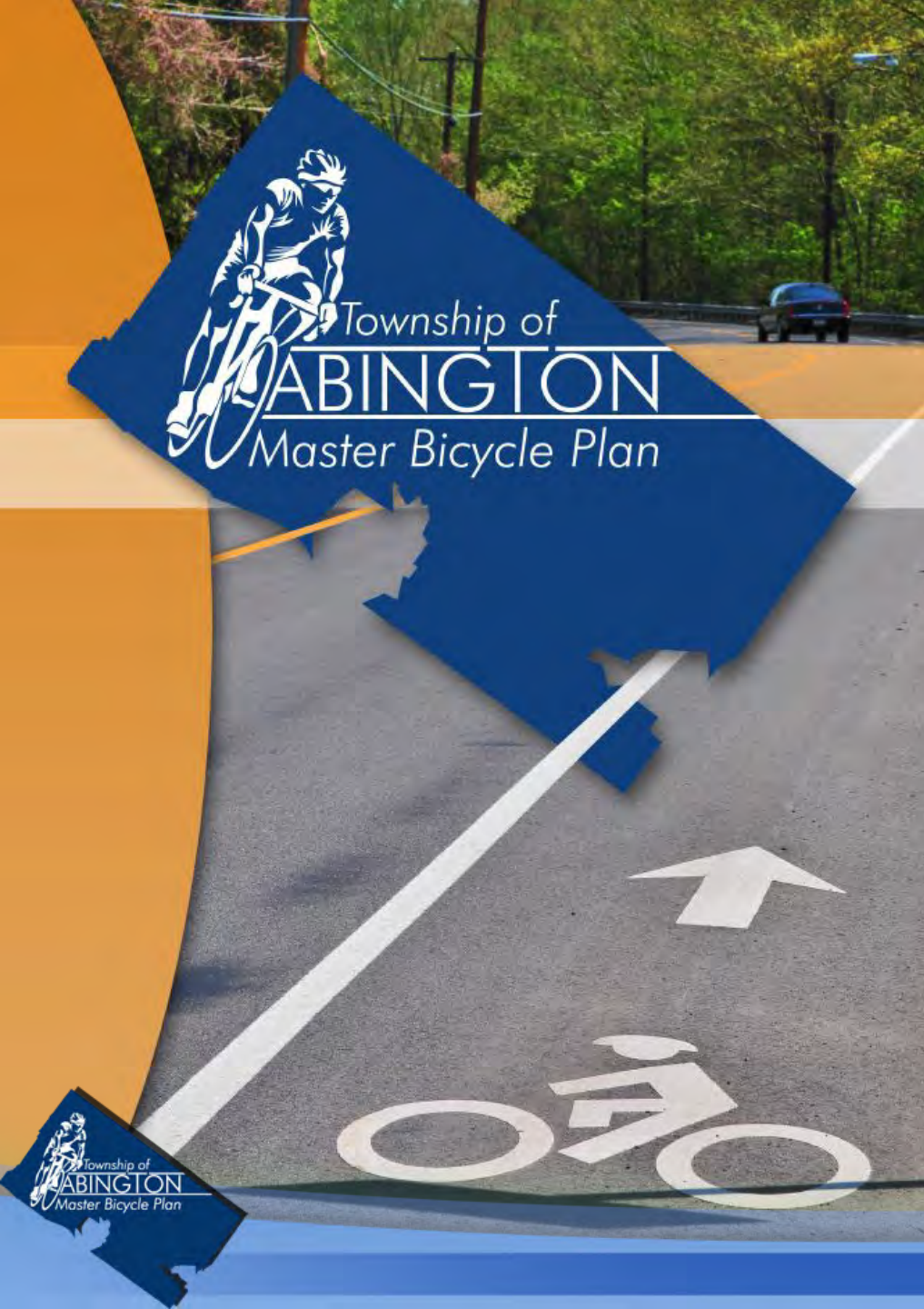


Questions?



Abington Township Master Bicycle Plan

***Bicycling Beyond the Big
Cities: Enhancing On-Road
Cycling in Small Towns and
Suburban Communities***



Project Consultants

Simone Collins Landscape Architecture

Planners and Landscape Architects

Peter Simone

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610-239-7601

Geoff Creary

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Traffic Planning & Design, Inc.

Transportation Engineers

Ben Guthrie

bguthrie@trafficpd.com

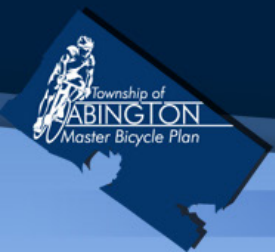
610-625-4242

Township Contact

Scott Marlin

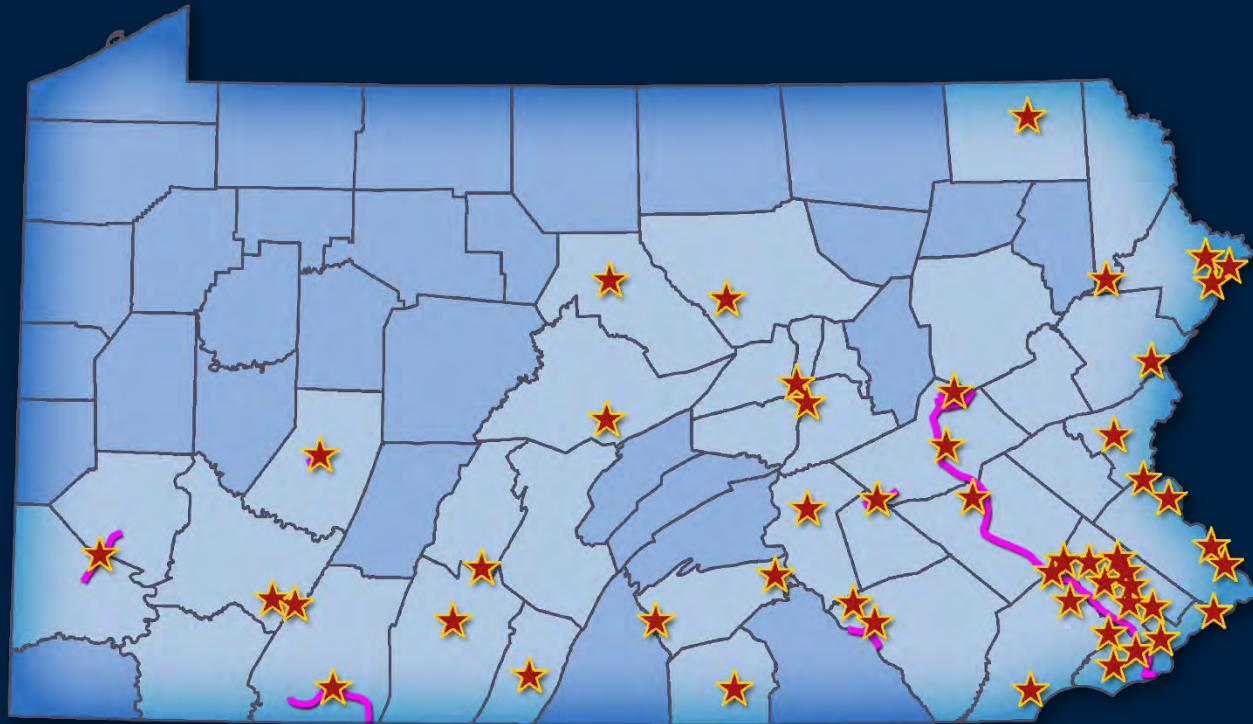
smarlin@abington.org

267-536-1044



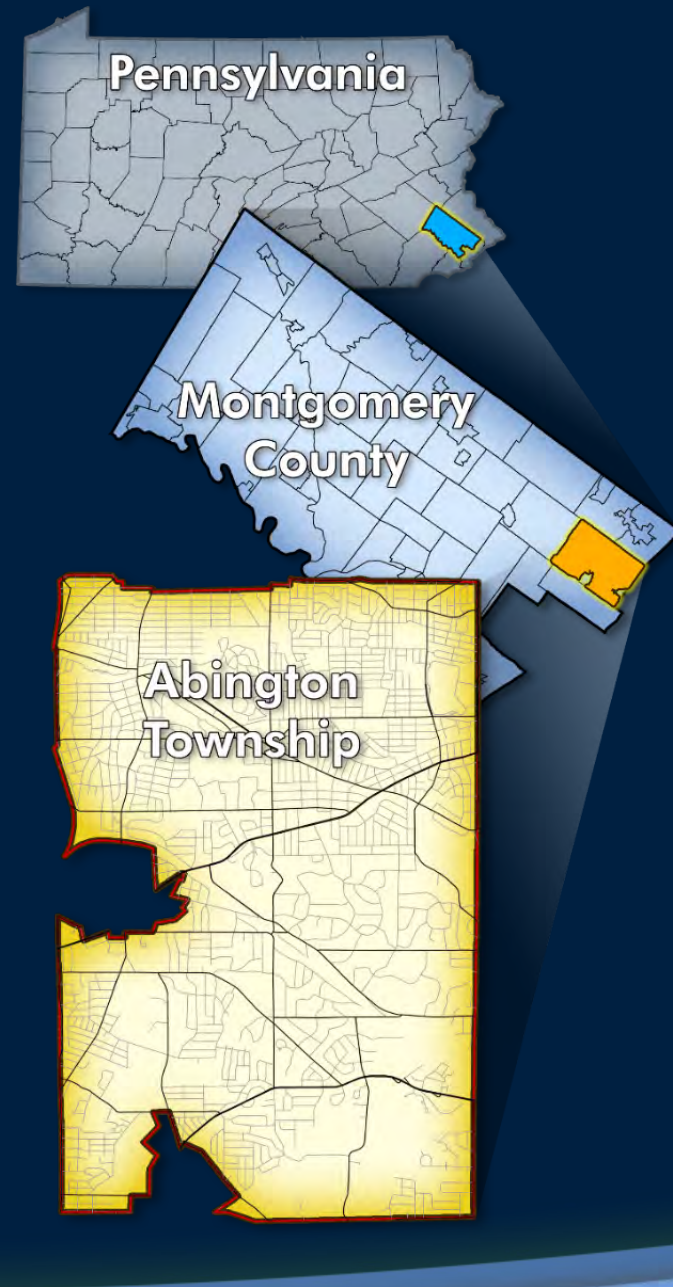
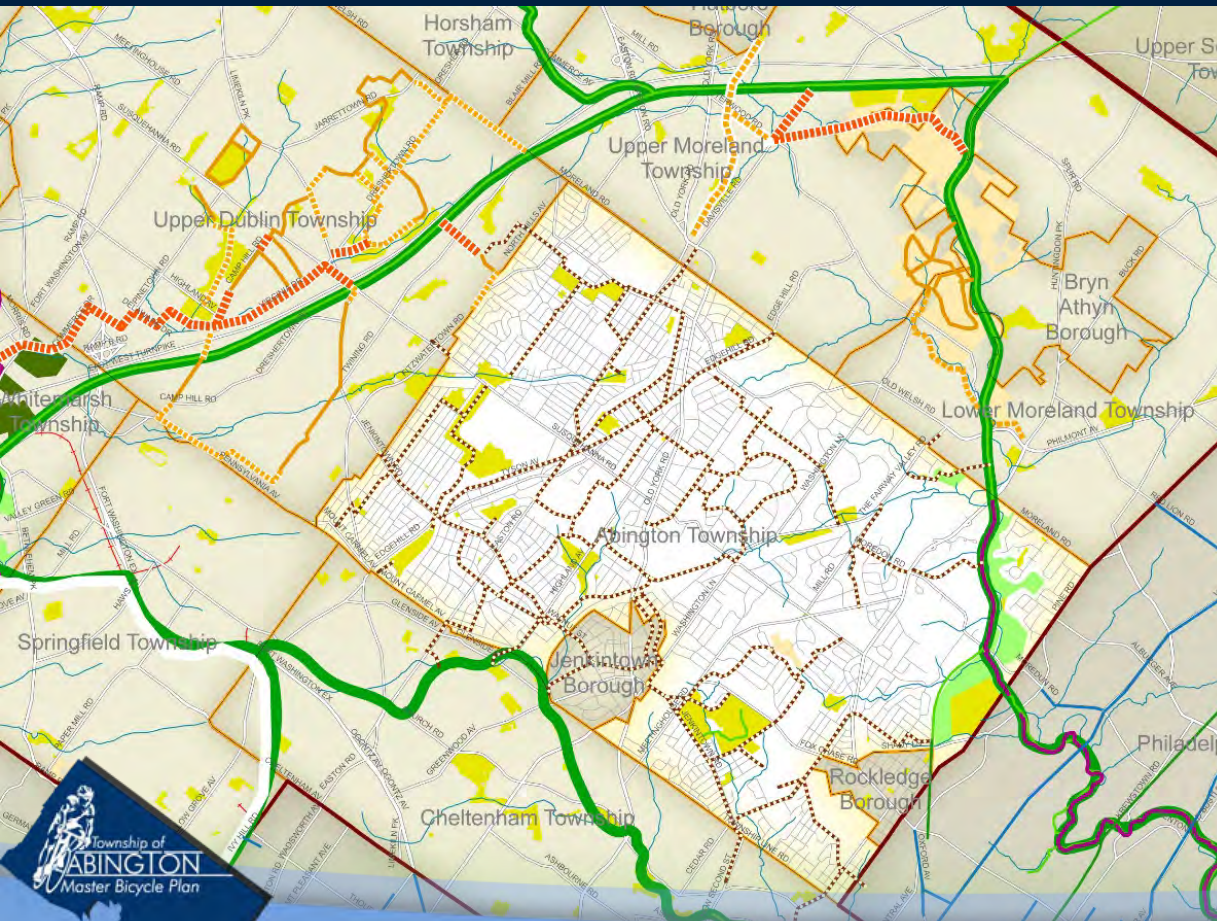
Simone Collins Landscape Architecture

- Over 100 trail & greenway projects



Abington Township

- 15 Square Miles
- Population of 55,310
- 1st Class Township

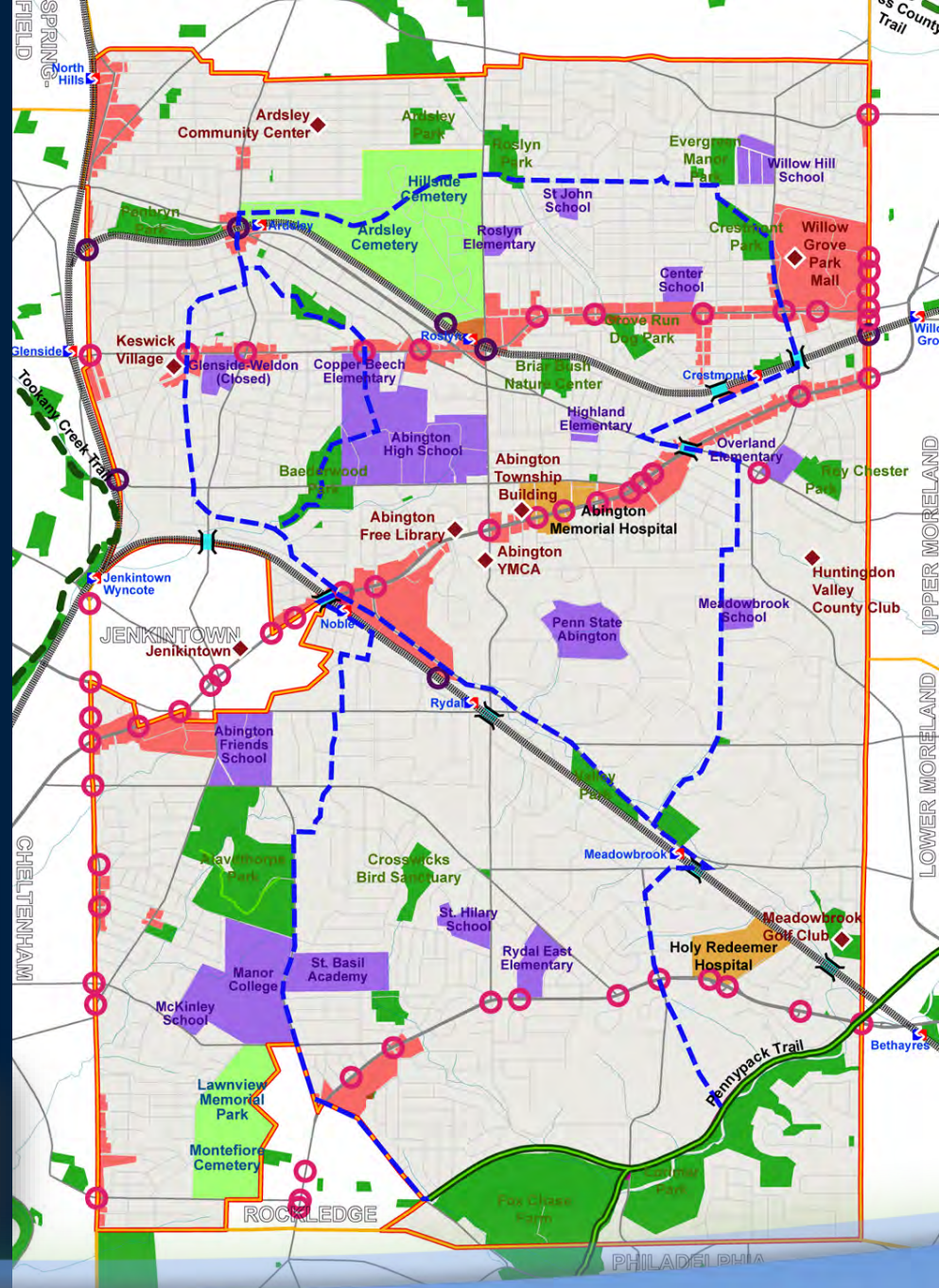
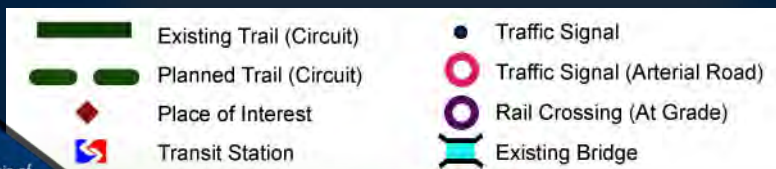
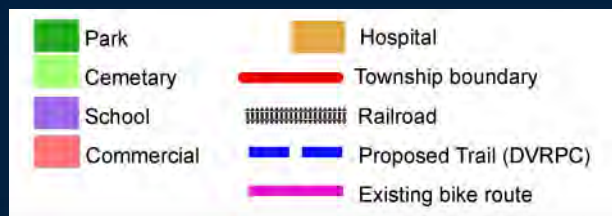




PA-APA 2017 - Bicycling Beyond the Big Cities

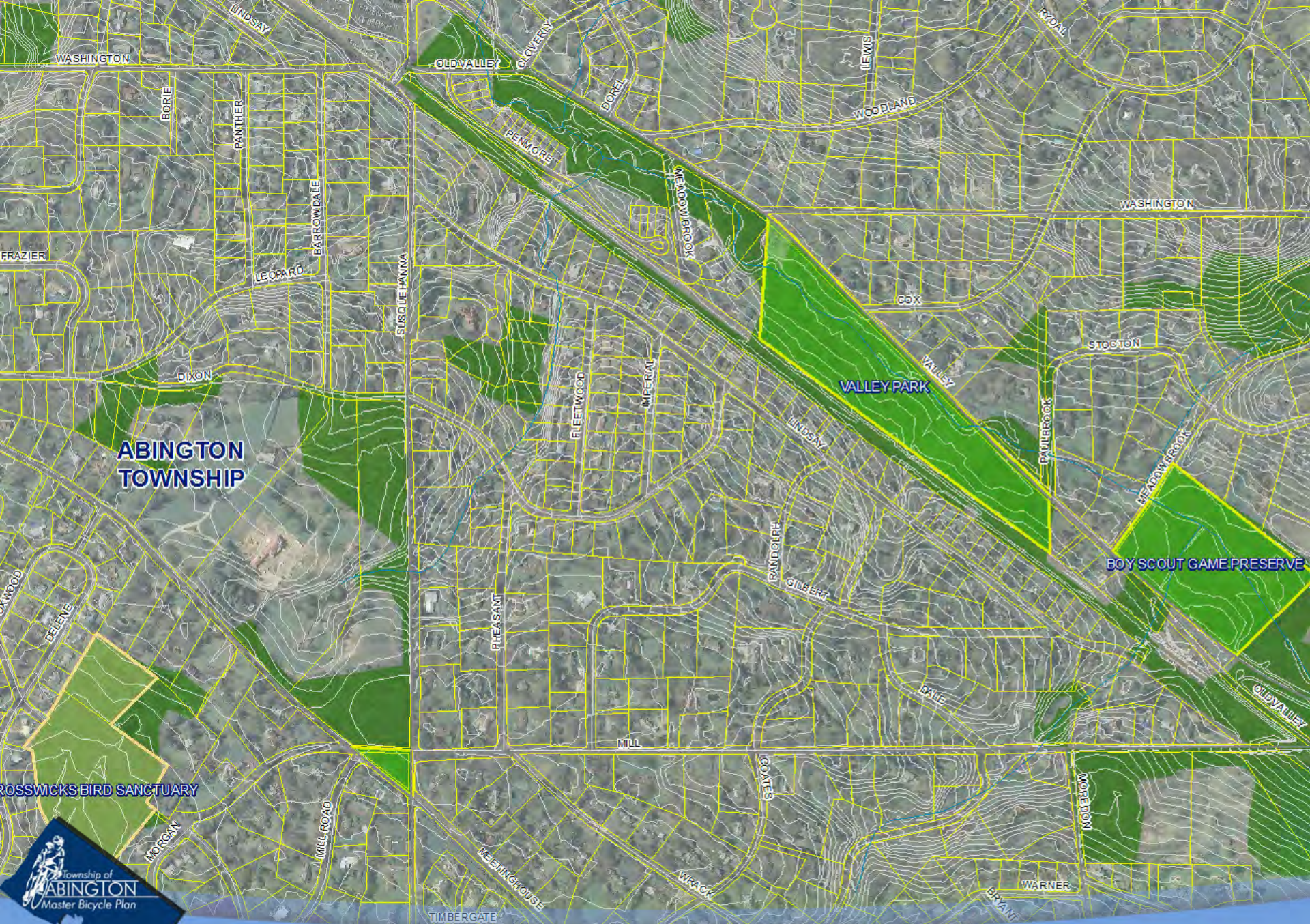
Township Features & Destinations

- Transit Stations
- Schools
- Parks and Open Space
- Cemeteries
- Hospitals
- Commercial Areas
- Other important destinations
- Existing Trails
- Proposed Trail



Strava Global Heatmap





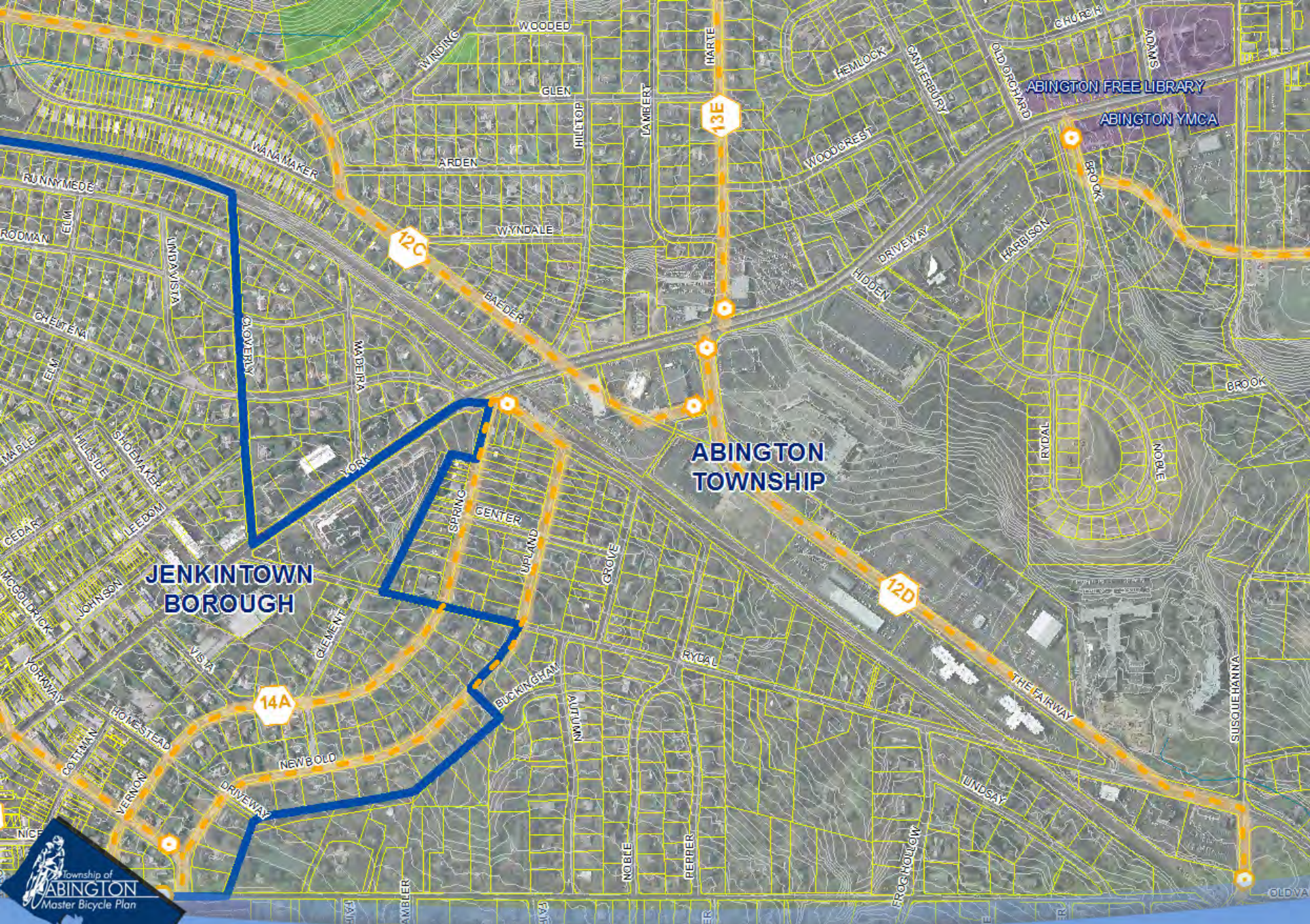
Windshield survey



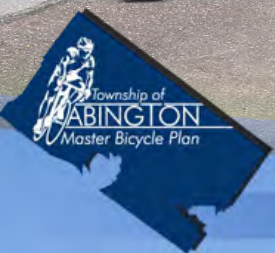
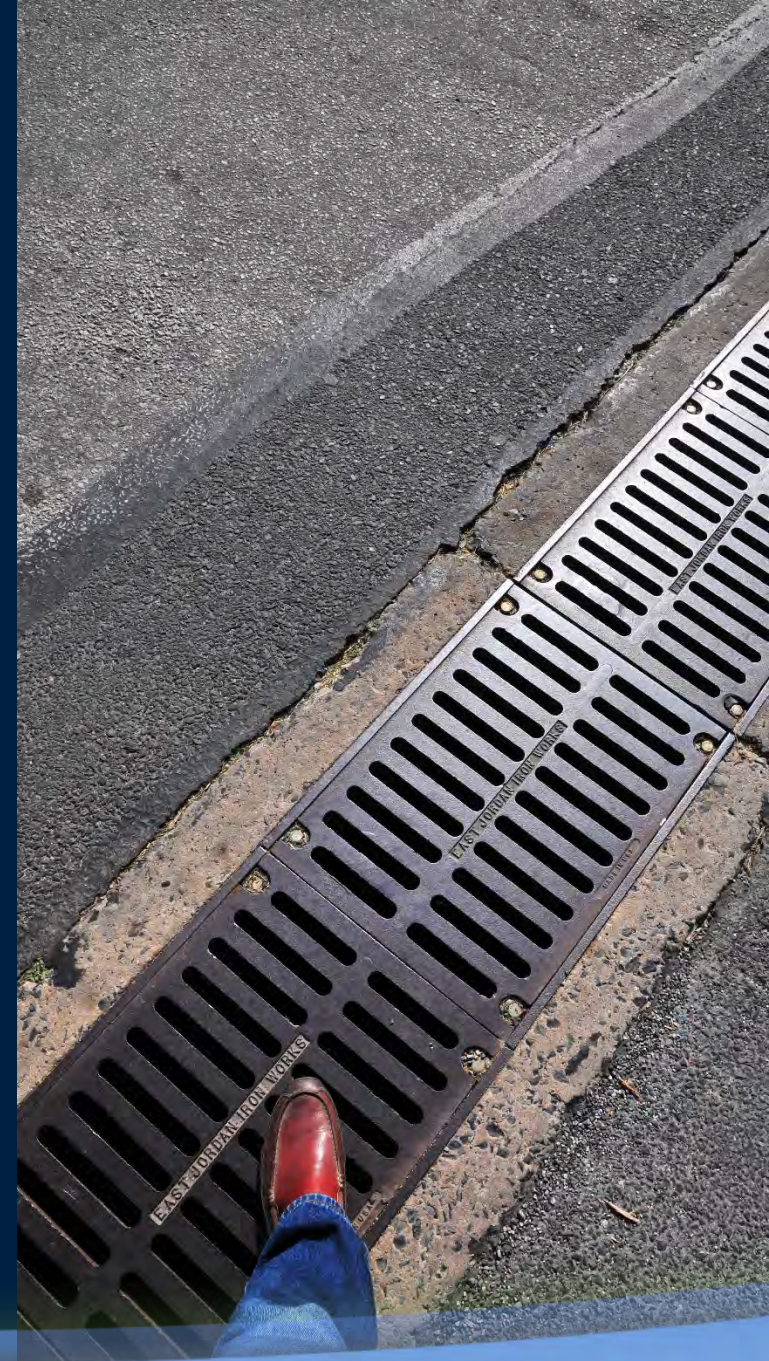
Public Process

- 4 Public Meetings
- 2 Board of Commissions Meetings
- 6 Committee Meetings
- 4 Township Staff Meetings





Detailed Site Investigation



Guide for the Development of Bicycle Facilities

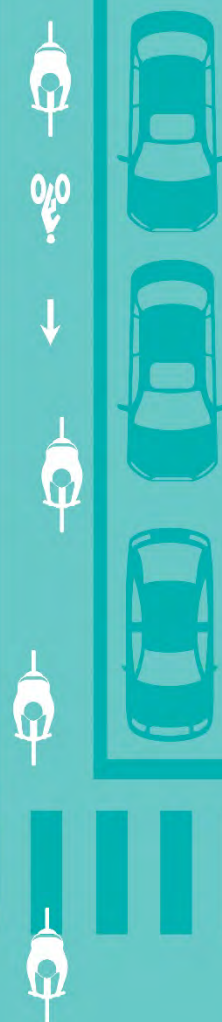
2012 • Fourth Edition



Urban Bikeway Design Guide

National Association of
City Transportation Officials

Second Edition



Pennsylvania Trail Design & Development Principles

Guidelines for Sustainable, Non-motorized Trails

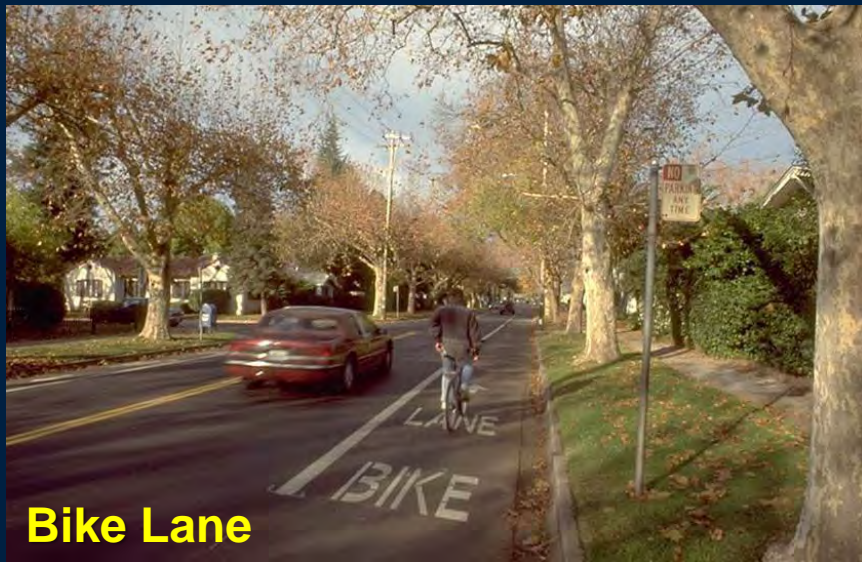


DECEMBER 2016

Small Town *and* Rural Multimodal Networks



U.S. Department of Transportation
Federal Highway Administration



Bike Lane



Sharrow



Off Road/ Multi use



Signage Only

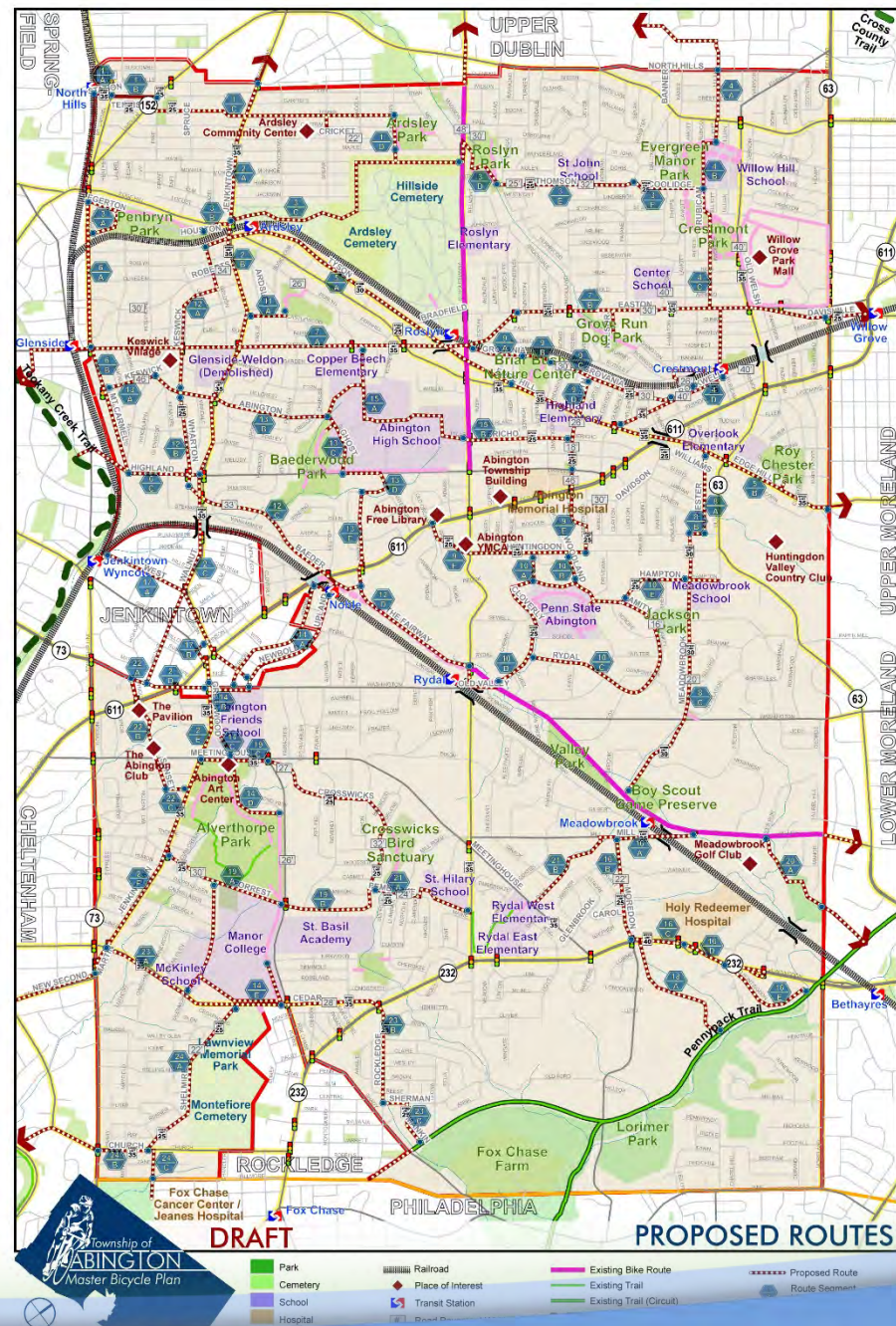
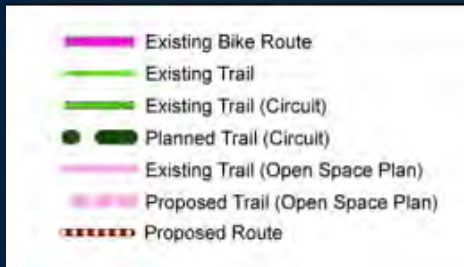


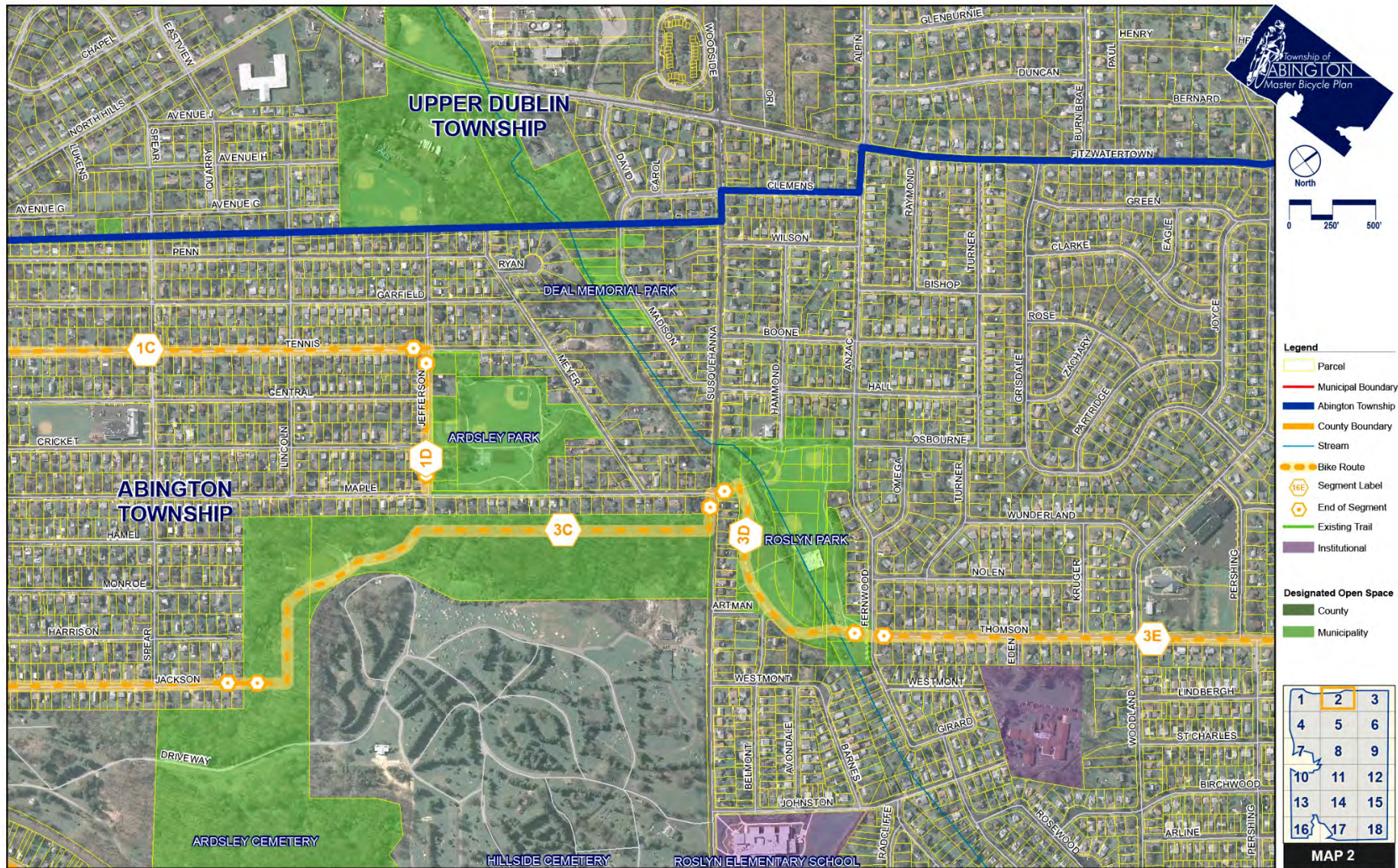
Go for a ride!

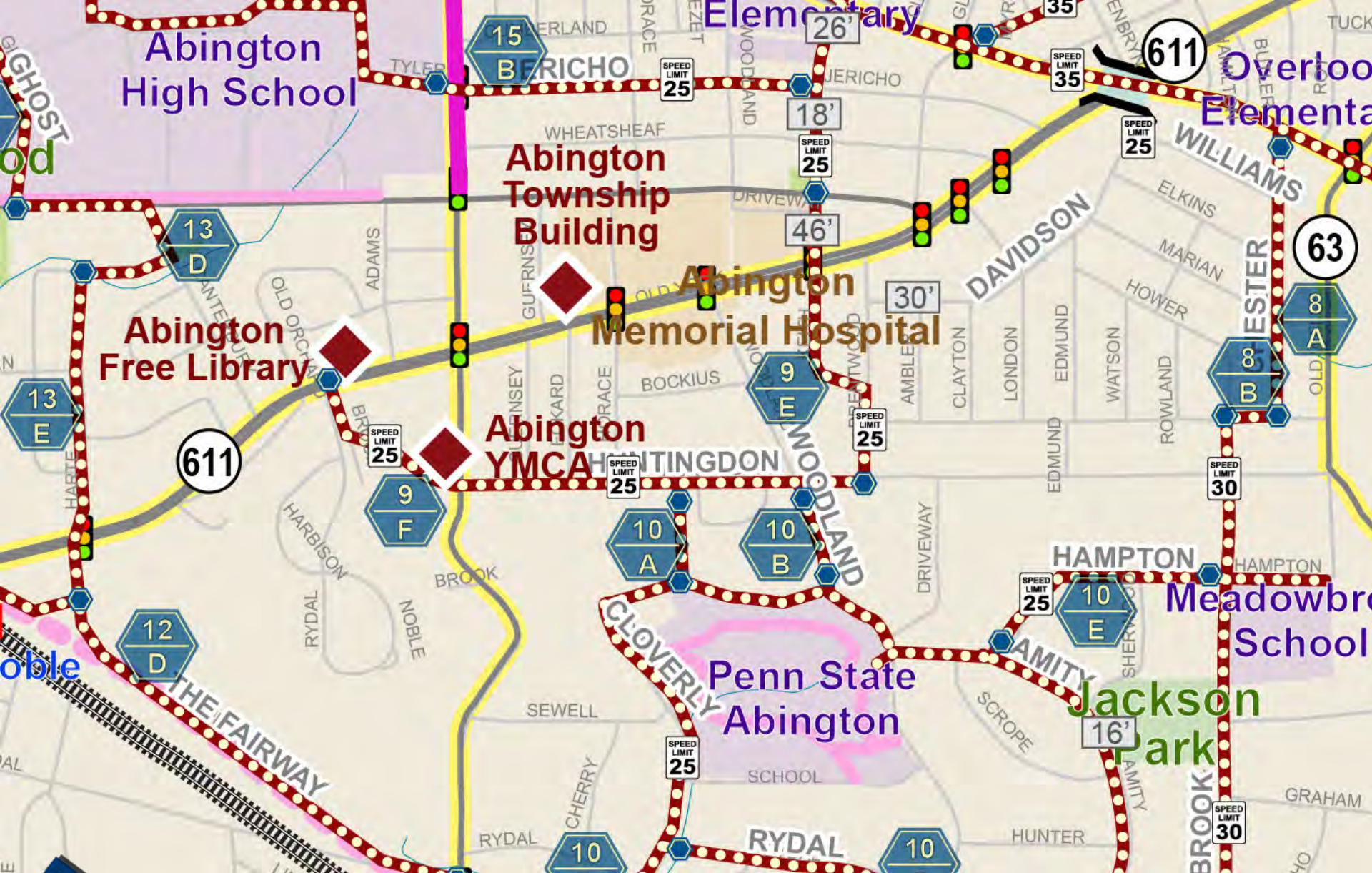


PA-APA 2017 - Bicycling Beyond the Big Cities

Proposed Routes (draft)

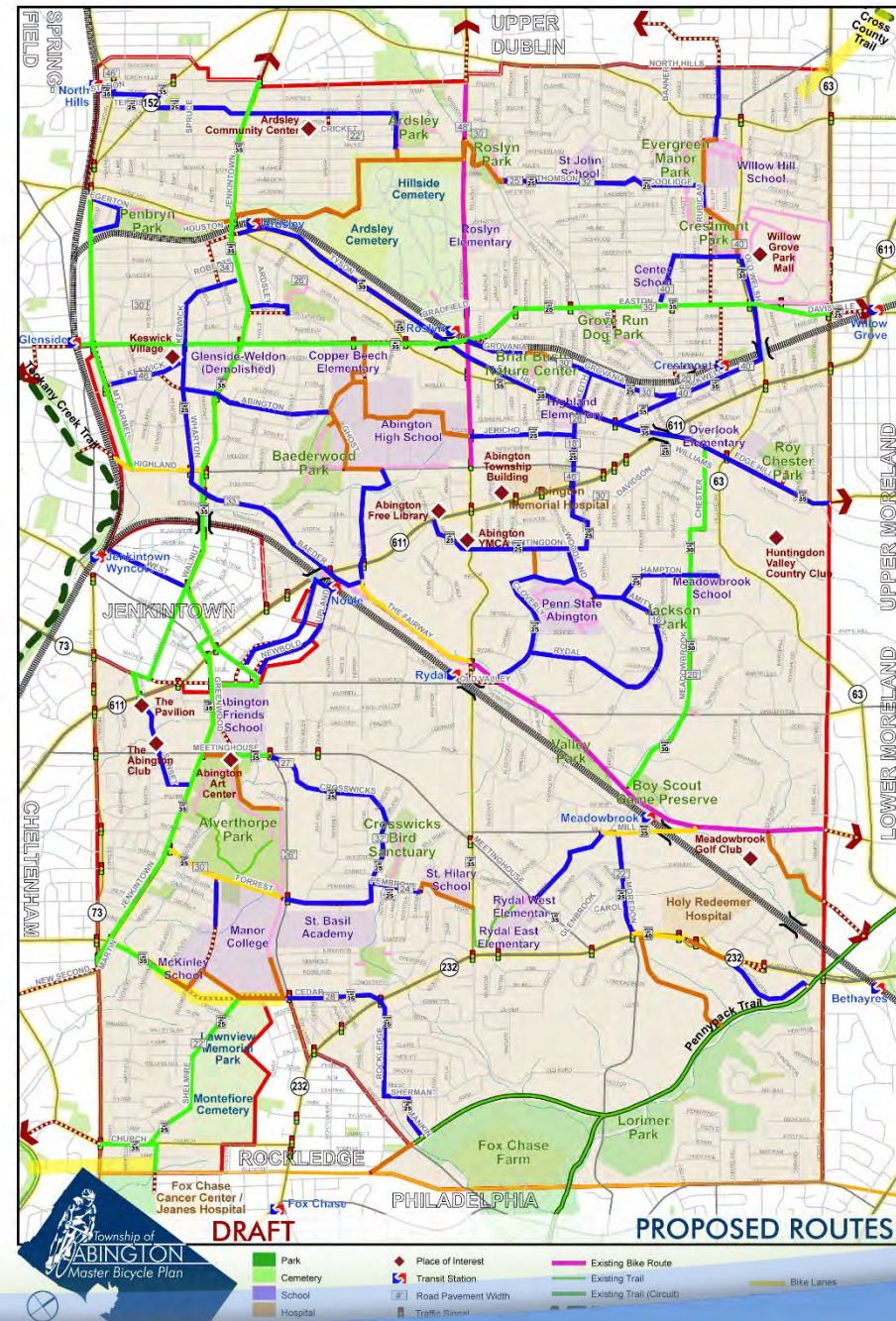


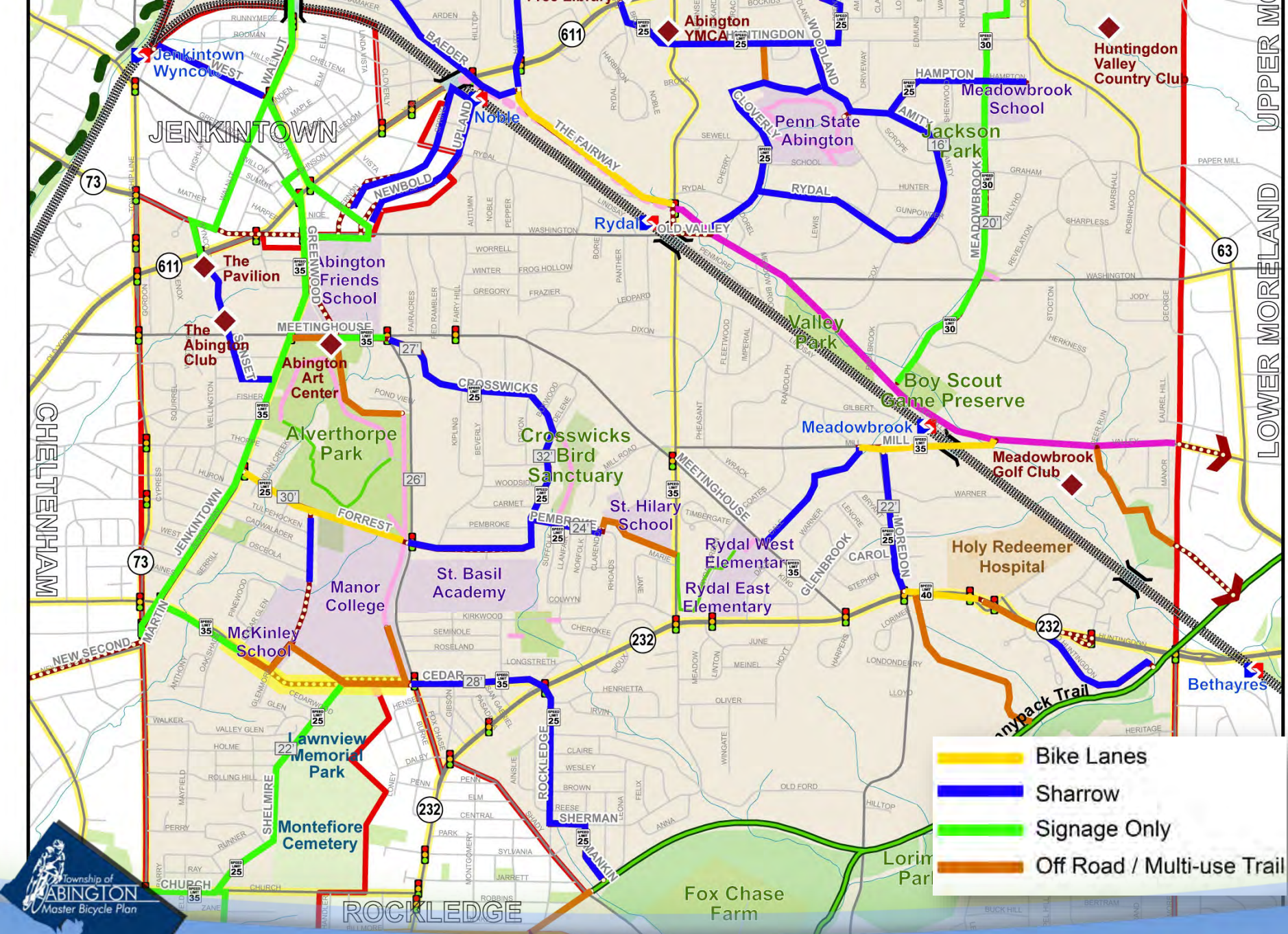








Route Type Mapping

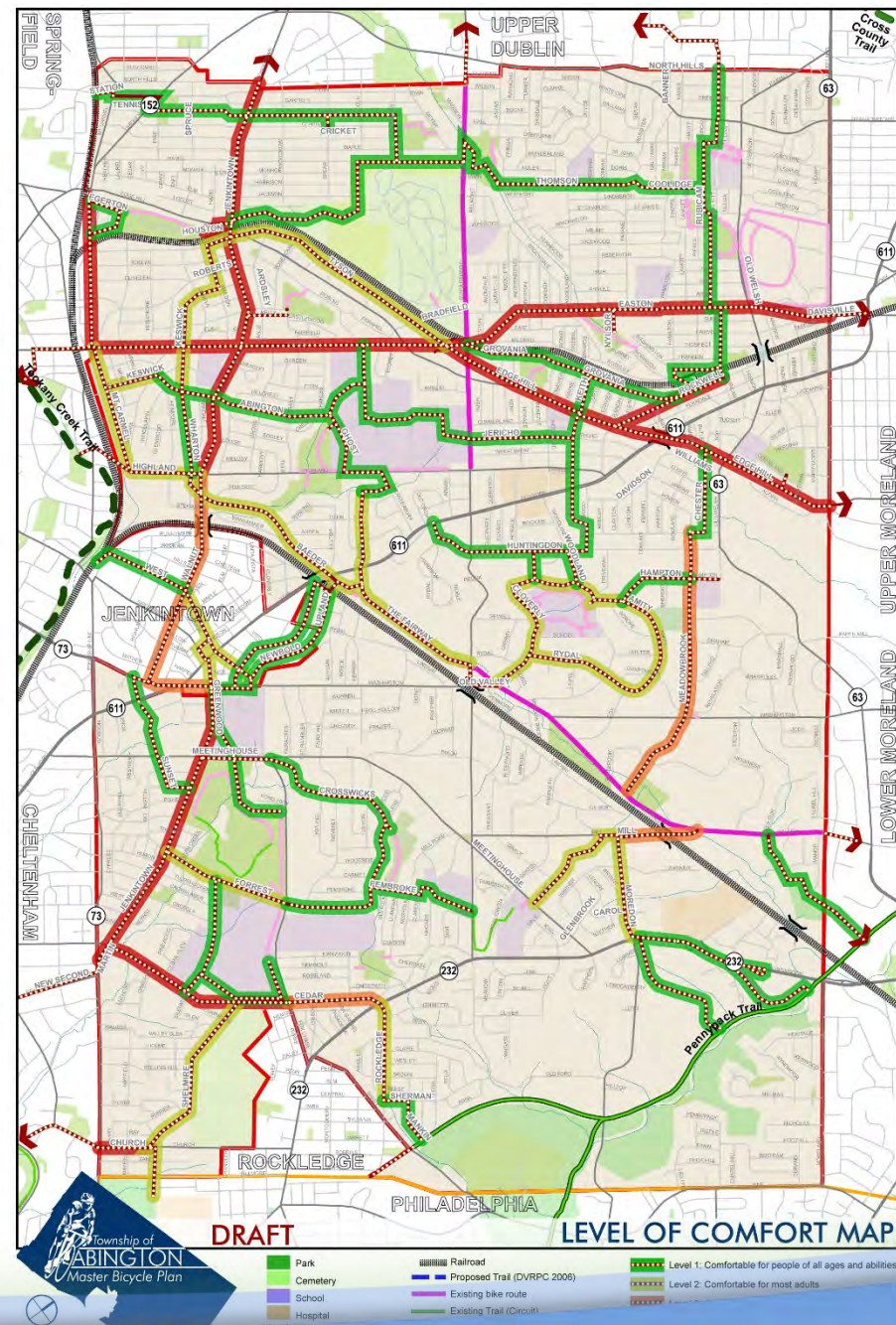
- Bike Lanes
- Sharrow
- Signage Only
- Off Road / Multi-use Trail



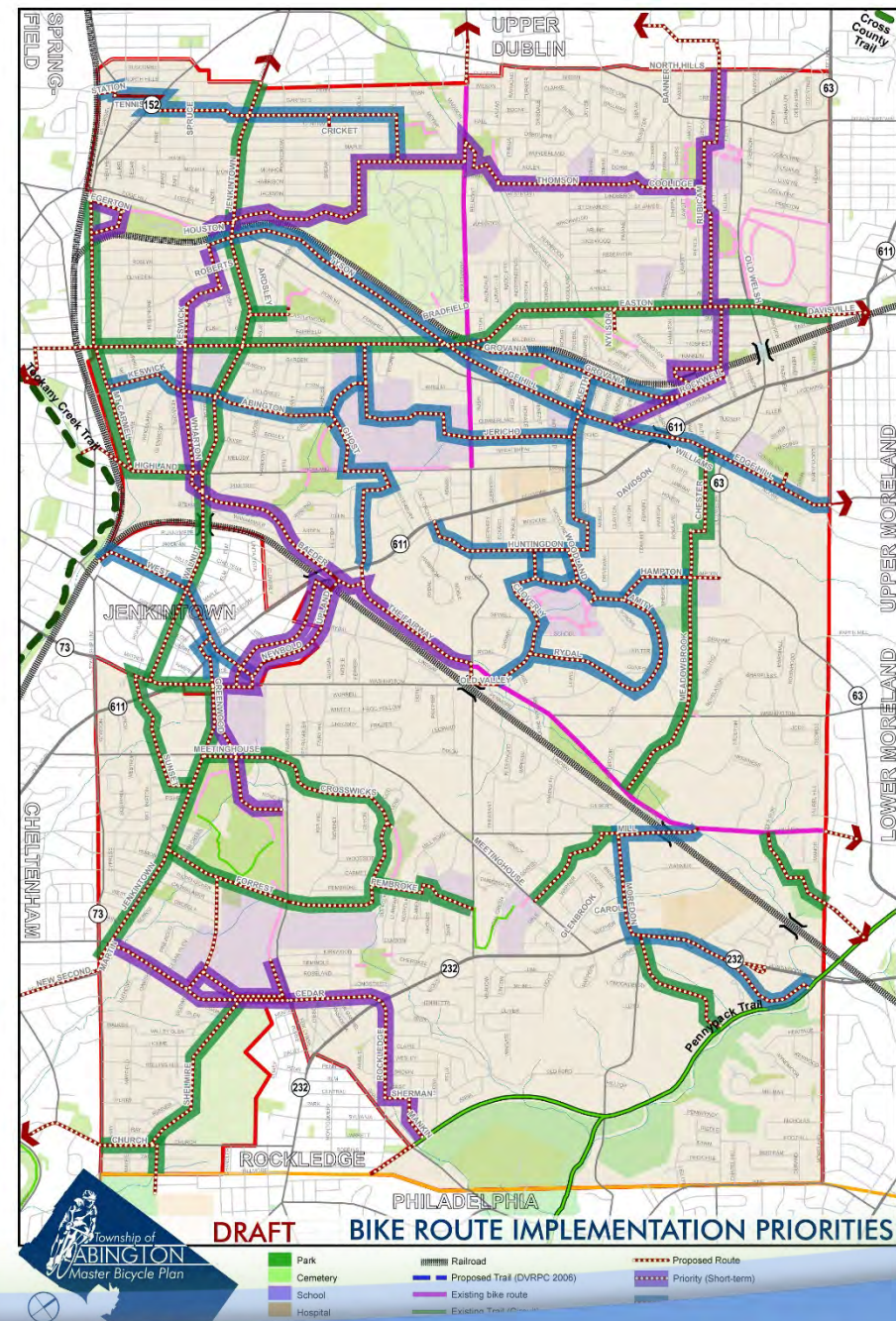


Level of Comfort

-  Level 1: Comfortable for people of all ages and abilities
-  Level 2: Comfortable for most adults
-  Level 3: Comfortable for many experienced cyclists
-  Level 4: Comfortable for experienced and confident cyclists



Priority Routes



High (short-term) Priority Routes

3 – Link Penbyn Park, Ardsley Station, Roslyn Park & Crestmont Parks \$1M

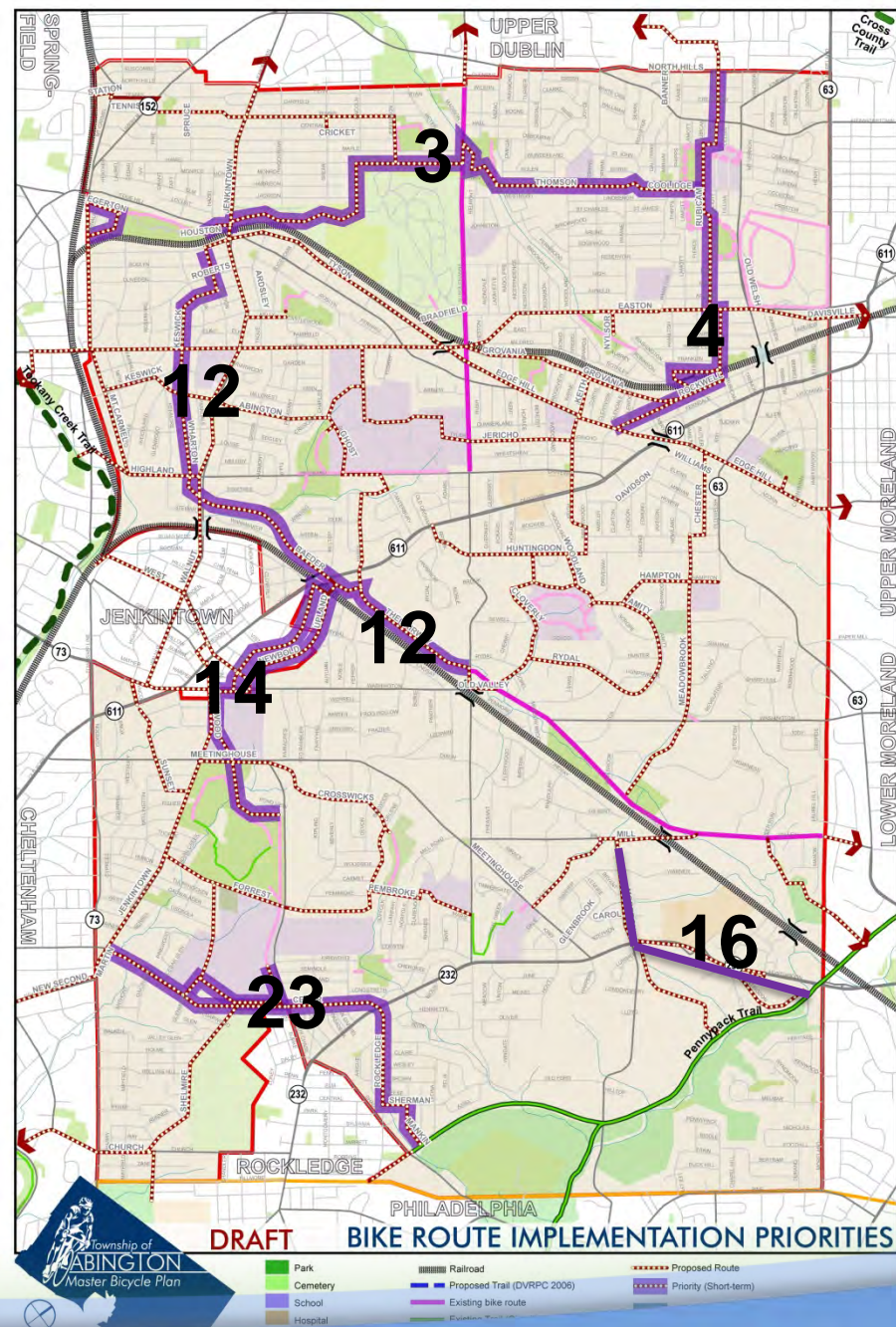
4, 12 – Connect Valley Road to Crestmont Park / future Cross County Trail \$300K

14 – Noble Train Station to Friends School and Averthorpe Park \$930K

16 – Meadowbrook Station to east end of Pennypack Trail \$839K

23 – Manor College area to west end of Pennypack Trail and Fox Chase Farm \$26K

... & Incorporate other on-road routes with Township road repaving schedules.



Proposed Route Lengths

Off Road Routes:

Class 1 - Share Use Paths	5 Miles
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On Road Routes:

Class 2 – Designated Bike Lanes:	2 Miles
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Class 3 – Marked Shared Lanes: (Sharrow Pavement markings)	27 Miles
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Class 3 – Signed Shared Lanes: (Share the road and bike route signage only)	14 Miles
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<u>Total:</u>	47 Miles
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Cost Estimates

ESTIMATE OF PROBABLE DEVELOPMENT COSTS

Segment ID	Priority	Road Name	Description	Roadway Ownership	Length (LF)	Proposed Improvements	QTY	UNIT	UNIT COST	TOTAL	
4C		Rubicam Avenue Shared Lane Markings	Coolidge Avenue to Washington Avenue	Township	4.300	Pavement Markings (Share the Road) Signage: W16-1 Share the Road Signage: W11-1 Bicycle Crossing Signage: Wayfinding (Confirmation Signs) Signage: Wayfinding (Turn Signs) Signage: Wayfinding (Decision Signs)	34 4 2 0 2 0	EA EA EA EA EA EA	\$300 \$80 \$165 \$200 \$200 \$200	\$10,200 \$320 \$330 \$0 \$400 \$0	Share the Road striping (250-foot spacing) Post mounted, supplement to sharrows as needed Post mounted at major intersections, both directions Post mounted every 1300-2600 feet along straight segments Post mounted where route turns from one street onto another. Post mounted, marks junction of two bikeways
									SUBTOTAL	\$11,250	
4D		Washington Avenue/Hamilton Avenue Shared Lane Markings	Rubicam Avenue to Rockwell Road	Township	1.965	Pavement Markings (Share the Road) Signage: W16-1 Share the Road Signage: W11-1 Bicycle Crossing Signage: Wayfinding (Confirmation Signs) Signage: Wayfinding (Turn Signs) Signage: Wayfinding (Decision Signs)	14 0 0 0 2 0	EA EA EA EA EA EA	\$300 \$80 \$165 \$200 \$200 \$200	\$4,200 \$0 \$0 \$0 \$400 \$0	Share the Road striping (250-foot spacing) Post mounted, supplement to sharrows as needed Post mounted at major intersections, both directions Post mounted every 1300-2600 feet along straight segments Post mounted where route turns from one street onto another. Post mounted, marks junction of two bikeways
									SUBTOTAL	\$4,600	
4E		Rockwell Road Shared Lane Markings	Rubicam Avenue to Edge Hill Road	Township	2.825	Pavement Markings (Share the Road) Signage: W16-1 Share the Road Signage: W11-1 Bicycle Crossing Signage: Wayfinding (Confirmation Signs) Signage: Wayfinding (Turn Signs) Signage: Wayfinding (Decision Signs)	22 2 0 0 2 2	EA EA EA EA EA EA	\$300 \$80 \$165 \$200 \$200 \$200	\$6,600 \$160 \$0 \$0 \$400 \$400	Share the Road striping (250-foot spacing) Post mounted, supplement to sharrows as needed Post mounted at major intersections, both directions Post mounted every 1300-2600 feet along straight segments Post mounted where route turns from one street onto another. Post mounted, marks junction of two bikeways
									SUBTOTAL	\$7,560	
5A		Tyson Ave Shared Lane Markings	Weeldon Avenue to Edge Hill Road	PennDOT	8.520	Pavement Markings (Share the Road) Signage: W16-1 Share the Road Signage: W11-1 Bicycle Crossing Signage: Wayfinding (Confirmation Signs) Signage: Wayfinding (Turn Signs) Signage: Wayfinding (Decision Signs)	68 6 4 0 0 4	EA EA EA EA EA EA	\$300 \$80 \$165 \$200 \$200 \$200	\$20,400 \$480 \$660 \$0 \$0 \$800	Share the Road striping (250-foot spacing) Post mounted, supplement to sharrows as needed Post mounted at major intersections, both directions Post mounted every 1300-2600 feet along straight segments Post mounted where route turns from one street onto another. Post mounted, marks junction of two bikeways
									SUBTOTAL	\$22,340	
5B		Edge Hill Road Shared Lane Markings	Tyson Avenue to Township Boundary	PennDOT	8.075	Pavement Markings (Share the Road) Signage: W16-1 Share the Road Signage: W11-1 Bicycle Crossing Signage: Wayfinding (Confirmation Signs) Signage: Wayfinding (Turn Signs) Signage: Wayfinding (Decision Signs)	64 8 2 6 0 6	EA EA EA EA EA EA	\$300 \$80 \$165 \$200 \$200 \$200	\$19,200 \$640 \$330 \$1,200 \$0 \$1,200	Share the Road striping (250-foot spacing) Post mounted, supplement to sharrows as needed Post mounted at major intersections, both directions Post mounted every 1300-2600 feet along straight segments Post mounted where route turns from one street onto another. Post mounted, marks junction of two bikeways
									SUBTOTAL	\$22,570	
6A		Mt Carmel Ave Wayfinding Signage Only	Edgerton Ave to Roberts Ave	PennDOT	3.245	Signage: Wayfinding (Confirmation Signs) Signage: Wayfinding (Turn Signs) Signage: Wayfinding (Decision Signs)	4 0 2	EA EA EA	\$200 \$200 \$200	\$800 \$0 \$400	Post mounted, every 1300-2600 feet along straight segments Post mounted Post mounted, marks junction of two bikeways
									SUBTOTAL	\$1,200	
6B		Mt Carmel Ave Wayfinding Signage Only	Roberts Ave to Highland Ave	Township	3.360	Signage: Wayfinding (Confirmation Signs) Signage: Wayfinding (Turn Signs) Signage: Wayfinding (Decision Signs)	4 0 4	EA EA EA	\$200 \$200 \$200	\$800 \$0 \$800	Post mounted, every 1300-2600 feet along straight segments Post mounted Post mounted, marks junction of two bikeways
									SUBTOTAL	\$1,600	
6C		Highland Ave Bike Lanes	Mt Carmel Ave to Jenkintown Road	Township	1.745	Asphalt shoulder modifications 4" White Epoxy Pavement Markings Hot Thermoplastic Paint Legend, Bicycle w/ Arrow Signage: R3-17 Bike Lane Signage: W11-1 Bicycle Crossing Signage: Wayfinding (Confirmation Signs) Signage: Wayfinding (Turn Signs) Signage: Wayfinding (Decision Signs)	0 3,490 18 4 4 4 0 2	SY LF EA EA EA EA EA EA	\$17 \$1.20 \$275 \$80 \$165 \$200 \$200 \$200	\$0 \$4,188 \$4,950 \$320 \$660 \$800 \$0 \$400	Post mounted, supplement to pavement markings as needed Post mounted, at major intersections, both directions Post mounted, every 1300-2600 feet along straight segments Post mounted Post mounted, marks junction of two bikeways
									SUBTOTAL	\$11,318	
7A		Easton Road Wayfinding Signage Only	Mt. Carmel Avenue to Independence Ave	Township	10.330	Signage: Wayfinding (Confirmation Signs) Signage: Wayfinding (Turn Signs) Signage: Wayfinding (Decision Signs)	8 0 8	EA EA EA	\$200 \$200 \$200	\$1,600 \$0 \$1,600	Post mounted, every 1300-2600 feet along straight segments Post mounted Post mounted, marks junction of two bikeways
									SUBTOTAL	\$3,200	
		Easton Road Wayfinding Signage Only	Independence Ave to West Moreland Road	Township	8.330	Signage: Wayfinding (Confirmation Signs) Signage: Wayfinding (Turn Signs) Signage: Wayfinding (Decision Signs)	12 0 4	EA EA EA	\$200 \$200 \$200	\$2,400 \$0 \$800	Post mounted, every 1300-2600 feet along straight segments Post mounted Post mounted, marks junction of two bikeways
									SUBTOTAL	\$3,200	



Cost Estimate - Summary

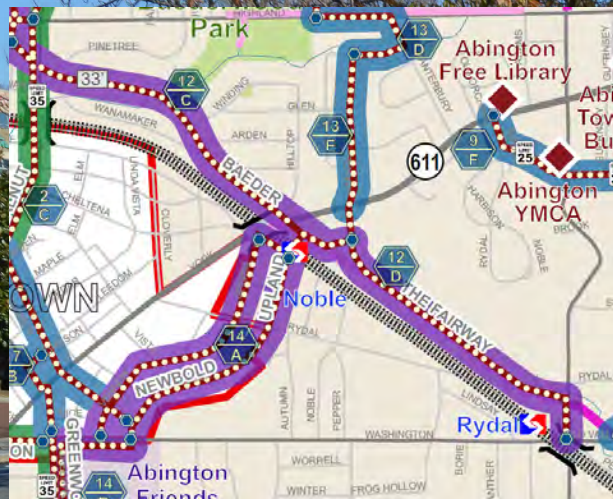
SUBTOTAL										\$2,000
24B	Church Road Wayfinding Signage Only	Shelmire Street to Township Line Road	Township	1,300	Signage: Wayfinding (Confirmation Signs)	0	EA	\$200	\$0	Post mounted, every 1300-2600 feet along straight segments
					Signage: Wayfinding (Turn Signs)	2	EA	\$200	\$400	Post mounted
					Signage: Wayfinding (Decision Signs)	1	EA	\$200	\$200	Post mounted, marks junction of two bikeways
					SUBTOTAL				\$600	
24C	Shelmire Street Wayfinding Signage Only	Shelmire Street to Township Line Road	Township	1,000	Signage: Wayfinding (Confirmation Signs)	0	EA	\$200	\$0	Post mounted, every 1300-2600 feet along straight segments
					Signage: Wayfinding (Turn Signs)	2	EA	\$200	\$400	Post mounted
					Signage: Wayfinding (Decision Signs)	0	EA	\$200	\$0	Post mounted, marks junction of two bikeways
					SUBTOTAL				\$400	
TOTAL TOWNSHIP ON ROAD										\$931,802
TOTAL TOWNSHIP OFF ROAD										\$3,471,430
Key										
Short-term Priority										
Mid-term Priority										
Long-term Priority										

Key

	Short-term Priority
	Mid-term Priority
	Long-term Priority

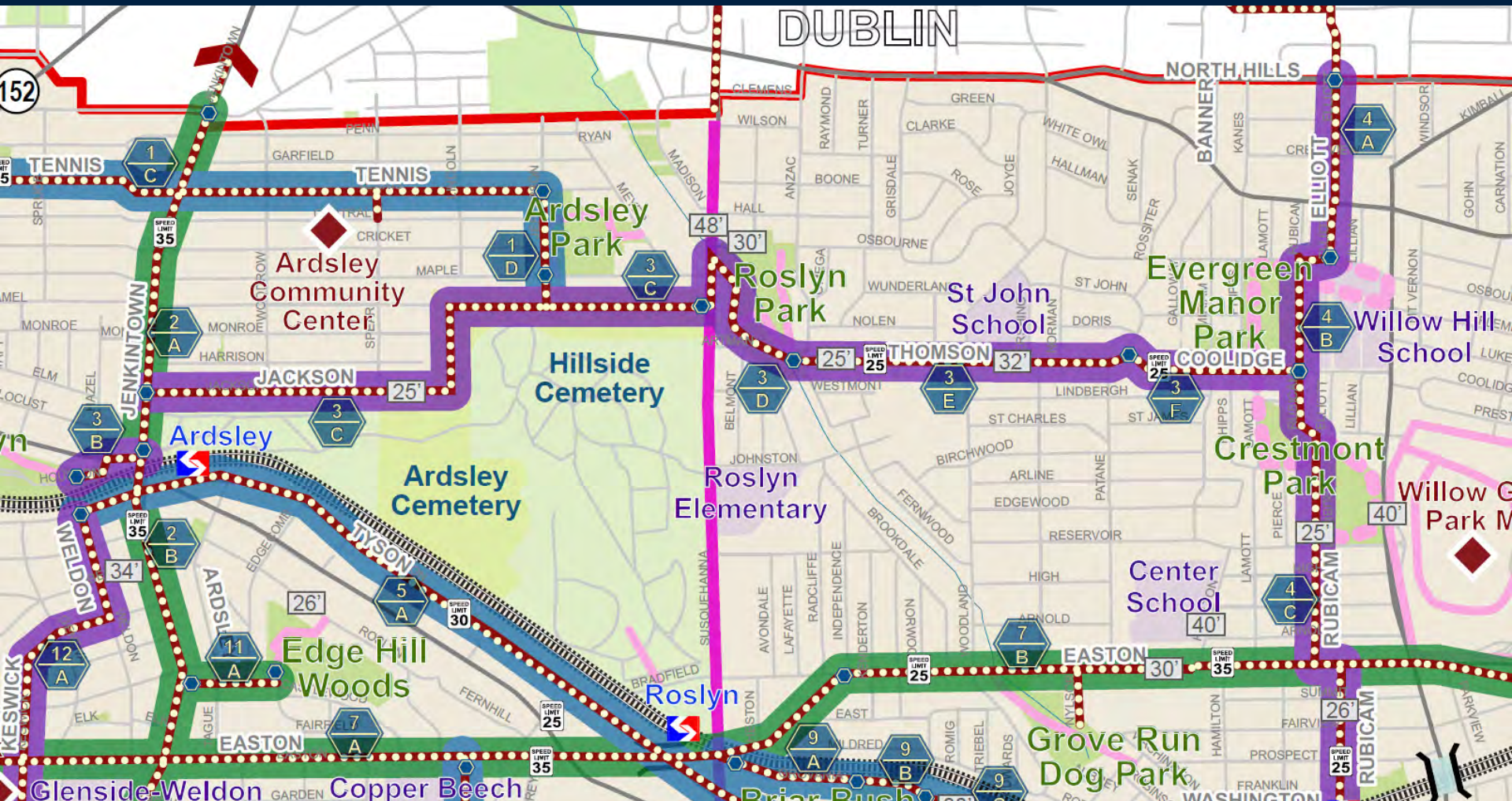
Off Road Routes (Shared Use Paths)	\$3,471,430
Bike Lanes	\$ 403,252
Share the Road (Sharrows)	\$ 503,150
Bike Routes (signage only)	\$ 25,400
Contingency (20%)	\$ 880,646
Design & Engineering (20%)	\$ 880,646
Grand Total	\$6,164,525





PA-APA 2017 - Bicycling Beyond the Big Cities

TAP Grant



Simone Collins Landscape Architecture

Planners and Landscape Architects

Geoff Creary

gcreary@simonecollins.com

610-239-7601

