

**NORTHAMPTON TOWNSHIP**

# sidewalk

**PRIORITIZATION STUDY**

**December 2005**



**Delaware Valley  
Regional Planning  
Commission**



**NORTHAMPTON TOWNSHIP**

# sidewalk

**PRIORITIZATION STUDY**



Delaware Valley  
Regional Planning  
Commission

## **NORTHAMPTON TOWNSHIP SIDEWALK PRIORITIZATION STUDY**

Created in 1965, the Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty and intercity agency that provides continuing, comprehensive and coordinated planning to shape a vision for the future growth of the Delaware Valley region. The region includes Bucks, Chester, Delaware, and Montgomery counties, as well as the City of Philadelphia, in Pennsylvania; and Burlington, Camden, Gloucester and Mercer counties in New Jersey. DVRPC provides technical assistance and services; conducts high-priority studies that respond to the requests and demands of member state and local governments; fosters cooperation among various constituents to forge a consensus on diverse regional issues; determines and meets the needs of the private sector; and practices public outreach efforts to promote two-way communication and public awareness of regional issues and the Commission.



Our logo is adapted from the official DVRPC seal, and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole, while the diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

DVRPC is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. (A sentence regarding special sources of funding may be inserted here.) The authors, however, are solely responsible for its findings and conclusions, which may not represent the official views or policies of the funding agencies.



# **NORTHAMPTON TOWNSHIP SIDEWALK PRIORITIZATION STUDY**

## **TABLE OF CONTENTS**

1	Foreword
3	Introduction
3	Methodology
12	Implementation

---

### **FIGURES**

7	Figure 1: Sidewalk Priorities Map
---	-----------------------------------

---

### **APPENDICES**

Appendix A: Priority Area Maps

Appendix B: Total Priority Points by Street Segment, rank order by points

Appendix C: Total Priority Points by Street Segment, alphabetically by street

Appendix D: Township Sidewalk Inventory

Appendix E: Sidewalks on State Highways, PennDOT Video Log

Appendix F: Northampton Township Comprehensive Plan 1999 Update, Circulation Element (excerpt)

Appendix G: DVRPC 2030 Long-Range Plan (excerpt)

Appendix H: Pennsylvania Statewide Bicycle & Pedestrian Master Plan – Goals & Objectives

Appendix I: Hometown Streets & Safe Routes to School Program Description

Appendix J: Congestion Mitigation and Air Quality Improvement Program Description



## FOREWORD

---



Over the last half of the twentieth century, the automobile has taken a predominant role in the life of most Americans, and in the design of our communities. The automobile has been a liberating force in society. Its influence on urban form and design, however, has not been without cost. The costs include degraded air quality, overreliance on imported oil, increased incidence of obesity and other ill effects of a sedentary lifestyle, traffic congestion and noise, and declining neighborhood commercial areas. Recognizing these costs, the U.S. Congress

set about changing policy to encourage a more balanced transportation system – one that promotes mass transit, bicycling and walking. The two most recent federal transportation bills embody this new thinking. The Commonwealth of Pennsylvania has also embraced this new direction. The Delaware Valley Regional Planning Commission (DVRPC) has begun work to assist and encourage suburban municipalities to improve the pedestrian environment.

Created in 1965 through an interstate compact between Pennsylvania and New Jersey, DVRPC is the federally designated and certified Metropolitan Planning Organization (MPO) for the nine-county Philadelphia-Camden-Trenton metropolitan region. Governed by an 18-member Board composed of state, county and city representatives from its member governments, as well as various participating nonvoting members and federal agency observers, DVRPC is responsible for land use and transportation planning in accordance with US Department of Transportation guidance.

Why improve Northampton Township for pedestrians?

- Walking is a healthy, nonpolluting form of personal transportation that does not consume limited natural resources nor requires a costly support infrastructure
- An improved walking environment will increase mass transit use, reduce the demand for parking, and help alleviate traffic congestion

- It will improve neighborhood appearance, increase retail trade, and boost property values
- It will give all Township residents – regardless of age, income, or the ability to drive – safe, healthy, and appealing mobility options
- It will reduce the incidence of injuries to pedestrians



## INTRODUCTION

---

### PRIORITIZATION OF SIDEWALK NEEDS IN NORTHAMPTON TOWNSHIP

As of 2005, Northampton Township contains approximately 211 miles of arterial and collector roads. Of those roads, eight percent have sidewalks on one or both sides of the street. Sidewalks on local streets have not been documented. The Township is committed to creating a safe walking environment; scarce resources dictate that the Township take a thoughtful approach in the location and timing of sidewalk construction in order to address the most critical needs. To that end the Township enlisted the technical assistance of DVRPC to prioritize street segments for the installation of sidewalks.

### METHODOLOGY

The methodology employed in this study for prioritizing sidewalk needs is adapted from guidance found in two sources: the American Association of State Highway Transportation Officials (AASHTO) in the *Guide for the Planning, Design, and Operation of Pedestrian Facilities* (July 2004, pp. 21-24) and the *PennDOT Statewide Bicycle and Pedestrian Master Plan, Pedestrian Facility Planning and Design Guidelines* (PennDOT, April 1996, pp. 10-12). Priorities are identified through a system whereby points are assigned to street segments meeting selected criteria related to the need and demand for sidewalks. The higher the total tally of points a street segment receives, the higher the priority that segment should receive for sidewalk installation. Points are assigned to streets and roads based on their functional classification, proximity to major pedestrian attractors and existing sidewalks, and the population density of the adjacent blocks. Points are assigned and tallied using a computer geographic information system (GIS). The five-step process is described in greater detail below.

### STEP 1: INVENTORY EXISTING SIDEWALKS

The Township inventoried existing sidewalks and provided the data to DVRPC on paper in both tabular and map form. The data were entered (digitized) into the GIS. The Township sidewalk data for roads maintained by PennDOT were crosschecked visually against “video logs” (a visual record of a roadway taken with a video camera mounted on a truck) of those roads taken by PennDOT in 2002. The video logs may be viewed

through PennDOT's Web site, <http://www.dot.state.pa.us>, allowing one to take a virtual drive down any state highway in the Commonwealth. Sidewalks were identified in the video logs that were not identified in the Township inventory, and were subsequently added to the digitized inventory.

## STEP 2: ESTABLISH CRITERIA AND ASSIGN POINTS

In this step, criteria are established by which streets will be evaluated and prioritized for sidewalks. The criteria reflect traffic safety concerns as well as the relative demand for walking trips. Points were assigned to each criterion based on PennDOT guidance and modified by Township officials and DVRPC technical staff to better reflect local needs.

### ROADWAY FUNCTIONAL CLASSIFICATION

Points were assigned to roadways based on their functional classification. In general there is a greater need to separate pedestrians from motor vehicles on roadways of a higher functional class (collectors and arterials) because the higher traffic volumes and speeds typical of those roads increase pedestrian danger and discomfort. Priority points are assigned as follows:

<u>Roadway Functional Class</u>	<u>Points</u>
Principal arterials	20
Minor arterials	15
Collectors	10
Local streets	5



### POPULATION DENSITY

Walking trips increase with population density. To reflect this, points were assigned to street and road segments based on the population density of the most densely inhabited block adjacent to the segment. If the population density was greater than 3,000 inhabitants per square mile, the segment received 10 points.

## SIDEWALK GAPS

Filling in the gaps in the existing sidewalk network, and extending the sidewalk network, are goals expressed by the Township. So that this goal is reflected in the priority scores, segments receive 10 points for every sidewalk that is within a quarter of a mile, the typical maximum distance of the majority of suburban utilitarian walking trips.



Sidewalk gaps, Richboro



## PEDESTRIAN ATTRACTIONS

The PennDOT ranking system enumerates those features that attract pedestrians. These include schools, parks and recreation facilities, shopping centers and other commercial land uses, and mass transit (bus and rail) routes. DVRPC maintains digital data on the location of these attractors within the Township. Priority points were assigned if the feature fell within a quarter of a mile of the segment, as follows:

- **Primary and Secondary Schools, Public and Private:** **5 points** for each school
- **Parks and Recreation Areas:** **10 points**
- **Commercial Facilities:** **5 points** for each commercial land parcel; **15 points** if within a quarter mile of the Richboro business district.
- **Bus Route:** There is one SEPTA bus route serving Northampton Township, the “Warminster RUSH,” connecting Richboro and the Warminster R2 regional rail station with various industrial parks in Northampton and Warminster townships; **10 points**.

## STEP 3: COMPUTE TOTAL PRIORITY POINTS

A total priority score was computed for each street segment by adding the street classification points with the pedestrian attractor points. This permits ranking of street sections by order of importance for installing a bike lane. Additionally, the segments were divided into quintiles by total priority score as displayed on Figure 1. The quintiles and their corresponding score ranges are as follows:

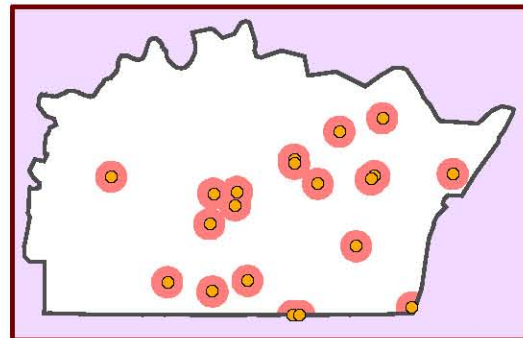
<u>Rank</u>	<u>Range</u>
1	86-250
2	66-85
3	46-65
4	26-45
5	5-25

## STEP 4: PRIORITIZE SITES FOR SIDEWALK INSTALLATION

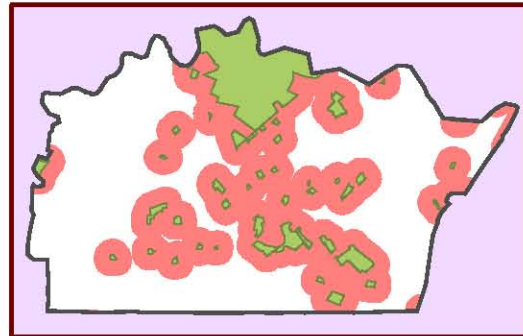
The results of the priority ranking analysis are displayed in Figure 1, with each street segment color coded according to which of the five ranges of priority points the



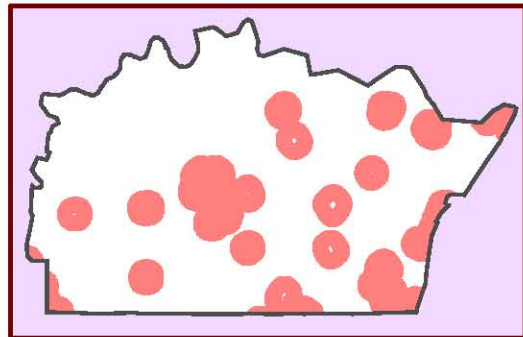
**Figure 1: Northampton Township Sidewalk Prioritization Study**



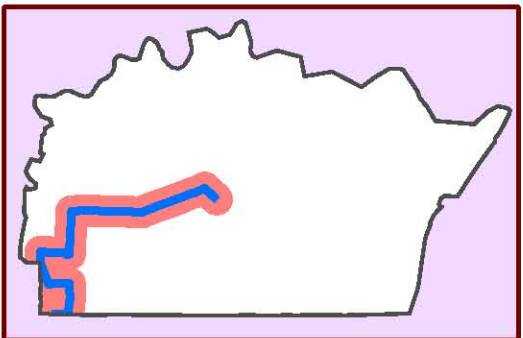
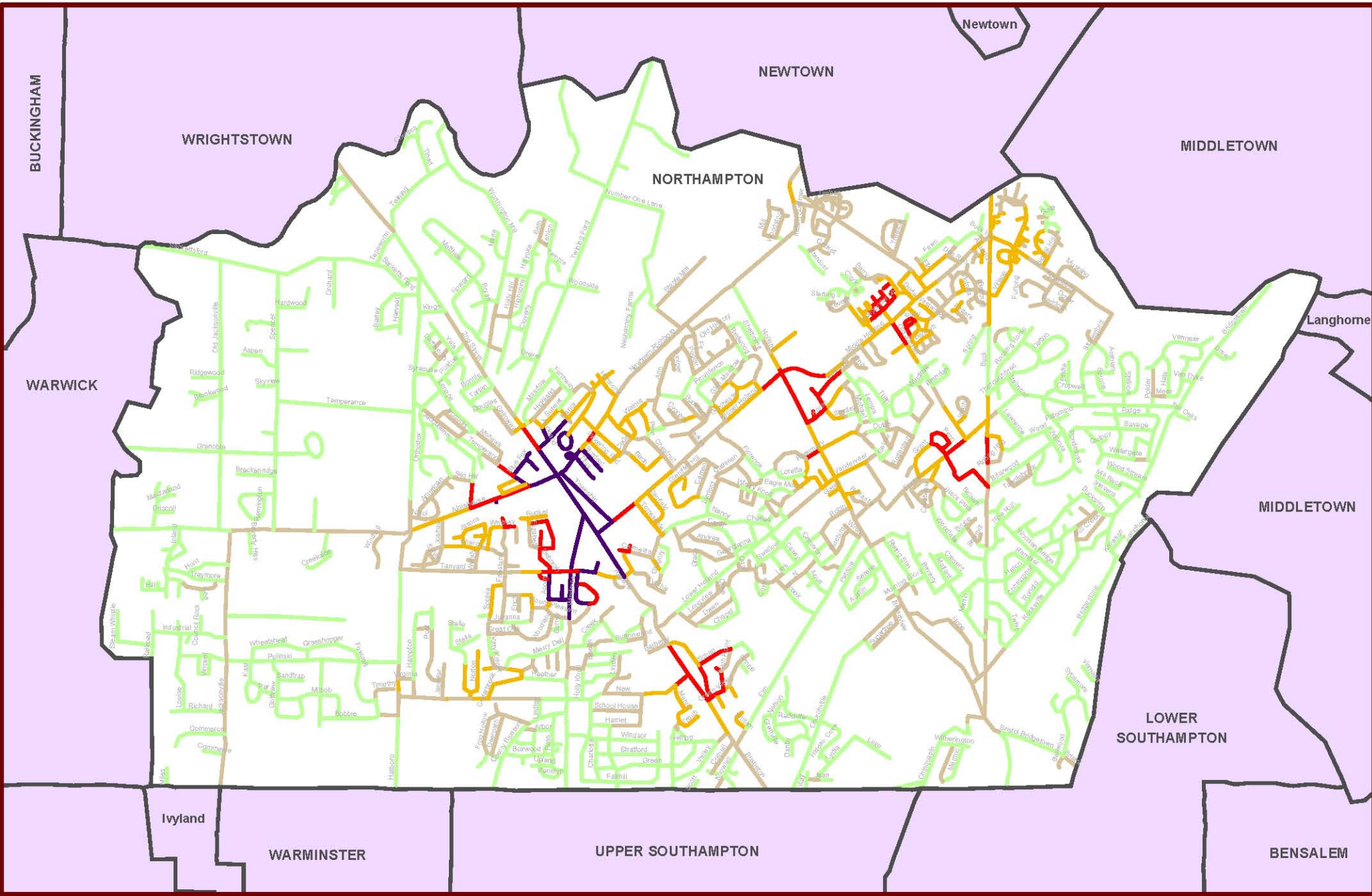
Radius of one-quarter mile around schools (5 points for each)



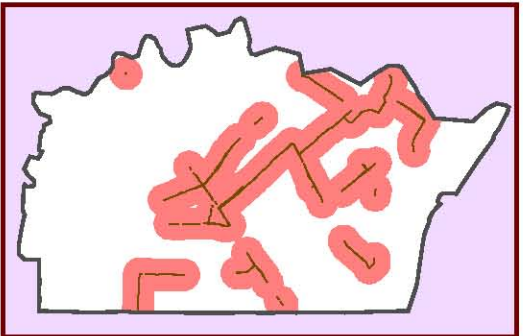
Radius of one-quarter mile around public parks (10 points)



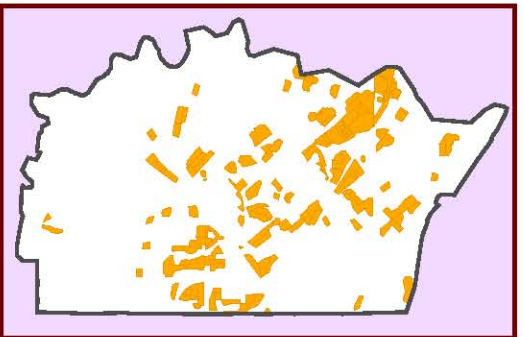
Radius of one-quarter mile around commercial land uses (5 points each)  
Richboro commercial area (15 points)



Radius of one-quarter mile around RUSH bus route (10 points)



Radius of one-quarter mile around existing sidewalks (10 points for each)



Population density greater than 3,000/square mile, by census block (10 points)



*\*Small maps not to scale*

**Rank of Road Segments**





segment's tally of points fell. Streets displayed in red have the highest priority, while streets in yellow have the lowest. Arrayed around the priority-ranking analysis map are smaller maps illustrating the locations of each of the classes of major pedestrian attractors, and surrounding areas within the quarter-mile walking range of those attractors. Total priority points by street segment are found in appendices A and B.





Elementary schools without sidewalk, above; discontinuous sidewalk, left

The Pennsylvania Department of Education subsidizes free transportation for students (“courtesy busing”) who live farther than 1 ½ miles from school, as well as for those who live closer provided that a PennDOT engineer has determined the walking route to be “hazardous” according to a defined set of safety factors not limited to the presence or absence of a sidewalk (see Pennsylvania Code, Title 24, PS 13-1362 for law regarding courtesy busing; Title 67, Section 447, for definition and certification of hazardous walking routes). Hazardous route designation was not among the criteria used in this study to prioritize streets for sidewalks; the proximity of street segments to schools was, however, an analysis factor.

### **PennDOT - Designated Hazardous Routes in Northampton Township:**

Jacksonville Road  
 Hatboro Road  
 Bristol Road  
 Almshouse Road (PA 332)  
 Richboro Road (PA 332)  
 Buck Road (PA 532)  
 Holland Road  
 Second Street Pike (PA 232)  
 Old Jacksonville Road  
 Upper Holland Road  
 Bustleton Pike (PA 918)



Chinquapin Road  
Churchville Lane  
Elm Avenue  
Sackettsford Road  
Twining Ford Road  
Old Jordan Road between Brendan Court & Middle Holland Road  
Twining Road between Second Street Pike & Worthington Mill Road  
Pulinski Drive  
New Road between Hatboro Road & Second Street Pike  
Spencer Road  
Tanyard Road between Hatboro Road & Second Street Pike  
Lower Holland Road  
Middle Holland Road between Liberty Road and Holland Road,  
and Doris Road and Buck Road  
East Holland Road between Old Jordan Road & Bridgetown Pike  
Rocksville Road  
Bridgetown Pike  
Stoneyford Road

## IMPLEMENTATION

---



The results of the priority ranking analysis provide the basis on which the Township can develop a rational phased program for the installation of sidewalks. The streets receiving higher priority are generally already fronted with developed -- principally residential -- land uses. In short, implementing the priorities identified in this study means, to a large extent, the retrofit of sidewalks on existing residential properties; and to a lesser extent, existing commercial properties. The Township must gain acceptance from property owners and the community at large on its sidewalk installation program. The information contained in this report can help justify the program to the public.

The reconstruction or widening of state-owned highways presents an opportunity to retrofit sidewalks. These projects are typically funded with federal highway dollars. The added right-of-way, design, and construction costs can more readily be justified on the basis of the priorities identified in this study. When federal highway funds are used for stand-alone sidewalk retrofits, the funds most likely come through one or both of two special funding programs: Congestion Mitigation/Air Quality (CMAQ) (see Appendix J) and Transportation



**Sidewalk in need of replacement, Second Street Pike**

Enhancements (TE). PennDOT has created its own program, called Hometown Streets/Safe Routes to School, using primarily federal TE funds (see Appendix I). For each of these programs, projects are awarded funds in competitive process at the regional level. Funding requests outstrip available dollars at a three-to-one ratio. Projects based on identified need have an edge over other projects, as do projects consistent with regional and state plans (see appendices G and H). DVRPC's member governments play a key role in the selection of projects for federal transportation funding. Northampton Township should work closely with the Bucks County Planning Commission to ensure that its projects are fairly considered in regional transportation decisionmaking.

Sidewalks are also eligible for funding through the federal Department of Housing and Urban Development's Community Development Block Grant (CDBG) Program. This program targets economically disadvantaged neighborhoods. Economic disadvantage was not among the criteria used in the priority analysis.

The priority ranking analysis is based exclusively on conditions currently existing in the Township. It did not take into account anticipated future land development and roadway reclassifications. Therefore, it is more suited to defining a retrofit program rather than the anticipation of future needs. Because the Township is still growing, future sidewalk needs must still be addressed.

A requirement for sidewalks in the Township's land development ordinance is one way to accomplish this. Another way is through the land development review process. This study provides a rational basis by which the planning board may request sidewalks from a developer.



Sidewalks are but the most basic aspect of a walkable community. Marked crosswalks warn motorists to expect pedestrians. Pedestrian signal heads help pedestrians cross busy intersections safely. Street trees provide shade, shelter, and visual interest, as well as a sense of separation from fast traffic. Furnishings such as benches, public restrooms, and artwork would make the historic

center more inviting and attractive as a pedestrian destination. Bus shelters along the Warminster RUSH bus route would be a valued amenity. Managing the speed of motor vehicle traffic must be considered in the design of new roads, and through retrofit of existing roads with traffic calming measures.



Utility poles in the sidewalk block passage by wheelchair users

The Americans with Disabilities Act of 1990 (ADA) is a landmark law that recognizes and protects the civil rights of people with disabilities. Title II of the ADA prohibits discrimination on the basis of disability in the provision of services, programs, and activities by state and local governments. Under the ADA, services and facilities must be accessible to be nondiscriminatory. Additionally, requirements for new construction and alterations are much more stringent than those for existing facilities. Sidewalks are no exception; newly constructed and altered sidewalks should be accessible and usable by people with disabilities. The law required all local governments to have developed, by January 1995, a transition plan identifying accessibility deficiencies in existing sidewalk networks and establishing a schedule for improvements tied to the local capital improvement programming process. For guidance on planning and designing sidewalks in compliance with the requirements of the ADA, see *Designing Sidewalks and Trails for Access, Part II of II: Best Practices Design Guide*, Publication No. FHWA-EP-01-027 (Washington, DC: Federal Highway Administration, September 2001).





The creation of a pedestrian-friendly environment should also be addressed through land use policies. The Township's 1999 Comprehensive Plan is a good start (see Appendix F). Specifically, its recommendations for commercial areas are a plus. The plan recognizes the need for sidewalks, parking management, and proper site design in creating a desirable pedestrian environment in Richboro. The responsibility for maintenance, including the removal of snow and the trimming back of encroaching vegetation, must be addressed by ordinance, and enforced throughout the Township.





## **APPENDIX A: PRIORITY AREA MAPS**

**FIG. A1: RICHBORO**

**FIG. A2: VILLAGE SHIRES/TAPESTRY**

**FIG. A3: HOLLAND WEST**

**FIG. A4: HOLLAND**

**FIG. A5: HOLLAND SOUTH**

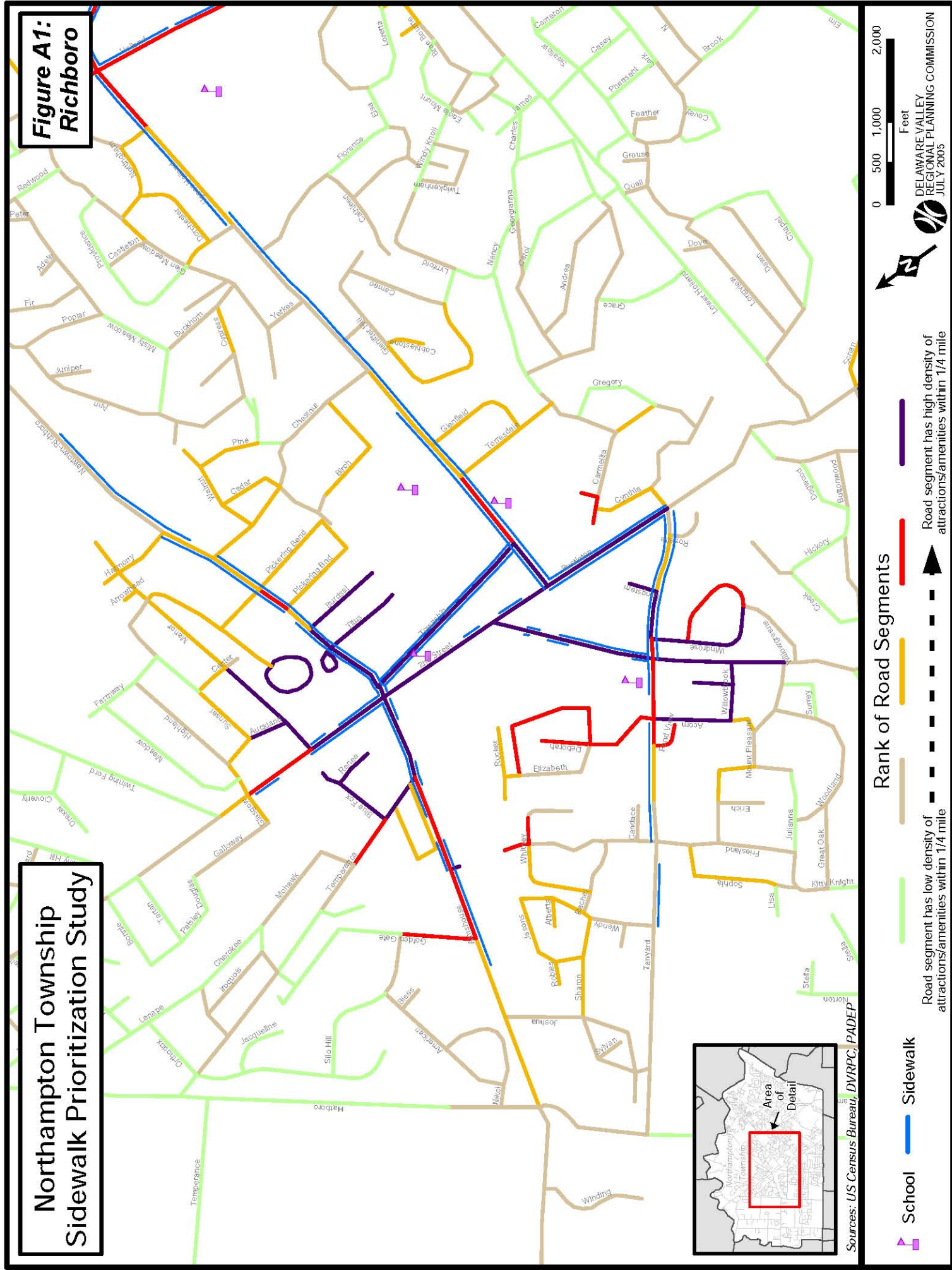
**FIG. A6: CHURCHVILLE**

**FIG. A7: CHURCHVILLE WEST**





**Figure A1:  
Richboro**



Sources: US Census Bureau, DVRPC, PADEP

School — Sidewalk

Rank of Road Segments

Road segment has low density of attractions/amenities within 1/4 mile

Road segment has high density of attractions/amenities within 1/4 mile

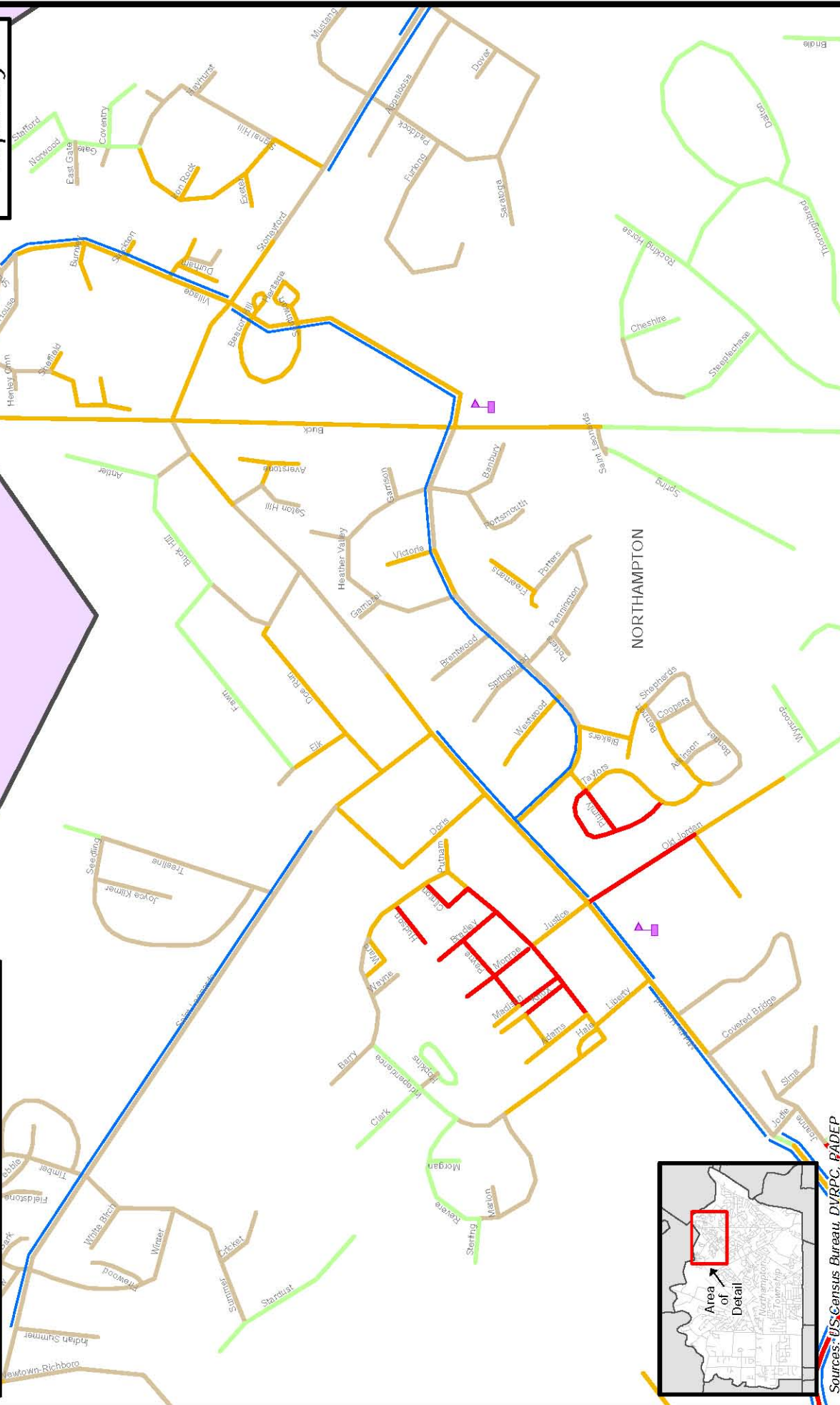
Feet

0	500	1,000	2,000
---	-----	-------	-------

DELAWARE VALLEY  
REGIONAL PLANNING COMMISSION  
JULY 2005

# Northampton Township Sidewalk Prioritization Study

## Figure A2: Village Shires/ Tapestry



**Rank of Road Segments**

- Rank 1 (Red line)
- Rank 2 (Orange line)
- Rank 3 (Yellow line)
- Rank 4 (Brown line)

**Rank segment has low density of attractions/amenities within 1/4 mile** (Green line)

**Rank segment has high density of attractions/amenities within 1/4 mile** (Purple line)

**School** (Purple triangle symbol)

**Sidewalk** (Blue line)

**Scale:** 0, 375, 750, 1,500 Feet

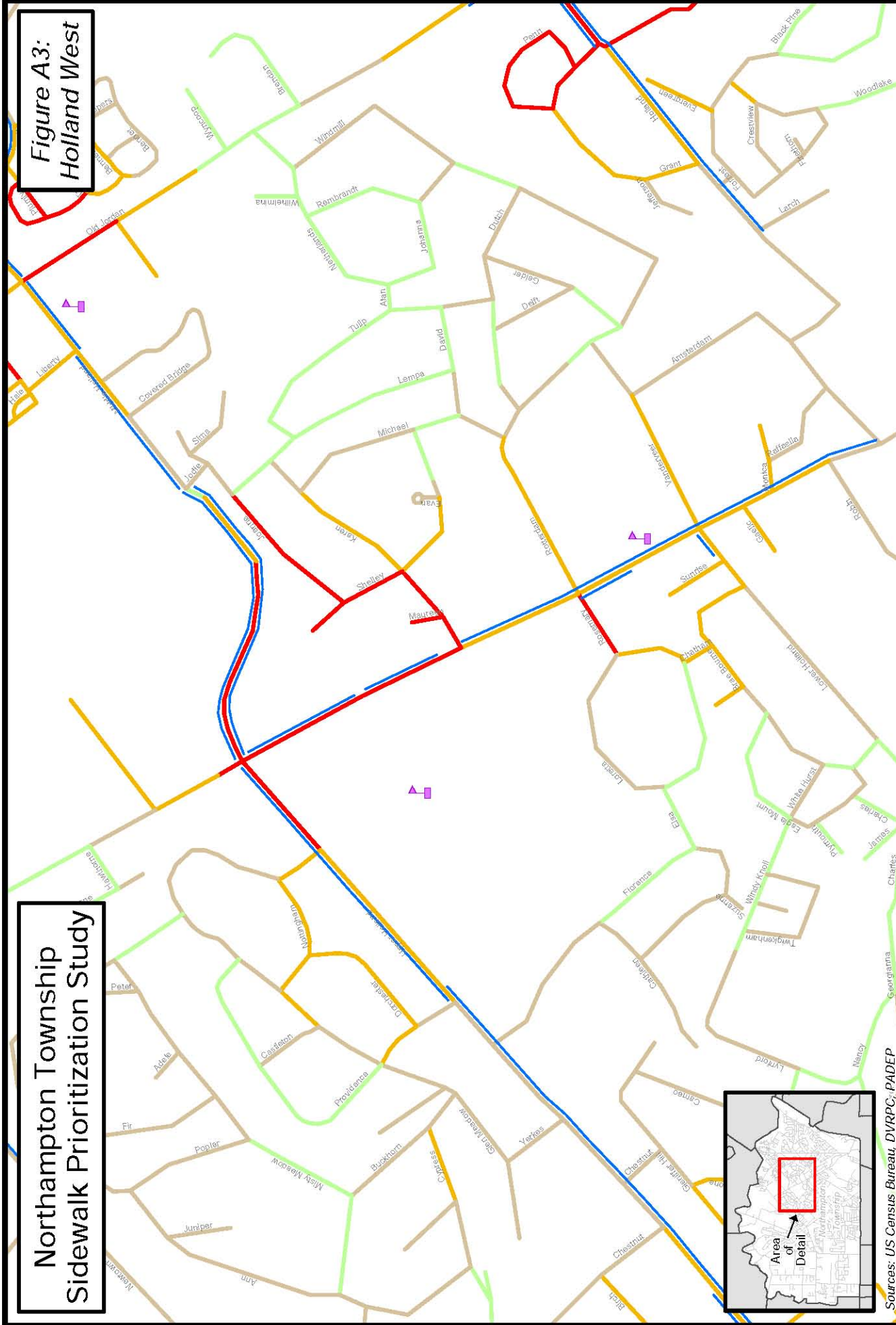
**DELAWARE VALLEY REGIONAL PLANNING COMMISSION**  
JULY 2005

**Sources:** US Census Bureau, DVRPC, PADEP



Figure A3:  
Holland West

Northampton Township  
Sidewalk Prioritization Study

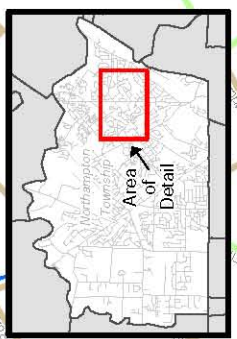
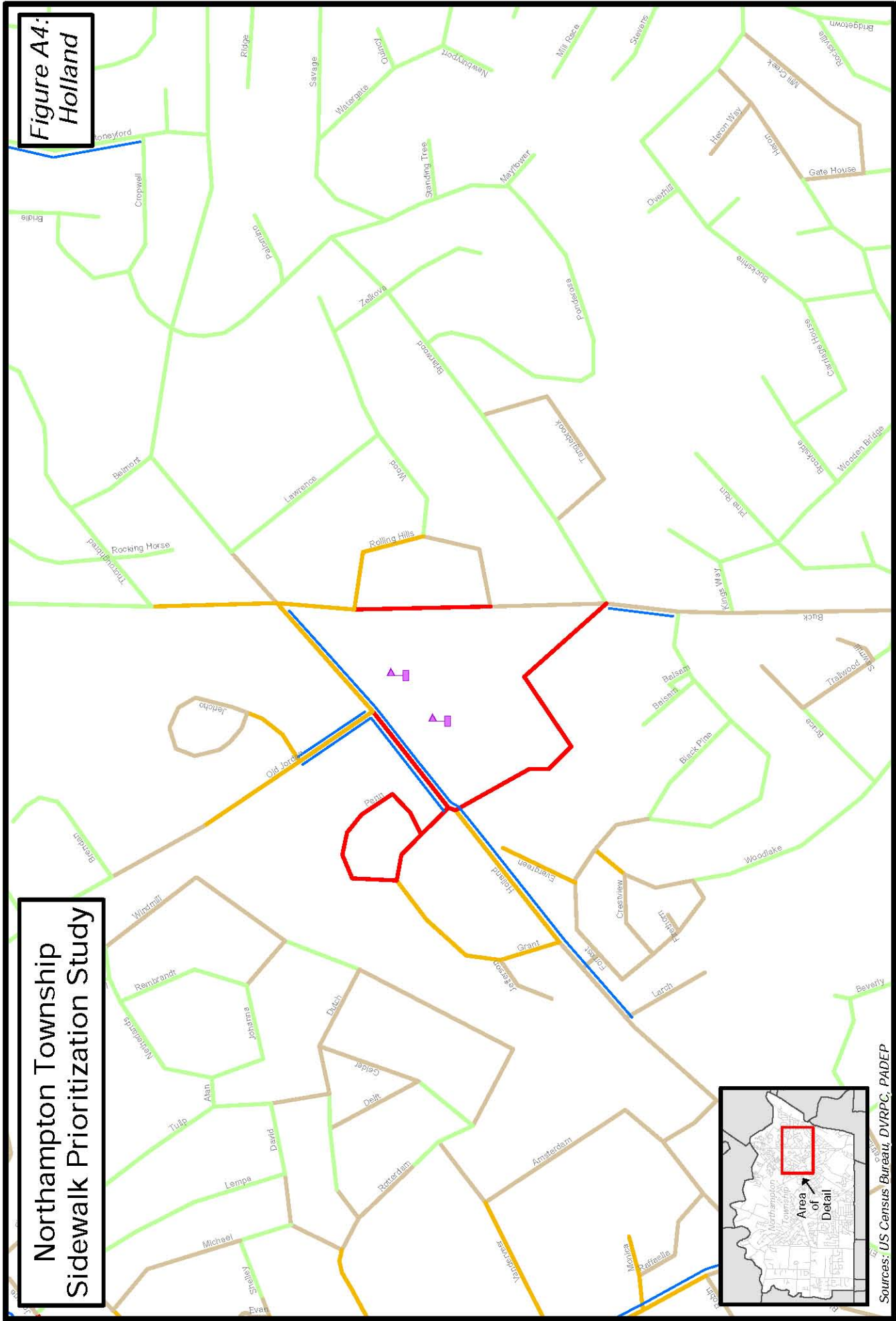


Sources: US Census Bureau, DVRPC, PADEP



**Figure A4:  
Holland**

**Northampton Township  
Sidewalk Prioritization Study**



Sources: US Census Bureau, DVRPC, PADEP

**Rank of Road Segments**

— Road segment has low density of attractions/amenities within 1/4 mile  
— Road segment has medium density of attractions/amenities within 1/4 mile  
— Road segment has high density of attractions/amenities within 1/4 mile

**Legend**

▲ School  
— Sidewalk

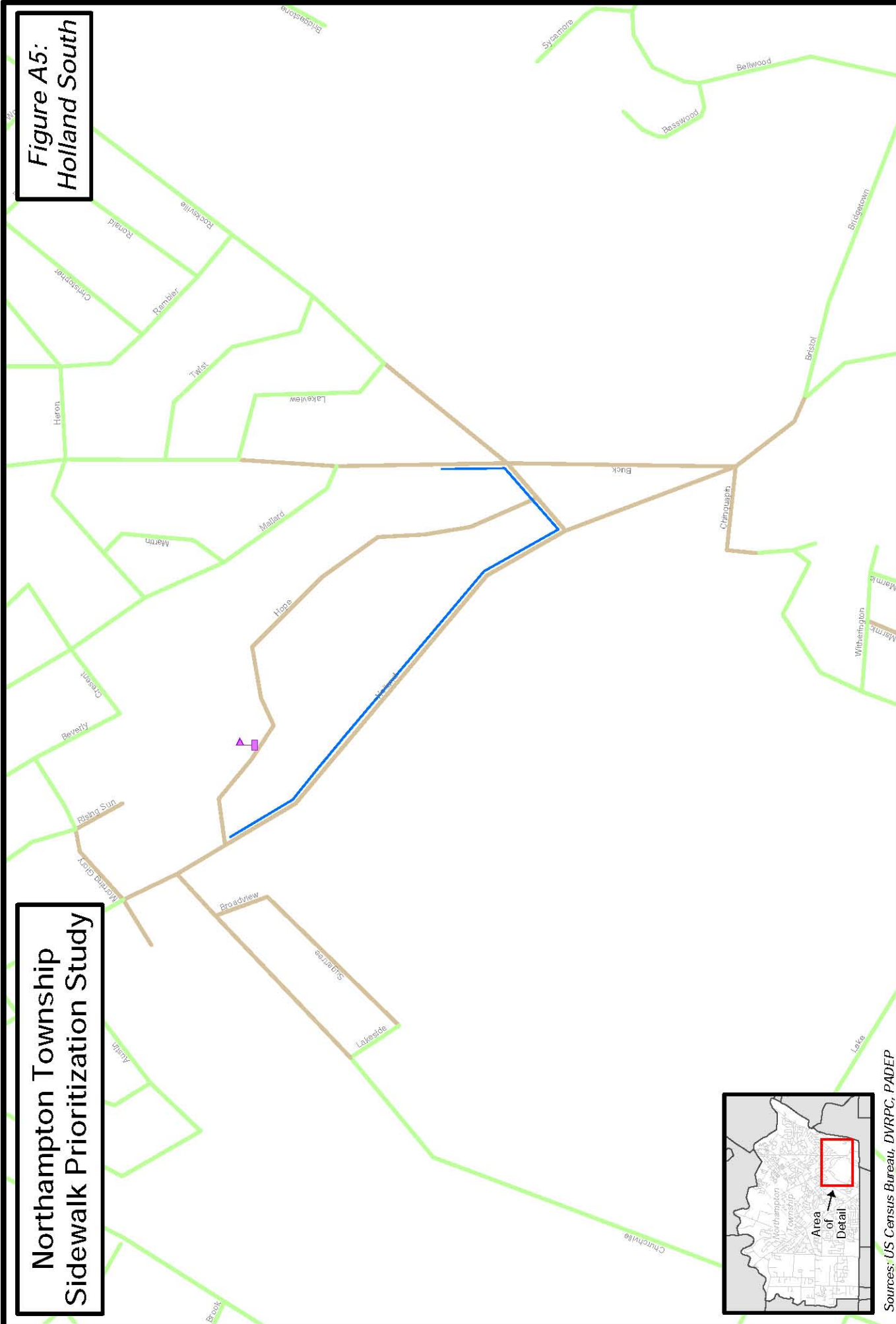
**Scale**

0 250 500 1,000 Feet

DELAWARE VALLEY  
REGIONAL PLANNING COMMISSION  
JULY 2005

# Northampton Township Sidewalk Prioritization Study

## Figure A5: Holland South



Sources: US Census Bureau, DVRPC, PADEP

- School
- Sidewalk
- Rank of Road Segments
  - Road segment has low density of attractions/amenities within 1/4 mile
  - Road segment has high density of attractions/amenities within 1/4 mile

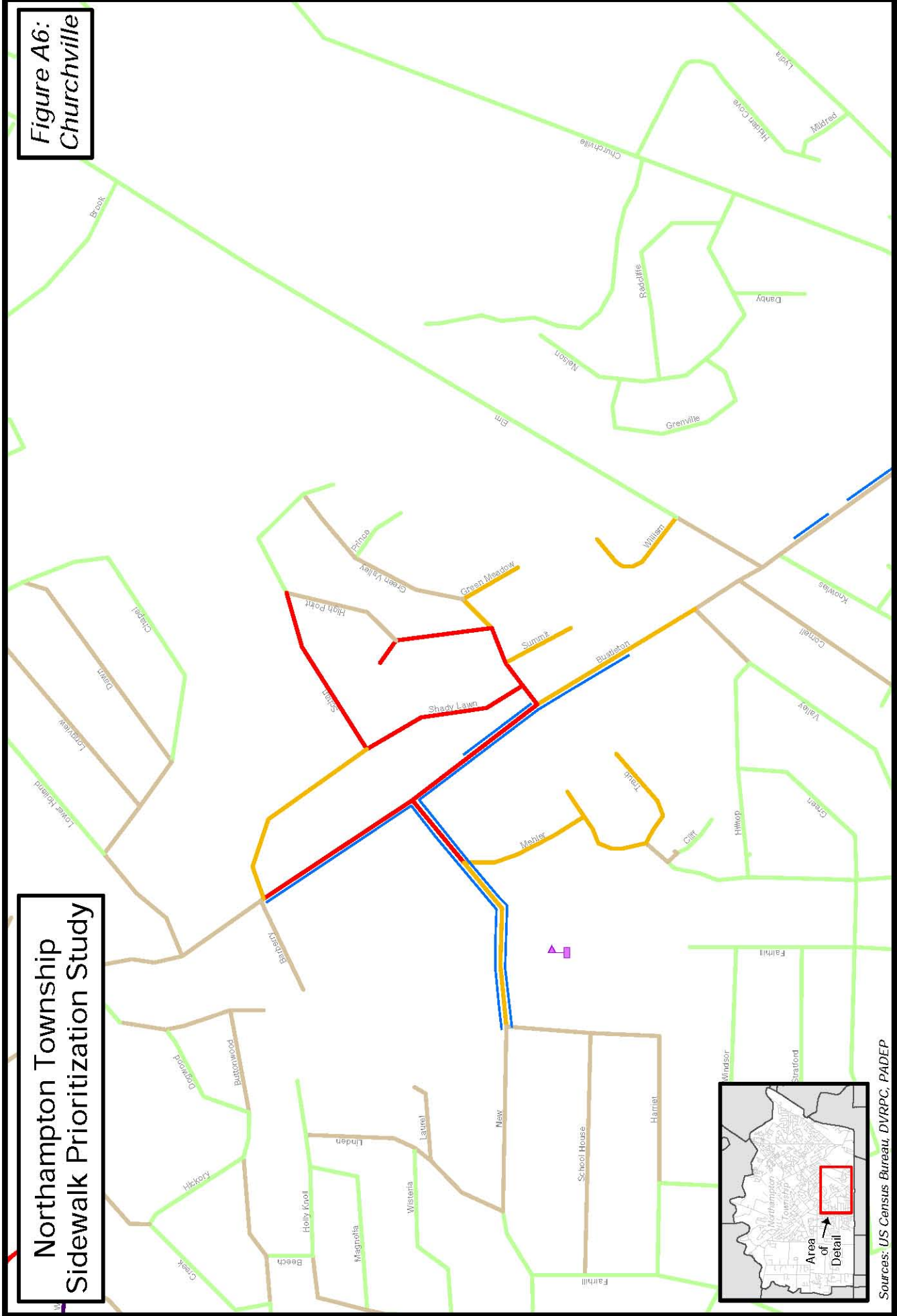
0 250 500 1,000 Feet

DELAWARE VALLEY  
REGIONAL PLANNING COMMISSION  
JULY 2005



# Northampton Township Sidewalk Prioritization Study

Figure A6:  
Churchville

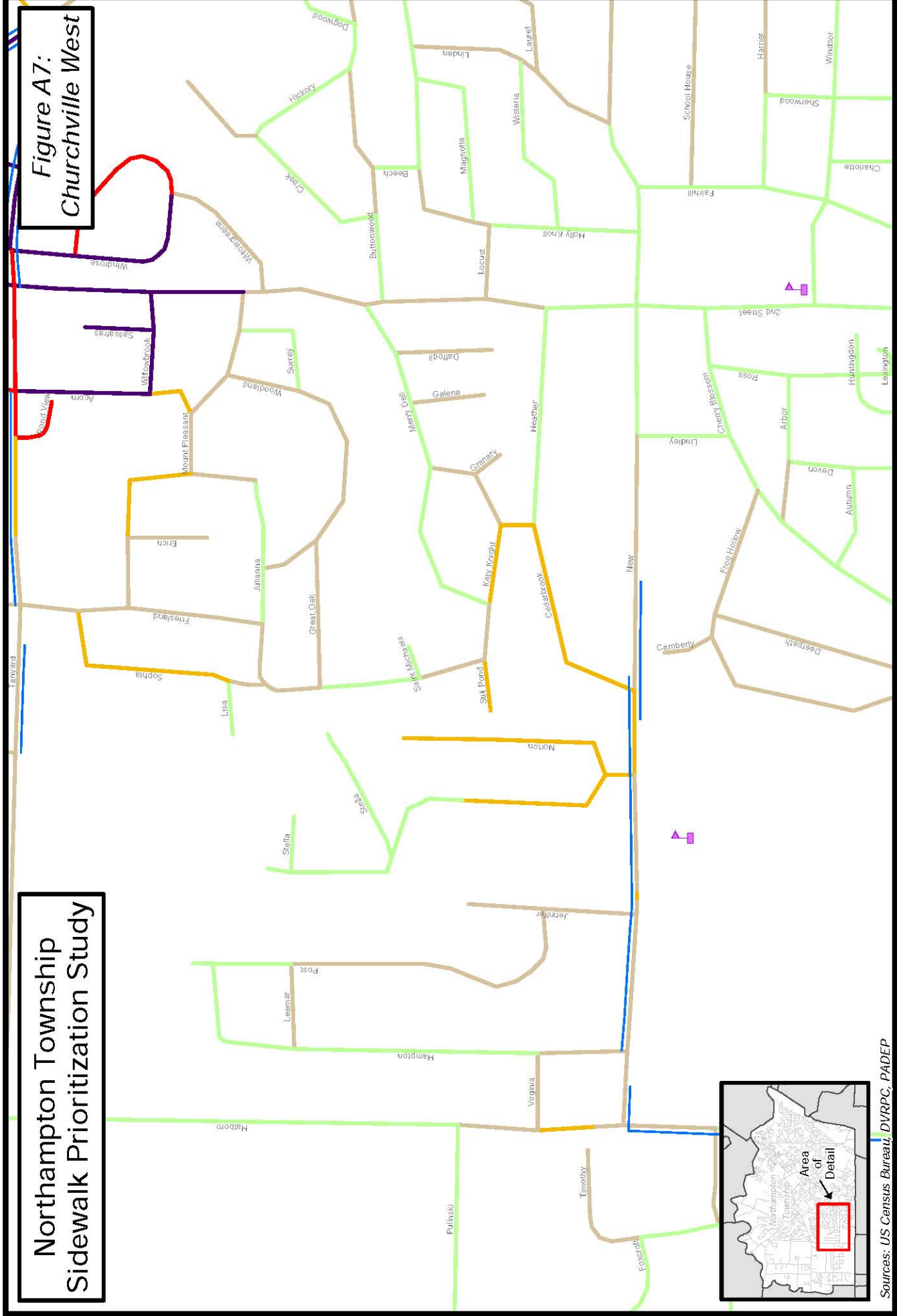


Sources: US Census Bureau, DVRPC, PADEP



# Northampton Township Sidewalk Prioritization Study

Figure A7:  
Churchville West



Sources: US Census Bureau, DVRPC, PADEP

DELAWARE VALLEY  
REGIONAL PLANNING COMMISSION  
JULY 2005

**Rank of Road Segments**

- Road segment has low density of attractions/amenities within 1/4 mile
- Road segment has medium density of attractions/amenities within 1/4 mile
- Road segment has high density of attractions/amenities within 1/4 mile

**School**

**Sidewalk**





**APPENDIX B: TOTAL PRIORITY POINTS FOR STREET SEGMENTS,  
RANK ORDER BY TOTAL PRIORITY POINTS, FOR SEGMENTS RECEIVING  
45 OR MORE PRIORITY POINTS**



STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
2nd Street	Pike	210	Tanyard	Bustleton	Partial	Partial
Bustleton	Pike	175	2nd Street Pike	Upper Holland	Partial	No
Upper Holland	Rd	170	Bustleton	Township	Yes	Yes
Sunset	Dr	125	circle		No	No
2nd Street	Pike	120	Manor	Almshouse	Partial	Yes
Almshouse	Rd	120	Temperance	2nd Street Pike	No	No
Newtown-Richboro	Rd	120	Township	Titus	Yes	Yes
Township	Rd	120	Newtown-Richboro	Upper Holland	Yes	Yes
Blue Fox	Run	115	Temperance	Renee	No	No
Manor	Dr	115	Auckland	2nd Street Pike	No	No
Newtown-Richboro	Rd	115	Titus	Burdsal	Yes	Yes
Renee	Cir	115	end	end	No	No
Temperance	Ln	115	Union Cem	Union Cem	No	No
Temperance	Ln	115	N of	Almshouse	No	No
Newtown-Richboro	Rd	110	Township	E	Yes	Yes
Newtown-Richboro	Rd	110	2nd Street Pike	Township	Yes	Yes
Titus	Ct	110	end	end	No	No
Titus	Ct	110	end	end	No	No
Titus	Ave	110	end	end	No	No
Blue Fox	Run	105	Renee	end	No	No
Titus	Ave	105	end	end	No	No
2nd Street	Pike	100	Willowbrook	Tanyard	No	No
2nd Street	Pike	100	N of	Tanyard	Yes	Yes
2nd Street	Pike	100	Bustleton	Almshouse	Partial	Yes
Longstem	Ln	100	end	end	No	No
Sassafras	Dr	100	end	end	No	No
Tanyard	Rd	100	Windrose	Longstem	Yes	Yes
Willowbrook	Dr	100	Sassafras	2nd Street Pike	No	No
Willowbrook	Dr	100	Acorn	Sassafras	No	No
2nd Street	Pike	95	Mt Pleasant	Willowbrook	No	No
Auckland	Dr	95	Manor	Sunset	No	No
Friesland	Dr	95	Whitley	end	No	No
Manor	Dr	95	Center	Auckland	No	No
Temperance	Ln	95	Union Cem	Blue Fox	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Acorn	Dr	90	Willowbrook	Tanyard	No	No
Burdsal	Ave	90	end	end	No	No
Bustleton	Pike	90	Upper Holland	Tanyard	Yes	Yes
Tanyard	Rd	90	Windrose		Yes	Yes
Windrose	Dr	90	Windrose	Willowgreene	No	No
Windrose	Dr	90	Tanyard	Windrose	No	No
Almshouse	Rd	85	W of	Temperance	No	Yes
Almshouse	Rd	85	Golden Gate	E	Yes	No
Holland	Rd	85	S of	Upper Holland	Yes	No
Independence	Dr	85	Hale	Hudson	No	No
Upper Holland	Rd	85	Township	Torresdale	Yes	Yes
Upper Holland	Rd	85	Glen Meadow	Holland	No	Yes
Bustleton	Pike	80	Schan	New	No	Yes
Bustleton	Pike	80	New	Green Valley	Yes	Yes
Carmelita	Dr	80	Cynthia	end	No	No
Carmelita	Dr	80	Cynthia	Lynford	No	No
Deborah	Rd	80	S of	Elizabeth	No	No
Deborah	Rd	80	N of	Tanyard	No	No
Elizabeth	Ln	80	E of	Deborah	No	No
High Point	Dr	80	Green Valley	High Point Cir	No	No
High Point	Cir	80	end	end	No	No
Holland	Rd	80	N of	Upper Holland	No	No
Holland	Rd	80	N of	Karen	Partial	No
Middle Holland	Rd	80	Holland	Jodie	Yes	Yes
Pond View	Dr	80	end	end	No	No
Shady Lawn	Dr	80	Schan	Green Valley	No	No
Shelley	Rd	80	Joanne	end	No	No
Shelley	Rd	80	Joanne	Karen	No	No
Tanyard	Rd	80	Pond View	Acorn	No	Yes
Tanyard	Rd	80	Acorn	2nd Street Pike	No	Partial
Tanyard	Rd	80	2nd Street Pike	Windrose	Yes	Yes
2nd Street	Pike	75	Highland	Manor	No	Partial
Almshouse	Rd	75	E of	Golden Gate	Yes	Yes
Bradley	Ct	75	end	end	No	No
Buck	Rd	75	Rolling Hills	Rolling Hills	No	No
Council Rock JHS	Dr	75	E Holland	Buck	No	No
E Holland	Rd	75	Grant	Old Jordan	Yes	Yes
E Holland	Rd	75	Council Rock JHS	Grant	Yes	No



STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Friesland	Dr	75	Whitley	end	No	No
Grant	Dr	75	Penn	Penn	No	No
Grant	Dr	75	Penn	E Holland	No	No
Karen	Rd	75	Holland	Maureen	No	No
Knox	Ct	75	end	end	No	No
Madison	Ct	75	end	end	No	No
Monroe	Ct	75	end	end	No	No
New	Rd	75	Mehler	Bustleton	Yes	Yes
Newtown-Richboro	Rd	75	Pickering Bend	Pickering Bend	Yes	Yes
Old Jordan	Rd	75	Twining Village Manor	Middle Holland	No	No
Payne	Ct	75	end	end	No	No
Penn	Cir	75	Grant	Grant	No	No
Plumly	Way	75	Taylor	Taylor	No	No
Plumly	Way	75	Taylor	Taylor	No	No
Rosemary	Dr	75	Holland	Loretta	No	No
Temperance	Ln	75	Blue Fox	Mohawk	No	No
Van Horn	Pl	75	end	end	No	No
Whitney	Ln	75	Friesland	end	No	No
Windrose	Dr	75	Willowgreene	Windrose	No	No
Clinton	Ct	70	end	end	No	No
Deborah	Rd	70	Elizabeth	end	No	No
Green Valley	Dr	70	Summit	High Point Dr	No	No
Green Valley	Dr	70	Shady Lane	Summit	No	No
Green Valley	Dr	70	Bustleton	Shady Lane	No	No
Hudson	Ct	70	end	end	No	No
Joanne	Rd	70	Shelley	Michael	No	No
Karen	Rd	70	Maureen	Shelley	No	No
Maureen	Rd	70	Karen	end	No	No
Schan	Dr	70	Shady Lane	High Point Dr	No	No
2nd Street	Pike	65	Highland	Twining Ford	No	No
Acorn	Dr	65	Willowbrook	Mt Pleasant	No	No
Adams	Ct	65	end	end	No	No
Auckland	Dr	65	Sunset	Highland	No	No
Buck	Rd	65	Rolling Hills	E Holland	No	No
Cynthia	Dr	65	Anthony	Carmelita	No	No
Glenfield	Dr	65	Upper Holland	Torresdale	No	No
Hale	Dr	65	end	end	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Highland	Dr	65	Meadow	Auckland	No	No
Hilltop	Dr	65	Mehler	end	No	No
Hilltop	Dr	65	Mehler	Traub	No	No
Holland	Rd	65	Rotterdam	Karen	Yes	No
Justice	Dr	65	Middle Holland	Independence	No	No
Mehler	Dr	65	New	Hilltop	No	No
Middle Holland	Rd	65	Old Jordan	E Village	Yes	No
Middle Holland	Rd	65	Liberty	Justice	Yes	No
Newtown-Richboro	Rd	65	Burdsal	Pickering Bend	Yes	Yes
Old Jordan	Rd	65	E Holland	Jericho	Yes	Yes
Plumly	Way	65	Taylors	E Village	No	No
Randolph	Ct	65	end	end	No	No
Rucker	Rd	65	end	end	No	No
Rucker	Rd	65	end	end	No	No
Rucker	Rd	65	end	end	No	No
Schan	Dr	65	Bustleton	Shady Lane	No	No
Sunset	Dr	65	Center	Auckland	No	No
Tanyard	Rd	65	Longstem	Rosette	Yes	Yes
Taylors	Way	65	Taylors	Benett	No	No
Traub	Dr	65	end	end	No	No
Twining Village		65	Old Jordan	end	No	No
Manor						
Union	Cem	65	end	end	No	No
Village	Rd	65	Southwart	Beacon Hill	No	No
Village	Rd	65	Middle Holland	Plumly	Yes	No
Village	Rd	65	Beacon Hill	Stonyford	No	No
Alberts	Ct	60	end	end	No	No
Cedar	Dr	60	Walnut	Chestnut	No	No
Chestnut	Dr	60	Cedar		No	No
Doris	Ave	60	end	end	No	No
Durham	Pl	60	end	end	No	No
E Holland	Rd	60	Grant	Grant	Yes	No
Gaelic	Ct	60	end	end	No	No
Green Valley	Dr	60	High Point	Green Meadow	No	No
Holland	Rd	60	Gaelic	Monica	Yes	No
Holland	Rd	60	Gaelic	Vanderveer	Yes	No
Jasons	Way	60	Robies	Sharon	No	No
Jasons	Way	60	Robies	Wendy	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Middle Holland	Rd	60	W of	Jodie	Yes	Yes
Middle Holland	Rd	60	E Village	Doris	Yes	No
Middle Holland	Rd	60	E of	Saint Leonards	No	No
Newtown-Richboro	Rd	60	Chestnut	Harmony	Partial	Yes
Nottingham	Dr	60	Dorchester	Glen Meadow	No	No
Putnam	Dr	60	end	end	No	No
Saint Leonards	Rd	60	Middle Holland	Doe Run	No	No
Sharon	Dr	60	Jasons	Wendy	No	No
Shelley	Rd	60	Karen	Evan	No	No
Signal Hill	Rd	60	Exeter	Signal Hill	No	No
Tanyard	Rd	60	W of	Pond View	No	Yes
Torresdale	Dr	60	Glenfield	Lynford	No	No
Upper Holland	Rd	60	E of Glenfield	Chestnut	Yes	Partial
Village	Rd	60	Plumly	Blakers	Yes	No
Wendy	Way	60	Alberts	Jasons	No	No
Westwood	Pl	60	W Village	end	No	No
Weymouth	Pl	60	end	end	No	No
Whitney	Ln	60	Rachel	Friesland	No	No
Almshouse	Rd	55	Hatboro	Joshua	No	No
Anthony	Dr	55	Bustleton	Cynthia	No	No
Averstone	Rd	55	end	end	No	No
Averstone	Ct	55	end	end	No	No
Averstone	Ct	55	end	end	No	No
Beacon Hill	Dr	55	end	end	No	No
Bennett	Pl	55	Taylor's	end	No	No
Bennett	Pl	55	Taylor's	Atkinson	No	No
Brae Bourne	Dr	55	Lower Holland	Chatham	No	No
Brae Bourne	Dr	55	Chatham	Chimney Hill	No	No
Bustleton	Pike	55	Valley	Green Valley	No	Partial
Bustleton	Pike	55	at	Barberry	No	No
Center	St	55	Sunset	Manor	No	No
Chatham	Ct	55	Brae Bourne	end	No	No
Chimney Hill	Ct	55	Brae Bourne	end	No	No
Cobblestone	Ct	55	end	end	No	No
Dorchester	Ln	55	Providence	Nottingham	No	No
E Holland	Rd	55	Old Jordan	Buck	No	Yes
Glasgow	Rd	55	W of	2nd Street Pike	No	No
Glen Meadow	Rd	55	Upper Holland	Nottingham	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Gleniffer Hill	Rd	55	Cobblestone	Cameo	No	No
Grant	Dr	55	Jefferson	Penn	No	No
Hatboro	Rd	55	S of	Virginia	No	No
Heritage	Pl	55	end	end	No	No
Highland	Dr	55	2nd Street Pike	Meadow	No	No
Holland	Rd	55	Vanderveer	Rotterdam	Yes	Partial
Holland	Rd	55	Upper Holland	Penns Court	No	No
Jericho	Rd	55	end	end	No	No
Julianna	Dr	55	Erich	Mt Pleasant	No	No
Liberty	Dr	55	end	end	No	No
Loretta	Cir	55	end	end	No	No
Lower Holland	Rd	55	Sunrise	Holland	No	Yes
Lower Holland	Rd	55	Brae Bourne	Sunrise	No	No
Manor	Dr	55	Center	Sunset	No	No
Middle Holland	Rd	55	Covered Bridge	Covered Bridge	No	Yes
Middle Holland	Rd	55	Covered Bridge	Liberty	No	Yes
Middle Holland	Rd	55	Buck Hill	Alverstone	No	No
New	Rd	55	S of	Jennifer	Yes	No
New	Rd	55	N of	Cedarbrook	Yes	Yes
New	Rd	55	Harriet	Mehler	Yes	Yes
New	Rd	55	E of	Norton Dr	No	Yes
Newtown-Richboro	Rd	55	Pickering Bend	Chestnut	Yes	Yes
Norton	Dr	55	New	Norton Dr E/W	No	No
Norton	Dr	55	E of	Norton	No	No
Nottingham	Dr	55	Glen Meadow	Dorchester	No	No
Old Jordan	Rd	55	Twining Village	Wyncoop	No	No
			Manor			
Old Jordan	Rd	55	Jericho	Brendan	No	No
Penns Court		55	Holland	end	No	No
Pickering Bend		55	Newtown-	Newtown-	No	No
			Richboro	Richboro		
Rotterdam	Rd	55	Holland	Michael	No	No
Southwart	Ct	55	end	end	No	No
Stoneyford	Rd	55	S of	W Village	No	No
Stoneyford	Rd	55	Buck	W Village	No	No
Sunburry	Ct	55	end	end	No	No
Sunrise	Ct	55	end	end	No	No
Sunset	Dr	55	Pickering Bend	Manor	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Sunset	Dr	55	Pickering Bend	circle	No	No
Taylors	Way	55	Taylors	Plumly	No	No
Torresdale	Dr	55	Upper Holland	Glenfield	No	No
Upper Holland	Rd	55	Torresdale	Glenfield	Yes	Yes
Vanderveer	Ave	55	Holland	Amsterdam	No	No
Village	Rd	55	Beacon Hill	Beacon Hill	No	Yes
William	Way	55	end	end	No	No
Almshouse	Rd	50	Joshua	Golden Gate	Partial	No
Arrowhead	Rd	50	Manor	end	No	No
Bedlington	Pl	50	end	end	No	No
Bennett	Pl	50	Atkinson	Coopers	No	No
Birch	Ave	50	Cedar	Chestnut	No	No
Blakers	Way	50	Shepherds	W Village	No	No
Buck	Rd	50	Village	Twp line	No	No
Buck	Rd	50	Saint Leonards	Village	No	No
Buck	Rd	50	Saint Leonards	Village	No	No
Buck	Rd	50	S of	Village	No	No
Buck	Rd	50	E Village	Middle Holland	No	No
Buck	Rd	50	E Holland	Thoroughbred	No	No
Burnley	Pl	50	end	end	No	No
Carmelita	Dr	50	Gregory	Lynford	No	No
Cedarbrook	Dr	50	New	Heather	No	No
Chestnut	Dr	50	Walnut		No	No
Chestnut	Dr	50	Newtown- Richboro	Walnut	No	No
Cypress	Ave	50	Buckhorn	Cypress	No	No
Doe Run	Dr	50	Saint Leonards	Elk	No	No
Doe Run	Dr	50	Elk	Buck Hill	No	No
Elk	Dr	50	Doe Run	Fawn	No	No
Evergreen	Ct	50	end	end	No	No
Exeter	Ct	50	end	end	No	No
Freemans	Ln	50	end	end	No	No
Freemans	Ln	50	end	end	No	No
Glen Meadow	Rd	50	Nottingham	Castleton	No	No
Grant	Dr	50	E Holland	Jefferson	No	No
Green Meadow	Cir	50	end	end	No	No
Harmony	Dr	50	Manor	end	No	No
Harmony	Dr	50	Manor	Newtown-	No	No



STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
				Richboro		
Heather	Rd	50	Cedarbrook	Kitty Knight	No	No
Holland	Rd	50	Robin	Monica	Yes	No
Iron Rock	Ct	50	end	end	No	No
Karen	Rd	50	Shelley	Michael	No	No
Kitty Knight	Dr	50	Heather	Merry Dell	No	No
Manor	Dr	50	Sunset	Arrowhead	No	No
Manor	Dr	50	Harmony	end	No	No
Manor	Dr	50	Arrowhead	Harmony	No	No
Middle Holland	Rd	50	Doris	Saint Leonards	Yes	No
Monica	Dr	50	Rafaella	end	No	No
Monica	Dr	50	Holland	Rafaella	No	No
Newtown-Richboro	Rd	50	N of	Saint Leonards	No	No
Norton	Dr	50	end	end	No	No
Pine	Ave	50	Walnut	Cypress	No	No
Potters	Pl	50	end	end	No	No
Providence	Dr	50	Dorchester	Glen Meadow	No	No
Robies	Ct	50	end	end	No	No
Rolling Hills	Dr	50	Buck	Wood	No	No
Saint Leonards	Rd	50	Doe Run	Doris	No	No
Sharon	Dr	50	Joshua	Jasons	No	No
Sheffield	Pl	50	end	end	No	No
Shepherds	Way	50	Blakers	end	No	No
Shepherds	Way	50	Blakers	Bennett	No	No
Signal Hill	Rd	50	Stonyford	Signal Hill	No	No
Signal Hill	Rd	50	Iron Rock	Gate	No	No
Signal Hill	Rd	50	Exeter	Iron Rock	No	No
Sophia	Dr	50	Friesland	Lisa	No	No
Still Pond	Dr	50	end	end	No	No
Stockton	Pl	50	end	end	No	No
Summit	Cir	50	end	end	No	No
Upper Holland	Rd	50	Providence	Glen Meadow	No	Yes
Upper Holland	Rd	50	E of	Glenfield	Yes	Yes
Victoria	Ct	50	E Village	end	No	No
Village	Rd	50	Stockton	Burnley	Yes	No
Village	Rd	50	Heather Valley	Victoria	No	No
Village	Rd	50	Durham	Stockton	Yes	No
Village	Rd	50	Burnley	Spring House	Yes	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Village	Rd	50	Buck	Southwart	No	Yes
Village	Rd	50	Bedlington	end	No	No
Village	Rd	50	Bedlington	E Village Ct	No	No
Walnut	Dr	50	Pine	end	No	No
Walnut	Dr	50	Chestnut	Cedar	No	No
Walnut	Dr	50	Cedar	Pine	No	No
Ward	Ct	50	end	end	No	No
Wendy	Way	50	Sharon	Rachel	No	No
Wendy	Way	50	Rachel	Alberts	No	No
Woodlake	Dr	50	Crestview	Forrest	No	No
Almshouse	Rd	45	Winding	Hatboro	No	No
Almshouse	Rd	45	W of	Hatboro	No	No
Almshouse	Rd	45	W of	Winding	No	No
American	Dr	45	Nikol	Nikol	No	No
Amsterdam	Ave	45	end	end	No	No
Averstone	Rd	45	end	end	No	No
Buck	Rd	45	Rocksville	Holland	No	No
Buck	Rd	45	Rocksville	Mallard	No	No
Bustleton	Pike	45	Tanyard	Willow	No	No
Carmelita	Dr	45	Cynthia	Lynford	No	No
Cedar	Dr	45	Birch	end	No	No
Center	St	45	Manor	end	No	No
Chapel	Dr	45	Lower Holland	Longview	No	No
Chapel	Dr	45	Longview	Dawn	No	No
Chestnut	Dr	45	Birch	Upper Holland	No	No
Covered Bridge	Rd	45	end	end	No	No
Cynthia	Dr	45	Gregory	end	No	No
E Holland	Rd	45	S of	Amsterdam	No	No
E Holland	Rd	45	Rafaella	Amsterdam	No	No
E Holland	Rd	45	Buck	Lawrence	No	No
Elizabeth	Ln	45	Deborah	Elizabeth	No	No
Frog Hollow	Rd	45	Kelinger	Camberly	No	No
Furlong	Ct	45	end	end	No	No
Gambrel	Ct	45	end	end	No	No
Glen Meadow	Rd	45	Redwood	Nottingham	No	No
Glen Meadow	Rd	45	Providence	Redwood	No	No
Glen Meadow	Rd	45	Nottingham	Providence	No	No
Hatboro	Rd	45	Virginia	Pulinski	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Hatboro	Rd	45	Virginia	New	No	No
Heather Valley	Rd	45	W Village	Hearthstone	No	No
Highland	Dr	45	Auckland	Farmway	No	No
Holland	Rd	45	Penns Court	Hawthorne	No	No
Jennifer	Ln	45	New	Post	No	No
Joanne	Rd	45	Sima	end	No	No
Middle Holland	Rd	45	Saint Leonards	Doe Run	No	No
Middle Holland	Rd	45	Doe Run	Alverstone	No	No
New	Rd	45	W of	Cedarbrook	Yes	Yes
New	Rd	45	S of	Jennifer	Yes	No
New	Rd	45	S of	Jennifer	Yes	No
New	Rd	45	Hatboro	Hampton	No	Partial
Newtown-Richboro	Rd	45	Fir	Holland	No	No
Newtown-Richboro	Rd	45	Fir	Holland	No	No
Nikol	Dr	45	American	American	No	No
Raffaella	Dr	45	Monica	E Holland	No	No
Robin	Rd	45	Cardinal	Holland	No	No
Rosette	Ln	45	end	end	No	No
Seton Hill	Ct	45	end	end	No	No
Sharon	Dr	45	Joshua	Sylvan	No	No
Stoneyford	Rd	45	N of	Signal Hill	No	No
Sylvan	Ct	45	end	end	No	No
Tanyard	Rd	45	Rosette	Bustleton	Yes	Yes
Upper Holland	Rd	45	Chestnut	Chestnut	Yes	No
Vanderveer	Ave	45	Amsterdam	Rotterdam	No	No
Village	Rd	45	Heather Valley	Brentwood	No	Yes
Virginia	Dr	45	end	end	No	No
Wren	Dr	45	end	end	No	No

**APPENDIX C: TOTAL PRIORITY POINTS FOR STREET SEGMENTS,  
ALPHABETICAL LISTING BY STREET, FOR SEGMENTS RECEIVING 45 OR MORE  
PRIORITY POINTS**





STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
2nd Street	Pike	210	Tanyard	Bustleton	Partial	Partial
2nd Street	Pike	120	Manor	Almshouse	Partial	Yes
2nd Street	Pike	100	Willowbrook	Tanyard	No	No
2nd Street	Pike	100	N of	Tanyard	Yes	Yes
2nd Street	Pike	100	Bustleton	Almshouse	Partial	Yes
2nd Street	Pike	95	Mt Pleasant	Willowbrook	No	No
2nd Street	Pike	75	Highland	Manor	No	Partial
2nd Street	Pike	65	Highland	Twining Ford	No	No
Acorn	Dr	90	Willowbrook	Tanyard	No	No
Acorn	Dr	65	Willowbrook	Mt Pleasant	No	No
Adams	Ct	65	end	end	No	No
Alberts	Ct	60	end	end	No	No
Almshouse	Rd	120	Temperance	2nd Street Pike	No	No
Almshouse	Rd	85	W of	Temperance	No	Yes
Almshouse	Rd	85	Golden Gate	E	Yes	No
Almshouse	Rd	75	E of	Golden Gate	Yes	Yes
Almshouse	Rd	55	Hatboro	Joshua	No	No
Almshouse	Rd	50	Joshua	Golden Gate	Partial	No
Almshouse	Rd	45	Winding	Hatboro	No	No
Almshouse	Rd	45	W of	Hatboro	No	No
Almshouse	Rd	45	W of	Winding	No	No
American	Dr	45	Nikol	Nikol	No	No
Amsterdam	Ave	45	end	end	No	No
Anthony	Dr	55	Bustleton	Cynthia	No	No
Arrowhead	Rd	50	Manor	end	No	No
Auckland	Dr	95	Manor	Sunset	No	No
Auckland	Dr	65	Sunset	Highland	No	No
Averstone	Rd	55	end	end	No	No
Averstone	Ct	55	end	end	No	No
Averstone	Ct	55	end	end	No	No
Averstone	Rd	45	end	end	No	No
Beacon Hill	Dr	55	end	end	No	No
Bedlington	Pl	50	end	end	No	No
Bennett	Pl	55	Taylors		No	No
Bennett	Pl	55	Taylors	Atkinson	No	No
Bennett	Pl	50	Atkinson	Coopers	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Birch	Ave	50	Cedar	Chestnut	No	No
Blakers	Way	50	Shepherds	W Village	No	No
Blue Fox	Run	115	Temperance	Renee	No	No
Blue Fox	Run	105	Renee	end	No	No
Bradley	Ct	75	end	end	No	No
Brae Bourne	Dr	55	Lower Holland	Chatham	No	No
Brae Bourne	Dr	55	Chatham	Chimney Hill	No	No
Buck	Rd	75	Rolling Hills	Rolling Hills	No	No
Buck	Rd	65	Rolling Hills	E Holland	No	No
Buck	Rd	50	Village	Twp line	No	No
Buck	Rd	50	Saint Leonards	Village	No	No
Buck	Rd	50	Saint Leonards	Village	No	No
Buck	Rd	50	S of	Village	No	No
Buck	Rd	50	E Village	Middle Holland	No	No
Buck	Rd	50	E Holland	Thoroughbred	No	No
Buck	Rd	45	Rocksville	Holland	No	No
Buck	Rd	45	Rocksville	Mallard	No	No
Burdsal	Ave	90	end	end	No	No
Burnley	Pl	50	end	end	No	No
Bustleton	Pike	175	2nd Street Pike	Upper Holland	Partial	No
Bustleton	Pike	90	Upper Holland	Tanyard	Yes	Yes
Bustleton	Pike	80	Schan	New	No	Yes
Bustleton	Pike	80	New	Green Valley	Yes	Yes
Bustleton	Pike	55	Valley	Green Valley	No	Partial
Bustleton	Pike	55	at	Barberry	No	No
Bustleton	Pike	45	Tanyard	Willow	No	No
Carmelita	Dr	80	Cynthia	end	No	No
Carmelita	Dr	80	Cynthia	Lynford	No	No
Carmelita	Dr	50	Gregory	Lynford	No	No
Carmelita	Dr	45	Cynthia	Lynford	No	No
Cedar	Dr	60	Walnut	Chestnut	No	No
Cedar	Dr	45	Birch	end	No	No
Cedarbrook	Dr	50	New	Heather	No	No
Center	St	55	Sunset	Manor	No	No
Center	St	45	Manor	end	No	No
Chapel	Dr	45	Lower Holland	Longview	No	No
Chapel	Dr	45	Longview	Dawn	No	No
Chatham	Ct	55	Brae Bourne	end	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Chestnut	Dr	60	Cedar		No	No
Chestnut	Dr	50	Walnut		No	No
			Newtown-			
Chestnut	Dr	50	Richboro	Walnut	No	No
Chestnut	Dr	45	Birch	Upper Holland	No	No
Chimney Hill	Ct	55	Brae Bourne	end	No	No
Clinton	Ct	70	end	end	No	No
Cobblestone	Ct	55	end	end	No	No
Council Rock JHS	Dr	75	E Holland	Buck	No	No
Covered Bridge	Rd	45	end	end	No	No
Cynthia	Dr	65	Anthony	Carmelita	No	No
Cynthia	Dr	45	Gregory	end	No	No
Cypress	Ave	50	Buckhorn	Cypress	No	No
Deborah	Rd	80	S of	Elizabeth	No	No
Deborah	Rd	80	N of	Tanyard	No	No
Deborah	Rd	70	Elizabeth	end	No	No
Doe Run	Dr	50	Saint Leonards	Elk	No	No
Doe Run	Dr	50	Elk	Buck Hill	No	No
Dorchester	Ln	55	Providence	Nottingham	No	No
Doris	Ave	60	end	end	No	No
Durham	Pl	60	end	end	No	No
E Holland	Rd	75	Grant	Old Jordan	Yes	Yes
E Holland	Rd	75	Council Rock JHS	Grant	Yes	No
E Holland	Rd	60	Grant	Grant	Yes	No
E Holland	Rd	55	Old Jordan	Buck	No	Yes
E Holland	Rd	45	S of	Amsterdam	No	No
E Holland	Rd	45	Rafaella	Amsterdam	No	No
E Holland	Rd	45	Buck	Lawrence	No	No
Elizabeth	Ln	80	E of	Deborah	No	No
Elizabeth	Ln	45	Deborah	Elizabeth	No	No
Elk	Dr	50	Doe Run	Fawn	No	No
Elk	Dr	40	end	end	No	No
Evergreen	Ct	50	end	end	No	No
Exeter	Ct	50	end	end	No	No
Freemans	Ln	50	end	end	No	No
Freemans	Ln	50	end	end	No	No
Friesland	Dr	95	Whitley	end	No	No
Friesland	Dr	75	Whitley	end	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Frog Hollow	Rd	45	Kelinger	Camberly	No	No
Furlong	Ct	45	end	end	No	No
Gaelic	Ct	60	end	end	No	No
Gambrel	Ct	45	end	end	No	No
Glasgow	Rd	55	W of	2nd Street Pike	No	No
Glen Meadow	Rd	55	Upper Holland	Nottingham	No	No
Glen Meadow	Rd	50	Nottingham	Castleton	No	No
Glen Meadow	Rd	45	Redwood	Nottingham	No	No
Glen Meadow	Rd	45	Providence	Redwood	No	No
Glen Meadow	Rd	45	Nottingham	Providence	No	No
Glenfield	Dr	65	Upper Holland	Torresdale	No	No
Gleniffer Hill	Rd	55	Cobblestone	Cameo	No	No
Grant	Dr	75	Penn	Penn	No	No
Grant	Dr	75	Penn	E Holland	No	No
Grant	Dr	55	Jefferson	Penn	No	No
Grant	Dr	50	E Holland	Jefferson	No	No
Green Meadow	Cir	50	end	end	No	No
Green Valley	Dr	70	Summit	High Point Dr	No	No
Green Valley	Dr	70	Shady Lane	Summit	No	No
Green Valley	Dr	70	Bustleton	Shady Lane	No	No
Green Valley	Dr	60	High Point	Green Meadow	No	No
Hale	Dr	65	end	end	No	No
Harmony	Dr	50	Manor	end	No	No
Harmony	Dr	50	Manor	Newtown-Richboro	No	No
Hatboro	Rd	55	S of	Virginia	No	No
Hatboro	Rd	45	Virginia	Pulinski	No	No
Hatboro	Rd	45	Virginia	New	No	No
Heather	Rd	50	Cedarbrook	Kitty Knight	No	No
Heather Valley	Rd	45	W Village	Hearthstone	No	No
Heritage	Pl	55	end	end	No	No
High Point	Dr	80	Green Valley	High Point Cir	No	No
High Point	Cir	80	end	end	No	No
Highland	Dr	65	Meadow	Auckland	No	No
Highland	Dr	55	2nd Street Pike	Meadow	No	No
Highland	Dr	45	Auckland	Farmway	No	No
Hilltop	Dr	65	Mehler	end	No	No
Hilltop	Dr	65	Mehler	Traub	No	No
Holland	Rd	85	S of	Upper Holland	Yes	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Holland	Rd	80	N of	Upper Holland	No	No
Holland	Rd	80	N of	Karen	Partial	No
Holland	Rd	65	Rotterdam	Karen	Yes	No
Holland	Rd	60	Gaelic	Monica	Yes	No
Holland	Rd	60	Gaelic	Vanderveer	Yes	No
Holland	Rd	55	Vanderveer	Rotterdam	Yes	Partial
Holland	Rd	55	Upper Holland	Penns Court	No	No
Holland	Rd	50	Robin	Monica	Yes	No
Holland	Rd	45	Penns Court	Hawthorne	No	No
Hudson	Ct	70	end	end	No	No
Independence	Dr	85	Hale	Hudson	No	No
Iron Rock	Ct	50	end	end	No	No
Jasons	Way	60	Robies	Sharon	No	No
Jasons	Way	60	Robies	Wendy	No	No
Jennifer	Ln	45	New	Post	No	No
Jericho	Rd	55	end	end	No	No
Joanne	Rd	70	Shelley	Michael	No	No
Joanne	Rd	45	Sima	end	No	No
Julianna	Dr	55	Erich	Mt Pleasant	No	No
Justice	Dr	65	Middle Holland	Independence	No	No
Karen	Rd	75	Holland	Maureen	No	No
Karen	Rd	70	Maureen	Shelley	No	No
Karen	Rd	50	Shelley	Michael	No	No
Kitty Knight	Dr	50	Heather	Merry Dell	No	No
Knox	Ct	75	end	end	No	No
Liberty	Dr	55	end	end	No	No
Longstem	Ln	100	end	end	No	No
Loretta	Cir	55	end	end	No	No
Lower Holland	Rd	55	Sunrise	Holland	No	Yes
Lower Holland	Rd	55	Brae Bourne	Sunrise	No	No
Madison	Ct	75	end	end	No	No
Manor	Dr	115	Auckland	2nd Street Pike	No	No
Manor	Dr	95	Center	Auckland	No	No
Manor	Dr	55	Center	Sunset	No	No
Manor	Dr	50	Sunset	Arrowhead	No	No
Manor	Dr	50	Harmony	end	No	No
Manor	Dr	50	Arrowhead	Harmony	No	No
Maureen	Rd	70	Karen	end	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Mehler	Dr	65	New	Hilltop	No	No
Middle Holland	Rd	80	Holland	Jodie	Yes	Yes
Middle Holland	Rd	65	Old Jordan	E Village	Yes	No
Middle Holland	Rd	65	Liberty	Justice	Yes	No
Middle Holland	Rd	60	W of	Jodie	Yes	Yes
Middle Holland	Rd	60	E Village	Doris	Yes	No
Middle Holland	Rd	60	E of	Saint Leonards	No	No
Middle Holland	Rd	55	Covered Bridge	Covered Bridge	No	Yes
Middle Holland	Rd	55	Covered Bridge	Liberty	No	Yes
Middle Holland	Rd	55	Buck Hill	Alverstone	No	No
Middle Holland	Rd	50	Doris	Saint Leonards	Yes	No
Middle Holland	Rd	45	Saint Leonards	Doe Run	No	No
Middle Holland	Rd	45	Doe Run	Alverstone	No	No
Monica	Dr	50	Rafaella	end	No	No
Monica	Dr	50	Holland	Rafaella	No	No
Monroe	Ct	75	end	end	No	No
New	Rd	75	Mehler	Bustleton	Yes	Yes
New	Rd	55	S of	Jennifer	Yes	No
New	Rd	55	N of	Cedarbrook	Yes	Yes
New	Rd	55	Harriet	Mehler	Yes	Yes
New	Rd	55	E of	Norton Dr	No	Yes
New	Rd	45	W of	Cedarbrook	Yes	Yes
New	Rd	45	S of	Jennifer	Yes	No
New	Rd	45	S of	Jennifer	Yes	No
New	Rd	45	Hatboro	Hampton	No	Partial
Newtown-Richboro	Rd	120	Township	Titus	Yes	Yes
Newtown-Richboro	Rd	115	Titus	Burdsal	Yes	Yes
Newtown-Richboro	Rd	110	Township	E	Yes	Yes
Newtown-Richboro	Rd	110	2nd Street Pike	Township	Yes	Yes
Newtown-Richboro	Rd	75	Pickering Bend	Pickering Bend	Yes	Yes
Newtown-Richboro	Rd	65	Burdsal	Pickering Bend	Yes	Yes
Newtown-Richboro	Rd	60	Chestnut	Harmony	Partial	Yes
Newtown-Richboro	Rd	55	Pickering Bend	Chestnut	Yes	Yes
Newtown-Richboro	Rd	50	N of	Saint Leonards	No	No
Newtown-Richboro	Rd	45	Fir	Holland	No	No
Newtown-Richboro	Rd	45	Fir	Holland	No	No
Nikol	Dr	45	American	American	No	No
Norton	Dr	55	New	Norton Dr E/W	No	No



STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Norton	Dr	55	E of	Norton	No	No
Norton	Dr	50	end	end	No	No
Nottingham	Dr	60	Dorchester	Glen Meadow	No	No
Nottingham	Dr	55	Glen Meadow	Dorchester	No	No
			Twining Village			
Old Jordan	Rd	75	Manor	Middle Holland	No	No
Old Jordan	Rd	65	E Holland	Jericho	Yes	Yes
			Twining Village			
Old Jordan	Rd	55	Manor	Wyncoop	No	No
Old Jordan	Rd	55	Jericho	Brendan	No	No
Payne	Ct	75	end	end	No	No
Penn	Cir	75	Grant	Grant	No	No
Penns Court		55	Holland	end	No	No
			Newtown-			
Pickering Bend		55	Richboro	Newtown-Richboro	No	No
Pine	Ave	50	Walnut	Cypress	No	No
Plumly	Way	75	Taylors	Taylors	No	No
Plumly	Way	75	Taylors	Taylors	No	No
Plumly	Way	65	Taylors	E Village	No	No
Pond View	Dr	80	end	end	No	No
Potters	Pl	50	end	end	No	No
Providence	Dr	50	Dorchester	Glen Meadow	No	No
Putnam	Dr	60	end	end	No	No
Raffaella	Dr	45	Monica	E Holland	No	No
Randolph	Ct	65	end	end	No	No
Renee	Cir	115	end	end	No	No
Robies	Ct	50	end	end	No	No
Robin	Rd	45	Cardinal	Holland	No	No
Rolling Hills	Dr	50	Buck	Wood	No	No
Rosemary	Dr	75	Holland	Loretta	No	No
Rosette	Ln	45	end	end	No	No
Rotterdam	Rd	55	Holland	Michael	No	No
Rucker	Rd	65	end	end	No	No
Rucker	Rd	65	end	end	No	No
Rucker	Rd	65	end	end	No	No
Saint Leonards	Rd	60	Middle Holland	Doe Run	No	No
Saint Leonards	Rd	50	Doe Run	Doris	No	No
Sassafras	Dr	100	end	end	No	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Schan	Dr	70	Shady Lane	High Point Dr	No	No
Schan	Dr	65	Bustleton	Shady Lane	No	No
Seton Hill	Ct	45	end	end	No	No
Shady Lawn	Dr	80	Schan	Green Valley	No	No
Sharon	Dr	60	Jasons	Wendy	No	No
Sharon	Dr	50	Joshua	Jasons	No	No
Sharon	Dr	45	Joshua	Sylvan	No	No
Sheffield	Pl	50	end	end	No	No
Shelley	Rd	80	Joanne	end	No	No
Shelley	Rd	80	Joanne	Karen	No	No
Shelley	Rd	60	Karen	Evan	No	No
Shepherds	Way	50	Blakers	end	No	No
Shepherds	Way	50	Blakers	Bennett	No	No
Signal Hill	Rd	60	Exeter	Signal Hill	No	No
Signal Hill	Rd	50	Stonyford	Signal Hill	No	No
Signal Hill	Rd	50	Iron Rock	Gate	No	No
Signal Hill	Rd	50	Exeter	Iron Rock	No	No
Sophia	Dr	50	Friesland	Lisa	No	No
Southwart	Ct	55	end	end	No	No
Still Pond	Dr	50	end	end	No	No
Stockton	Pl	50	end	end	No	No
Stoneyford	Rd	55	S of	W Village	No	No
Stoneyford	Rd	55	Buck	W Village	No	No
Stoneyford	Rd	45	N of	Signal Hill	No	No
Summit	Cir	50	end	end	No	No
Sunburry	Ct	55	end	end	No	No
Sunrise	Ct	55	end	end	No	No
Sunset	Dr	125	circle		No	No
Sunset	Dr	65	Center	Auckland	No	No
Sunset	Dr	55	Pickering Bend	Manor	No	No
Sunset	Dr	55	Pickering Bend	circle	No	No
Sylvan	Ct	45	end	end	No	No
Tanyard	Rd	100	Windrose	Longstem	Yes	Yes
Tanyard	Rd	90	Windrose		Yes	Yes
Tanyard	Rd	80	Pond View	Acorn	No	Yes
Tanyard	Rd	80	Acorn	2nd Street Pike	No	Partial
Tanyard	Rd	80	2nd Street Pike	Windrose	Yes	Yes
Tanyard	Rd	65	Longstem	Rosette	Yes	Yes

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Tanyard	Rd	60	W of	Pond View	No	Yes
Tanyard	Rd	45	Rosette	Bustleton	Yes	Yes
Taylors	Way	65	Taylors	Benett	No	No
Taylors	Way	55	Taylors	Plumly	No	No
Temperance	Ln	115	Union Cem	Union Cem	No	No
Temperance	Ln	115	N of	Almshouse	No	No
Temperance	Ln	95	Union Cem	Blue Fox	No	No
Temperance	Ln	75	Blue Fox	Mohawk	No	No
Titus	Ct	110	end	end	No	No
Titus	Ct	110	end	end	No	No
Titus	Ave	110	end	end	No	No
Titus	Ave	105	end	end	No	No
Torresdale	Dr	60	Glenfield	Lynford	No	No
Torresdale	Dr	55	Upper Holland	Glenfield	No	No
			Newtown-			
Township	Rd	120	Richboro	Upper Holland	Yes	Yes
Traub	Dr	65	end	end	No	No
Twining Village						
Manor		65	Old Jordan	end	No	No
Union	Cem	65	end	end	No	No
Upper Holland	Rd	170	Bustleton	Township	Yes	Yes
Upper Holland	Rd	85	Township	Torresdale	Yes	Yes
Upper Holland	Rd	85	Glen Meadow	Holland	No	Yes
Upper Holland	Rd	60	E of Glenfield	Chestnut	Yes	Partial
Upper Holland	Rd	55	Torresdale	Glenfield	Yes	Yes
Upper Holland	Rd	50	Providence	Glen Meadow	No	Yes
Upper Holland	Rd	50	E of	Glenfield	Yes	Yes
Upper Holland	Rd	45	Chestnut	Chestnut	Yes	No
Van Horn	Pl	75	end	end	No	No
Vanderveer	Ave	55	Holland	Amsterdam	No	No
Vanderveer	Ave	45	Amsterdam	Rotterdam	No	No
Victoria	Ct	50	E Village	end	No	No
Village	Rd	65	Southwart	Beacon Hill	No	No
Village	Rd	65	Middle Holland	Plumly	Yes	No
Village	Rd	65	Beacon Hill	Stonyford	No	No
Village	Rd	60	Plumly	Blakers	Yes	No
Village	Rd	55	Beacon Hill	Beacon Hill	No	Yes
Village	Rd	50	Stockton	Burnley	Yes	No

STREET NAME	SUFFIX	PTS.	FROM	TO	S'WALK	S'WALK
					NB/EB	SB/WB
Village	Rd	50	Heather Valley	Victoria	No	No
Village	Rd	50	Durham	Stockton	Yes	No
Village	Rd	50	Burnley	Spring House	Yes	No
Village	Rd	50	Buck	Southwart	No	Yes
Village	Rd	50	Bedlington	end	No	No
Village	Rd	50	Bedlington	E Village Ct	No	No
Village	Rd	45	Heather Valley	Brentwood	No	Yes
Virginia	Dr	45	end	end	No	No
Walnut	Dr	50	Pine	end	No	No
Walnut	Dr	50	Chestnut	Cedar	No	No
Walnut	Dr	50	Cedar	Pine	No	No
Ward	Ct	50	end	end	No	No
Wendy	Way	60	Alberts	Jasons	No	No
Wendy	Way	50	Sharon	Rachel	No	No
Wendy	Way	50	Rachel	Alberts	No	No
Westwood	Pl	60	W Village	end	No	No
Weymouth	Pl	60	end	end	No	No
Whitney	Ln	75	Friesland	end	No	No
Whitney	Ln	60	Rachel	Friesland	No	No
William	Way	55	end	end	No	No
Willowbrook	Dr	100	Sassafras	2nd Street Pike	No	No
Willowbrook	Dr	100	Acorn	Sassafras	No	No
Windrose	Dr	90	Windrose	Willowgreene	No	No
Windrose	Dr	90	Tanyard	Windrose	No	No
Windrose	Dr	75	Willowgreene	Windrose	No	No
Woodlake	Dr	50	Crestview	Forrest	No	No
Wren	Dr	45	end	end	No	No







## **APPENDIX D: TOWNSHIP SIDEWALK INVENTORY**



ROAD	FROM	TO	SIDE OF ROAD	DISTANCE (FEET)
Holland	#322	Karen	E	5,105
Holland	Rosemary	Point South	W	400
Holland	Hope	Rocksville	E	2,275
Lower Holland	Sunrise Ct.	Holland	N	150
New Road	Bustleton	Churchville Elem.	N	920
New Road	Bustleton	Churchville Elem.	S	920
New Road	Cedarbrook	Hampton	N	2,280
New Road	in front of Welsh Elem.		S	1,000
New Road	in front of Station 83 firehouse		S	290
Tanyard	Bustleton	2nd St Pike	N	1,785
Tanyard	Bustleton	2nd St Pike	S	1,785
Tanyard	2nd St Pike	to a point west	N	370
Tanyard	#119	#183	N	1,440
Tanyard	#180	Addis Dr.	S	525
Hatboro	Bristol	New	E	3,070
2nd St Pike	#1977		E	100
2nd St Pike	Kindercare		W	300
2nd St Pike	Schoolhouse Plaza	Almshouse	W	650
2nd St Pike	Almshouse	#3892	W	1,625
Rt 332	Rt. 232	Chesnut	S	2,100
Rt 332	#388	#692	S	2,700
Rt 332	Harmony	W. Pickering	N	2,180
Rt 332	#65 (Alterra)	Rt. 232	N	1,360
St Leonard's	Indian Summer	#283	E	3,500
Old Jordon	E. Holland	#212	W	1,350
Old Jordon	E. Holland	Jericho	E	530
E. Holland	#106	Holland Jr. High	S	2,700
E. Holland	in front of Hillcrest Elem.		S	700
E. Holland	Old Jordon	Grant	N	750
Bustleton Pike	Upper Holland	Anthony	E	1,540
Bustleton Pike	#347	Basin-New Rd.	W	1,700
Bustleton Pike	#93	#115	E	280
Bustleton Pike	Green Valley Dr.	#357	E	470
W. Village	Middle Holland	Buck	N	327
E. Village	Buck	Stoneyford	N	2,250

E. Village	Stoneyford	Clubhouse	S	900
Stoneyford	RR Bridge	Cropwell	W	6,010
Stoneyford	ballfields	Mustang Ct.	E	1,550
Rt 232	Tanyrad	#700	W	220
Rt 232	front of Crossroads Plaza		E	600
Rt 232	front of Gasper's		W	30
Rt 232	#832	#778	W	270
Rt 232	#853		E	100
Rt 232	KFC	William Penn Bank	E	215
Rt 232	township park		E	150
Rt 232	Gulf Service Station		E	230
Middle Holland	Holland	Liberty	N	3,650
Middle Holland	St. Leonards	Old Jordon	S	1,580
Middle Holland	Rolling Hills Elem.		S	150
Middle Holland	Twining Village		S	770
Upper Holland	Holland	#461	N	2,660
Upper Holland	Richboro Elem.	Bustleton Pike	N	2,500
Upper Holland	Fox Chase Bank		S	150
Upper Holland	Richboro Jr. High	Florence	S	4,450
Almshouse	Exxon		N	200
Almshouse	Legacy Oaks		S	1,640
Almshouse	Richboro Carwash		S	250
Almshouse	First Union Bank		N	240
Almshouse	#67		N	100
Buck Road	at Forest		W	630
Buck Road	at Rocksville		W	630
Rocksville	Buck	Holland	N	520

## **APPENDIX E: SIDEWALKS ON STATE HIGHWAYS, FROM PENNDOT VIDEO LOGS**





ROUTE	SECTION	OFFSET	DATE	SIDEWALKS	
				NB/EB	SB/WB
2067	0010	1141	Nov-01	YES	
2067	0012	2166.6	Nov-01		
2067	0040	898.3	Nov-01		YES
2067	0040	1279.4	Nov-01		
2067	0040	2229.4	Nov-01	YES	
2067	0040	3749.2	Nov-01		
332	0110	995.7	Jul-02	YES	
332	0110	2645.3	Jul-02		
332	0110	3295.6	Jul-02	YES	
332	0120	213.4	Jul-02		YES
332	0120	339.1	Jul-02		
332	0120	507.1	Jul-02		YES
332	0120	739.6	Jul-02	YES	YES
332	0120	866.2	Jul-02		YES
332	0120	1290.8	Jul-02	YES	YES
332	0130	109.4	Jul-02	YES	
332	0130	319.6	Jul-02	YES	YES
332	0130	1058.7	Jul-02		YES
332	0130	2518.2	Jul-02		
332	0150	75	Jul-02		YES
332	0150	963.7	Jul-02		
232	0080	1457.9	Nov-01	YES	
232	0080	1711.5	Nov-01		
232	0090	201.6	Nov-01	YES	
232	0090	623.1	Nov-01	YES	YES

ROUTE	SECTION	OFFSET	DATE	SIDEWALKS	
				NB/EB	SB/WB
232	0090	1004.2	Nov-01	YES	
232	0090	1130.3	Nov-01	YES	YES
232	0090	1172.5	Nov-01		
232	0090	1342.1	Nov-01	YES	YES
232	0090	1574.1	Nov-01		YES
232	0090	1785.1	Nov-01	YES	YES
232	0090	1997.1	Nov-01		YES
232	0100	42.5	Nov-01	YES	YES
232	0100	212.5	Nov-01		YES
232	0100	613.9	Nov-01		
232	0100	908.8	Nov-01	YES	
232	0100	1077.9	Nov-01	YES	YES
232	0100	1141.4	Nov-01		YES
232	0100	1352.5	Nov-01		
2065	0010	1267.8	Nov-01	YES	
2065	0010	1478.7	Nov-01		
2065	0020	2165.2	Nov-01	YES	
2065	0020	2609.6	Nov-01		YES
2065	0030	1203.9	Nov-01		
2065	0050	75.2	Nov-01	YES	YES
2065	0050	327.5	Nov-01	YES	
2065	0050	1615.7	Nov-01		
2065	0050	1996.9	Nov-01	YES	
2065	0050	2355	Nov-01		



**APPENDIX F: NORTHAMPTON TOWNSHIP COMPREHENSIVE PLAN 1999  
UPDATE, CIRCULATION ELEMENT**



## **Pedestrian Circulation<sup>1</sup>**

In order to provide adequate pedestrian circulation between residential development and nearby commercial, institutional, and park and recreation uses, sidewalks and/or pedestrian walkways should be installed. Sidewalks should be located within existing or ultimate street rights-of-way; while pedestrian paths would be situated within off-street easements or rights-of-way. These facilities will serve to reduce dependence on private vehicular transportation and school busing.

Because existing street rights-of-way have been found in many areas to be either insufficiently wide or topographically unsuitable for standard sidewalk construction, it is recognized that the installation of sidewalks and pedestrian paths will require preliminary planning and engineering input. Additionally, the fiscal impacts of such facilities should be adequately addressed.

The **Proposed Circulation Map** indicates those primary pedestrian routes that should be provided upon further study by the Township. Until such an investigation is completed, it is recommended that the Township require applicants for subdivision and land development approval to:

- offer ultimate rights-of-way for dedication or reservation for sidewalks and pedestrian paths along those routes; and
- construct sidewalks and/or pedestrian paths along a designated route, regardless of whether an adjoining sidewalk or pedestrian path is immediately available to tie into.

---

<sup>1</sup> *Northampton Township Comprehensive Plan 1999 Update*, page 90.





**APPENDIX G: EXCERPTS FROM DVRPC YEAR 2030 LONG-RANGE LAND USE  
AND TRANSPORTATION PLAN**



Destination 2030 is intended to help DVRPC carry out its defined mission “to plan for the orderly growth and development of the region.” It is also a requirement of the US Department of Transportation, which is charged with certifying MPO plans and programs. MPOs are key actors, in regions across the country, helping to implement the federal Surface Transportation Act (most recently, TEA-21, the Transportation Equity Act for the 21st Century).

DVRPC’s Long-Range Plan serves as the basis for the Transportation Improvement Program (TIP), a capital program of highway, bridge and public transit projects, as well as separate plans for regional airports, goods movement and bicycle/pedestrian activities. Proposed projects must be included on the TIP if they are to receive federal funding. The Plan is also used to evaluate the consistency of sewer and water projects in the New Jersey and Pennsylvania portions of the region, as well as relating regional plans to the on-going, concurrent planning at the county and state levels. Finally, DVRPC’s Long-Range Plan serves as an educational guide and informational resource for the citizens, businesses and institutions in the Delaware Valley.

The Transportation component provides the vision and foundation for the region’s transportation system. The transportation goals are 1) Improving Safety, 2) Reducing Congestion, 3) Increasing Mobility, 4) Rebuilding the Infrastructure, 5) Enhancing the Environment, and 6) Linking Transportation Investments to Land Use and Economic Development Goals.

Northampton Township is classified as a “growing suburb” in the 2030 Plan. Communities in this class are experiencing or are forecast to experience significant additional growth, including employment and retail centers. However, unlike the stereotypical “bedroom” communities of the 1950s and 1960s, they also provide a location for jobs and shopping and are evolving into self-contained communities. With rapid growth in population, jobs and land consumption, these communities face problems of traffic congestion, low density, leap-frogging sprawl, increased infrastructure construction demands, dwindling open space resources and a lack of community identity.

Key policies for these communities are Growth Management and Community Design reflecting the need to improve the form of development, reduce congestion and mitigate the negative impacts of rapid growth. A “reimaging” of the growing suburbs would establish a more concentrated development pattern, with higher densities (including clustering, mixed-use, and transit-oriented development) to provide the critical mass that can support new transit services and other mobility alternatives to the single-occupant automobile. A key approach is to focus on the quality of design and architectural character, in terms of the location and arrangement of buildings and parking areas, landscaping, signage, and other design features. Preservation and creation of a coordinated system of open space and recreational areas is also a priority goal and strategy for these communities.

**APPENDIX H: PENNSYLVANIA STATEWIDE BICYCLE AND PEDESTRIAN  
MASTER PLAN – GOALS AND OBJECTIVES**





**Goal #1 Modify the existing transportation infrastructure to encourage bicycling and walking in targeted rural, suburban and urban areas of the Commonwealth.**

**Objective # 1 a**

Investigate establishing a method of funding non-motorized transportation improvements to the existing transportation infrastructure for bicycling and walking.

***Short Term Actions***

- (1) Establish a task force to review potential funding options including dedicating funds which can be set aside to specifically fund bicycle and pedestrian improvements to the existing highway network.
- (2) Utilize the recommended Shoulder Paving initiative as an immediate means to identify candidate projects.

***Mid Term Actions***

- (3) Review the effectiveness of the program in meeting the target goals of the study and recommend changes in policies as necessary.
- (4) Establish a monitoring program to evaluate the effectiveness of the improvements in increasing usage and safety.

***Long Term Actions***

- (5) Continue to investigate the feasibility of a predictable source of funding sufficient to improve the existing infrastructure to meet the demands for bicycling and walking in targeted areas of the Commonwealth.

***Performance Measures***

- Amount of capital or resources devoted to planning, design, construction and maintenance of bicycle/pedestrian facilities.
- Number of lane miles of construction.

**Objective # 1 b**

Target bicycling and pedestrian improvements in areas where the most impact in increasing bicycling and walking and improving the safety of bicyclists and pedestrians can be accomplished.

### ***Short Term Actions***

- (1) Give District bicycle/pedestrian coordinators the responsibility for working with local and regional agencies to coordinate bicycle/pedestrian improvements.
- (2) Identify areas where there is a high incidence of bicycle/pedestrian accidents for study.
- (3) Establish process to outline how 3R and overlay projects should be evaluated in order to be bicycle/pedestrian compatible.

### ***Mid Term Actions***

- (4) Widen pavement shoulders to be bicycle compatible in 3R and over-lay projects where sufficient right of way exists and engineering permits and where feasible along pre-established corridors.
- (5) Based on funding available, develop a program for bicycle and pedestrian improvements focusing on target areas where bicycling and walking can be most effectively increased and made safer.
- (6) Work cooperatively with MPO, LDD and city transportation agencies to improve the safety and access of pedestrians on highways which pass through the central business district of urban areas. Particular attention will be given to:
  - Crosswalks, lighting, pedestrian signals and the ability of pedestrians to safely and quickly cross routes.
  - The continuity and quality of sidewalks along routes.
  - Signing and routing of pedestrians along and across routes.
  - Opportunities to make improvements in conjunction with meeting the requirements of the Americans with Disabilities Act.
- (7) Work cooperatively with MPO, LDD and city transportation agencies to review the opportunities to improve the safety and access of bicyclists and pedestrians on urban arterials. Particular attention will be given to:
  - Provision of bike lanes, wide outside lanes and alternative improvements along arterial corridors.
  - The ability of bicyclists and pedestrians to safely cross arterials and access commercial and retail outlets in the arterial corridors.

(8) Work cooperatively with MPO, LDD and city transportation agencies to review the opportunities to improve the safety and access of bicyclists and pedestrians to transit services. Particular attention will be given to:

- Ensuring light and heavy rail systems are equally accessible by foot and bicycle by providing sidewalks within 1.6 kilometers (1 mile) and bicycle facilities within 3.2 kilometers (2 miles) of stations and terminals.
- Providing secure and weather-protected bicycle parking at stations, terminals and bus stops.
- Providing secure and weather-protected bicycle parking at park and ride lots and other commuter services. Encouraging the provision of bike racks on buses and bicycle carriage on trains.

(9) Work cooperatively with MPO and LDD staff to identify opportunities to improve conditions for bicyclists in tourist areas of the state. Particular attention will be given to:

- Providing shoulders on state highways in rural tourist areas.
- Developing and signing long distance routes for bicyclists.

(10) Work cooperatively with MPO, LDD and rural communities to identify the opportunities to improve the safety and access for bicyclists and pedestrians on state highways that are the main street in rural communities. Where appropriate, consideration will be given to:

- Adding shoulders if none exist.
- Striping bicycle lanes.
- Constructing or improving sidewalks in retail areas, school zones, and residential developments.
- Providing pedestrian crosswalks and/or refuge islands.

(11) Work cooperatively with MPO, LDD and city transportation agencies to review the opportunities to improve the safety and access of bicyclists in college towns and campuses. Particular attention will be given to:

- Providing bicycle lanes and other facilities on state routes that provide access to college campuses and major educational facilities.

### ***Long Term Action***

(12) Expand program to make appropriate state transportation facilities bicycle/pedestrian compatible.

### ***Performance Measures***

- Number of projects programmed and number of kilometers (miles) that increase compatible roadways in target areas for bicycle/pedestrian improvements

**Goal #2 Plan, design, construct and maintain new and improved transportation facilities to accommodate and encourage appropriate use by bicyclists and pedestrians.**

### **Objective # 2a**

Design new construction projects with the intent they will be used by bicyclists and pedestrians and that they will share the roadway with motorists.

### ***Short Term Actions***

(1) Issue a Strike-Off letter which incorporates a minimum level of accommodation into the design guidelines used for all highways and bridges on which bicycles and / or pedestrians are legally allowed to operate. Currently Chapters 6 and 16 in PennDOT's Design Manual refer to bicycle designs. However, these guidelines need to be part of normal design practices.

### ***Mid Term Actions***

(2) Amend current Highway and Bridge Design Manuals to reflect the above standards and to include references to bicycling and walking throughout the manuals where appropriate.

(3) Adopt revised guidelines for the development of bicycle and pedestrian facilities. The guidelines will:

- incorporate the AASHTO Guide for the Development of Bicycle Facilities and the FHWA's Selecting Roadways Treatments to Accommodate Bicyclists
- be incorporated into Chapters 6 and 16 of PennDOT's highway design manual
- be submitted to the Department of Conservation and Natural Resources to ensure consistent trail design and that trails are properly integrated with the highway system

- be distributed to MPOs and LDDs to ensure consistent designs are used throughout the State.

### ***Performance Measures***

- Percent of highways that have the minimum level of accommodation, either a 4.2 meter (14 foot) right hand travel lane or a 1.2 meter (4 foot) shoulder.
- Percent of highways built since 1996 that have the minimum level of accommodation.
- Percentage of roadways with adequate sidewalks.
- Linear feet of sidewalks constructed.

### **Objective #2b**

Develop and implement a process to ensure the needs of bicyclists and pedestrians are adequately addressed in the planning and design of new and improved transportation facilities and services.

### ***Short Term Actions***

- (1) Establish an internal Task Force to review the Department's current policy on sidewalks, lighting and signals for pedestrians. This Task Force will investigate the legal and financial implications of revising current policies and recommend options for the Department to follow to provide these facilities.
- (2) Define the role of the District bicycle and pedestrian coordinators in the planning and design process.
- (3) Continue to actively encourage local, city and county governments to provide sidewalks in conjunction with all ongoing highway and development projects.
- (4) Actively participate and cooperate in the development of local, county and regional bicycle and pedestrian plans through the District bicycle and pedestrian coordinators.
- (5) Develop and / or distribute guidance on the development of bicycle and pedestrian plans to all levels of local governments.

### ***Mid Term Actions***

- (6) Develop a planning process to identify key bicycle and pedestrian corridors where more than minimum accommodation is appropriate. This planning process will include:

§ an evaluation of the existing suitability of roadways for bicycle and pedestrian travel.

§ identification of significant gaps in the existing system that will be improved.

§ the key bicycle and pedestrian target areas identified by the Bicycle and Pedestrian Master Plan.

### ***Long Term Actions***

(7) Provide facilities in key corridors which will enable pedestrians and bicyclists of all skill levels to operate. Facilities such as bike lanes, shoulders, trails in separate rights-of-way and direct, signed bicycle routes will be considered in these locations. Sidewalks will also be provided in accordance with PennDOT's adoption of policies recommended by the Task Force.

### ***Performance Measures***

§ Kilometers (miles) of continuous bicycle and pedestrian compatible roadways.

§ The percentage of new highway construction or reconstruction plans that include facilities such as bike lanes, shoulders, trails.

§ Volume count of bicyclists and pedestrians in targeted areas.

§ Additional mileage of new bicycle and pedestrian paths.

### ***Objective #2c***

Make intermodal transportation facilities, such as airports, ports, park and rides, rail and transit systems accessible to bicyclists and pedestrians.

### ***Short Term Actions***

(1) Meet the minimum guidelines for bicycle/pedestrian compatibility on highway projects serving intermodal transportation facilities. In addition, incorporate bicycle and pedestrian amenities such as secure bicycle parking, protection from the weather, seating and other facilities to accommodate people on foot, into the design of these facilities.

### ***Mid Term Actions***

(2) Provide hooks, racks or other devices to carry bicycles on transit vehicles when new projects are proposed and when eligible for funding.



### ***Long Term Actions***

(3) Develop a methodology for evaluating and providing pedestrian access for a distance of 1.6 kilometers (1 mile) from the intermodal facility and providing bicycle access for 3.2 kilometers (2 miles) from the facility.

### ***Performance Measures***

- Number of transit facilities and services that are bicycle/pedestrian friendly and contain such facilities as bike storage, shelters.
- Percentage of non-compatible infrastructure.

**Goal #3 Provide technical assistance, training and leadership to support local jurisdictions in improving conditions for bicycling and walking.**

### **Objective # 3a**

Demonstrate leadership to all levels of government in the Commonwealth by producing state-of-the-practice guidance documents, model programs and procedures, and training opportunities for state, regional, metropolitan and local engineers and planners.

### ***Short Term Actions***

(1) Distribute guidelines for designing and planning bicycle and pedestrian facilities that can be used by engineers and planners at all levels of government.

### ***Mid Term Actions***

(2) Develop training programs in the areas of bicycle and pedestrian facility planning and design to complement these guidelines.

(3) Support and/or assist other state, regional and local agencies including the Department of Conservation and Natural Resources and Department of Commerce in developing a range of model documents to assist with:

- land use and zoning regulations which can encourage bicycling and walking.
- bicycle parking ordinances.
- developer dedication agreements ensuring railroad abandonment opportunities are assessed for bicycling and walking potential.
- development, subdivision and building codes which can ensure bicycle and pedestrian friendly development.

### ***Performance Measures***

- Number of technical reports and guidelines handed out and additional versions of successful projects implemented.
- Number of training programs conducted annually which focus on guidelines for designing and planning bicycle and pedestrian facilities.
- Number of individuals receiving instruction.

### **Objective #3b**

Encourage MPOs, LDDs, cities and counties to continue to develop and implement plans for bicycle and pedestrian networks in targeted areas of the state.

### ***Mid Term Actions***

- (1) Work with MPOs and LDDs to encourage the development of local bicycle/pedestrian plans and networks as part of community planning efforts and transportation planning work programs.
- (2) Investigate establishing a fund for demonstration projects to test highway designs, planning and design techniques and other bicycle and pedestrian initiatives that are new to Pennsylvania communities, such as European-style traffic reduction (traffic calming) and integrating bikes with transit vehicles.

### ***Performance Measures***

- Number of communities which are including the specific targets of the comprehensive bicycle and pedestrian master plan in their local comprehensive plan.
- Number of communities that complete bicycle/pedestrian plans.

### **Objective #3c**

Develop an internal structure and philosophy which promotes bicycle and pedestrian planning and engineering by strengthening the working relationships between state agencies and all levels of government.

### ***Short Term Actions***

- (1) Establish an internal bicycle and pedestrian transportation steering committee to coordinate the work of districts, the Center for Program Development and Management, the Bureau of Design, the Bureau of Maintenance and Operation, the Bureau of Highway

Safety, Traffic Engineering and the Bureau of Environmental Quality, District representatives and Chief Counsel.

(2) Strengthen the role of the District bicycle and pedestrian coordinators by providing clear job descriptions, and by offering training and greater support from District Engineers.

#### ***Mid Term Action***

(3) Assume a leadership role through PennDOT's Center for Program Development and Management in promoting bicycle and pedestrian planning, particularly by establishing and promoting partnerships between PennDOT district offices, MPOs and LDDs. These partnerships will encourage and assist communities with the development of plans and programs to improve conditions for bicycling and walking.

#### ***Performance Measures***

- Number of PennDOT assisted projects for biking and walking at local level.
- Percent of District staff having received training on bicycle/pedestrian issues and guidelines.

#### **Objective #3d**

Become a central resource and clearinghouse for information on bi-cycle and pedestrian program information.

#### ***Mid Term Action***

(1) Develop and maintain a statewide directory of organizations and individuals involved in bicycle and pedestrian programming, planning and engineering for use at all levels of government.

#### ***Long Term Action***

(2) Work with user groups and the private sector to conduct an annual statewide conference and occasional regional symposiums to assist local governments with bicycle and pedestrian planning, engineering and program activities.

#### ***Performance Measure***

- Number of resources or publications which include substantial information on bicycle /pedestrian issues.

**Goal #4 Implement education and enforcement programs to reduce crashes involving bicyclists and pedestrians by at least 10 percent over the next 20 years and to provide a better sense of safety and security for bicyclists and pedestrians.**

**Objective #4a**

Coordinate and oversee a wide range of education and enforcement activities such as driver licensing and training, bicycle and pedestrian safety education, traffic law enforcement and the provision of public service information, to provide consistent safety messages and training to all road users.

***Short Term Actions***

- (1) Establish an interagency and non-governmental Task Force on bicycle and pedestrian education and enforcement. Membership will include PennDOT staff, Deputy of Safety Administration, representatives of the Legislature, Governor's Office, Departments of Health, Education, and Conservation and Natural Resources, the American Automobile Association, American Academy of Pediatrics, law enforcement agencies, consumer advocates, the bi-cycle and pedestrian community and others.
- (2) Constitute and work, through the Task Force, with the State Bicycle Advisory Committee and submit an annual report to the Governor at the end of each state fiscal year. The initial goal of this task force will be to determine the responsibilities of the various agencies and identify funding sources.

***Performance Measures***

- Designation of Task Force.
- Number of organizations, agencies or individuals receiving basic bike / pedestrian planning material (directors of groups and individuals involved in bike / pedestrian planning, design guidelines).

**Objective #4b**

Improve bicycle handling skills and teach safer walking strategies through education and training opportunities.

***Short Term Actions***

- (1) Review appropriate curriculum, through the Educational Task Force, dealing with bicycle and pedestrian safety, including those from the health, safety, wellness, physical

education and life skills components of the curriculum, to ensure the bicycle and pedestrian information is consistent and addresses the primary causes of crashes.

(2) Review by the Education Task Force of a sample of materials currently being used for corporate wellness programs and employer-based trip reduction programs throughout the state.

### ***Mid Term Actions***

(3) Develop and make available, through the Educational Task Force, sample materials which include safety messages and promotional ideas relating to bicycling and walking, such as the importance of riding with traffic and using lights at night. As the materials used in these programs are aimed primarily at motorists, they represent a unique opportunity to teach motorists how to share the road safely with bicyclists and pedestrians.

(4) Identify, through the Educational Task Force, the people who are currently delivering bicycle and pedestrian safety instruction to children and review the training they are given prior to performing this important task. Recommendations will be made to ensure instructors have the most current information on bicycle and pedestrian safety, and that they are delivering consistent safety messages.

(5) Develop a program to train American Academy of Pediatrics project staff and local Comprehensive Highway Safety Coordinators in each county within the next 18 months. The program will enable them to train teachers to deliver comprehensive bicycle and pedestrian safety education to their students.

### ***Long Term Actions***

(6) Identify, through the Task Force, appropriate delivery mechanisms both through the school system and outside the school system. The Texas bicycle education program, recently created by the state legislature, is an innovative approach which ensures every child in the state has access to bicycle safety education and should be used as a model.

(7) In addition to teaching basic bicycle handling skills, teach children the importance of riding with traffic, following traffic control devices and entering traffic in a safe manner. The program can also be used to introduce children to the health and other benefits of bicycling and walking.

### ***Performance Measures***

- Number of public awareness programs geared toward children, motorists, etc.
- Amount of funds directed toward education each year.

### **Objective #4c**

The training of drivers should be expanded to promote sharing the road with bicyclists and pedestrians.

### ***Short Term Actions***

(1) Assess, through the Education Task Force, the attitude of motorists and bicyclists towards bicycling and walking and review their knowledge of bicycle and pedestrian related laws. The results of the survey will help identify goals for motorist education and information. In particular, the survey will be useful in determining how and why motorists react to the presence of bicyclists and pedestrians.

(2) Review and prepare amendments to all driver training materials to ensure adequate coverage of bicycle and pedestrian safety issues through the Task Force. For example, specific questions and case studies involving bicyclist and pedestrians will be included in the driving test and in driving classes for offenders.

### ***Mid Term Actions***

(3) Develop a specific bicycle and pedestrian module for driver's instructors in their classes in conjunction with the Safety Administration Deputate as the lead agency. The module will include strategies for sharing the transportation system safely with bicyclists and pedestrians, relevant exam questions and other technical support material.

(4) Review, through the Education Task Force, the certification and training program for driving instructors and examiners to ensure they are trained to teach appropriate strategies for the shared use of the transportation system by motorists, pedestrians and bicyclists. A continuing education element will be developed to ensure veteran instructors receive this training.

### ***Performance Measure***

- Percentage of licensed motorists receiving bicycle/pedestrian training.

#### **Objective #4d**

Improve enforcement of laws to prevent dangerous and illegal behavior by motorists, bicyclists and pedestrians.

#### ***Mid Term Actions***

(1) Identify and develop, through the Educational Task Force, enforcement strategies and programs for bicyclists aimed at:

- wrong-way riding.
- riding out into traffic.
- ignoring traffic control devices.
- riding at night without lights.

(2) Identify and develop, through the Task Force, enforcement strategies to counteract actions by motorists that cause bicycle and pedestrian crashes and deter people from bicycling and walking, including:

- improper turning movements.
- tailgating.
- passing too close.
- excessive speed.
- ignoring traffic control devices.
- failure to yield to pedestrians at crosswalks.

#### ***Performance Measures***

- Number of citations issued to bicyclists/pedestrians.
- Number of citations issued to motorists.

**Goal #5 Promote acceptance and welcome bicyclists and pedestrians as users of the transportation system.**

#### **Objective # 5a**

Establish policies and programs which will encourage bicycling and walking throughout the Commonwealth and raise the profile and awareness of the benefits of these two modes of transportation.



### ***Short Term Action***

(1) Encourage state and key officials representing the state; i.e. the Governor, Secretary of Transportation and Deputy Secretaries, to increase the profile given to bicycling and walking by including references to the two modes in speeches, official publications and public appearances. Bicycling and walking can benefit substantially from being depicted as every-day, normal activities by opinion leaders such as these. Issue regular news stories and information about bicycling and walking from the Communications Office of PennDOT and other agencies.

### ***Mid Term Actions***

(2) Review official state publications developed for the motoring public, such as highway maps, brochures, tourist information, roadside information and safety literature and ensure that they include one or more of the following types of information about bicycling and walking:

- encouragement for motorists to share the road with bicyclists and pedestrians.
- reminder of the legal responsibilities motorists have towards pedestrians.
- information about the opportunities for bicycling and walking.
- "how to" information of safe walking and bicycling strategies.

(3) Work with the state bicycle advisory committee to review and examine the state's vehicle code in response to on-going needs and current issues.

(4) Encourage police departments to operate bicycle-mounted police patrols. In communities across the country Police on Bikes programs have been hugely successful in fighting street crime and improving the public image and profile of bicycling as a mainstream activity.

### ***Performance Measures***

- Number of police on bicycle programs.
- Number of official publications about bicycling and walking.

### **Objective #5b**

Develop programs to increase awareness of benefits by bicycling and walking.

### ***Mid Term Actions***

(1) Work with the Bicycle Federation of Pennsylvania, Rails-to-Trails Conservancy and other statewide and regional interest groups to develop and pro-mote bicycling and walking action plans. The action plans would highlight, and provide information on how to implement, strategies for successful bicycle and pedestrian programs at the local level. In particular, emphasis will be given to getting local advisory committees and bicycle coordinator positions in place.

(2) Encourage bicycle and pedestrian user groups to take the lead in promoting bicycling and walking through events, publicity, public service announcements and other promotional activities. Where appropriate, PennDOT, other state agencies, MPOs and LDDs will support these activities with resources and publicity.

### ***Performance Measures***

- Number of new bicycle and pedestrian programs promoting increased participation.
- Number of public awareness programs.

### **Objective #5c**

Become a model employer for bicyclists and pedestrians.

### ***Short Term Action***

(1) Conduct a bicycle and walk to work day in the state complex.

### ***Midterm Actions***

(2) Implement a Cooperative Commuter program to:

- encourage employees to bicycle and walk to work.
- provide sample materials and information that other employers can use to promote bicycling and walking.
- ensure bicycling and walking are promoted as available options for reducing motor vehicle trips.

(3) Increase the level of bicycle and pedestrian commuting to their offices through a combination of incentive programs, provision of parking and changing facilities, and promotions - such as bike to work events.

### ***Performance Measures***

- Number of PennDOT staff or offices initiating programs to increase bicycle and pedestrian usage.
- Number of employees commuting to work by bicycle or walking.

**APPENDIX I: TRANSPORTATION ENHANCEMENTS, HOME TOWN STREETS, &  
SAFE ROUTES TO SCHOOL PROGRAM DESCRIPTIONS**



The federally-funded **Pennsylvania Transportation Enhancements, Home Town Streets and Safe Routes to School programs** are intended to improve the quality of life in our communities. The Pennsylvania Department of Transportation (PennDOT) recognizes the streets that run through the centers of our cities and towns as vital connections. Sprucing up these streets will bring people back to our town centers and promote healthy living. PennDOT can also contribute to the safety of our children by making improvements to the routes children take to school. This program has two primary objectives:

- To encourage the reinvestment in and redevelopment of our downtowns; and
- To establish, where feasible, safe walking routes for our children to commute to school and to promote healthy living

### **Eligible Activities**

**Transportation Enhancements.** Transportation Enhancements (TE) is a set-aside of Federal highway and transit funds, mandated by Congress in the Safe, Accountable, Flexible, and Efficient Transportation Equity Act – a Legacy for Users (SAFETEA – LU) for the funding of "non-traditional" projects designed to enhance the transportation experience, to mitigate the impacts of transportation facilities on communities and the environment, and to enhance community character through transportation-related improvements. Typical TE projects include bicycle and pedestrian trails, restoration of historic train stations, downtown streetscape improvements, roadside beautification, and preservation of scenic vistas.

**Home Town Streets.** The Home Town Streets program targets funds to a variety of streetscape improvements that are vital to reestablishing our downtown and commercial centers. These projects will include activities undertaken within a defined "downtown" area that collectively enhance that environment and promote positive interactions with people in the area. Projects may include sidewalk improvements, planters, benches, street lighting, pedestrian crossings, transit bus shelters, traffic calming, bicycle amenities, kiosks, signage and other visual elements. This program will not fund costs related to buildings or their facades or personnel costs related to a Main Street manager.

**Safe Routes to School.** This program is designed to work with both school districts and pedestrian and bicycle safety advocates to make physical improvements that promote safe walking and biking passages to our schools. Collectively, these efforts would save on school busing costs and promote a healthy lifestyle for our children. In addition, some funding may be used for pedestrian education efforts. Examples of these types of improvements include: sidewalks, crosswalks, bike lanes or trails, traffic diversion improvements, curb extensions, traffic circles and raised median islands.

## **Funding**

During the project selection round completed in 2006, 12 projects were selected from 88 applicants competing for \$12 million in funding regionwide. The total amount requested from all applicants was \$74 million. Funding for future rounds has yet to be determined.

Funding for this program from PennDOT will not be grant money. PennDOT will reimburse project sponsors for eligible activities upon receipt of invoices for services performed.

Selection preference have be given to projects that are physically ready to immediately advance to the construction phase or that are located within areas with approved funding under the Main Street or Elm Street programs sponsored by the Pennsylvania Department of Conservation and Natural Resources.

## **Application Process**

The second round of application and project selection for the programs under the previous federal surface transportation bill, TEA-21, was completed in January 2006. The schedule for future rounds under SAFETEA-LU, and the amount of funding to be made available to the DVRPC region, has yet to be determined. It is likely that the programs will not open again for applications until 2007 or later. As soon as the application schedule is set by PennDOT, DVRPC will send notice by mail to all municipal managers and school district superintendents throughout Bucks, Chester, Delaware and Montgomery counties and the City of Philadelphia, and will announce the schedule on its Web site, [www.DVRPC.org](http://www.DVRPC.org).



The DVRPC's member governments, through the Regional Transportation Committee's Pennsylvania subcommittee, the Regional Citizens Committee and technical assistance by staff, jointly make the selection and recommendation of the projects constrained to the available funds. The final list of projects to be funded is submitted for the approval of the DVRPC Board and the Pennsylvania State Transportation Commission.



## **APPENDIX J: DVRPC COMPETITIVE CMAQ PROGRAM DESCRIPTION**



### **DVRPC's Competitive Congestion Mitigation and Air Quality Improvement (CMAQ)**

**Program** seeks transportation-related projects that can help the region reduce emissions from highway sources and meet National Clean Air Act standards. Among the recently approved projects are five freight projects, which encourage reduced truck emissions and promote rail freight as an alternative to long-haul trucks. Additional air quality initiatives include the creation of bike and hike trails and efforts to increase ridership on public transportation. Other projects focus on traffic control, such as coordination of traffic signals in several boroughs in the region.

As of the publication of this report, DVRPC is faced with unanswered questions concerning future CMAQ funding levels available to the region from Pennsylvania and New Jersey, respectively, and the amount to set aside for competitive project selection. **Due to these uncertainties, DVRPC has decided to hold off on the next competition until we know more. The soonest another round could be held might be in the summer of 2007.**

When a new round of competition for CMAQ funds begins, DVRPC solicits applications from public agencies, private firms and non-profit entities. DVRPC's Regional Transportation Committee (RTC) forms a special CMAQ sub-committee to evaluate the applications that are submitted by a wide array of both public and private sector groups. The subcommittee is comprised of county, state and transit operator planners, and citizen representatives of environmental, biking, transit, and business interests.

Past selection rounds have seen as many as 100 applications submitted for funding. Knowing the competition will be tight, the subcommittee applies a fairly strict evaluation procedure. Each project is evaluated to determine its potential for reducing harmful emissions in the region using software tools provided by PennDOT. Candidate projects are ranked based on their emissions reduction potential and other criteria before recommendations are made to the DVRPC Board.

The outline below summarizes the CMAQ project evaluation process last used by the CMAQ Subcommittee. The process has some formal measurement structure since the CMAQ Program is primarily based on a measurable performance indicator, reduction in emissions. It was also recognized that there are other factors that contribute to the quality of a project, and that these factors are largely subjective.

## **A. General Process**

1. Perform initial screening to weed out ineligible applications
2. Score and rank eligible projects based on **objective / measurable criteria** (see B. below)
3. Hold an Information Session where members have an opportunity to speak to or inquire about projects or project sponsors.
4. Adjust rank order of projects based on consideration of **subjective criteria** (see C. below) and other pertinent factors

## **B. Objective / Measurable Criteria**

1. Emissions reduction
2. Cost effectiveness

**C. Subjective Criteria** - The following have been identified by the Subcommittee as the top six subjective criteria.

### **1. Feasibility of Implementation / Project Readiness**

Ease of Implementation: Highest rated projects are those that should proceed smoothly through all phases, based on regional or national experience for this type of project or for the particular circumstances. (e.g. consider are how far advanced the project is, such as whether design or environmental clearance is complete or will be accomplished with relative ease.)

### **2. Likelihood of Implementation / Sponsor Readiness**

Commitment to Implement: A proposal can only be effective if the agencies responsible for permitting, implementing, operating and maintaining the project have agreed to advance it.

Highest rated projects are those where municipal, state and federal permits and approvals are in hand or nearing completion, as well as commitments to implement, operate and maintain (e.g., consider the ability or history of the project sponsor to deliver the project.).

### **3. Timely / Long Term Viability of Emissions Benefit**

The value of a project to help the region meet and maintain the air quality standards depends on when the benefits begin and whether those benefits can be sustained over time. Highest rated projects deliver benefits immediately and they will likely be sustained over time.

#### **4. Link or Relationship to Other Projects**

Highest rated projects increase the utility of other projects, without being dependent on them.

#### **5. Consistency with Other Plans and Goals**

Highest rated projects are not only consistent with existing plans and goals of the region and the locale, but directly implement them.

#### **6. “Bang for the Buck”**

This competitive program is a very limited resource. Given the cost of any given project, evaluate the level of impact. (e.g., consider whether the project benefits will effectively impact a wide geographical area or a large population, or remedy a long existing or particularly difficult problem, or whether the project efficiently uses a limited amount of funds.)





## **NORTHAMPTON TOWNSHIP SIDEWALK PRIORITIZATION STUDY**

**Publication No.:** 05036

**Date Published:** December 2005

**Geographic Area Covered:** Northampton Township, Bucks County

**Key Words:** pedestrian, facilities, sidewalks, geographic information system, prioritization, Americans with Disabilities Act, Safe Routes to School, Northampton, Bucks, Richboro, PennDOT

### **ABSTRACT**

The Northampton Township Sidewalk Prioritization Study documents the methodology and results of a process of prioritizing municipal sidewalk needs through GIS analysis. Using a methodology adapted from guidance found in the *Pennsylvania State Bicycle and Pedestrian Master Plan* and AASHTO, street segments are scored according to their functional class, pedestrian trip production density, proximity to pedestrian trip attractions, and proximity to existing sidewalks (mapped from municipal and PennDOT data). Results are presented in both map and tabular formats.

---

Delaware Valley Regional Planning Commission  
American College of Physicians Building  
190 North Independence Mall West  
Philadelphia, PA 19106

Phone: 215-592-1800  
Fax: 215-592-9125  
Internet: [www.dvrpc.org](http://www.dvrpc.org)

Staff contact: John Madera, PP, AICP  
Direct phone: 215-238-2854  
E-mail: [jmadera@dvrpc.org](mailto:jmadera@dvrpc.org)

**NORTHAMPTON TOWNSHIP SIDEWALK PRIORITIZATION STUDY**

**Publication No.:** 05036

**Date Published:** December 2005

**Geographic Area Covered:** Northampton Township, Bucks County

**Key Words:** pedestrian, facilities, sidewalks, geographic information system, prioritization, Americans with Disabilities Act, Safe Routes to School, Northampton, Bucks, Richboro, PennDOT

**ABSTRACT**

The Northampton Township Sidewalk Prioritization Study documents the methodology and results of a process of prioritizing municipal sidewalk needs through GIS analysis. Using a methodology adapted from guidance found in the *Pennsylvania State Bicycle and Pedestrian Master Plan* and AASHTO, street segments are scored according to their functional class, pedestrian trip production density, proximity to pedestrian trip attractions, and proximity to existing sidewalks (mapped from municipal and PennDOT data). Results are presented in both map and tabular formats.

---

Delaware Valley Regional Planning Commission  
American College of Physicians Building  
190 North Independence Mall West  
Philadelphia, PA 19106

Phone: 215-592-1800  
Fax: 215-592-9125  
Internet: [www.dvrpc.org](http://www.dvrpc.org)

Staff contact: John Madera, PP, AICP  
Direct phone: 215-238-2854  
E-mail: [jmadera@dvrpc.org](mailto:jmadera@dvrpc.org)