

# PROJECT PRIORITIZATION



Based on input from the three surveys, identified needs and local desires, the Berks County Bicycle and Pedestrian Plan Steering Committee has compiled a listing of the following projects and programs for inclusion in the Plan. It is understood that not all proposed projects may be implementable as included. Local factors may dictate that a project of a similar nature and/or in a different location

may need to be substituted and, when appropriate, would be supported by this Plan. They are prioritized based on the number of requests, identified municipal desires, need, fundability, and the ability to be implemented. Some are far-reaching, while others are very local in scope. Potential projects from past Plans may also be included. Additionally, overall concepts and ideas are incorporated into these priorities.

An overall listing of system improvements and concepts, without prioritization, that apply to Berks County include:

- Complete the Schuylkill River Trail through Berks County;
- Maintain and improve the existing Schuylkill River Trail;
- Maintain and improve the County's Union Canal Trail;
- Maintain and improve existing municipal pedestrian and bicycle networks;
- Increase safety and security of all bicycle and pedestrian accommodations;
- Complete accessible curb ramp improvements countywide;
- Maintain existing sidewalk and crosswalk infrastructure countywide;
- Restore degraded sidewalk networks countywide;
- Complete bicycle and pedestrian facilities that connect directly to the Schuylkill River Trail, the Union Canal Trail, and other existing municipal trail systems;
- Provide connections to other non-motorized networks in surrounding counties;
- Provide/maintain/improve pedestrian access to transit routes;
- Provide bicycle and pedestrian connections to schools, retail centers, recreation areas and employment opportunities;
- Work with municipal governments to incorporate pedestrian and bicycle planning into their local comprehensive plans.

Aside from the non-ranked projects and project types listed above, the results from the three aforementioned surveys and other local priorities were aggregated into listings of potential projects that were further analyzed and prioritized. Although meant to give general guidance, this ranking system is not meant to be the 'last word' in defining the importance or constructability of a project. Each project is important to the overall system on its individual merits. Project ranking would only apply if multiple projects are applying during competitive funding processes. Otherwise, if a project sponsor presents with plans and a funding application, ranking would not apply. The following ranking methodology was used:

# PROJECT PRIORITIZATION



1. Projects were separated into the five Planning Regions, understanding full well that some projects will cross into other regions;
2. Each Region's projects were separated between Bicycle and Pedestrian, where possible;
3. Projects were sorted (high-to-low) based on the number of Draft Goals (Chapter 2) that were satisfied;
4. Projects were then sorted (high-to-low) by the number of identified requests (from the surveys) for that project;
5. Projects were then sorted (Yes/No) as to whether it was already identified in an existing document or a previously planned project.

Projects were ranked HIGH/MED/LOW based on the above system. In particular:

- Projects meeting 4-5 of the draft Goals were ranked HIGH;
- Those meeting 2-3 draft Goals were ranked MED; and
- Those meeting 0-2 draft Goals received a LOW rank.

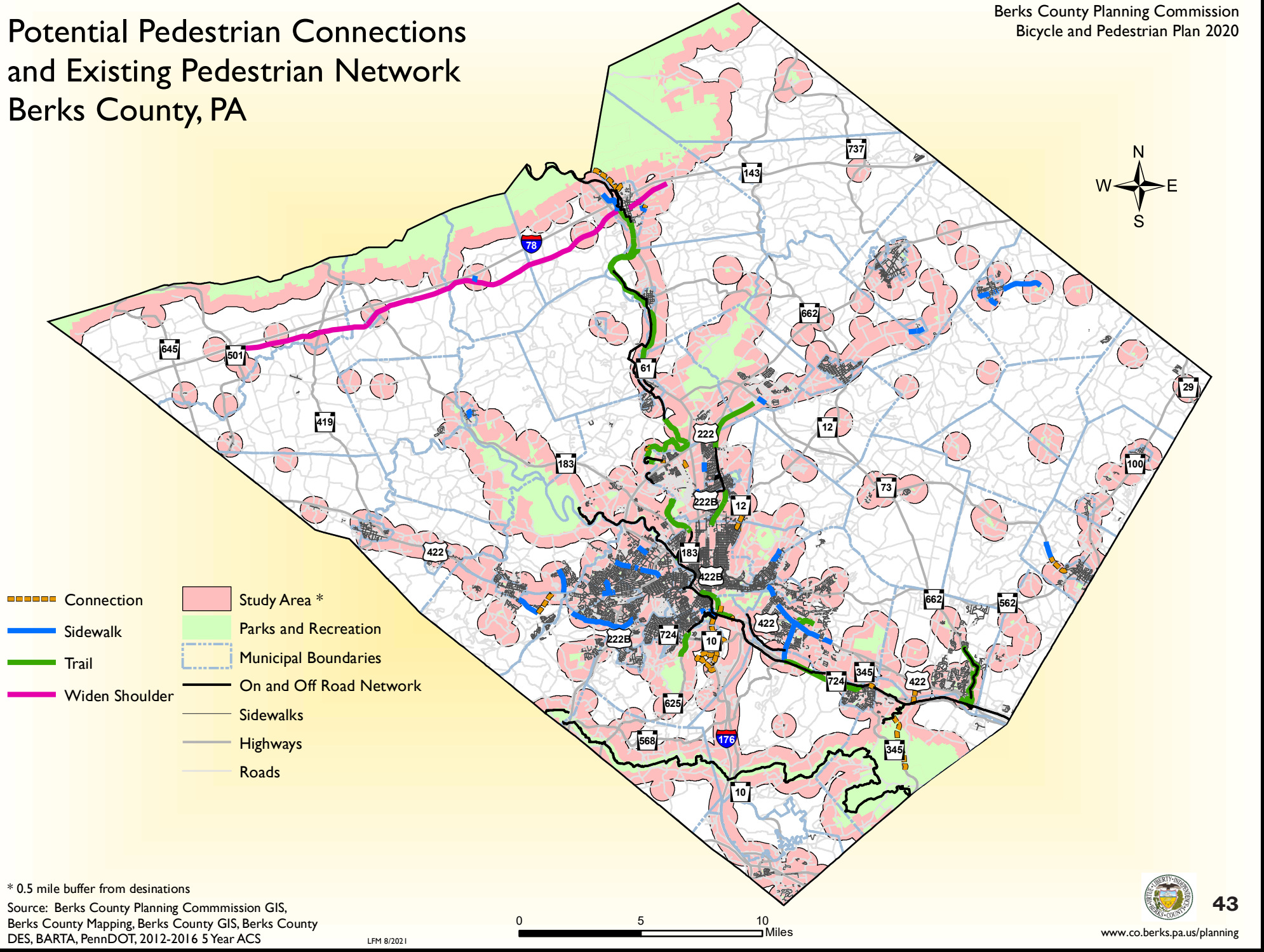
As for timing, these were all ranked more subjectively based on potential costs, difficulty of implementation, number of municipalities involved, potential need for land acquisition, PennDOT or Norfolk Southern involvement, and other factors:

- SHORT-term is essentially 1-5 years;
- MID-term is 6-10 years, and
- LONG-term is more than 10 years.

Finally, the potential projects (still separated by Planning Region) were reorganized based on Rank/Timing

- High Rank / Short Term
- High Rank / Mid Term
- High Rank / Long Term
- Medium Rank / Short Term
- Medium Rank / Mid Term
- Medium Rank / Long Term
- Low Rank / Short Term
- Low Rank / Mid Term
- Low Rank / Long Term

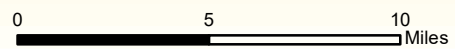
# Potential Pedestrian Connections and Existing Pedestrian Network Berks County, PA



- - - - Connection
- Sidewalk
- Trail
- Widen Shoulder
- Study Area \*
- Parks and Recreation
- Municipal Boundaries
- On and Off Road Network
- Sidewalks
- Highways
- Roads

\* 0.5 mile buffer from destinations  
 Source: Berks County Planning Commission GIS,  
 Berks County Mapping, Berks County GIS, Berks County  
 DES, BARTA, PennDOT, 2012-2016 5 Year ACS

LFM 8/2021





# Potential Bicycle Connections and Existing Bicycle Facilities

## Berks County, PA

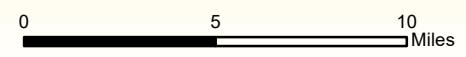


- Bike Lane
- - - Connection
- Sharrows
- Trail
- Widen Shoulder
- Study Area \*
- Parks and Recreation
- Municipal Boundaries
- On and Off Road Network
- BARTA Routes
- Highways
- Roads

\* 2 mile buffer from destinations

Source: Berks County Planning Commission GIS,  
Berks County Mapping, Berks County GIS, Berks County  
DES, BARTA, PennDOT, 2012-2016 5 Year ACS

LFM 8/2021





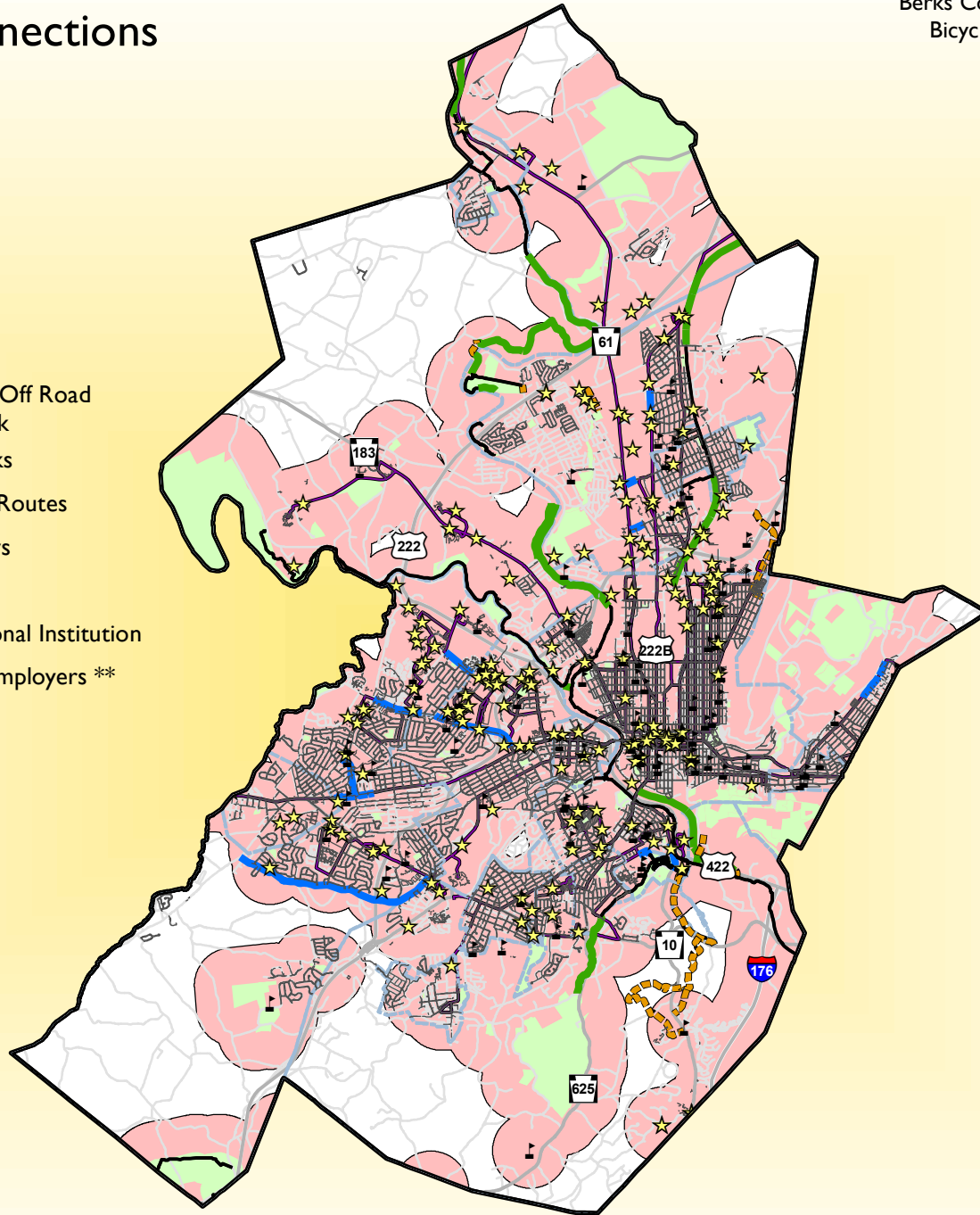
<b>METRO REGION</b>				
<b>Project Location</b>	<b>Municipality</b>	<b>Type</b>	<b>Potential Rank</b>	<b>Timing</b>
<b>Bicycle</b>				
Crossing Dr bt Spring and Woodland	Wyomissing	Bike Lanes	HIGH	SHORT
724 and Angstadt Lane		crossing	HIGH	SHORT
Albright	Reading	bike share	HIGH	SHORT
Wyomissing School District	Wyomissing	bike share	HIGH	SHORT
Alvernia to Millmont School	Reading	bike lane	HIGH	SHORT
Museum Road	Shillington, Wyomissing, West Reading	Bike Lanes	HIGH	MID
Morgantown Road		bike lane	HIGH	MID
Lancaster Ave	Reading, Kenhorst, Shillington	Bike Lanes	HIGH	LONG
State Hill Rd	Wyomissing, Spring	Bike lane	HIGH	LONG
Crossing 61 Muhl	Muhlenberg	crossing	HIGH	LONG
Oakbrook and Millmont	Reading	Bike Lane	MED	SHORT
Exeter Scenic Trail	Exeter	Trail	MED	SHORT
Angelica Trail	Reading, Cumru	Trail	MED	MID
Penn Ave	West Reading, Wyomissing, Spring, Sinking Spring, Lower Heidelberg, South Heidelberg, Wernersville, Heidelberg, Robesonia	Bike Lanes	MED	MID
Perkiomen	Reading, Mt Penn, St Lawrence, Exeter	bike lanes	MED	MID
Reading Ave W Reading	West Reading	Bike Lanes	MED	MID
St. Lawrence to Exeter Shopping	St Lawrence, Exeter	Bike Lane/trail	MED	MID
Bernhardt to Hampden Heights	Muhlenberg, Reading	Widening shoulder	MED	MID
River Road	Muhlenberg	Bike Path/Lane	MED	MID
Exeter Scenic River Trail through Cumru & Heritage Park	Exeter, Cumru	Trail	MED	LONG
Cross Schuylkill River	Muhlenberg, Bern	Bridge	MED	LONG
SRT to Mt Penn	Reading	bike lane	MED	LONG
Along Antietam from Exeter Rd to Harvey Ave Carsonia Park	Lower Alsace	Bike Path	MED	LONG
Connect Trails in Muhlenberg	Muhlenberg	trail	LOW	MID
Wyo Blvd	Wyomissing	Bike Lanes	LOW	MID
Fritztown Road	Spring	Widening shoulder	LOW	MID
Shiloh Hills Park to Wyo Park	Spring, Cumru, Wyomissing	Bike Lanes	LOW	LONG
Route 724	Union, Birdsboro, Robseon, Cumru, Shillington	bike lanes	LOW	LONG
New Holland Road	Reading, Kenhorst, Cumru, Brecknock	bike lane	LOW	LONG
Muhl SRT Access	Muhlenberg	connection	LOW	LONG
Rt 12 to Dietrich	Muhlenberg	Bike Path/Lane	LOW	LONG
Shillington Road SR0724	Spring, Sinking Spring	Bike Lane	LOW	LONG

<b>METRO REGION</b>				
<b>Project Location</b>	<b>Municipality</b>	<b>Type</b>	<b>Potential Rank</b>	<b>Timing</b>
5th Street Walmart to Bingaman	Muhlenberg, Reading	Bike Lane	LOW	LONG
Warren St Bypass		crossing	NO	
<b><u>Pedestrian</u></b>				
Delaney Circle W Reading	West Reading	crossing	HIGH	SHORT
6th and Greenwich	Reading	crossing	HIGH	SHORT
724 and Angstadt Lane	Cumru	crossing	HIGH	SHORT
Park Rd Wyomissing	Wyomissing	walkability	HIGH	SHORT
Alvernia	Reading	sidewalk	HIGH	SHORT
Broadcasting Road under 222	Spring	crossing	HIGH	MID
422 and 724 Sinking Spring	Sinking Spring	crossing	HIGH	MID
Tuckerton bt Heather Knoll and 5th	Muhlenberg	sidewalk	HIGH	MID
Dwight St	Spring	sidewalk	HIGH	MID
Bellevue and George/61/5th	Muhlenberg	sidewalk	HIGH	MID
West Reading	West Reading	crossing	HIGH	MID
Morgantown Rd near Angelica	Reading	sidewalk	HIGH	MID
5th St from Water St/S Temple Rd	Muhlenberg	sidewalk	HIGH	MID
Penn Ave West Lawn	Wyomissing	sidewalk	HIGH	MID
State Hill from Penn Ave to Van Reed	Wyomissing, Spring	sidewalk	HIGH	MID
Papermill from Wyo to Broadcasting Rd	Wyomissing, Spring	sidewalk	HIGH	MID
Lancaster Ave and 10	Reading	crossing	HIGH	LONG
Sidewalks on Gibraltar Rd Exeter	Exeter	sidewalk	HIGH	LONG
Reedy Road	Spring, Sinking Spring	marked lane	MED	SHORT
Sidewalks Perki from Mt Penn to Exeter	Mt Penn, St Lawrence, Exeter	sidewalk	MED	MID
River Road Muhl	Muhlenberg		MED	MID
Nolde to Angelica	Cumru, Reading	connection	MED	MID
Trail connections Muhlenberg	Muhlenberg	sidewalk	MED	MID
Exeter Scenic Trail	Exeter	Trail	MED	MID
Sidewalks Carsonia near L Alsace building	Lower Alsace	sidewalk	MED	MID
Bernhardt to Hampden Heights	Muhlenberg, Reading	marked lane	MED	MID
Sidewalks 422 corridor Exeter	Exeter	sidewalk	MED	LONG
Lancaster Ave between 724 and 222s	Reading	sidewalk	MED	LONG
Lakewood Drive Flying Hills Cumru	Cumru	sidewalk	MED	LONG
Old Fritztown Road	Spring	sidewalk	MED	LONG
Thun Trail from Flying Hills	Cumru	connection	MED	LONG
Laureldale trail north	Muhlenberg, Ontelaunee	trail	LOW	LONG

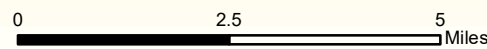
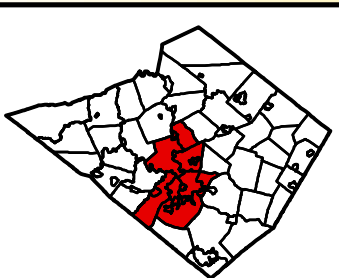
# Potential Pedestrian Connections Metro Region Berks County, PA



- Connection
- Sidewalk
- Trail
- Widen Shoulder
- Study Area
- Parks and Recreation
- Municipal Boundaries
- On and Off Road Network
- Sidewalks
- BARTA Routes
- Highways
- Roads
- Educational Institution
- Major Employers \*\*



\* 0.5 mile buffer from destinations  
 \*\* Employers with 100 or more workers  
 Source: Berks County Planning Commission GIS,  
 Berks County Mapping, Berks County GIS, Berks County  
 DES, BARTA, PennDOT, 2012-2016 5 Year ACS

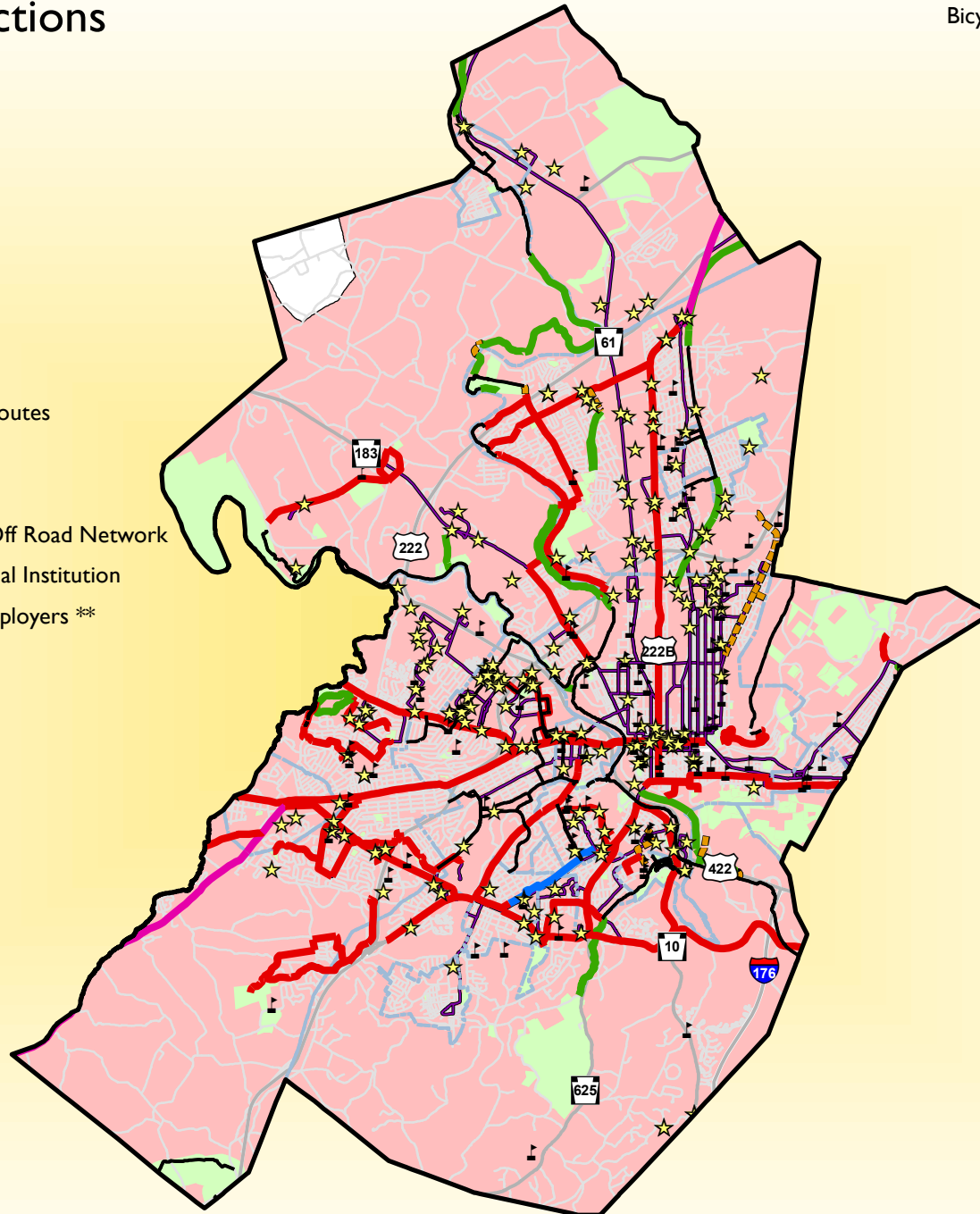




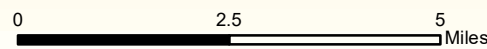
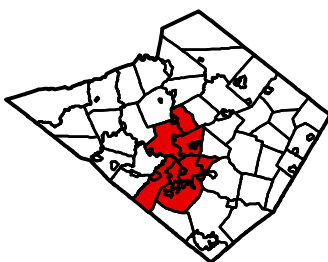
# Potential Bicycle Connections Metro Region Berks County, PA



- Bike Lane
- - - Connection
- Sharrows
- Trail
- Widen Shoulder
- Study Area \*
- Parks and Recreation
- Municipal Boundaries
- BARTA Routes
- Highways
- Roads
- On and Off Road Network
- Educational Institution
- ★ Major Employers \*\*

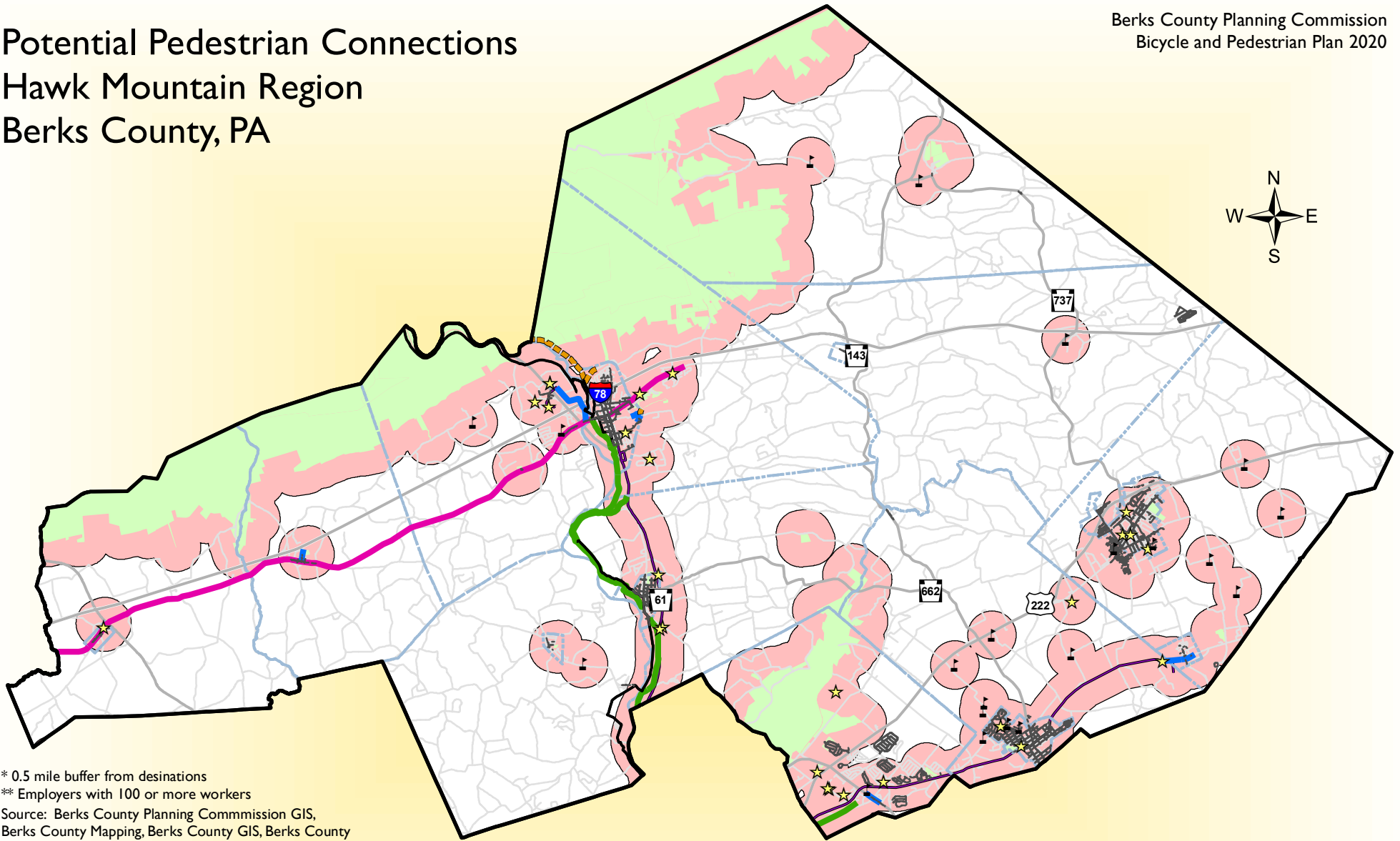


\* 2 mile buffer from destinations  
 \*\* Employers with 100 or more workers  
 Source: Berks County Planning Commission GIS,  
 Berks County Mapping, Berks County GIS, Berks County  
 DES, BARTA, PennDOT, 2012-2016 5 Year ACS



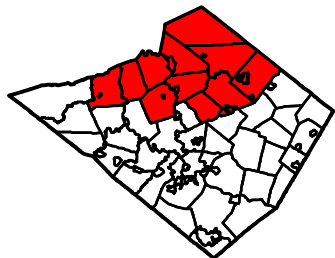
<b>HAWK MOUNTAIN REGION</b>				
<b>Project Location</b>	<b>Municipality</b>	<b>Type</b>	<b>Potential Rank</b>	<b>Timing</b>
<b><u>Bicycle</u></b>				
SRT	Hamburg, Perry, Windsor, Shoemakersville	Trail	HIGH	LONG
Maiers Grove to developments schools businesses and parks	all		MED	MID
Hex Highway	Tilden, Upper Bern, Upper Tulpehocken	Bike Lane	MED	MID
Kutztown Major Attractions	Kutztown	Bike Lane/trail	MED	LONG
Fleetwood to 5th	Fleetwood, Maiden creek, Ontelaunee,	Bike Lane	MED	LONG
Kutztown to Temple	Kutztown, Maxatawny, Maiden creek, Ontelaunee, Muhlenberg	Widening shoulders	MED	LONG
<b><u>Pedestrian</u></b>				
73 from Grove Rd to Andrew Maier ES	Maiden creek	sidewalk	HIGH	MID
SRT	Hamburg, Perry, Windsor, Shoemakersville	trail	HIGH	LONG
Old Rt 22	Tilden, Upper Bern, Upper Tulpehocken, Hamburg	marked lane	HIGH	LONG
Industrial Drive and W State Tilden	Hamubrg, Tilden	sidewalk	HIGH	LONG
400/500 blocks Main Fleetwood	Fleetwood	crossing	HIGH	SHORT

# Potential Pedestrian Connections Hawk Mountain Region Berks County, PA

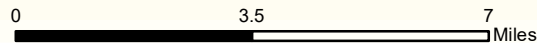


\* 0.5 mile buffer from destinations  
\*\* Employers with 100 or more workers

Source: Berks County Planning Commission GIS,  
Berks County Mapping, Berks County GIS, Berks County  
DES, BARTA, PennDOT, 2012-2016 5 Year ACS

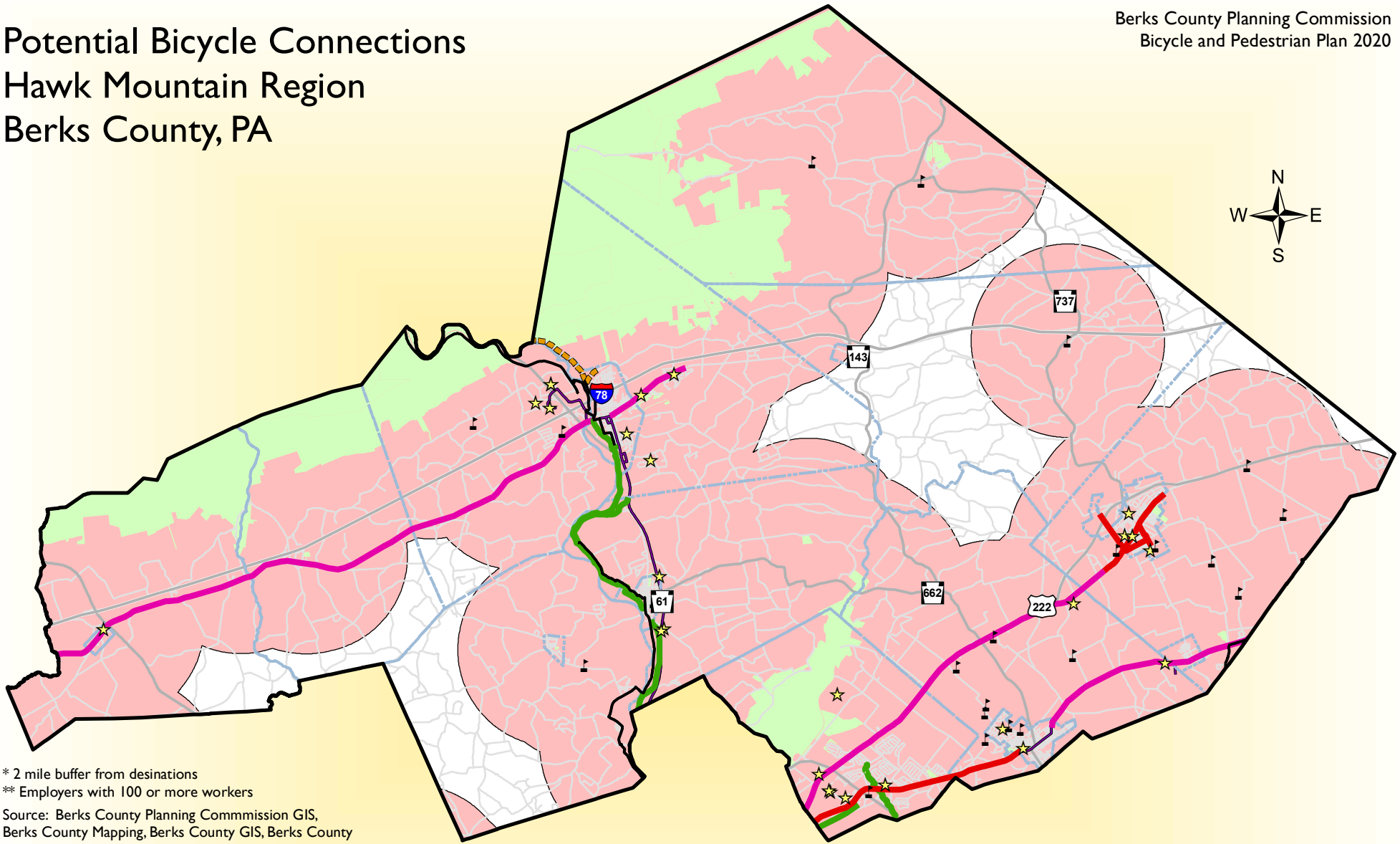


- |                |                      |                         |                         |
|----------------|----------------------|-------------------------|-------------------------|
| Connection     | Study Area *         | On and Off Road Network | Educational Institution |
| Sidewalk       | Parks and Recreation | Sidewalks               | Major Employers **      |
| Trail          | Municipal Boundaries | BARTA Routes            |                         |
| Widen Shoulder |                      | Highways                |                         |
|                |                      | Roads                   |                         |



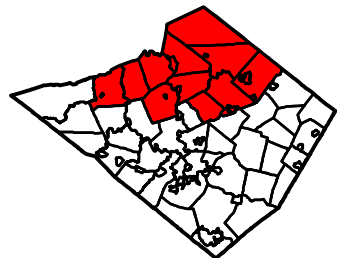


# Potential Bicycle Connections Hawk Mountain Region Berks County, PA

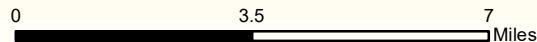


\* 2 mile buffer from destinations  
\*\* Employers with 100 or more workers

Source: Berks County Planning Commission GIS,  
Berks County Mapping, Berks County GIS, Berks County  
DES, BARTA, PennDOT, 2012-2016 5 Year ACS



- |                |                      |                         |                         |
|----------------|----------------------|-------------------------|-------------------------|
| Bike Lane      | Study Area *         | On and Off Road Network | Educational Institution |
| Connection     | Parks and Recreation | BARTA Routes            | Major Employers **      |
| Sharrows       | Municipal Boundaries | Highways                |                         |
| Trail          |                      | Roads                   |                         |
| Widen Shoulder |                      |                         |                         |



LFM 8/2021



<b>OLEY HILLS REGION</b>				
<b>Project Location</b>	<b>Municipality</b>	<b>Type</b>	<b>Potential Rank</b>	<b>Timing</b>
<b><u>Bicycle</u></b>				
Connect Boyertown SD	Boyertown	Bike Lane	LOW	MID
SR 0073	Boyertown	Bike Lane	LOW	LONG
Boyertown to Pottstown Trail	Boyertown	Bike Lanes	MED	LONG
Secret Valley Trail near Boyertown	Boyertown, Douglass, Amity	Trail	MED	LONG
<b><u>Pedestrian</u></b>				
8 intersection improvements Boyertown	Boyertown	crossing	HIGH	SHORT
73 in Boyertown SD	Boyertown	sidewalk	HIGH	LONG
State Street Longswamp	Longswamp	sidewalk	MED	LONG
Secret Valley Trail near Boyertown	Douglass, Boyertown, Amity	Trail	MED	LONG
Leaf Creek Trail	Amity	trail	LOW	LONG

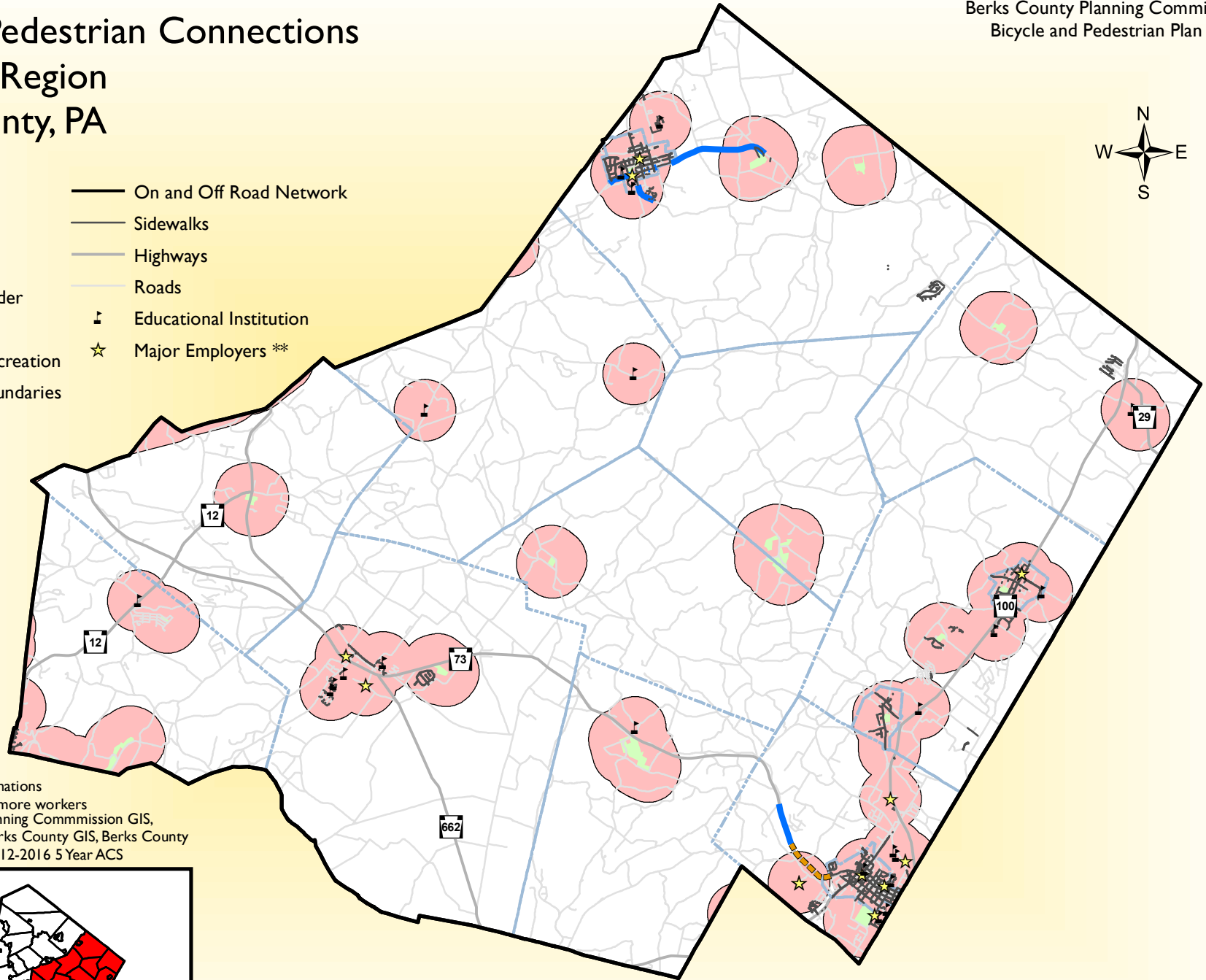
# Potential Pedestrian Connections

## Oley Hills Region

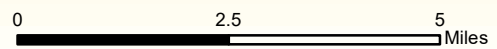
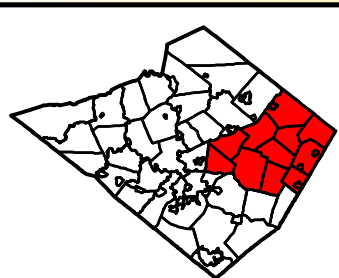
### Berks County, PA



- - - - Connection
- Sidewalk
- Trail
- Widen Shoulder
- Study Area \*
- Parks and Recreation
- Municipal Boundaries
- On and Off Road Network
- Sidewalks
- Highways
- Roads
- Educational Institution
- ★ Major Employers \*\*



\* 0.5 mile buffer from destinations  
 \*\* Employers with 100 or more workers  
 Source: Berks County Planning Commission GIS,  
 Berks County Mapping, Berks County GIS, Berks County  
 DES, BARTA, PennDOT, 2012-2016 5 Year ACS



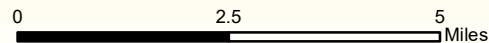
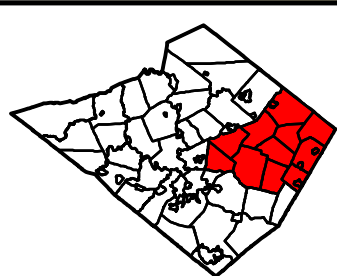
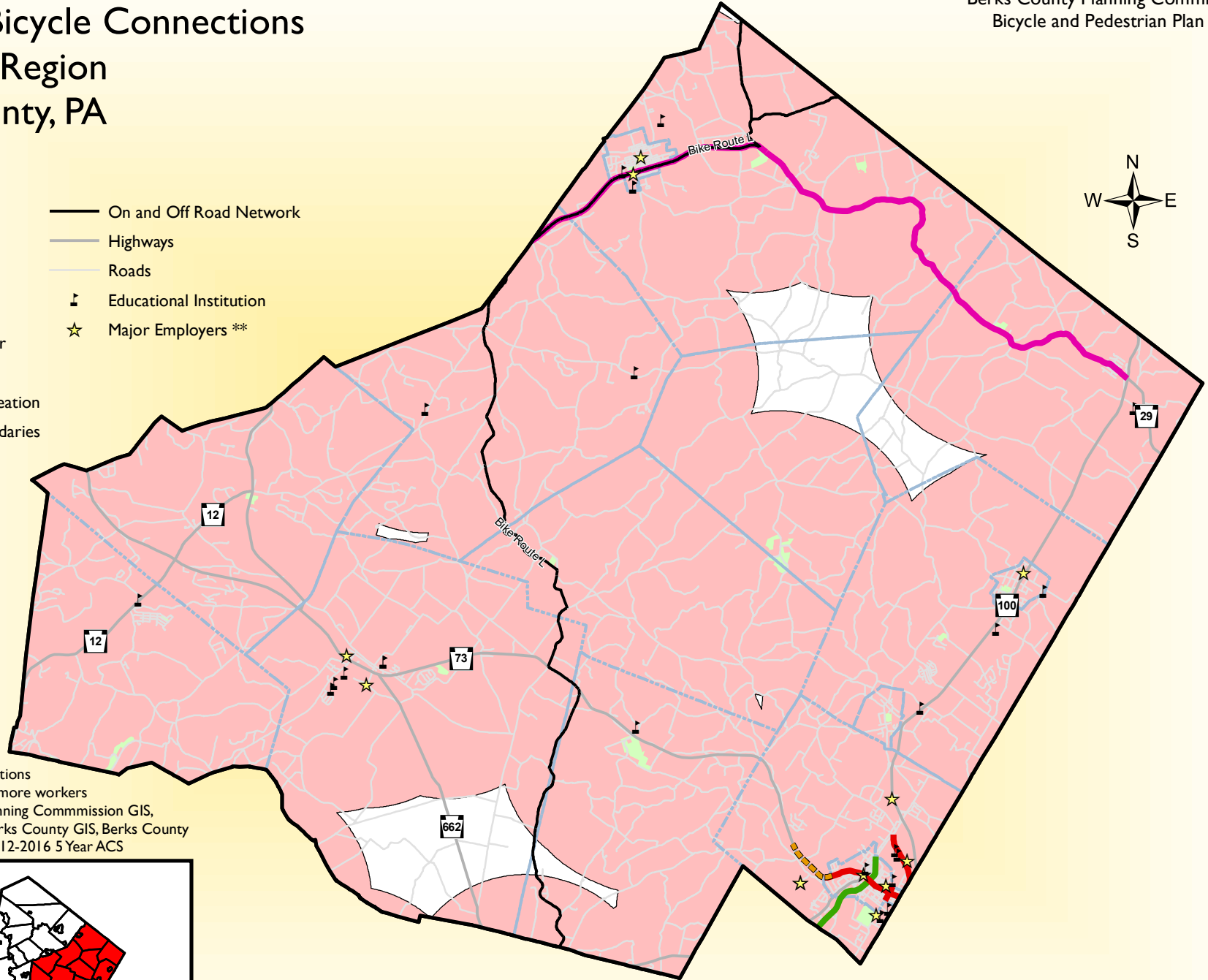


# Potential Bicycle Connections

## Oley Hills Region

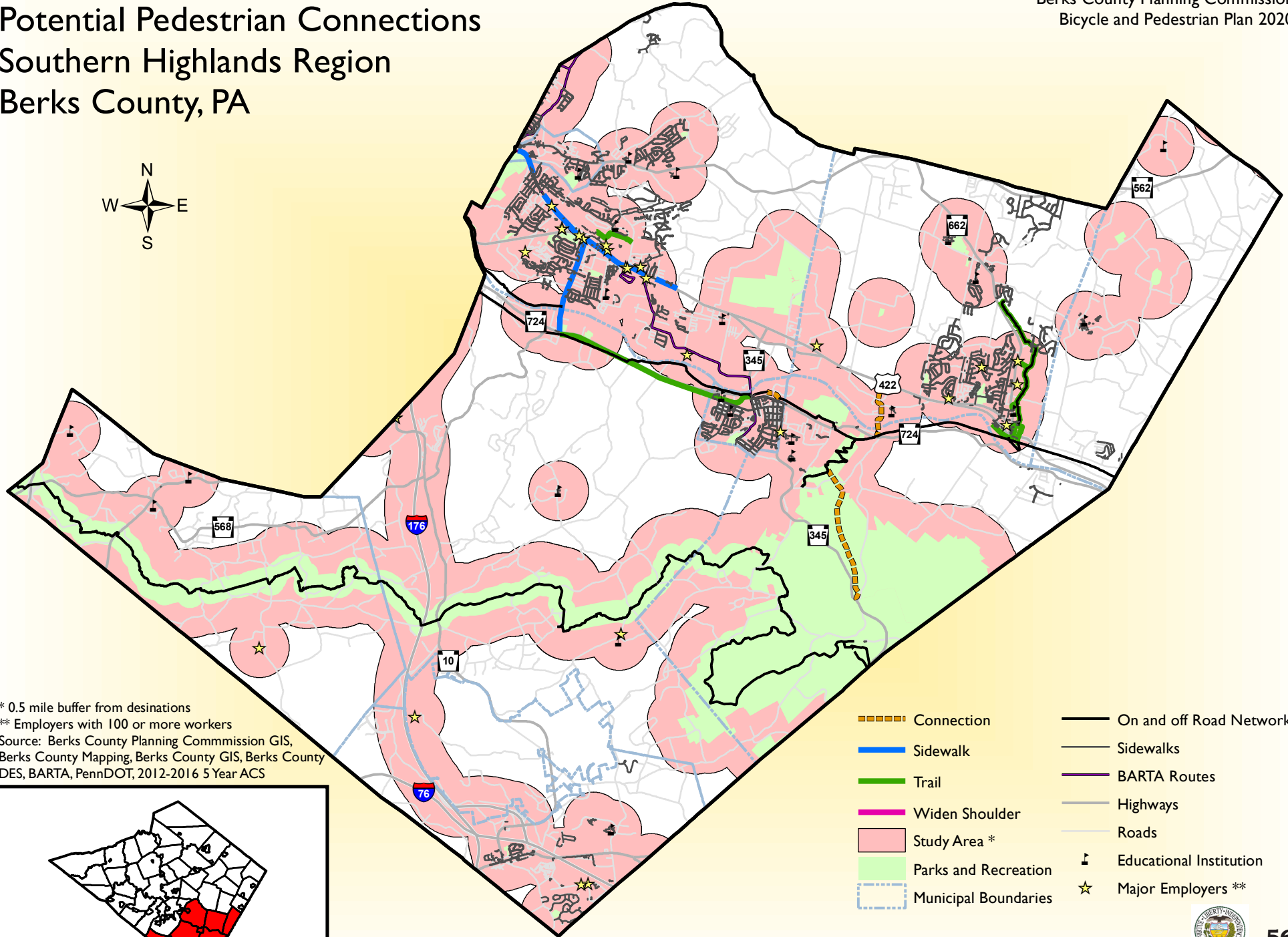
### Berks County, PA

- Bike Lane
- - - Connection
- Sharrows
- Trail
- Widen Shoulder
- Study Area \*
- Parks and Recreation
- Municipal Boundaries
- On and Off Road Network
- Highways
- Roads
- Educational Institution
- ★ Major Employers \*\*



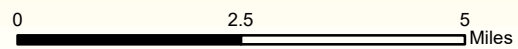
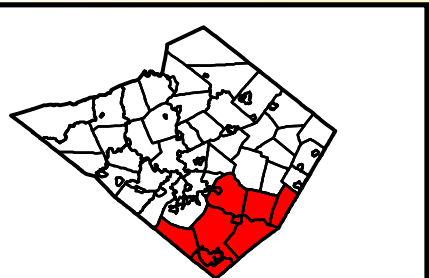
<b>SOUTHERN HIGHLANDS REGION</b>				
<b>Project Location</b>	<b>Municipality</b>	<b>Type</b>	<b>Potential Rank</b>	<b>Timing</b>
<b>Bicycle</b>				
SRT Connection Birdsboro	Birdsboro		HIGH	MID
Monacacy Thun Bridge over 724	Union	bridge	HIGH	SHORT
Crossings 422	Amity, Douglass	crossing	HIGH	MID
SRT b/t Gibraltar and Birdsboro offroad	Robeson, Birdsboro	trail	HIGH	LONG
Oley Turnpike Rd	Oley, Exeter	Bike Lane	LOW	LONG
Faust Road	Lower Heidelberg	Widening shoulder	MED	MID
Lincoln Drive Krick Lane Wern	Wernersville, South Heidelberg	Bike Lane	MED	LONG
Bike Trail Following Railroad	Heidelberg, Robeson, South Heidelberg, Wernersville	trail	LOW	LONG
<b>Pedestrian</b>				
Monacacy Thun Bridge over 724	Union	bridge	HIGH	SHORT
Amity 422 near wawa	Amity	crossing	HIGH	MID
Shelbourne to Exeter shopping	Exeter	trail	HIGH	MID
SRT b/t Gibraltar and Birdsboro offroad	Robeson, Birdsboro	trail	HIGH	LONG
Amity and Union SRT Connections	Amity, Union	connection	MED	MID

# Potential Pedestrian Connections Southern Highlands Region Berks County, PA



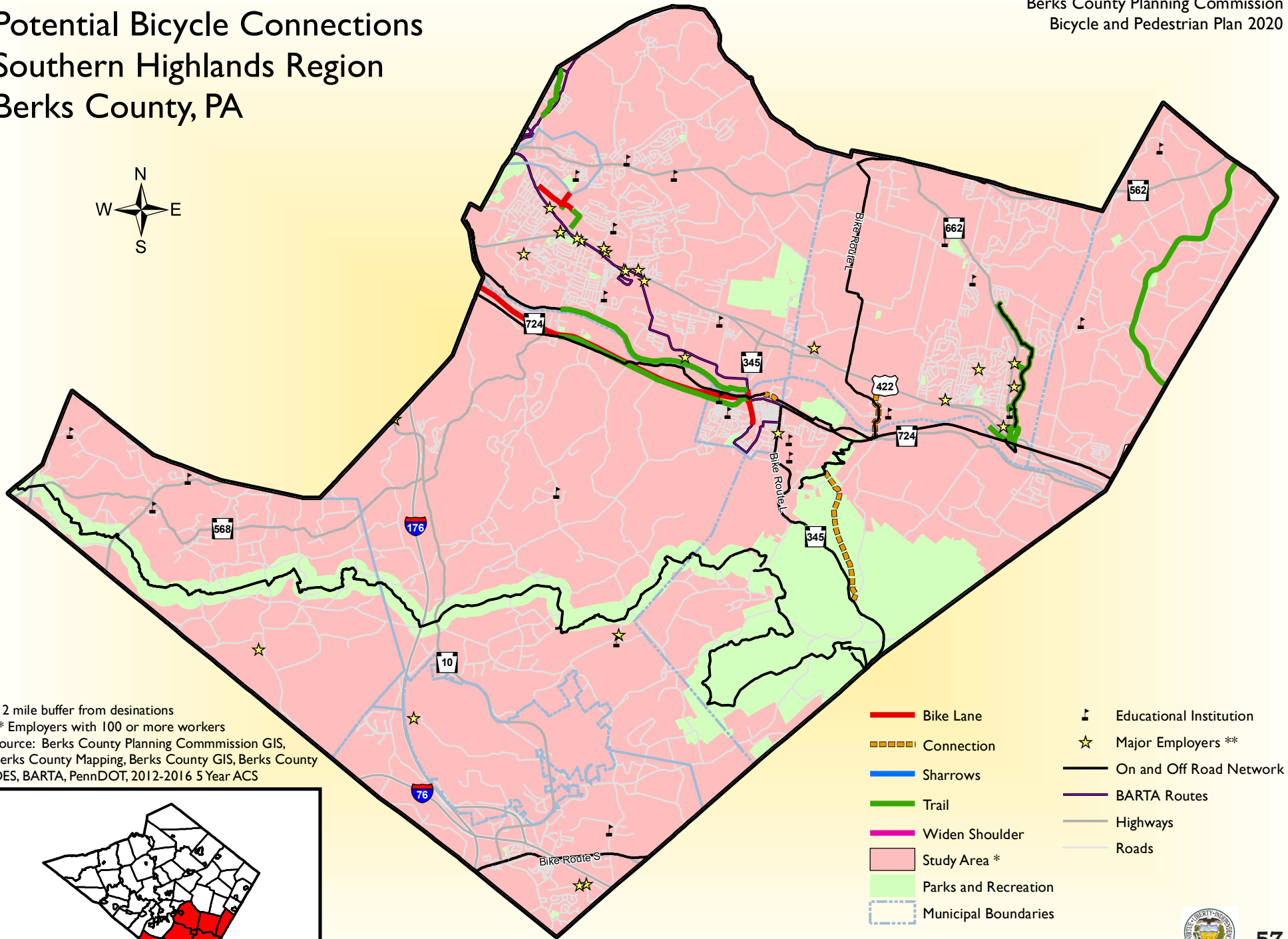
\* 0.5 mile buffer from destinations  
 \*\* Employers with 100 or more workers  
 Source: Berks County Planning Commission GIS,  
 Berks County Mapping, Berks County GIS, Berks County  
 DES, BARTA, PennDOT, 2012-2016 5 Year ACS

- |                      |                         |
|----------------------|-------------------------|
| Connection           | On and off Road Network |
| Sidewalk             | Sidewalks               |
| Trail                | BARTA Routes            |
| Widen Shoulder       | Highways                |
| Study Area *         | Roads                   |
| Parks and Recreation | Educational Institution |
| Municipal Boundaries | Major Employers **      |

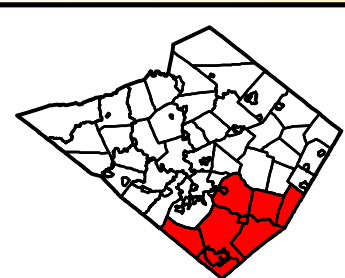




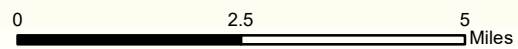
# Potential Bicycle Connections Southern Highlands Region Berks County, PA



\* 2 mile buffer from destinations  
 \*\* Employers with 100 or more workers  
 Source: Berks County Planning Commission GIS,  
 Berks County Mapping, Berks County GIS, Berks County  
 DES, BARTA, PennDOT, 2012-2016 5 Year ACS



- Bike Lane
- - - Connection
- Sharrows
- Trail
- Widen Shoulder
- Municipal Boundaries
- BARTA Routes
- Highways
- Roads
- ▲ Educational Institution
- ★ Major Employers \*\*
- On and Off Road Network

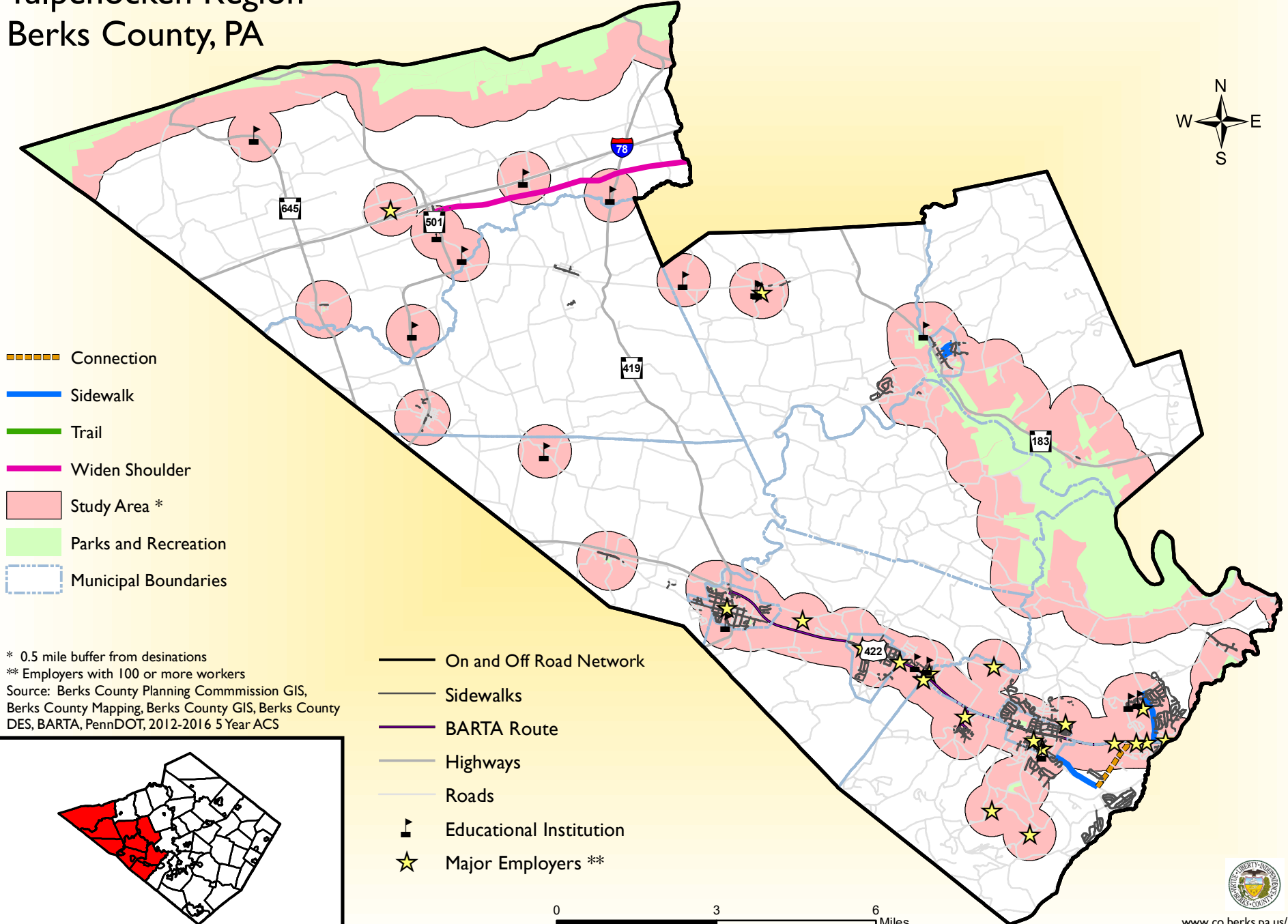


<b>TULPEHOCKEN REGION</b>				
<b>Project Location</b>	<b>Municipality</b>	<b>Type</b>	<b>Potential Rank</b>	<b>Timing</b>
<b><u>Bicycle</u></b>				
Faust Road	Lower Heidelberg	Widening shoulder	MED	MID
Lincoln Drive Krick Lane	Wernersville, South Heidelberg	Bike Lane	MED	LONG
Bike Trail Following Railroad	Heidelberg, Robesonia, South Heidelberg, Wernersville	trail	LOW	LONG
<b><u>Pedestrian</u></b>				
Green Valley Rd	Lower Heidelberg	sidewalk	HIGH	MID
Lincoln Drive S. Heidel to Krick	Wernersville, South Heidelberg	sidewalk	MED	LONG

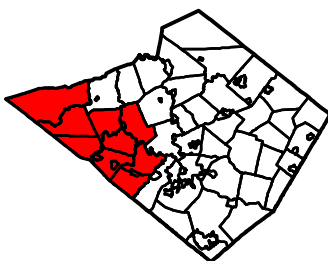
# Potential Pedestrian Projects

## Tulpehocken Region

### Berks County, PA



\* 0.5 mile buffer from destinations  
 \*\* Employers with 100 or more workers  
 Source: Berks County Planning Commission GIS,  
 Berks County Mapping, Berks County GIS, Berks County  
 DES, BARTA, PennDOT, 2012-2016 5 Year ACS



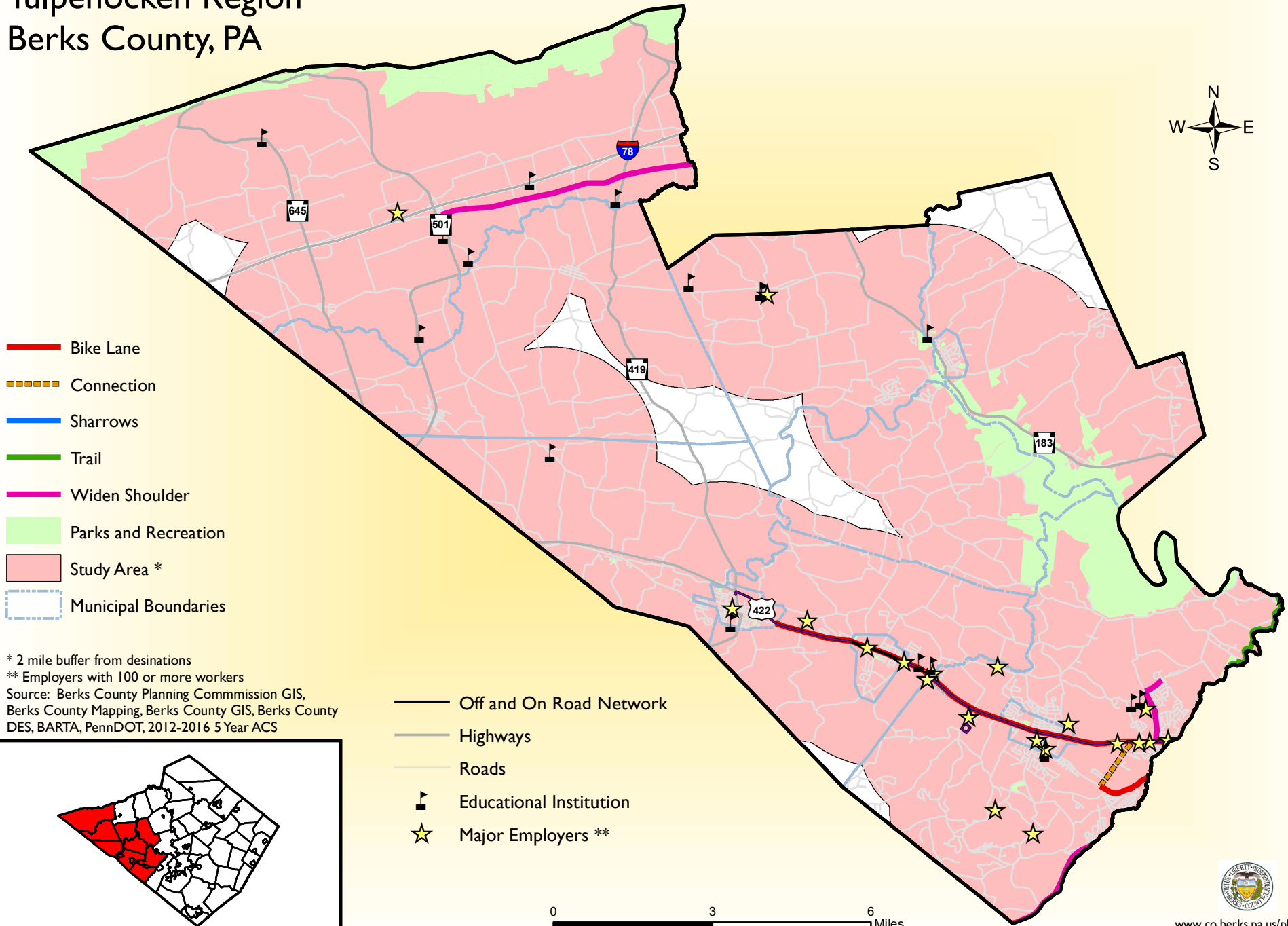
LFM 8/2021



# Potential Bicycle Connections

## Tulpehocken Region

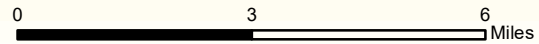
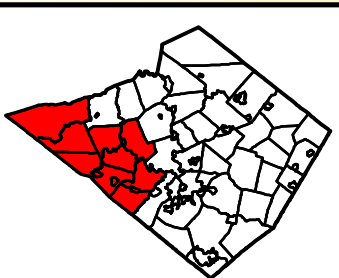
### Berks County, PA



- Bike Lane
- - - Connection
- Sharrows
- Trail
- Widen Shoulder
- Parks and Recreation
- Study Area \*
- Municipal Boundaries

\* 2 mile buffer from destinations  
 \*\* Employers with 100 or more workers  
 Source: Berks County Planning Commission GIS,  
 Berks County Mapping, Berks County GIS, Berks County  
 DES, BARTA, PennDOT, 2012-2016 5 Year ACS

- Off and On Road Network
- Highways
- Roads
- ▬ Educational Institution
- ★ Major Employers \*\*



# FUNDING



The costs of bicycle and pedestrian improvements differ based on multiple factors such as type of improvement, physical geography, presence or lack of utilities/infrastructure, and right-of-way. The University of North Carolina Highway Safety Research Center prepared “Costs for Pedestrians and Bicycle Infrastructure Improvements: A Resource for Researchers, Engineers, Planners, and the

General Public” for the Federal Highway Administration in 2013. The costs reported in this document include engineering, design, and installation. The table below shows the average costs across the United States for bicycle and pedestrian improvements provided by this document.

Type	Improvement	Average Cost
Bicycle Parking	Bicycle Locker	\$2,090
Bicycle Parking	Bicycle Rack	\$660
Bikeway	Bicycle Lane	\$133,170/mile
Bikeway	Signed Bicycle Route	\$25,070/mile
Bikeway	Signed Bicycle Route with Improvements	\$239,440/mile
Chicane	Chicane	\$9,960
Curb Extension	Curb Extension/Choker/Bulb-Out	\$13,000
Diverter	Diverter	\$26,040
Diverter	Partial/Semi Diverter	\$15,060
Island	Median Island	\$13,520
Raised Crossing	Raised Crosswalk	\$8,170
Raised Crossing	Raised Intersection	\$50,540
Speeding Deterrent	Speed Hump	\$2,640
Speeding Deterrent	Speed Bump	\$1,550
Speeding Deterrent	Speed Table	\$2,400
Speeding Deterrent	Speed Trailer	\$9,510
Bollard	Bollard	\$730
Curb Ramp	Wheelchair Ramp	\$810
Fence/Gate	Fence	\$130/foot
Fence/Gate	Gate	\$910
Gateway	Gateway Sign	\$340
Gateway	Gateway Structure	\$22,750
Lighting	In-pavement Lighting	\$17,620
Lighting	Streetlight	\$4,880
Overpass/Underpass	Wooden Bridge	\$124,670



# FUNDING

Table information provided by the University of North Carolina Highway Safety Research Center's "Costs for Pedestrians and Bicycle Infrastructure Improvements: A Resource for Researchers, Engineers, Planners, and the General Public."



Type	Improvement	Average Cost
Overpass/Underpass	Pre-Fab Steel Bridge	\$206,290
Railing	Pedestrian Rail	\$100/foot
Street Furniture	Street Trees	\$430
Street Furniture	Bench	\$1,550
Street Furniture	Bus Shelter	\$11,560
Street Furniture	Trash/Recycling Receptacle	\$1,420
Crosswalk	High Visibility Crosswalk	\$2,540
Crosswalk	Striped Crosswalk	\$770
Crosswalk	Asphalt Paved Shoulder	\$5.56/foot <sup>2</sup>
Sidewalk	Asphalt Sidewalk	\$35/foot
Sidewalk	Brick Sidewalk	\$60/foot
Sidewalk	Concrete Sidewalk	\$32/foot
Sidewalk	Concrete Sidewalk - Patterned	\$36/foot
Sidewalk	Concrete Sidewalk - Stamped	\$45/foot
Sidewalk	Concrete Sidewalk and Curb	\$150/foot
Sidewalk	Sidewalk	\$45/foot
Sidewalk	Sidewalk Pavers	\$80/foot
Path	Boardwalk	\$2,219,470/mile
Path	Multi-Use Trail - Paved	\$481,140/mile
Path	Multi-Use Trail - Unpaved	\$121,390/mile
Beacon	Flashing Beacon	\$10,010
Beacon	Rectangular Rapid Flashing Beacon	\$22,250
Beacon	Pedestrian Hybrid Beacon	\$57,680
Detection	Bicycle Detector	\$1,920
Detection	Pedestrian Detector	\$390
Detection	Push Button	\$350
Signal	Audible Pedestrian Signal	\$800
Signal	Countdown Timer Module	\$740

# FUNDING



Local, public-private partnerships, state, and federal funding types are accessible to municipalities to aid in improving their bicycle and pedestrian network.

Type	Improvement	Average Cost
Signal	Pedestrian Signal	\$1,480
Signal	Signal Face	\$430
Signal	Signal Head	\$550
Signal	Signal Pedestal	\$800
Sign	Stop/Yield Sign	\$300
Pavement Marking	Advance Stop/Yield Line	\$10/foot <sup>2</sup>
Pavement Marking	Island Marking	\$1.94/foot <sup>2</sup>
Pavement Marking	Painted Curb/Sidewalk	\$3.06/foot
Pavement Marking Symbol	Pedestrian Crossing	\$360
Pavement Marking Symbol	Shared Lane/Bicycle Marking	\$180
Pavement Marking Symbol	School Crossing	\$470
Curb/Gutter	Curb	\$21
Curb/Gutter	Curb and Gutter	\$21
Curb/Gutter	Gutter	\$23

By referencing the above table, one can gain a better understanding of the costs of bicycle and pedestrian improvements. It can aid in determining which improvement would be the most cost effective to achieve the desired results of the community. Treating the above numbers as cost estimates can allow for better funding allocations by communities to enhance their transportation infrastructure. There are four types of funding a municipality can access to aid in improving their bicycle and pedestrian network: local, public-private partnerships, state, and federal.

## LOCAL

To implement a well-planned and connected pedestrian and bicycle network, a municipality can look to their Capital Improvement Plan for funding. Another source for local funding for a municipality would be their general fund.

# FUNDING

## PUBLIC-PRIVATE PARTNERSHIPS



Local businesses, organizations, corporations, individuals, and schools are possible sources for additional funding. Large scale bicycle and pedestrian improvements can be expensive, but private contributions could be used for smaller, but still significant improvements such as bicycle racks, street trees, or bicycle route signage. Local organizations and businesses that have close ties with the community or are interested in gaining more walk-in business may be more than willing to assist in making these types of improvements to benefit the community they serve.

A recent example in Berks County of a local business taking it upon themselves to aid in the bicycle infrastructure is the Oakbrook Brewing Company located in the Oakbrook community of Reading. This microbrewery uses the proceeds from an ale they brew to purchase bike fix-it stations. The first was installed at their brewpub in August of 2019 and by working closely with Wyomissing Borough a second bike fix-it station has been placed along the Wyomissing Trail near the intersection of Old Mill and Old Wyomissing roads. Sly Fox Brewing Company based in Pottstown, with a tap house in Wyomissing, also uses a portion of their proceeds from one of their ales to benefit the Schuylkill River Trail through working with the Schuylkill River Greenways National Heritage Area.

Non-profit organizations often have requests for bicycle and pedestrian improvements and are able to apply for funding. By working closely with municipalities, they desire improvements within, non-profit organizations and municipalities can plan large-scale connected networks to benefit the community and residents as their funding can be used as matching funds for state and federal funding programs.

## STATE

State based entities such as DCED, DCNR, and PennDOT are often used as sources for funding. Most state funding programs require local matching funds. Some are set up as a reimbursement program. In these instances, a local sponsor pays for the improvements and are then reimbursed when the improvement is completed. In these circumstances, municipalities often have the option of matching funds through other grants or donations.

The Pennsylvania Department of Community and Economic Development (DCED) provides grants from the Multimodal Transportation Fund (MTF) to encourage economic development and ensure that a safe and reliable system of transportation is available to residents. Examples of eligible bicycle and pedestrian projects include bus stops, lighting, sidewalk connections, sidewalk/crosswalk safety improvements, and bicycle lane/route designation and markings. MTF grants require a \$100 application fee and are available for projects with a total cost equal to or greater than \$100,000, however, the grants cannot exceed \$3 million for an individual project. These grants require a 30% minimum

## FUNDING

**S**tate entities such as DCED, DCNR, and PennDOT are often used as sources for funding.

match of local funding, which must be committed by the application deadline of July 31<sup>st</sup>. Municipalities, councils of governments, businesses, economic development organizations, public transportation agencies, and rail and freight ports are eligible to receive these grants. Applications and required supplemental information can be submitted between March 1<sup>st</sup> and July 31<sup>st</sup> every year.

The Pennsylvania Department of Conservation & Natural Resources (DCNR) provides Community Conservation Partnerships Program (C2P2) grants to assist local governments and recreation and conservation organizations with funding for projects related to parks, recreation, and conservation. Non-motorized trail projects including the acquisition, planning, development, rehabilitation, maintenance, the purchase of necessary equipment for trail construction or maintenance, and education programs can be funded through this grant program. Examples of eligible bicycle and pedestrian improvements on trails include trailheads, interpretive signage, and comfort stations. These grants require a matching contribution from the applicant that is equal to 50 percent of the project cost. Counties, municipalities, municipal agencies, non-profit organizations, state heritage areas, and prequalified land trusts are eligible to receive these grants. Applications for these grants are accepted annually beginning in January.

The Pennsylvania Infrastructure Bank (PIB) is a low-interest loan program through PennDOT to assist local governments with their transportation needs. As of August 2019, the PIB interest rate is 2.625% with terms up to 10 years. Cities, townships, boroughs, counties, transportation authorities, economic development agencies, not-for-profit organizations, and private corporations are eligible to apply for these loans. Most capital projects are eligible for financing, but construction projects receive highest priority. Eligible bicycle and pedestrian projects that could be executed through this loan would be through complete streets construction or improvements. These loans will finance up to 100% of the costs and associated costs for completing the loan and municipal borrowers may use Liquid Fuels funds to repay their loan. The only loan that require a match are equipment loans, which have a maximum loan term of 5 years. There is no application fee to apply for PIB loans.

The Automated Red Light Enforcement (ARLE) Funding Program is administered through PennDOT. ARLE grant funds may be used for planning, pre-construction, and construction costs. Types of projects funded include traffic control signal improvements; roadway capacity, mobility, and safety upgrades; bicycle and pedestrian improvements; and Local Technical Assistance Program (LTAP) projects. Examples of bicycle and pedestrian improvements funded are complete street elements, pedestrian countdown timers, pushbuttons, crosswalk striping, pedestrian and bicycle signing, and school zone designations. The total amount of grant funding available in the 2019-2020 fiscal year is approximately \$14 million. There is no match requirement and no minimum or maximum for grants awarded. Although there is no match requirement, ARLE funding is a reimbursement-based program. Applications for ARLE funding are accepted annually during the month of June and funding is awarded

# FUNDING



by the end of December the same year.

WalkWorks, developed in partnership with the state Department of Health and the University of Pittsburgh Center for Public Health Practice, seeks increased opportunities for physical activity in a community through safe walking routes, support of walking groups, walk-to-school programs, and local policies designed to increase safe walking. The organization also provides mini-grants that municipalities can use to develop active transportation plans, “complete streets” policies, and “vision zero” policies. This grant money helps communities implement policy and infrastructure improvements that will optimize physically active lifestyles for residents, such as increasing active

## FEDERAL

transportation (walking, biking, and public transit) and connectivity to common destinations.

The Transportation Alternatives Set-Aside (TASA) is a set-aside of federal funds under the Surface Transportation Block Program. PennDOT administers this program, and in Berks County, the projects are reviewed by the Reading Area Transportation Study (RATS), which is the Metropolitan Planning Organization (MPO) for Berks County. TASA funding is provided for projects defined as transportation alternatives. Examples of eligible bicycle and pedestrian projects include bicycle and pedestrian facilities, trails that serve a transportation purpose, and safe routes to school projects. There is a minimum award of \$50,000 and a maximum award of \$1 million. No applicant match is required for these awards, however project sponsors must pay for preconstruction activities such as project design, pre-construction permits, and clearances. The funds from TASA are awarded biannually.





# IMPLEMENTATION

For a Plan like this to be useful there needs to be specific actions outlined. How do projects go from being listed to construction? A document like this is not meant to be static, but to be constantly referenced, updated and expanded. In order to be implementable, actions may need to be taken at different levels of government and the private sector.

## BERKS COUNTY

- Transform the project lists included in this *Plan* into an overall desired bicycle and pedestrian network throughout the county;
- Incorporate performance metrics into future updates of this *Plan* to measure its effectiveness;
- Work with municipalities to implement bicycle and pedestrian planning and improvements into their planning, zoning and land development processes, including (but not limited to):
  - Adopting Complete Streets Policies;
  - Incorporating pedestrian and bicycle planning into local and joint comprehensive plans and/or recreation plans;
  - Evaluate areas demonstrating a need for pedestrian and bicycle improvements;
  - Developing prioritized improvements listings along with Capital Improvements plans/budgets
  - Requiring bicycle parking in shopping centers, retail areas and places of employment;
  - Ensuring pedestrians and bicyclists have safe and adequate access into and within these destinations;
  - Educating municipalities about the need for bike/ped access and the detriment of allowing variances against sidewalk installation
- Work with municipalities and neighborhood organizations to plan expansions of and connections to existing bike/ped networks/infrastructure;
- Work with municipalities and disabilities advocates to examine areas where sidewalks are deteriorated and/or missing and create plans to address deficiencies;
- Coordinate with SCTA/BARTA to undertake a study of pedestrian access to transit stops with recommendations for improvements;
- Create and include standard language in Subdivision / Land Development reviews that include SCTA/BARTA on any correspondence related to new development that may be occurring along or near transit routes;

# IMPLEMENTATION

**This document is not meant to be static, but to be constantly referenced, updated and expanded.**

- Stay current with funding programs and information that is valuable to local governments and non-profit agencies and ensure that information is made available to them;
- Ensure that projects and/or accommodations listed in this Plan are referenced during all meetings for State roadway projects as part of the PennDOT Connects process;
- As part of the Transportation Improvement Program (TIP) development process, ensure that this Plan is referenced in order to accommodate needed improvements;
- Coordinate with surrounding counties on potential bicycle and pedestrian connections coming from their respective areas;
- Explore model ordinances that can be used by local governments to bolster their bicycle and pedestrian infrastructure;
- Involve municipal solicitors and engineers in local training for Complete Streets policies/ordinances;
- Encourage the incorporation of programs like Safe Routes to Schools in all school districts;
- Advocate to state and federal officials for dedicated funding for pedestrian and bicycle improvements;
- Maintain the Bicycle and Pedestrian Transportation Plan Steering Committee through quarterly meetings and information exchange;
- Maintain and regularly update this *Bicycle and Pedestrian Transportation Plan*.

## MUNICIPALITIES

- Adopt and enforce Complete Streets policies to ensure the entire public right-of-way is available for appropriate users;
- Ensure that local ordinances and regulations include requirements for pedestrian and bicycle accommodations into and within all new developments;
- Examine existing bicycle and pedestrian infrastructure for strengths and weaknesses, and devise plans for improvements;
- Work with neighboring municipalities to provide logical sidewalk and bicycle connections across boundaries;



## IMPLEMENTATION

- Continue to work with residents and visitors to gather information on where facilities like bike lanes and sidewalks are wanted or needed;
- Formalize those needs/desires within municipal planning documents;
- Encourage businesses to provide bike racks for visitors and storage facilities for employees;
- Ensure local development guidelines include requirements for bicycle and pedestrian facilities;
- Enact policies that new development, when located near transit lines, engages early with BARTA to ensure adequate transit access;
- Examine bus stops and sidewalk connections to bus stops and prioritize missing connections and/or areas needing repair;
- Engage with PennDOT officials during the PennDOT Connects process on all state roadway projects;
- Be aware of grant funding opportunities and requirements of those programs;
- Explore using alleyways and low-volume roads as designated bicycle and pedestrian pathways;
- Advocate to county, state and federal officials for dedicated funding for pedestrian and bicycle improvements.

### NON-PROFIT ORGANIZATIONS AND SCHOOL DISTRICTS

- Be familiar with available funding programs and their various requirements, including:
  - Required cash matches
  - Grant vs. loan vs. reimbursement
  - Up-front planning/engineering needs
  - Coordination with local government
- Coordinate with local officials to get agreement and support for projects;
- School Districts should provide bicycle parking at all school buildings;
- School Districts should incorporate bicycle and pedestrian safety instruction at all elementary and middle schools;

# IMPLEMENTATION

- Ensure that local governments are aware of any projects or special needs so they may be incorporated, when appropriate, into the PennDOT Connects process;
- Advocate for your particular constituencies at all levels of government, school districts and SCTA/BARTA.



## THE PUBLIC

- Examine existing bicycle and pedestrian infrastructure for strengths and weaknesses, and devise plans with local governments for improvements;
- Be an active advocate at the state, county and local level for network improvements and funding;
- Be a regular participant in local government and school district meetings and remain knowledgeable in local plans that affect bicycle, pedestrian and transit access;
- Become educated in safe and proper walking, cycling and driving rules and etiquette;
- Support local businesses that cater to cyclists;
- Work with your employer to provide facilities that encourage walking and cycling to work (i.e., lockers, showers, bicycle parking);
- If the opportunity exists, try an alternative method of commuting or shopping that includes walking or bicycling.

**BERKS COUNTY BICYCLE AND PEDESTRIAN TRANSPORTATION PLAN 2020  
MARCH 5, 2020 DRAFT**

**Reading Area Transportation Study Coordinating Committee**

<i>PennDOT District 5-0</i>	<i>Mr. Michael W. Rebert, District Executive (Chairman)</i>
<i>PennDOT Central Office</i>	<i>Ms. Kristin Mulkerin, Div. Chief, Center for Prog. Dev.</i>
	<i>Mr. Gene Porochniak, Transportation Planning Spec.*</i>
<i>Berks County Commissioners</i>	<i>Mr. Kevin Barnhardt, Commissioner</i>
<i>Berks County Planning Commission</i>	<i>Mr. Thomas McKeon, Board Member (Vice Chairman)</i>
	<i>Mr. Alan Piper, Transportation Planner III (MPO Sec.)*</i>
<i>City of Reading</i>	<i>Ms. Donna Reed, Council Member</i>
	<i>Mr. Jeffrey Waltman, Council President*</i>
<i>Berks County Boroughs</i>	<i>Mr. Stephen H. Price, Borough Council President</i>
	<i>(Wernersville Borough)</i>
<i>Berks County 1<sup>st</sup> Class Townships</i>	<i>Vacant</i>
<i>Berks County 2<sup>nd</sup> Class Townships</i>	<i>Mr. James D. Oswald, Township Supervisor</i>
	<i>(Lower Alsace Township)</i>
<i>South Central Transit Authority /</i>	<i>Mr. David Kilmer, Executive Director</i>
<i>Berks Area Regional Transportation Authority</i>	<i>Mr. Jeffrey Glisson, Dir. of Capital Projects/Planning *</i>
<i>Reading Regional Airport Authority</i>	<i>Mr. Randall Swan, Board Member</i>
	<i>Mr. Joseph E. Rudderow, III, Board Member*</i>

\*Denotes Board Alternate

**Reading Area Transportation Study Technical Committee**

<i>PennDOT District 5-0</i>	<i>Mr. Christopher Kufro, A.D.E. for Design (Chairman)</i>
	<i>Ms. Vanessa Koenigkramer, Planning &amp; Programming*</i>
<i>PennDOT Central Office</i>	<i>Mr. Gene Porochniak, Transportation Planning Specialist</i>
	<i>Mr. James Mosca, Transportation Planning Manager*</i>
<i>Berks County Planning Commission</i>	<i>Mr. Alan Piper, Transportation Planner III (MPO Sec.)</i>
	<i>Mr. Glenn Knoblauch, BCPC Board Member*</i>
<i>Berks County Planning Commission</i>	<i>Mr. Michael Golembiewski, Transportation Modeler</i>
	<i>Mr. Glenn Knoblauch, BCPC Board Member*</i>
<i>City of Reading</i>	<i>Vacant</i>
<i>City of Reading</i>	<i>Mr. Timothy Krall, Department of Public Works</i>
<i>South Central Transit Authority /</i>	<i>Mr. David Kilmer, Executive Director</i>
<i>Berks Area Regional Transportation Authority</i>	<i>Mr. Jeffrey Glisson, Dir. of Capital Projects/Planning*</i>
<i>Reading Regional Airport Authority</i>	<i>Mr. Terry Sroka, Airport Manager</i>

\*Denotes Board Alternate

**Berks County Planning Commission Staff for this Report**

*Beth Burkovich, GIS Coordinator*  
*Michael Golembiewski, Transportation Modeler (Project Planner)*  
*Devon Hain, Transportation Planner II*  
*Laura Mursch, Planner II*  
*Alan Piper, Transportation Planner III*  
*Amanda Timochenko, Planner II*