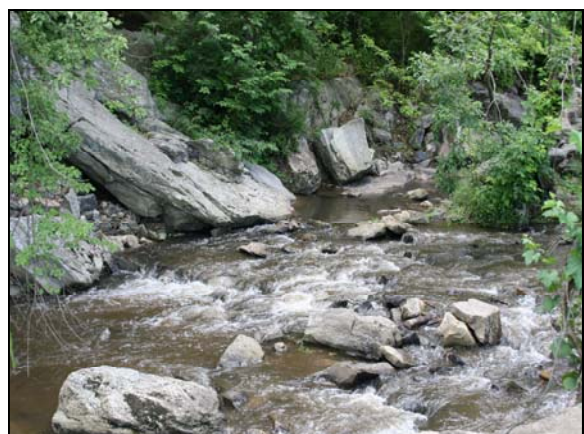


HOLLAND VILLAGE MASTER PLAN

Northampton Township, Pennsylvania

May 2014



HOLLAND VILLAGE MASTER PLAN

May 2014

Prepared by:

Bucks County Planning Commission
Neshaminy Manor Center
1260 Almshouse Road
Doylestown, PA 18901
Phone: 215-345-3400
bcpc@co.bucks.pa.us

HOLLAND VILLAGE MASTER PLAN

BOARD OF SUPERVISORS

Eileen Silver, Chairman
Barry Moore, Vice Chairman
Larry Weinstein, Secretary
Dr. Kimberly Rose, Treasurer
George Komelasky

PLANNING COMMISSION

Art Friedman, Chairman
Steve Saddlemire, Vice-Chairman
Ed Ingle, Secretary
Gail Foley
Steve Saddlemire
Evan Stone
Steve Tillery

Robert M. Pellegrino, Township Manager
Michael T. Solomon, Director of Planning and Zoning

NORTHAMPTON TOWNSHIP ECONOMIC DEVELOPMENT CORPORATION

PLANNING CONSULTANT

Bucks County Planning Commission

1260 Almshouse Road
Doylestown, PA 18901
Phone: 215-345-3400
Fax: 215-345-3886
www.BucksCounty.org

TABLE OF CONTENTS

Executive Summary	1
Setting and History	9
Plan Purpose	10
Plan Process and Public Outreach.....	10
Chapter 1	
Land Use and Natural Resources	11
General Conditions.....	11
Village Function	11
Previous Initiatives.....	12
Holland Street Light Implementation Plan	12
Churchville Nature Preserve Master Plan and Watershed Conservation Plan (2006)	12
Churchville to Playwicki: Environmental Education, Recreation and Green Link Plan (2008)	12
Bellwood Preserve North Master Site Plan (2012).....	13
Regional Plans	14
Bucks County Open Space and Greenways Plan (2011).....	14
Bucks County Comprehensive Plan (2011).....	15
Land Use.....	16
Zoning.....	16
Historic Resources	19
Natural Resources.....	21
Topography and Geology.....	21
Soils.....	22
Vegetation.....	22
Wildlife	22
Water Resources	23
Floodplains.....	26
Land Use Analysis of Planning Areas	26
Planning Area 1: Composition and Physical Conditions	27
Planning Area 2: Composition and Physical Conditions	28
Planning Area 3: Composition and Physical Conditions	30
Areas of Influence	31
Chapter 2	
Transportation	35
Traffic Counts	36
Previous Studies	38
Northampton Township Sidewalk Prioritization Study, 2005	38
Buck Road and Holland Road Feasibility Study, 2006	39
Congestion and Crash Site Analysis Program, 2009	40
Level of Service.....	40
Crash Data.....	41
Recommendations.....	42
Congestion and Crash Site Analysis Program Conclusions.....	45
Holland Area Traffic Simulation, 2012	45
Alternative A: DVRPC Improvements.....	46
Alternative B: Improvements to the Buck Road/Old Bristol Road Intersection.....	47
Alternative C: Roundabout at the Buck Road/Old Bristol Road Intersection	49
Alternative D: One-way Operation on Buck Road, north of the Holland Road Intersection.....	49
Alternative E: Holland Road Realignment.....	49

Chapter 2	Transportation (continued)	
	Conclusions of Traffic Modeling Simulation.....	50
	Buck Road Bridge.....	50
	DVRPC Transportation Improvement Program.....	54
	Public Transportation.....	55
	Pedestrians and Bicyclists.....	56
Chapter 3	Integrating Land Use and Transportation	59
	Alternative Road and Intersection Layout and Improvements.....	60
	Planning Area 1: Buck Road/Holland Road Intersection Realignment.....	60
	Planning Area 2: Buck Road/Holland Road Intersection Realignment Enhancement.....	64
	Access Management.....	67
	Planning Area 2: Mill Race Inn Parking Lot.....	68
	Traffic Calming.....	70
	Planning Area 1: Rocksville and Holland Road Closures.....	70
	Connectivity.....	70
	Streetscape Improvements.....	71
	Planning Area 3: Streetscape Improvements.....	72
	Planning Area 3: Gateways.....	72
	Signage.....	74
Chapter 4	Planning for Economic Development	77
	Market Analysis.....	77
	Market Boundaries.....	77
	Market Demographics.....	78
	Retail Goods and Expenditures.....	79
	Retail Marketplace Profile.....	79
	Business Survey Summary.....	80
	Town Hall Meeting.....	81
	Development Preference Exercise.....	81
	Survey Summary.....	82
	Marketing and Coordination.....	83
	Strategies for Economic Development.....	83
Chapter 5	Putting It All Together: A Master Plan for Holland	87
	Vision and Principles.....	87
	Vision Statement.....	87
	Principles.....	87
	A Master Plan for Holland.....	89
Appendices		
	Appendix A: Funding and Assistance.....	91
	Transportation and Community Development Initiative.....	91
	Automated Red Light Enforcement (ARLE) Program.....	91
	Home Town Streets Program.....	92
	Transportation Alternatives Program.....	92
	Congestion Mitigation and Air Quality Program.....	93
	DVRPC Transportation Improvement Program.....	93
	Building Blocks for Sustainable Communities Program.....	93
	Smart Growth Implementation Assistance (SGIA).....	94
	Community Development Block Grant (CDBG) Program: Entitlement Communities.....	95
	Municipal Assistance Program (MAP) (Part A): Shared Service and Community Planning Activities.....	95
	Keystone Communities Program.....	96
	Tax Increment Financing Guarantee Program.....	97
	Redevelopment Assistance Capital Program.....	98

Appendices (continued)

Appendix B: Survey Results..... 99
 Holland Village Master Plan: Business Survey Summary..... 99
 Comments 104
 Holland Village Master Plan: Town Hall Meeting Survey Summary 107
 Comments 110
 Holland Village Town Hall Meeting 115
 Development Preference Exercise..... 115

Appendix C: Market Analysis 117
 Market Boundaries 117
 Retail Goods and Expenditures..... 122
 Retail Marketplace Profile..... 125

Appendix D: Holland Street Light Implementation Plan after pg. 128

List of Tables

Table 1 Holland Land Use..... 16
 Table 2 District Uses and Requirements..... 17
 Table 3 Locally Significant Historic Resources..... 19
 Table 4 Holland Area Roads, Traffic Volumes..... 36
 Table 5 Holland Area Roads, Level of Service 41

List of Figures

Figure 1 Study Area after pg. 12
 Figure 2 Land Use..... after pg. 16
 Figure 3 Study Area Zoning and Parcel Ownership..... after pg. 16
 Figure 4 Floodplain and Topography after pg. 26
 Figure 5 Planning Areas..... 27
 Figure 6 Functional Classification and Traffic Counts 37
 Figure 7 Rank of Road Segments..... 39
 Figure 8 Proposed Improvement to Buck Road and Old Bristol Road Intersection..... 44
 Figure 9 McMahon Holland Area Traffic Simulation Alternative B: AM Peak 48
 Figure 10 Overhead View of Mill Creek Bridge..... 53
 Figure 11 Mill Creek Bridge Reconstruction Ultimate Improvement, Aerial 54
 Figure 12 Public Transportation 56
 Figure 13 Planning Areas..... 59
 Figure 14 Planning Area 1: Potential Redevelopment of Wright Site:
 Alternative 1: Townhouses with Park 61
 Figure 15 Planning Area 1: Potential Redevelopment of Wright Site: Alternative 2: Townhouses 62
 Figure 16 Planning Area 1: Potential Redevelopment of Wright Site:
 Alternative 3: Commercial Development 63
 Figure 17 Planning Area 1: Potential Redevelopment of Wright Site:
 Alternative 4: Village Style Commercial with Residential 64
 Figure 18 Planning Area 2: Existing Holland Shopping Center, Aerial 66
 Figure 19 Planning Area 2: Holland Shopping Center Potential Redevelopment, Aerial..... 66
 Figure 20 Planning Area 2: Holland Shopping Center Potential Redevelopment with
 Gas Station, Aerial 67
 Figure 21 Planning Area 2: Mill Race Inn Existing Conditions, Aerial..... 69
 Figure 22 Planning Area 2: Mill Race Inn Potential Parking Lot Redevelopment, Aerial 69
 Figure 23 Planning Area 3: Streetscape and Connectivity Improvements..... 72
 Figure 24 Planning Area 3: Gateway Potential 73
 Figure 25 Holland Village 5-, 10-, and 15-Minute Drive Time Market Areas 78
 Figure 26 Holland Village Master Plan, Implementation, Planning Area 1..... after pg. 90
 Figure 27 Holland Village Master Plan, Implementation, Planning Area 2..... after pg. 90
 Figure 28 Holland Village Master Plan, Implementation, Planning Area 3..... after pg. 90

List of Figures (continued)

Figure 29	Holland Village 5-, 10-, and 15-Minute Drive Time Market Areas	117
Figure 30	Median Household Income by Income Bracket, 5-Minute Drive	120
Figure 31	Population Percentage by Age, 5-minute Drive	121

EXECUTIVE SUMMARY

The *Holland Village Master Plan* is intended to serve as the guiding document for the future of Holland. Past studies and initiatives have focused on aspects of the village or a greater regional setting, but no one plan has focused solely on revitalizing Holland itself, taking into account its history, economic role, and setting in the natural environment. This plan ties together the key recommendations of previous initiatives and explores actions to be taken to strengthen the village's transportation system, physical appearance, and economic structure.

LOCATION AND STUDY AREA CONDITIONS

The village of Holland is located at the south corner of Northampton Township, Bucks County. Holland is centered on Mill Creek, which bisects the village in a west to east direction and eventually empties into the Neshaminy Creek two miles downstream at Playwicki Park. While Holland can be classified as a commercial village, it is somewhat unique in that the original settlement was commercial in character.

The village's roadways are fronted mostly by commercial properties. This is significant in that commercial property is much more given to change than residential property. Investments in property improvements on just a few commercial properties may provide substantial improvements in the village's commercial appeal.

There are numerous natural resources in the village area that have a role and function in maintaining Holland's character and potential. The steeply sloping and rocky Mill Creek stream valley has been particularly important to the development of Holland in that these resources have kept the village distinct from the surrounding area, but have also limited some development opportunities. The Mill Creek valley, Churchville Nature Preserve, and Bellwood Preserve provide a refuge for native flora and fauna. The study area has several water resources located both within the village of Holland and adjacent areas, including the Churchville Reservoir, Ironworks Creek, and Mill Creek. Recreational opportunities are currently limited in adjacent natural resource areas.

Areas of Influence

Several large properties in and around the village will have direct influence on its future. These properties include:

Holland Preserve—Holland Preserve is an age-qualified community just off the west side of Buck Road, adjacent to the north side of the railroad tracks.

Aqua PA, Churchville Reservoir Property—The Churchville Reservoir is part of the larger 653-acre Churchville Nature Preserve that adjoins the village of Holland. The purpose of the reservoir is to allow for releases to increase flows to the Neshaminy Creek and permit adequate operation of Aqua’s sewage disposal facility.

Platt Property—This 13.5-acre large residential property sits just west of where the Ironworks Creek empties into Mill Creek.

Heritage Conservancy, Bellwood Preserve North—Bellwood Preserve North is a 66-acre property located north of the intersection of Bristol Road and the West Trenton Cutoff railroad line, with frontage along Buck Road north of Mill Creek.

Northampton Township Open Space Property—This 4.7-acre open space township-owned property along Chinquapin Road appears to contain a wetland.

Holland Residential Properties—These single-family home properties abut the west side of Holland Road between Rocksville Road and the Holland Shopping Center.

Wright Property—The 5.4-acre Wright property is located between Rocksville, Buck, and Holland roads.

TRANSPORTATION

Integrated transportation, land use, and circulation systems that are well-designed help preserve a sense of community, advance economic development goals, and preserve both public and private infrastructure investments.

The Holland study area is traversed by Buck Road (Route 532) and short sections of Rocksville Road, Chinquapin Road, and Old Bristol Road. Buck Road runs in a north-south direction from Rocksville Road to the underpass of the West Trenton Cutoff freight rail line for a distance of approximately sixth tenths of a mile and is classified as a Major Arterial according to the street classifications found within the township subdivision and land development ordinance. The intersection of Buck Road and Old Bristol Road is signalized. The width of Buck Road is two lanes, with additional turning lanes at its intersection with Holland Road and Old Bristol Road and at the entrances of several shopping and business centers. On a regional level, Buck Road connects with several key roads, including Roosevelt Boulevard (U.S. Route 1), Street Road (Route 132), and the Newtown Bypass (Route 332). Overall, cartway conditions are good.

Most of the intersections within the study area function acceptably during the morning and evening peak-hours. However, certain “legs” of some of the intersections function poorly. Specifically, the southbound leg of Buck Road at the Holland Road intersection and the northbound leg of Buck Road at Old Bristol Road function at level or service “D” or less in the morning peak-hour. In

addition, the southbound leg of Buck Road at the Holland Road intersection also performs poorly in the evening peak-hour.

As a precursor to the *Holland Village Master Plan*, Northampton Township contracted with McMahon Associates, Inc., to conduct traffic modeling for the roadway network in Holland. After calibrating the model to existing conditions, potential alternative traffic improvements were modeled to observe the impact of those improvements on the overall traffic operations. Based on a review of the improvements listed in previous studies, as well as through discussions with Township staff and other representatives, several improvement scenarios were considered:

Based upon existing conditions of the study area, high delays will continue and most likely increase along Buck Road as the area develops and redevelops. Each improvement alternative will provide varying levels of traffic improvements in Holland. However, the traffic modeling simulation proves that any improvements to the roadway network must begin at the Buck Road/Old Bristol Road intersection. The modeling proves that this intersection is the main choke point for traffic in the study area. Because of this, any improvements that don't include improving the Buck Road/Old Bristol Road intersection first, may only have minimal effect in reducing traffic congestion.

The modeling simulation demonstrates that larger-scale improvements provide the most congestion relief for the study area. However, there are significant cost and right-of-way impacts associated with each of these alternatives. Considering the current economic conditions and the lack of state and federal funds available to implement these improvements, it is highly unlikely that all of these recommended improvements will be constructed in the near future. Therefore, these improvements should be considered as long-term solutions to the congestion problems currently experienced in the corridor.

INTEGRATING LAND USE AND TRANSPORTATION

Improving the linkage between land use and transportation planning is essential for the future of Holland. This plan presents concept plans implementing techniques and improvements as they apply to identified planning areas (see Figure 13 on page 59) and addresses the challenges of Holland's land use and transportation environment through recommended design and planning strategies. Recommended strategies for planning areas include:

- **Alternative road and intersection layouts and improvements**—One of the alternative transportation improvements investigates the scenario in which the existing intersection of Buck Road and Holland Road would be abandoned and a new intersection would be built between Rocksville Road and the current Buck Road and Holland Road intersection. Relocating this intersection northward would allow for more distance between the Holland Road intersection and Old Bristol Road which would allow for better traffic flow through

the village. This alternative, shown in Figures 14, 15, 16, and 17 is based on the expectation that the Wright Property will likely be developed at some point in the future.

If Holland Road was realigned, the portion of Rocksville Road from Buck Road to Hope Road could be abandoned. Through this realignment scenario, two tracts of land would be created by the realignment of Holland Road. The upper portion could be developed as a park, which would act as a transitional area from the current residential development north of Rocksville Road to the village of Holland. The tract below the newly created roadway could be then developed as residential units or commercial buildings. New residential development could be a medium density multifamily use, such as townhouses. Another potential scenario would be combination of both residential and commercial uses.

- **Access management**—The basic approach of access management is to minimize the number of conflict points along these roads and to provide safe and efficient access to properties along roads. Access management includes such techniques as shared driveways and parking, providing access to secondary roadways, driveway spacing, planted median strips, protected left turn lanes, and any other appropriate access control measures.

The plan proposes shared parking at the Mill Race Inn site with a shared driveway providing ingress and egress at a traffic signal along Buck Road (see Figure 22). Also proposed is the addition of curbing with planted islands to denote the location of the driveways, which would improve safety for vehicles entering and exiting the site.

- **Traffic calming**—Traffic calming measures are used to address speeding and high cut-through traffic volumes on neighborhood streets. These issues can create an atmosphere in which non-motorists are intimidated, or even endangered by motorized traffic. By addressing high speeds and cut-through volumes, traffic calming can increase both the real and perceived safety of pedestrians and bicyclists, and improve the quality of life within the neighborhood. Figure 26 shows a partial closure of Rocksville Road to prevent vehicles from using Hope Road as a cut-through as a potential traffic calming measure.
- **Connectivity**—Any future roadway improvements and development in the village should include pedestrian and bicycle connections, including sidewalks, crosswalks, and bike trails. By striving to provide better connectivity in the village, people would have the option of walking or biking to businesses. This would reduce congestion in the village since fewer vehicles would be used for these trips.

Sidewalks and crosswalks are proposed throughout Holland to improve pedestrian circulation and safety. The *Bucks County Open Space and Greenways Plan* proposes a trail for the

Mill-Neshaminy-Core-Dyers Creeks Greenway. The potential pathway through the village is shown on Figure 27 in Chapter 5.

- **Street improvements**—Streetscape improvements are an integral part of village revitalization. Streetscape improvements combine roadways with sidewalks, signage, village-style lighting, landscaping and other elements in the public right-of-way to create public space for pedestrians, residents, and traffic.

The plan proposes village-scale streetscape improvements for Holland. The plan also recommends that the existing shoulder be converted to a bike path, slowing traffic and permitting bicyclists to comfortably travel through the south part of the village.

- **Improved signage**—Signage is important for any business so that location and services are clear to motorists and pedestrians. However, signage in the village has an inconsistent design that is often not compatible with a village setting. The design, material, color, size, location, and illumination of the sign shall be selected considering the architecture of the buildings and streetscape characteristics.

The *Holland Village Master Plan* recommends the zoning ordinance be revised to limit signage to a more pedestrian scale. This can be done by prohibiting free-standing signs and would emphasize a smaller scale, village oriented design. In addition, the plan recommends the ordinance more clearly require indirect illumination of business signage.

PLANNING FOR ECONOMIC DEVELOPMENT

Economic development is the process of improving a community's well-being through job creation, business growth, and income growth, as well as through improvements to the community that enhance quality of life and strengthen the economy. Holland's success as an economic center has been limited by:

- A mismatch between goods and services the village provides and the market it serves;
- A lack of coordinated public investment in the village's infrastructure and failure to understand the local business environment; and
- Longstanding quality of life issues that need to be addressed to make the village a more desirable area to visit and shop.

The market study and survey results offer a way forward in mapping out a path toward economic revitalization. Successful economic development requires a multi-pronged, nuanced approach that understands the local market and business environment, engages business owners and residents, and builds on a community's strengths. Accordingly, the village of Holland's economic development policy should incorporate the following planning and improvement strategies:

1. **Support a common vision**—A common vision forms the basis for the actions of the plan and, when implemented, ensure the plan is carried out in a manner that is consistent with the vision for the village of Holland. A common vision will also help lay the groundwork in establishing a marketable identity to be promoted to potential customers.
2. **Designate a coordinating entity**—A coordinating person or entity should be appointed soon after plan adoption. Coordinating activities consist of the following responsibilities:
 - Act as a champion for the village and plan;
 - Engage property and business owners to understand their needs (e.g., helping to lower business costs) and develop public-private partnerships;
 - Promote the concepts and vision of the plan;
 - Develop and coordinate marketing efforts;
 - Secure funding for improvements; and
 - Ensure the activities and recommendations of the plan continue are carried out in accordance with the principles of the plan.
3. **Market the area**—Marketing Holland by means of retail promotions, special events, and image-building promotions should be a primary activity of the coordinating entity. The idea of Holland as a destination and a place to do business should be clear in the minds of potential customers.
4. **Improve the streetscape**—The analysis in this plan identified several areas where street improvements, such as gateways, streetlights, street trees, curbing, and sidewalks could make a real difference in how the business district of Holland is perceived. Chapter 3. Integrating Land Use and Transportation details locations and provides photographic mock-ups of potential improvements in the village.
5. **Improve signage**—Along with streetscaping, a lack of consistent, well-designed signage was identified in many areas of the village. Signage should be consistent with the design requirements of the subdivision and land development ordinance, without resorting to themes.
6. **Make it a place**—Most residents desire Holland to exhibit a small-town character but are open to creating mixed-use opportunities. Stores suggested by the market analysis that would be compatible with this ideal include:
 - Entertainment and recreation uses
 - Specialty food stores
 - Financial institutions
 - Home furnishings

- Clothing and shoe stores
- Books, periodical and music stores
- Hobby and musical instrument stores
- Restaurants

The Village Overlay District currently permits all of the above uses by right with dimensional standards designed to emulate traditional village patterns. However, even with the proper zoning in place, potential business owners may be unaware of the plan for the village and the market it serves. Marketing and attracting compatible businesses will be a main activity of coordinating entities.

7. **Support code enforcement efforts**—The image of a neighborhood often depends how well property owners maintain their properties. Township codes, including building codes, require that owners address issues such as yard maintenance, rehabilitation of substandard properties, security of vacant structures, and prevention of health and safety hazards like broken windows, vermin, and littered grounds. A common understanding that property maintenance and investment not only benefits the individual business owner but the entire district will go a long way in making Holland a more pleasant place to shop and do business.
8. **Encourage weekend and evening hours**—To become the vibrant economic center that Holland strives to be, businesses must be available to potential customers during the evenings and on weekends. Holland must maintain a perception of being “open for business” to keep the area in the minds of potential customers.
9. **Support transportation improvement efforts**—Traffic congestion is the number one issue in Holland and a primary reason people have a negative view of the area. Economic development efforts should support improvements to intersection improvements, vehicle capacity, pedestrian and vehicle circulation patterns, traffic calming, and access management.
10. **Plan for the pedestrian**—Any future roadway improvements and development in the village should include pedestrian facilities. By striving to provide better connectivity and safety in the village, people would have the option of walking or biking to businesses. This would reduce congestion in the village since fewer vehicles would be used for these trips.

A MASTER PLAN FOR HOLLAND

The maps following page 90 (Figures 26, 27, and 28) illustrate strategies and concept plans that form an actionable plan for improving Holland’s transportation, land use, and business environment. Each map will focus on a designated Planning Area as described in the previous chapters by showing concepts, resources, and potential improvements.

The maps and images are meant to provide concrete examples but also provide inspiration for more detailed small-scale projects that are keeping with the plan's principles.

SETTING AND HISTORY

The village of Holland is located at the south corner of Northampton Township, Bucks County. Holland is centered on Mill Creek, which bisects the village in a west to east direction and eventually empties into the Neshaminy Creek two miles downstream at Playwicki Park. Buck Road (PA 532) is the main road through the village, connecting the Newtown area to the north with Street Road traffic and northeast Philadelphia to the south. Intersecting Buck Road are Holland and Chinquapin roads (in the north part of the village) and Bristol Road (in the south part of the village).

Holland is a village with well-defined borders. The Churchville Park and Reservoir is located northwest of the village, while the Mill Creek stream valley lies to the west. The village's southern border is defined by the West Trenton Cutoff railroad line, an active freight line. Just east of Holland are lands held in conservation and owned by the Heritage Conservancy.

Holland was first known as Rocksville because of Mill Creek's rocky banks, but was often called New Holland because of the many Dutch settlers that arrived in the late 1600s. In 1870 a post office called Holland was established and the village's name was soon changed to follow suit. Holland is known for having the earliest mill in the township.¹

Many changes have occurred since the founding of Holland. During the 20th century, lower Bucks County developed into a mature community with fully-developed infrastructure and robust economy. As development pressures moved upland from the Delaware River and Philadelphia, Northampton Township began its rapid rise as an idyllic bedroom community, gaining 20,000 new residents from 1970 to 1990. More recently, development has significantly abated due to a lull in the national economy and housing market, as well as the success of local open space preservation programs.

But while the township has transformed from a rural farming economy to modern suburb, Holland has still struggled to fully adapt itself to its new circumstances. Its location in the sloping, rocky Mill Creek stream valley and its few remaining historic buildings has allowed Holland to maintain an identity as a functioning commercial village. However, its mix of strip shopping centers and highway commercial uses, congested roadways, and lack of fully-integrated infrastructure has held the village back from reaching its full economic potential.

¹ Areas north of the village also go by the name of Holland. During the years the Newtown Rail Line was open to commuter service (and earlier), a station by the name of Holland Station was located at the corner of Holland Road and Elm Avenue. Holland has long been an acceptable name for the 18966 zip code (now Southampton). This plan focuses only on the area known historically as Rocksville, which will be referred to as the village of Holland throughout.

PLAN PURPOSE

The *Holland Village Master Plan* is intended to serve as the guiding document for the future of Holland. Past studies and initiatives have focused on aspects of the village or a greater regional setting, but no one plan has focused solely on revitalizing Holland itself, taking into account its history, economic role, and setting in the natural environment. This plan ties together the key recommendations of previous initiatives and explores actions to be taken to strengthen the village's transportation system, physical appearance, and economic structure.

PLAN PROCESS AND PUBLIC OUTREACH

The *Holland Village Master Plan* provides an inventory and analysis of land use, economic, and transportation data. The Master Plan focuses on the most pressing issues in Holland as identified through the inventory and analysis, past studies and plans, conversations with Township officials and staff, and public outreach.

The plan's vision, principles, and strategies are built on the results of the business operator survey and participation of business owners and residents in a Town Hall-style meeting. A market report and analysis, which details local economic and market conditions, supplements the plan and provides possible future avenues for economic development and revitalization. The *Holland Village Master Plan* concludes with a community vision and guiding principles designed to fulfill Holland's future and a map that summarizes the plan's strategies and actions.

Chapter 1

LAND USE AND NATURAL RESOURCES

GENERAL CONDITIONS

The primary village study area, as depicted in Figure 1, includes all parcels within the boundaries of the Village Overlay zoning district. This plan will also take into account the influence of secondary areas adjacent to and near the village zoning district boundaries.

The village is bisected by the major arterials of Buck and Bristol roads. Buildings are set closer to the road than what is typically expected in a commercial district. Some mid-20th-century residences have been redeveloped into commercial uses. A few historic buildings remain, but their historic value has been compromised by multiple renovations and expansions.

VILLAGE FUNCTION

A village is generally viewed as a relatively small clustered settlement, often dominated by older homes and other structures. Frequently, the houses are closely spaced on small lots with dwellings set close to the road, establishing the village as an identifiable place.

Lots are typically small or narrow and structures have a pre-20th century origin. Although villages contain historic structures, the development pattern and village elements are the most significant characteristics.

Villages in Bucks County can be grouped into three basic categories: hamlets, residential villages, and commercial villages. Hamlets are the smallest type of village, consisting of a few houses located near each other, and having no commercial uses or services. A residential village is the classic type of village: a settlement that is mostly residential but also contains community-related services such as a post office or church.

A commercial village is the 20th century or “motorized” version of a previously residential village. It is a settlement that is originally residential in use, but is characterized by commercial uses or services that draw on a broader region for support (e.g., gas stations, antique and furniture stores, restaurants, inns, and taverns).

While Holland can be classified as a commercial village, it is somewhat unique in that the original settlement was commercial in character. For much of its history, Finney’s general store and the Mill Race gristmill were the focal points of the local agricultural community and much of the land

surrounding these Holland landmarks remained in the Finney family. Holland never had the closely spaced groupings of residences that typify other villages in Bucks County.

PREVIOUS INITIATIVES

Previous plans and studies have been developed for areas in and around the village in recent years. Each has made a valuable contribution to land use planning and resource protection and enhancement in the Holland area. The following summarizes the purpose of these studies and their key recommendations.

Holland Street Light Implementation Plan

This plan, shown in Appendix D, consists of a plot plan overlain on an aerial photograph, showing parcel lines and street rights-of-way. Proposed locations of street lights are indicated along both sides of Buck Road from the railroad bridge to Rocksville Road. The proposed street lights are illustrated with pedestrian-scale light post and fixture details.

Churchville Nature Preserve Master Plan and Watershed Conservation Plan (2006)

This plan assesses the conservation aspects of the area and creates a vision for the Preserve and Nature Center into the future. The study area contains a total of about 650 acres which includes lands owned by Northampton Township (64 acres), Aqua PA (397 acres), and Bucks County Churchville Nature Center and Churchville Farm (192 acres).

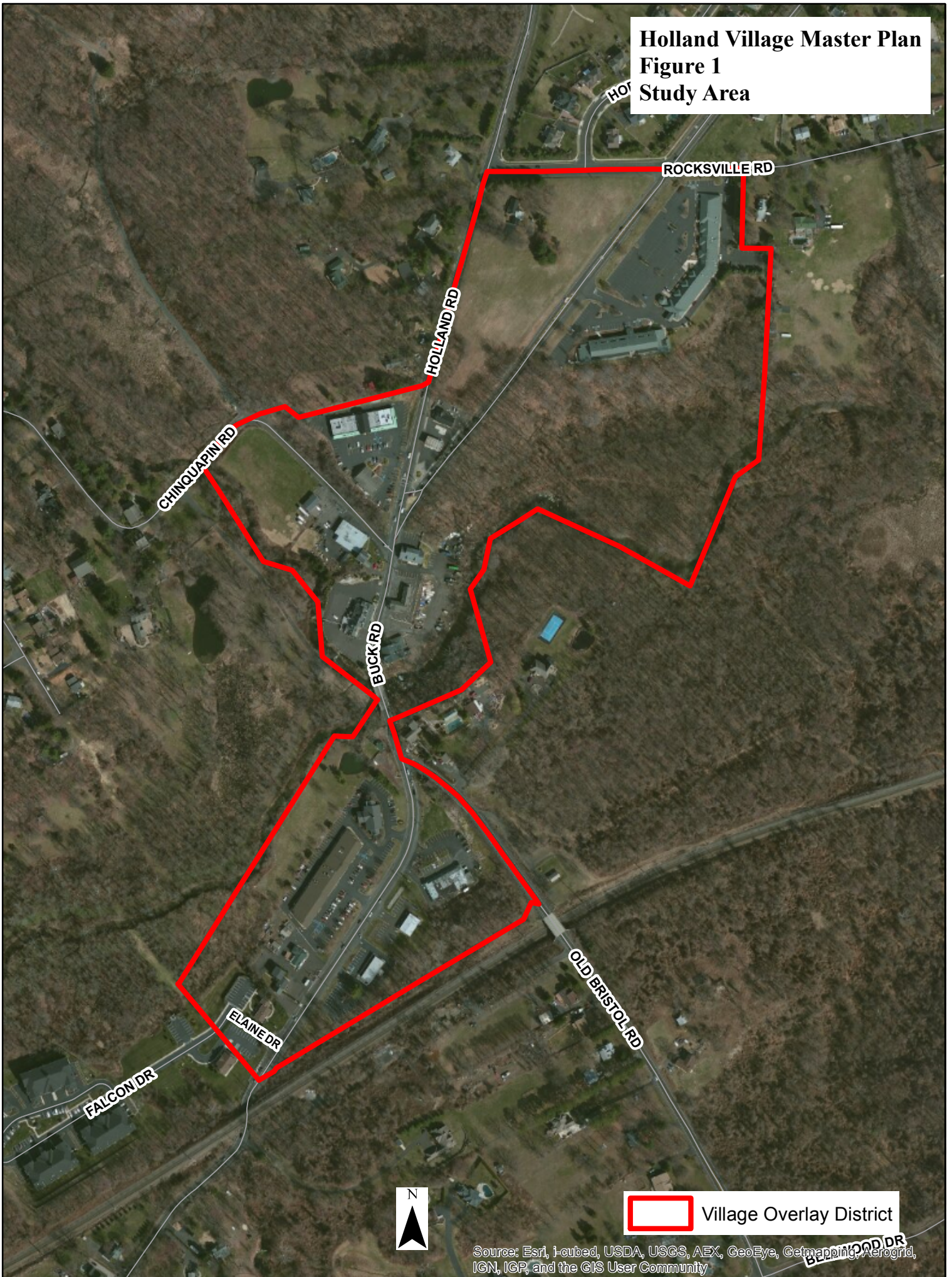
The plan promotes a future for the preserve that respects and protects the site's natural environment while providing enhanced passive recreational opportunities. Plan recommendations include enhancing the visitor's experience, improving functional aspects of the facilities, protecting the site and its natural resources and setting goals to sustain the park into the next century.

The Master Plan provides for 3 distinct areas: Nature Preserve Area, Public Use Area, and Restricted Use Area. The Public Use area, which is limited to the 55 acres surrounding the Nature Center building is the only area designated for public access. In the Nature Preserve Area, access has limited use for environmental education and research activities. Although the Restricted Use Area is not open to general public use, future limited access may be considered once the management, access points, and control procedures are finalized.

Churchville to Playwicki: Environmental Education, Recreation and Green Link Plan (2008)

This plan began as an outgrowth of the *Churchville Nature Preserve Master Plan and Watershed Conservation Plan* (2006). The primary purpose of the *Churchville to Playwicki: Environmental Education, Recreation and Green Link Plan* (2008) is to extend a greenway from Churchville Nature Center along Mill and Ironworks creeks to Playwicki Park, connecting a number of significant open space areas

**Holland Village Master Plan
Figure 1
Study Area**



 Village Overlay District

Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

including Playwicki Park (33 acres), undeveloped open space (known as Bellwood, Pheasant Valley, and Seven Families tracts, 130 acres), and Playwicki Farm Park (190 acres).

Churchville Nature Center and Neshaminy High School are designated primary centers of environmental education, Bellwood Preserve and Playwicki Farm Park are designated Environmental Education Satellites, and the village of Holland's purpose is to "enhance the village as the social hub of the greenway."

The *Churchville to Playwicki: Environmental Education, Recreation and Green Link Plan* recommends support of the Village Overlay District, the provision of sidewalks to improve public access, and the completion of a feasibility study to analyze whether a network of pedestrian paths, separate from sidewalks, could improve access to the greenway.

Bellwood Preserve North Master Site Plan (2012)

This plan follows up on the Churchville to Playwicki Green Link Plan, which identifies Bellwood Preserve's (112 acres) potential to serve as a satellite location for environmental education activities.

The plan outlines how a portion of Bellwood Preserve (63.5 acres) can be developed to support leisure and learning activities in a way that is compatible with maintaining and restoring the natural features of the site as an integral part of the Churchville to Playwicki Greenway.

The public participation process recommended that the site be improved for low-intensity passive recreation and environmental education activities (self-guided walking, wildlife observation, fishing and seasonal hunting, guided group visits/hands on educational activities).

The Master Site Plan proposes:

- A small parking lot (20 motor vehicle spaces and 2 bus spaces) that takes access from Bristol Road;
- A loop system of trails that will provide access to key site features;
- Overlook areas along trail for wildlife observation;
- Public facilities include port-a-johns, picnic tables, and water fountain;
- Information kiosk with interpretive signage, explaining unique features of the site; and
- Web cams for monitoring wildlife.

In 2013 Heritage Conservancy submitted an application to the Pennsylvania Department of Community and Economic Development's Greenways, Trails, and Recreation Grant Program for trail enhancement and interpretive signage at its Bellwood Preserve.

REGIONAL PLANS

Bucks County Open Space and Greenways Plan (2011)

The *Bucks County Open Space and Greenways Plan* is meant to provide a decision making, implementation and management tool designed to protect and create linkages between the county's vast natural resources, open space and farmland, recreational facilities, and historic and cultural resources. The plan identifies an interconnected network of greenways that protect ecologically valuable lands, provide open space and recreational opportunities, protect important habitat areas and migration paths for wildlife, and provide access to the county's historic and cultural resources. Specifically, the plan identifies corridors that could potentially host trails for public recreation, wildlife viewing, lessons in history, and alternative transportation.

Municipalities, conservation groups, landowners, and developers will utilize the plan to aid in decisions that will maintain and enhance the quality of life for residents. Finally, residents will find the Plan useful for identifying and exploring the many and varied historic, cultural, and recreational resources of the county.

The 172-acre Churchville Park and Nature Center is identified as a Hub in the *Bucks County Open Space and Greenways Plan*. (See page 25 for a discussion of the Mill-Neshaminy-Core-Dyers Creeks (Cross County) Greenway.) The park and nature center is known for its commitment to the protection of natural resources and wildlife habitat; adjoining Churchville Reservoir, known for its birdwatching; and the nearby Churchville Historic District, which is listed on the National Register of Historic Places.

Hubs are areas which feature a high degree of human or wildlife activity. They anchor the greenways system and serve as significant destination points within the greenways system. Human activity hubs are typically defined as areas with a large concentration of resources and facilities such as housing, places of worship, historic and cultural sites, and libraries and schools. Wildlife or natural area hubs are areas with large blocks of publicly-owned open space such as state parks and larger regional parks.

The hubs of the Bucks County Greenways System naturally developed around the major boroughs and in areas where a concentration of community, natural, historical and scenic elements are found. A total of eleven hubs were identified for inclusion in the Bucks County Greenways System including six boroughs and five open space areas.

Bucks County Comprehensive Plan (2011)

The *Bucks County Comprehensive Plan* (2011) seeks to coordinate and assist the county's municipalities, agencies, and general public in the planning, development, and management of Bucks County's natural and built environment. The plan places a strong emphasis on sustainability and smart growth development strategies.

The Future Land Use Plan Map provides a framework for Smart Growth planning in Bucks County. Smart Growth is a land use planning strategy which seeks to focus development on existing developed areas, preserve open space and natural resources, and link transportation and land use planning efforts. This map is meant to assist in the coordination and implementation of local and regional planning efforts.

Because of its location along the Mill Creek Stream corridor and nearby Churchville Park and Reservoir, Holland is located mainly in the Natural Resource/Conservation Area. Natural Resource/Conservation Areas include greenway corridors, recreation areas, and significant natural resource areas.

However, because the future land use plan is not a site-specific land use plan but a generalized view of the types of land use that should be encouraged in the designated areas, local officials are encouraged to take into account local planning and zoning and current conditions when implementing the vision set forth in the comprehensive plan.

Thus, the Future Land Use Plan map can also be interpreted to place Holland in the Emerging Suburban Areas, which are areas with available public infrastructure and services intended for future development by municipalities. Within the county these areas are the most susceptible to change due to the potential for population increases and the availability of public infrastructure. It is in these areas that that the mixed use, smart growth development types should be implemented. The location of new public facilities should be steered towards underutilized sites (e.g., brownfields and grayfields), new development should be compact and built where existing infrastructure is adequate, and all development should be designed with the pedestrian in mind. Future development may include residential, nonresidential, and a mixed uses as part of planned developments.

LAND USE

Land use is the purpose for which land or buildings are used. Table 1 provides land use acreages within the Holland study area in 2013 and Figure 2 shows 2013 parcel-by-parcel land use.

Table 1. Holland Land Use

Land Use	Acreage	Percentage
Single Family Residential	1.74	3.7%
Park, Recreation, and Open Space	10.02	21.4%
Commercial	28.30	60.5%
Vacant	6.69	14.3%
Total	46.75	100.0%

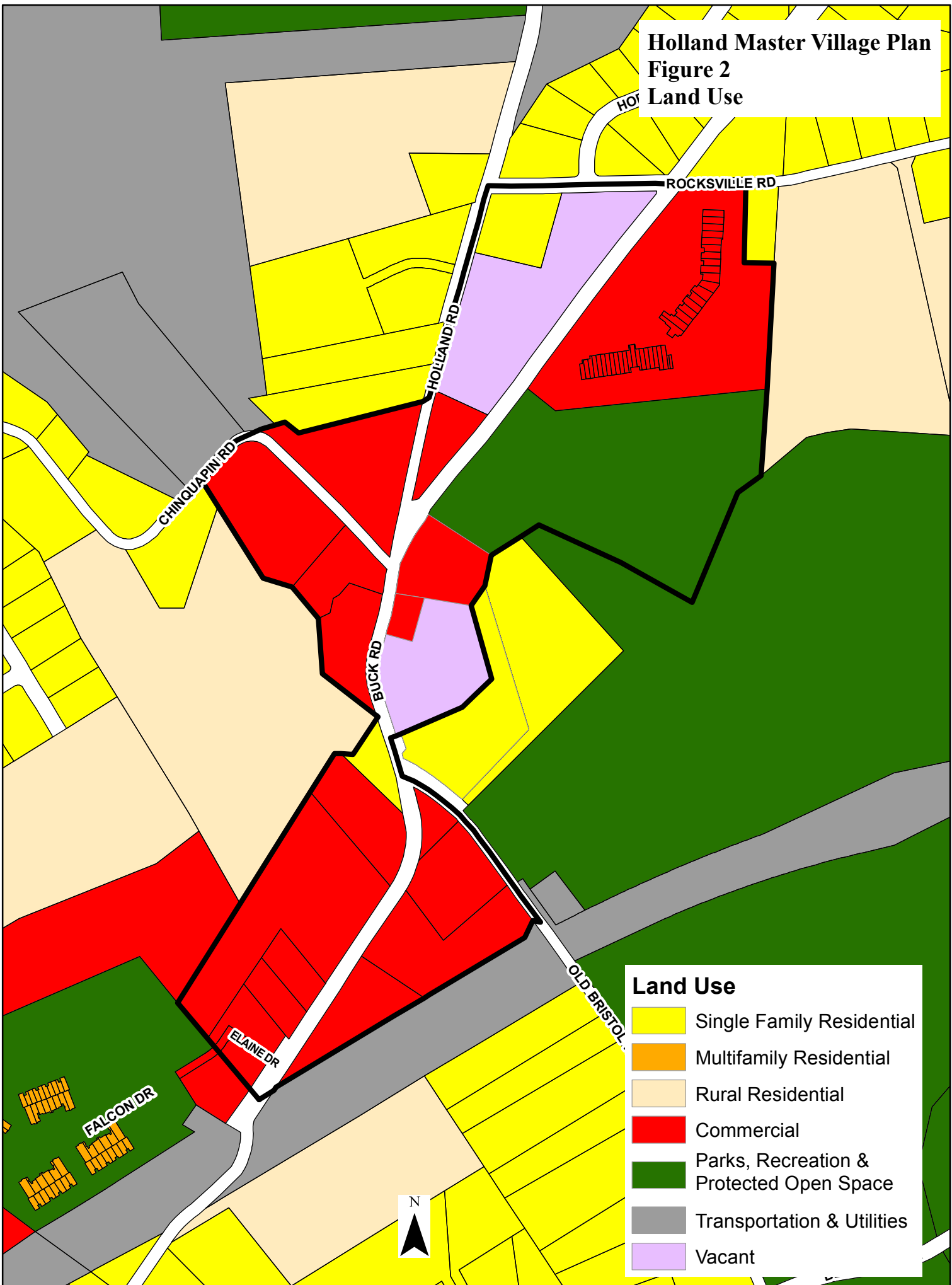
About 10 acres, or 21 percent, of Holland’s land use is dedicated to Park, Recreation, and Open Space use. Most of this land consists of a portion of the Bellwood Preserve property, which sits between Buck Road and Mill Creek. Another 28 acres, or 61 percent, of land consists of commercial uses. About 4 percent of land in the study area is Single-Family Residential. About 6.7 acres are classified as Vacant.

The Land Use map shows that the village’s roadways are fronted mostly by commercial properties. This is significant in that commercial property is much more given to change than residential property. Investments in property improvements on just a few commercial properties may provide substantial improvements in the village’s commercial appeal. The Bellwood Preserve property is an outstanding resource to the village for the habitat and resource protection it provides, as well as its potential as a recreational resource.

Zoning

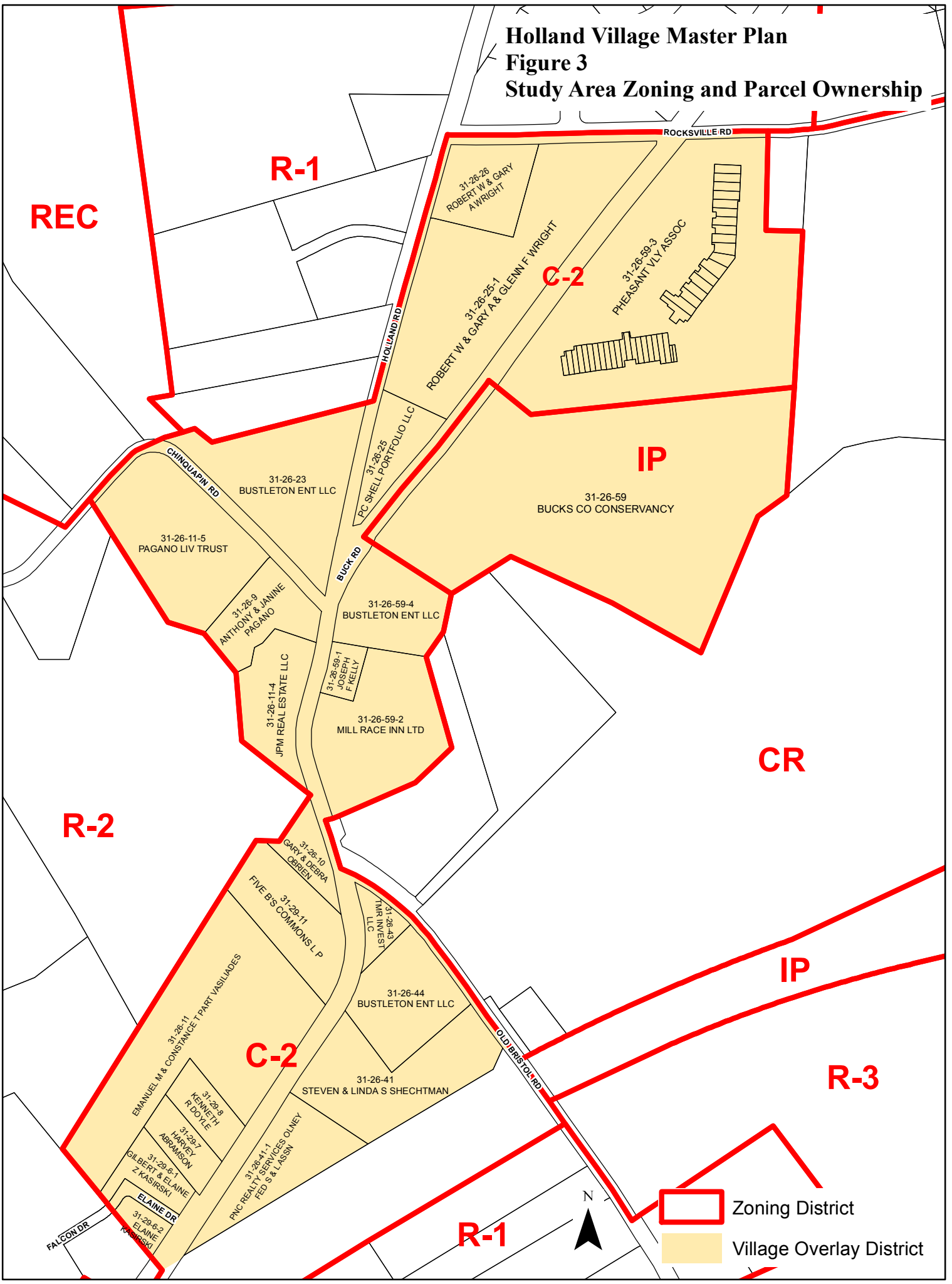
The study area is composed of several zoning districts, including the R-1 and R-2 Single-Family districts, the CR Country Residential District, the C-2 General Commercial/Office District, and the IP Institutional Public District. Overlaying the two nonresidential districts (C-2 and IP) is the VOD Village Overlay District. Each of these districts is detailed in Table 2, including the VOD regulations. Figure 3 shows the village’s zoning districts and parcel ownership.

Holland Master Village Plan
Figure 2
Land Use



- Single Family Residential
- Multifamily Residential
- Rural Residential
- Commercial
- Parks, Recreation & Protected Open Space
- Transportation & Utilities
- Vacant

**Holland Village Master Plan
Figure 3
Study Area Zoning and Parcel Ownership**





 Zoning District
 Village Overlay District



Table 2. District Uses and Requirements

District	Permitted Uses	Minimum Lot Area	Front Yard	Side Yard	Rear Yard	Imperv. Surface	Open Space
Village Overlay District	Uses permitted by right, special exception, or conditional use approval in the C-2, C-3, PO, and IP districts. Conditional use approval is required for special exceptions and conditional uses. CU approval required for uses permitted outside of underlying C-2, C-3, PO, or IP districts.	15,000 sf	20 ft min. 40 ft max.	10 ft	20 ft	70%	-
C-2 General Commercial/ Office District	Any R-3 Multifamily Residential use Retail stores Business/professional office Personal service Restaurant Tavern Funeral home Private club Utility substation <i>Conditional Uses</i> Automotive/Farm equipment sales Gasoline service station Motel Rooming house Shopping center <i>Special Exceptions</i> Commercial dry cleaning/laundry Municipal use						
C-3 Planned Commercial District*	Retail stores General merchandise stores Supermarkets Delis Restaurant Business/professional office Personal service Branch library <i>Special Exceptions</i> Commercial dry cleaning/laundry Municipal use						
PO Professional Office*	Business/professional office No-impact home-based business <i>Special Exceptions</i> Municipal use <i>Conditional Uses</i> Senior citizen housing						
IP Institutional Public District	Municipal offices Municipal authority offices School district offices Dedicated open space Public open space <i>Conditional Uses</i> Federal post service facility Federal military installation State military installation Federal and State medical facility Storage road surface treatment Hospital Health care facility School Water and sewer facility Cemetery Airfield and related facility Any PUC regulated facility Telecommunications facility						Area regulations are controlled by most restrictive adjacent district.

*These districts are not located in the village but their permitted uses are permitted by right in the Village Overlay District.

The controlling district for most of the study area is the Village Overlay District. The VOD ordinance was adopted in 2008 for both Richboro and Holland. The Village Overlay District permits any use permitted by right, special exception, or conditional use approval in the C-2, C-3, PO, and IP districts. Conditional use approval is required for any use that is a special exception or conditional use in the C-2, C-3, PO, or IP districts. Conditional use approval is also required for uses that are prohibited in the underlying district but are permitted by-right in another Village Overlay District. For example, a tavern in the VOD would require conditional use approval if the underlying district were the PO or IP districts, which do not permit taverns. Features of the VOD include reduced lot size and setback requirements and design standards that are intended to integrate and enhance the visual, historic, and cultural character of the district.

Subdivision and land development ordinance standards for the VOD are divided into 13 general categories: land use and development, architecture, site and building design, pedestrian and vehicle circulation, off-street parking and loading, curbs sidewalks, and crosswalks, landscaping, lighting, streetscape design, outdoor storage and refuse disposal, and signs.

Signs are limited to freestanding or ground, wall or parallel, projecting, window, and directional signs in the Village Overlay District. Freestanding and projecting signs may be as high as 16 feet. Wall or parallel signs may be as high as 30 feet or to the permitted building height. The subdivision and land development ordinance requires signs in the VOD to be constructed out of a durable material such as wood, metal, or stone. The design, material, color, size, location, and illumination of the sign shall be selected considering the architecture of the buildings and streetscape characteristics.



Estates Chimney

Thus far, one project has been developed under the requirements of the Village Overlay District in Holland. Estates Chimney has been constructed on the derelict Holland Gardens site at the south corner of Buck and Bristol roads. The project is a 2,700 square foot showroom that sells fireplaces, stoves, and accessories.

A small site in a difficult location, the Estates Chimney project required variances for setbacks and parking. The potential for a shortage of parking is alleviated by a cross-parking arrangement with the owners of the adjacent shopping center. The building is designed to meet the architecture and building design requirements stated in the subdivision and land development ordinance and includes sidewalks and pedestrian-scale lighting.

Historic Resources

For most of its history, Holland Village was the center of a larger agricultural community and consisted of a mill, general store, and residences. The historic resources that remain are reflective of the village’s agricultural history and its importance as a meeting point for commerce and social interaction within the local community. They are standing reminders of the ways and values of the people who settled the area and provide a physical and cultural context to the appearance and function of the village. Future revitalization efforts should ensure the continuation and enhancement of the village’s historic resources so that residents and visitors understand and enjoy Holland’s setting and role in Northampton Township’s history.

Table 3. Locally Significant Historic Resources

Tax Map Number	Address	Date	Former Use	Present Use
31-26-10	180 Buck Road	ca.1810	Tenant House	Office/Apartment
31-26-59-2	Buck Road	ca. 1787/1918	Grist Mill	Vacant
31-26-11-4	Buck Road	ca. 1825/1875/1906	General Store	Restaurant
31-26-59-1	Buck Road	ca. 1830/1959	Horse Barn	Offices
31-26-59-4	Buck Road	ca. 1830	Bank Barn	Offices
31-26-9	200 Chinquapin Road	ca. 1850	Farm House	Residence

Source: Heritage Conservancy, *Churchville to Playwicki: Environmental Education, Recreation, and Greenway Link Plan*, 2008.



Johnny Apples Restaurant (formerly Finney's general store)

MILL RACE INN

Settlers were first attracted to the Holland area because of its natural beauty, fertile farmland, and access to Philadelphia via Buck Road. The original Rocksville settlement was established just east of the confluence of Ironworks and Mill Creek, where the Mill Race Gristmill was constructed to serve the thriving agricultural community around it.

The mill and Finney's general store, which once held the Holland post office, are central to the history and function of Holland Village. One longtime resident of Holland can remember when the mill was still in operation and the general store had gasoline pumps. Others have fond memories of the Mill Race Inn restaurant, which served lunches and dinners and hosted banquets. Diners were treated to dramatic views of the dam and waterfall, making it a popular spot for almost 40 years.

More recently, the Mill Race Inn has fallen on hard times. Heavily damaged by Hurricane Floyd in 1999 and again by heavy rains just a year later, the building has remained vacant since. The dam has been removed, allowing Mill Creek to flow freely once more.



Mill Race Inn

NATURAL RESOURCES

Natural resources serve not only to help maintain the character of a place and enhance the quality of life, but understanding their importance also is crucial for helping guide land use planning and future development. There are numerous natural resources in the village area that have a role and function in maintaining Holland's character and potential.

Topography and Geology

The steeply sloping and rocky Mill Creek stream valley has been particularly important to the development of Holland in that these resources have kept the village distinct from the surrounding area, but have also limited some development opportunities.

Topography affects development capacity, stormwater runoff, wastewater facility siting, and potential for soil erosion. Development on steep slopes must be managed to prevent erosion and sedimentation of drainage ways, increased stormwater runoff, and flooding problems. The underlying geology of an area affects the type of soil formed, and in conjunction with the hydrologic cycle, is responsible for the topography, slopes, location of streams, waterbearing capacity of aquifers, plant and animal habitat diversity, and vegetation.

The village of Holland lies within the Piedmont Physiographic Province which is generally characterized by rolling lowlands, gentle ridges and valleys. The topography of the area slopes downward from the north and south into the valley of Mill Creek, which generally flows from west to east. The village of Holland study area encompasses the Bellwood Preserve North nature preserve area. This nature preserve area accounts for most of the southern and eastern boundary of the village of Holland study area. The topography of the preserve located to the south of Mill Creek is gradual and consists of three separate bands of varying slopes starting with 0–3 percent slopes along the stream, progressing uphill through a swath of 3–8 percent slopes and ending with 8–15 percent slopes interspersed with a few small pockets of 15–25 percent slopes along the railroad tracks.

Four geologic formations can be found in the village of Holland. The underlying rock of the Gettysburg-Newark Lowland Section mainly consists of red shale, siltstone and sandstone, along with some conglomerate and diabase. These materials, which are sedimentary in nature, are evident in the rock formations on the northern side of Mill Creek. Alternating bands of Stockton Formation (trs) and Stockton Conglomerate Formation (trsc) parallel the north side of the creek and are an important groundwater source and contain some of the most productive aquifers in the Neshaminy Watershed. However, the rock formations on the south side of the creek are metamorphic in nature and is predominantly Felsic Gneiss-Pyroxene (fgp), with a pocket of Mafic Gneiss-Hornblende Bearing (mgh) found at the eastern most portion of the Bellwood Preserve.

Although these metamorphic rocks are less productive drinking water sources, they are a good source of building stone.

Soils

Soil types are a reflection of the underlying geology of the area. The soils formed from sedimentary rocks such as shale, sandstone and conglomerate are generally located along and to the north of Mill Creek and include the Bowmansville-Knauers, Lansdale, and Urban Land-Lansdale. These soils are typically deep to very deep, with the exception of the Urban Land complexes that have been subject to significant disturbance. The Urban Land-Chester and Chester soil series found to the south of Mill Creek are formed from the underlying metamorphic gneiss rock. These soils are deep to very deep and are moderately-well to well-drained.

Each soil type has a unique structure that presents specific opportunities or challenges for using the land for a variety of purposes. All soils can be eroded if improperly managed, although some soils are more susceptible to erosion if the vegetative cover is not maintained. Soils located along streams are often poorly drained since they are regularly subjected to flooding conditions and usually contain finer particles that reduce permeability. Groundwater conditions may also create poorly-drained soils due to high water tables or seasonal wetness. Some poorly-drained soils, called hydric, may be able to support wetland vegetation. Examples of these soils in the village of Holland include Bowmansville-Knauers. In contrast, soils that have a highly porous structure may drain so quickly that the soil cannot properly filter out pollutants carried in stormwater runoff. The porosity of the soil in combination with the steepness of the slopes also determines the rate of stormwater runoff and the potential impact of runoff on the overall drainage patterns within a watershed. The Urban Land-Chester and Urban Land-Lansdale soils in the village of Holland study area are representative of these types of soils.

Vegetation

From a vegetative standpoint the village of Holland and surrounding areas including the Mill Creek valley, Churchville Nature Preserve, and Bellwood Preserve provide a refuge for native flora and fauna. The dominant vegetative cover is deciduous hardwood forest interspersed with successional forest areas and conifer plantations. Common vegetation includes red maple, green ash, red oak, sycamore, river birch, box-elder, pine, beech, and spicebush. As with most park sites, invasive species including Japanese honeysuckle, grape vine, Japanese stiltgrass and garlic mustard are a constant concern and threat. Meadow areas exist as well as agriculture fields, riparian corridor vegetation, and wetlands.

Wildlife

The combination of water resources and vegetation found in the village of Holland study area offer diverse landscapes for various species of mammals and birds. These ecosystems include the forests, riverine/floodplain areas, tributaries, and the freshwater marsh. These environments afford food,

protection, cover and breeding territory for a myriad of mammals, amphibians, reptiles, birds, fish, insects and other invertebrates. Common mammals found in the area include white-tail deer, raccoon, opossum, skunk, rabbit, chipmunks, and red and gray squirrels. Species of amphibians and reptiles that can be found using the area for cover, foraging and breeding include the eastern box turtle, common snapping turtle, northern water snake, eastern garter snake, green frog, spring peepers, frogs and salamanders. The area is well known as a site for bird watching and attracts eagles, waterfowl, owls, various woodpeckers, nuthatches, sparrows, and finches, among others. A heron nesting area—one of just a few known in Bucks County—is located along Mill Creek in the south part of the village.

Water Resources

The Village of Holland Study Area has several water resources located both within the village of Holland and adjacent area. The largest of these resources is the 180-acre Churchville Reservoir. The reservoir is separated into three water bodies by the two major cross roads, Elm Avenue and Churchville Lane. The northern most section of the reservoir, north of Elm Avenue forms from the flow of Ironworks Creek. This area of the reservoir is shallow and at times of drought and reservoir draw down exists primarily as mud flats which provide excellent habitat that attracts shorebirds. This area is also surrounded by mature deciduous vegetation and wetlands. The central portion of the reservoir provides the most public access primarily due to trails linked to the adjacent Churchville Nature Center. This area is primarily vegetated with mature deciduous woodlands and white pine plantations. The southern portion of the reservoir closest to Holland is the largest of the three reservoir areas and is characterized by open lawn and limited vegetative buffers on the eastern shoreline and mature deciduous woods on the western shoreline. There are numerous species of fish in the reservoir and it attracts waterfowl and other wildlife.

The Churchville Reservoir is part of the larger 653-acre Churchville Nature Preserve that adjoins the village of Holland. The preserve site is composed of many tracts held by three different owners: Bucks County, Aqua Pennsylvania and Northampton Township. Aqua Pennsylvania owns the reservoir and the land immediately surrounding the water body (397 acres), including the land area adjacent to the western boundary of the village of Holland. Through a lease agreement with Bucks County, Aqua Pennsylvania controls the type of use permitted in this area. Bucks County owns the land that contains the Churchville Nature Center and Churchville Farm (193 acres). Northampton Township owns four parcels totaling 63 acres.

Two additional surface water resources in the area include the Ironworks Creek and Mill Creek. Ironworks Creek is a small stream that feeds into the nearby Churchville Reservoir from the north, and then flows from the outlet structure of the reservoir south to converge with Mill Creek at Buck Road. Mill Creek, a tributary to the Neshaminy Creek, stretches from Warminster Township in the north, through much of Upper Southampton and Northampton Townships, including the village of

Holland, and into Lower Southampton Township. Mill Creek is designated as Migratory and Warm Water Fisheries according to the Chapter 93 Water Quality Standards established by the Pennsylvania Department of Environmental Protection (PA DEP). The stream provides a warm water habitat for the propagation and maintenance of fish that are indigenous to such waters including those migratory species that are born in fresh water, travel to the ocean to mature, and then return to fresh water to reproduce. According to the *Lower Neshaminy Creek Watershed Conservation Plan*, both the Mill Creek and the Ironworks Creek watersheds were not listed as impaired, indicating that these stream reaches maintain a relatively high percentage of riparian vegetation. However, areas just west of the Buck Road bridge and adjacent to the Mill Creek Inn are eroded and bare of streamside vegetation.



Mill Creek

Portions of the Churchville Watershed, including the Mill Creek and Ironworks Creek tributaries, have been designated as greenways in various plans, including the *Churchville to Playwicki: Environmental Education, Recreation and Greenway Link Plan* (2008), the *Churchville Nature Preserve Master Plan and Watershed Conservation Plan* (2006), and as part of the larger Mill-Neshaminy-Core-Dyers Creeks (Cross County) Greenway in the *Bucks County Open Space and Greenways Plan* (2011).

Recreational opportunities are currently limited in adjacent natural resource areas. Churchville Nature Center has a network of trails on-site on 54 acres of preserve and runs a variety of environmental education programs. However, the nature center and the adjacent Churchville Farm can only be directly access through Churchville Reservoir land. Churchville Reservoir land owned by Aqua PA is not open for public use. The Heritage Conservancy has plans to improve access to

Bellwood Preserve and in 2013 submitted an application to the Pennsylvania Department of Community and Economic Development's Greenways, Trails, and Recreation Grant Program for trail enhancement and interpretive signage. Increased public access to the Churchville Reservoir and Bellwood Preserve will require solutions that address property owner concerns over property misuse, costs, and liability.

MILL–NESHAMINY–CORE–DYERS CREEKS (CROSS COUNTY) GREENWAY

The *Bucks County Open Space and Greenways Plan* (2011) identifies 27 greenways in Bucks County, including 13 Multi-Use greenways. The Mill–Neshaminy–Core–Dyers Creeks Greenway, also known as the Cross County Greenway, follows the courses of three different creeks, Mill, Core, and Dyers creeks, as well as a section of the Neshaminy from the confluence of Mill Creek with the Neshaminy at Playwicki Park, to the confluence of Core Creek with the Neshaminy just southwest of Core Creek Park. The greenway provides linkages between three separate County parks, Churchville Nature Center, Playwicki Park and Core Creek Park, and six municipalities.

The section of the greenway extending from the County line in Upper Southampton Township over to and including Core Creek Park was identified as greenway in the Delaware Valley Regional Planning Commission's Long Range Plan, *Destination 2030*, and extends westward into Montgomery County. The section of the greenway from Playwicki Park to the Delaware River is part of the Central Bucks Agricultural Open Space Priority Land Area as identified as an Open Space Priority Land in the *Regional Greenspace Priorities Project* (2004) by the GreenSpace Alliance.

The portion of the greenway extending from Churchville Nature Center lies within the Neshaminy Creek Conservation Landscape (*Bucks County, Pennsylvania, Natural Areas Inventory Update* (2011)).

Five sites listed on the National Register of Historic Places are found along this greenway including Dolington Village Historic District. In addition to the three County-owned parks, six municipal parks are found along the greenway.

Connections to other greenways include the lower and middle sections of the Neshaminy Main Stem Greenway, and the Poquessing Creek Greenway. The *Bucks County Open Space and Greenways Plan* proposes a trail for this greenway. A potential pathway through the village will be shown on Figure 27 in Chapter 5.

There are other passive recreational opportunities available beyond these two significant open space properties. For example, streamside areas along Mill Creek near the Mill Race Inn provide great views of the rocky stream corridor. While some restoration of the streambank will be necessary to prevent future erosion and establish public access, it is this type of activity that can provide the community with both environmental and economic benefits. Another passive recreation opportunity is bird watching. As previously stated, the Holland area attracts a variety of important bird species.

A heron nesting area—one of just a few known in Bucks County—is located along Mill Creek in the south part of the village. Restored natural areas and quality recreational amenities can increase quality of life and draw visitors, which can help market the village as a destination.

Floodplains

Floodplains are relatively flat or low-lying areas adjacent to surface waters that experience occasional or periodic flooding. Floodplains are comprised of the floodway, which consists of the stream channel and adjacent areas that carry flood flows, and the flood fringe, which is the adjacent area covered by flood water but which does not experience the strong current as in the floodway.

Floodplains play a significant role in Bucks County by providing ecological, aesthetic and recreational benefits. The natural vegetation supported by floodplains helps trap sediment from upland surface runoff, stabilizes stream banks for erosion control, and provides shelter for wildlife and proper stream conditions for aquatic life. Primarily composed of loosely deposited sediments, floodplains allow for infiltration water that is slowly released into the stream, as well as aquifers. During periods of heavy rains and high stream flow, floodplains provide temporary storage for floodwaters, reducing flooding threats to adjacent areas, and providing a slower, more consistent flow of water. Development on floodplains deprives flooded rivers of the space they need for drainage, which causes flood waters to flow farther inland damaging communities and forcing more water downstream, creating problems for downstream communities.

Flooding has occurred along the banks of Mill Creek over the history of Holland. In September 1999, Hurricane Floyd dumped several inches of rain on the region. Bucks County and the Neshaminy Creek watershed were hit particularly hard by this storm. Local creeks swelled to record levels and many overflowed their banks. It was during this storm that the Mill Race Inn was heavily damaged by flooding. Just a year later, heavy rains destroyed the dam next to the inn and the building again was heavily damaged. The dam was subsequently removed to provide flood relief to upstream areas.

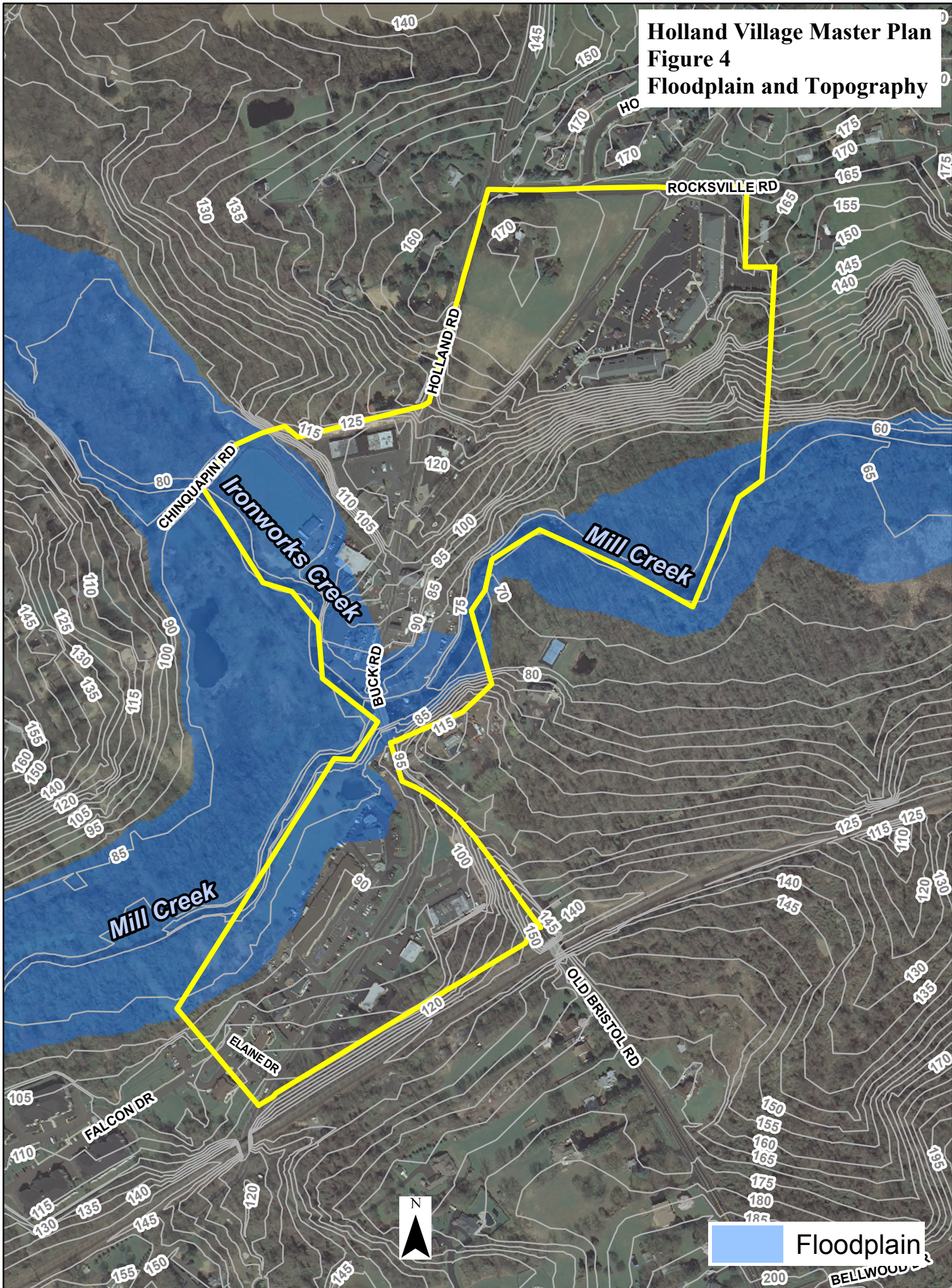
Future plans for development along Mill Creek must take into account the potential for flooding along this stream corridor. While the removal of the dam has provided some relief anecdotally, FEMA maps still show a wide area along the creek as floodplain. Elevation and floodproofing will be required for new structures in floodplain areas.

LAND USE ANALYSIS OF PLANNING AREAS

Changes in topography and Mill Creek divide Holland Village into separately functioning areas. The land use analysis focuses on three distinct planning areas and devises appropriate strategies for each.

Mill Creek clearly divides the village into north and south portions. The north part of the village is only accessible to the south part by crossing over Mill Creek and vice-versa.

Holland Village Master Plan
Figure 4
Floodplain and Topography



Elevation changes and topography further subdivide the north portion of the village. A steady increase in elevation characterizes the landform from the Mill Creek Bridge to the Shell service station at the intersection of Holland and Buck Roads. Beyond the Shell service station, the change in elevation becomes more dramatic, until flattening off at the Pheasant Valley Shopping Center and residential properties along Holland Road. This steeply sloping area forms a clear boundary between the two northern planning areas. The southern planning area is a distinct planning area.

Figure 5: Planning Areas



Based on these natural boundaries, three planning areas have been identified (See Figure 5: Planning Areas).

Planning Area 1: Composition and Physical Conditions

Planning Area 1 is the least “village-like” area in Holland Village. On the west side of Holland Road are several suburban residential homes. Between Holland and Buck roads is the Wright property, which contains a residence and vacant land, totaling about 5.4 acres. No sidewalks exist on either road. Pheasant Valley Shopping Center sits across Buck Road from the Wright Property. Sitting on almost 7 acres, the center has two main buildings: one a shopping center and the other an office building. At the time of this plan, commercial businesses in the shopping center include a deli and market, a dry cleaner, a salon and spa, a

tanning salon, a jeweler, a barbershop, picture framer, a chiropractor, three restaurants, and a restaurant and bar. The office building includes an optometrist, insurance agent, two dentists (one pediatric and one family), two family medical practices, an orthodontist, and an attorney’s office.

The buildings sit back from the road. The shopping center has a brick façade and its roofline is gabled and articulated. The shops are fronted by a wide sidewalk and divided windows offer shoppers a peek into individual stores.



Pheasant Valley Shopping Center

The office building has a more modern look. The offices are setback from the parking lot by a two-story canopy. Visitors must either walk upstairs or downstairs to get to their destination. The roofline is very prominent, extending back 20 feet from the front edge of the canopy. The entire property is well-landscaped and maintained.

Planning Area 2: Composition and Physical Conditions

Planning Area 2 is the heart of Holland, sitting just north of Mill Creek and containing the original settlement buildings. North of the intersection of Buck and Holland roads is a gasoline service station. Just west of the gas station is a Wawa convenience store and the Holland Shopping Center. The shopping center contains a law office, physical therapist, nail salon, barbershop, pizza shop, computer repair shop, day spa, hair salon, dry cleaners, and jeweler.

The shopping center is well-maintained, if a little dated. The Wawa convenience store is of a type the corporation no longer constructs. The company now favors larger stores on larger properties to permit the installation of gasoline service pumps. The site contains no street trees and little landscaping.

Across Chinquapin Road to the south is Holland Lawn Mower, which consists of a two-story farmhouse, one story repair shop and showroom, and additional outbuilding. Finney's general store is now Johnny Apples restaurant. Another pizza shop sits adjacent to the south part of the restaurant.

Holland Lawn Mower presents a good face to Buck Road. The farmhouse is well-maintained and the front of the property is landscaped, but does not have street trees.

Johnny Apples restaurant little resembles the original general store. An addition has been placed on the front to accommodate more diners. Parking is constrained by Ironworks Creek to the rear of the property and elevation change to the south, where parking occurs on a lower tier for the adjacent Holland Pizza. A dumpster sits prominently by the road at the edge of the parking lot. Some landscaping exists in the front of the restaurant but the property has no street trees.



207 Buck Road, looking north.

Crossing over to Buck Road is an office building converted from its original use as a bank barn (207 Buck Road), a construction company (Mun’s Construction) in a converted horse barn, and the Mill Race gristmill.

207 Buck Road is another well-maintained building, even if its original purpose as a barn has been obscured by newer elements, including windows, dormers, siding, and “exposed” faux stone. The building is very close to the road with parking on either side.

Mun’s Construction also sits close to the road and its original purpose is difficult to guess from its current configuration. Parking in front of the building requires drivers to back into the right-of-way of Buck Road. Parallel and angled parking exists surrounding the building, but circulation is awkward due a narrow travel lane that closely abuts the building.

The Mill Race gristmill is the most prominent building in Planning Area 2. The gristmill actually sits partially in the right-of-way. The building is in poor shape: windows are broken, the roof is aging, and the south façade and foundation have been severely damaged by past flooding.

Several investors have come forward with plans to reopen the building as a restaurant or apartments, but nothing yet has materialized as a viable project. Redevelopment efforts have been hampered by the poor condition of the building and the Federal Emergency Management Agency's (FEMA) insistence that the mill is located in the floodplain, despite the relief in flooding provided by the removal of the dam.



Mill Race Inn, south façade.

The Northampton Township Blight Committee has been formed to focus on the Mill Race Inn and the former Holland Gardens site, which is now Estates Chimney. In conjunction with the Redevelopment Authority, the township is looking to acquire the Mill Race Inn by eminent domain through the Redevelopment Act to facilitate its redevelopment.

A vacant lot once used for parking for the Mill Race Inn restaurant sits behind Mun's Construction and 207 Buck Road. None of the three properties has sidewalks or any landscaping.

Overall Planning Area 2 is constrained by elevation changes and the confluence of Mill and Ironworks Creeks. There is limited area for expansion of business and a high percentage of impervious surface cover. No sidewalks exist throughout the area and landscaping is limited.

Planning Area 3: Composition and Physical Conditions

Planning Area 3 sits just south of Mill Creek and consists of a medium-intensity commercial corridor. Along the west side of Buck Road is a dentist and medical center, a dentist and counselor, a law and medical office, a building contractor and handyman's office, the Gateway Shopping Center,

and Holland Commons office building. A residence sits just west of the intersection of Buck and Bristol roads.

The Gateway Shopping Center contains a law office, tanning salon, clothing shop, deli, pizza shop, organic dry cleaner, flower shop, salon, insurance office, and dentist office.

Along the east side of Buck Road is a PNC Bank, an animal hospital, Holland Village Shopping Center, and Estates Chimney fireplace showroom.

Holland Village Shopping Center contains a kosher wine store, a produce and deli market, a homemade food store, and a restaurant.



Buck Road Corridor

While the corridor is curbed, no sidewalks are present. Some street trees exist on the Gateway Shopping Center site but are not present on other sites. Business signage is inconsistent in design and a little garish. Offices that have been converted from residential buildings look dated and out of place. The shopping centers are also in need of updating.

Areas of Influence

Several large properties in and around the village will have direct influence on its future. These properties are shown on Figure 5 and include:

Holland Preserve—Holland Preserve is an age-qualified community just off the west side of Buck Road, adjacent to the north side of the railroad tracks. The community was built in 2003 by DeLuca Enterprises. Sidewalks connect the condominiums to the offices on either side of Elaine Drive but do not extend out to Buck Road.

Holland Preserve is a residential community adjacent to Area 3. Older residents often have more limited access to transportation. A walkable village setting would allow older residents to get to the Gateway and Holland Village shopping centers without using a car.

Aqua PA, Churchville Reservoir Property—The Churchville Reservoir property is privately held by Aqua, PA. The purpose of the reservoir is to allow for releases to increase flows to the Neshaminy Creek and permit adequate operation of Aqua’s sewage disposal facility. While the reservoir allows horseback riding from users of an onsite stable, it is not open to other recreational uses. Illegal activities on the site include ATVs and other trespassers. At this point, Aqua, PA does not want to open the property to passive or active recreational use due to concerns about liability, property maintenance, and the possibility of bad actors. However, Aqua may be willing to listen to ideas that would help address their concerns while allowing some limited recreational opportunities.

Platt Property—This 13.5-acre large residential property sits just west of where the Ironworks Creek empties into Mill Creek. The site contains several residential structures, a pond, and wooded wetland along Mill Creek. An agreement with the Northampton Township Municipal Authority permits access by the Authority to a sewer line along Mill Creek via an access driveway along Chinquapin Road. This sewer line conveys wastewater from the township to the Bucks County Water and Sewer Authority’s Neshaminy Interceptor.

The property is zoned R-1 Residential District. It is likely the property will continue as a residence for the foreseeable future. However, the sewer easement presents an access opportunity for a trail along the Mill-Neshaminy-Core-Dyers Creeks Greenway (as proposed in the *Bucks County Open Space and Greenways Plan*) that would connect Holland with the Dolphin Swim Club property in Lower Southampton Township. For this opportunity to be realized, efforts must be made to ensure the privacy of the property’s owner and a safe point of access along Chinquapin Road.

Heritage Conservancy, Bellwood Preserve North—Bellwood Preserve North is a 66-acre property located north of the intersection of Bristol Road and the West Trenton Cutoff railroad line, with frontage along Buck Road north of Mill Creek. The property is owned by the Heritage Conservancy and has been deed restricted from development for a period of 50 years. The *Bellwood Preserve North Master Site Plan* (2012) identifies Bellwood Preserve as a potential to serve as a satellite location for environmental education activities. While only limited public access is planned for the property, the Bellwood Preserve is a good example of the opportunity to integrate environmental and recreational sites into branding and marketing activities.

Northampton Township Open Space Property—The township currently has no plans for this 4.7-acre open space property. The site appears to contain a wetland. Due to its adjoining location to Chinquapin Road and an access road to the reservoir property, the site could have a role in future recreation activities in the village.

Holland Residential Properties—These single-family home properties abut the west side of Holland Road between Rocksville Road and the Holland Shopping Center. Residents living along Holland Road have been frustrated by the high speed of drivers approaching Holland Village. Future development on the Wright Property should provide buffering along Holland Road and provide solutions to speeding traffic along Holland Road.

Wright Property—The 5.4-acre Wright property is located between Rocksville, Buck, and Holland roads. The parcels contain a residence and vacant farmland and are strategically located across from the Pheasant Valley shopping center. A proposal to construct an 11,000-square-foot Rite Aid on the property was denied approval in 2009. The Wright family remains interested in improving the property and should be kept abreast of revitalization plans and activities.



Wright Property

Chapter 2

TRANSPORTATION

Community transportation issues involve more than just moving vehicles safely and efficiently. To fully understand transportation problems and solutions, economic development, public safety, the environment and quality of life for residents must be considered. Integrated transportation, land use, and circulation systems that are well-designed help preserve a sense of community, advance economic development goals, and preserve both public and private infrastructure investments. Transportation is a primary quality of life issue for the community of Holland.

The Holland study area is traversed by Buck Road (Route 532) and short sections of Rocksville Road, Chinquapin Road, and Old Bristol Road. Buck Road runs in a north-south direction from Rocksville Road to the underpass of the West Trenton Cutoff freight rail line for a distance of approximately six tenths of a mile and is classified as a Major Arterial according to the street classifications found within the township subdivision and land development ordinance. The intersection of Buck Road and Old Bristol Road is signalized. The width of Buck Road is two lanes, with additional turning lanes at its intersection with Holland Road and Old Bristol Road and at the entrances of several shopping and business centers. On a regional level, Buck Road connects with several key roads, including Roosevelt Boulevard (U.S. Route 1), Street Road (Route 132), and the Newtown Bypass (Route 332). Overall, cartway conditions are good.

The 1,200-foot section of Holland Road in the village is classified as a Major Collector that runs north to south through the study area. The intersection of Holland Road and Buck Road is one of two signalized intersections in the study area. Holland Road has a two-lane cross-section with varying shoulder widths.

Old Bristol Road is classified as a Major Collector. It intersects with Buck Road on a steep down-grade and is signalized. Old Bristol Road has two lanes with adequate shoulders and provides access to Route 213 south of the study area.

Rocksville Road is a minor collector as defined by the township subdivision and land development ordinance and represents the northern limit of the study area. Its cross-section is two lanes with wide shoulders and intersects with Holland Road and Buck Road.

Chinquapin Road contains a two-lane cross-section with narrow shoulders. Chinquapin Road intersects with Buck Road on a steep up-grade and at a skewed angle. It is classified as a minor collector.

TRAFFIC COUNTS

According to PennDOT's Internet Traffic Monitoring System, traffic through the study area is extremely heavy for the roadways. The main road through the study area is Buck Road and in 2012, it had an average daily traffic (ADT) of 19,368 vehicles in the segment from Old Bristol Road to Holland Road. Trucks accounted for 4 percent of this volume. Traffic volumes for all sections of roadways in the study area are shown in the table below.

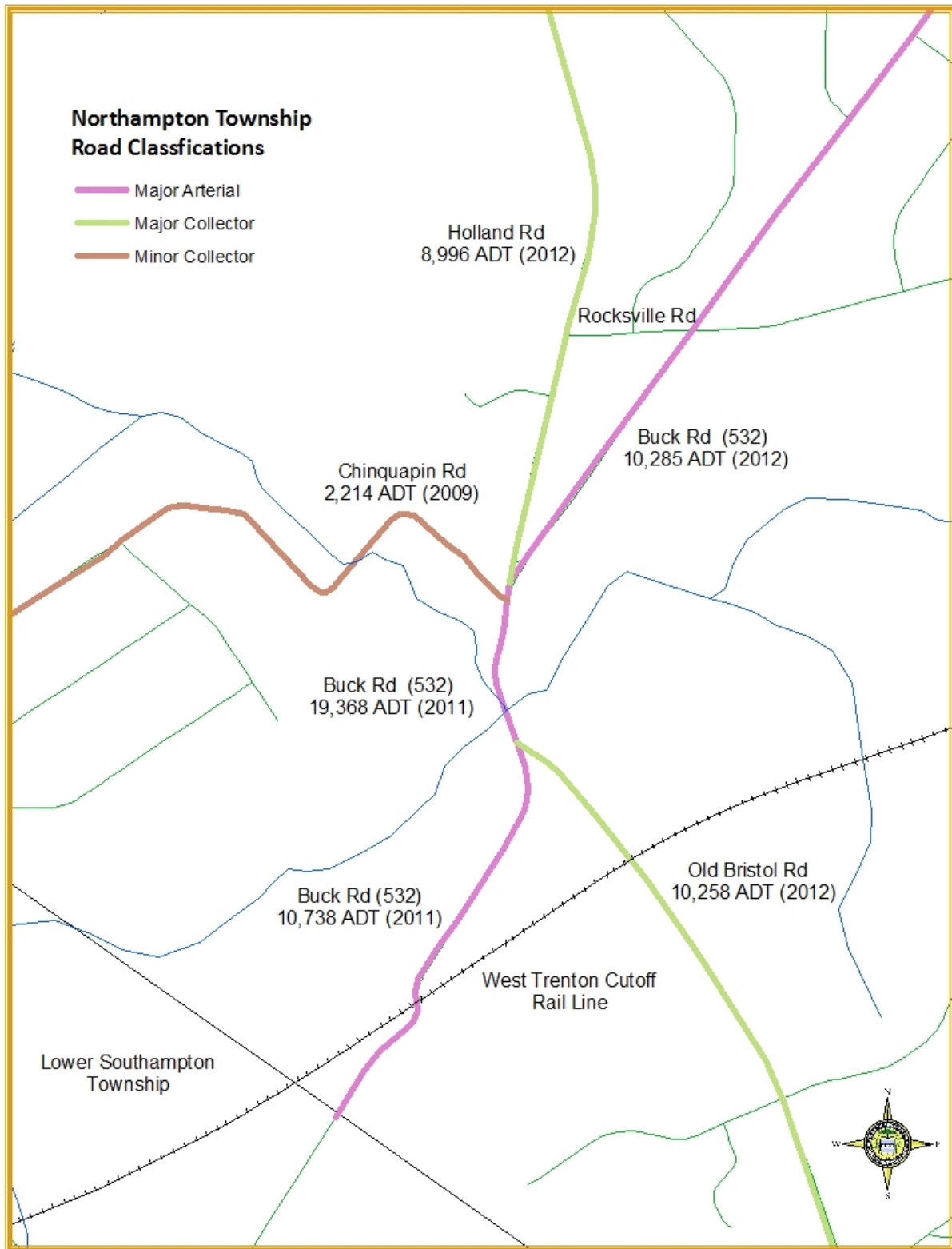
Table 4. Holland Area Roads, Traffic Volumes

Buck Road				
From	To	ADT	Year	% Trucks
Trenton Cutoff Rail Line	Old Bristol Road	10,738	2011	3%
Old Bristol Road	Holland Road	19,368	2012	4%
Holland Road	Rocksville Road	10,285	2012	3%
Holland Road				
From	To	ADT	Year	% Trucks
Rocksville Road	Buck Road	8,996	2012	3%
Chinquapin Road				
From	To	ADT	Year	% Trucks
Bristol Road	Buck Road	2,214	2009	5%
Old Bristol Road				
From	To	ADT	Year	% Trucks
Buck Road	Bridgetown Pike	10,258	2012	4%

Source: PennDOT's Internet Traffic Monitoring System

In the northern portion of the study area, Holland Road feeds into Buck Road and in the southern portion of the study area, Old Bristol Road feeds into Buck Road. The traffic movements at the two signalized intersections along Buck Road at Holland and Old Bristol roads are approximately split evenly between vehicles staying on Buck Road and those turning onto Holland Road and Old Bristol Road. This condition, along with insufficient turning lanes, makes providing optimal traffic signal conditions challenging.

Figure 6: Functional Classification and Traffic Counts



Source: Northampton Township Subdivision and Land Development Ordinance and PennDOT.

PREVIOUS STUDIES

The Holland area of the township has long been recognized as an area which continues to suffer from traffic congestion. Northampton Township has been fortunate in that several studies have been developed for this area which will provide a basis for recommendations related to transportation enhancements and potential land use recommendations. These studies include the following:

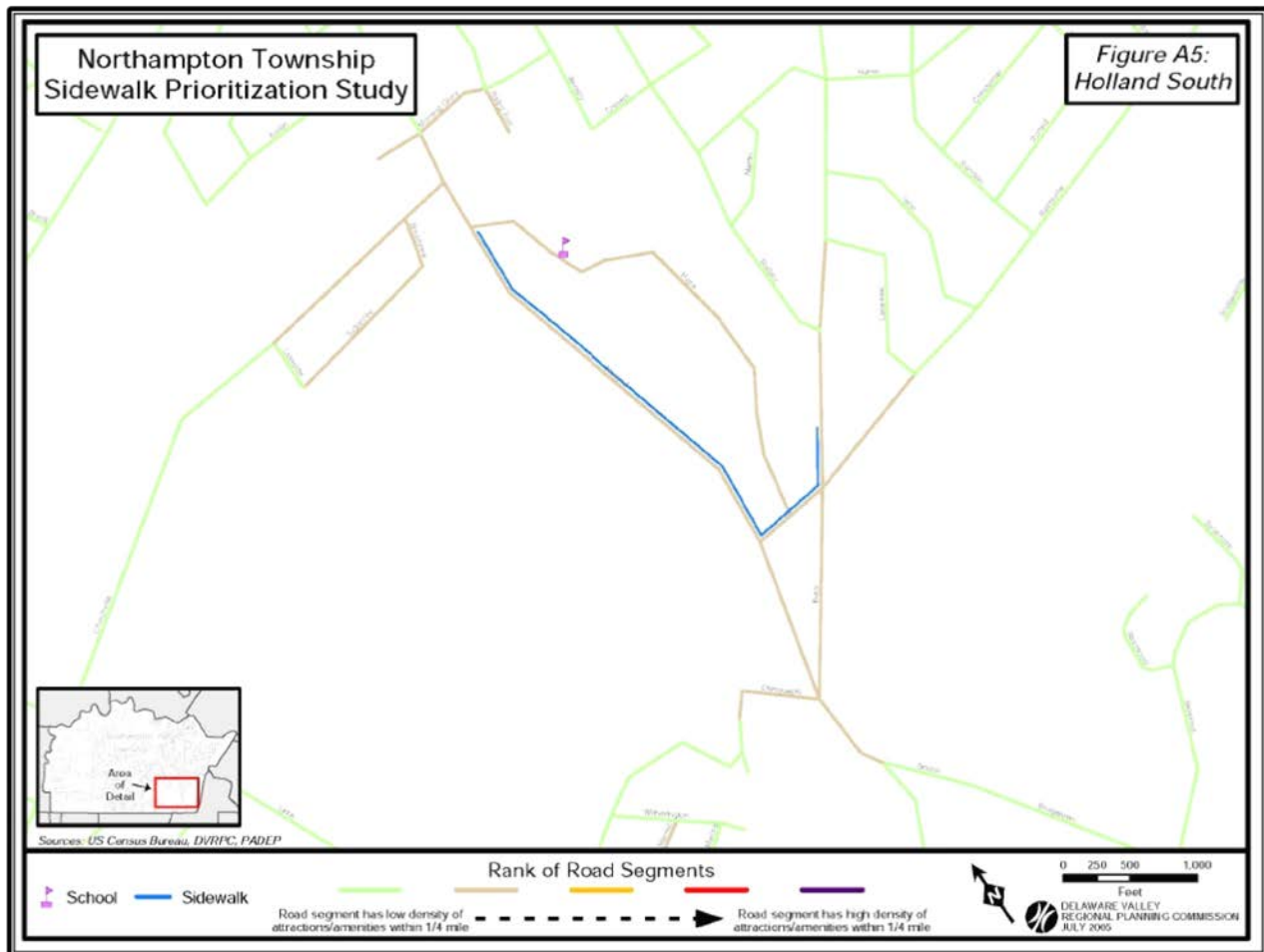
1. Northampton Township Sidewalk Prioritization Study, DVRPC, 2005;
2. Buck Road and Holland Road Feasibility Study, Gilmore & Associate, Inc. 2006;
3. Northampton Township, Bucks County, Congestion & Crash Site Analysis Program, DVRPC, 2009; and
4. Village of Holland Traffic Modeling Study, McMahan Associates, 2012.

Northampton Township Sidewalk Prioritization Study, 2005

In 2005, the Delaware Valley Regional Planning Commission (DVRPC) completed the Northampton Township Sidewalk Prioritization Study. The study documents the methodology and results of a process of prioritizing municipal sidewalk needs through an analysis which utilized a Geographic Information System. Using a methodology adapted from guidance found in the *Pennsylvania State Bicycle and Pedestrian Master Plan* and guidance from the American Association of State and Highway Transportation Officials (AASHTO), street segments were scored according to their functional class, pedestrian trip production density, proximity to pedestrian trip attractions, and proximity to existing sidewalks.

A total priority score was computed for each street segment by adding the street classification points with the pedestrian attractor points. This permitted ranking of street sections by order of importance for installing a bike lane. Additionally, the segments were divided into quintiles by total priority score. According to the study, none of the road segments found within the Holland Area Study were recommended as priority routes for sidewalk installation. However, several of the roadways were specifically identified as PennDOT Hazardous Walking Routes. The roadways identified as hazardous were Buck Road, Holland Road and Chinquapin Road.

Figure 7: Rank of Road Segments



Source: Northampton Township Sidewalk Prioritization Study, DVRPC, 2005

The Township is committed to creating a safe walking environment in all areas of the Township. However, limited 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.

Buck Road and Holland Road Feasibility Study, 2006

In 2006, Gilmore & Associates, Inc. developed sketch plan level recommendations for the study area. These recommendations included the following:

- Examine utilizing the railroad bridge over Buck Road as a “Gateway”;
- Providing a center turn lane on Buck Road;
- Perform queue and signal study;
- Improve pedestrian facilities at Buck Road and Old Bristol Road;
- Investigate an alternate pedestrian circulation route along Mill Creek;
- Provide sidewalks/multi-use trail at Chinquapin Road and Buck Road;

- Improve crosswalks and pedestrian facilities at Buck Road and Holland Road;
- Investigate alternate pedestrian circulation route along Buck Road north of Holland Road;
- Provide crosswalks at Holland Road and Rocksville Road;
- Perform traffic signal feasibility study at Buck Road and Rocksville Road; and
- Investigate primary circulation route along Holland Road north of Buck Road.

To date, only one of the proposed recommendations has been implemented. In 2012, McMahon Associates conducted a signal modeling effort for Buck Road and Old Bristol Road to complete queue and signal study task. (See description of these modeling efforts on page 45.)

Congestion and Crash Site Analysis Program, 2009

In December of 2009, the Delaware Valley Regional Planning Commission completed the *Northampton Township, Bucks County Congestion and Crash Site Analysis Program Study* for the Holland Area of the Township. The goals of the Congestion and Crash Site Analysis Program are to improve the access and efficiency of the region's transportation system, improve safety and air quality, and reduce congestion through analyses for specific highway locations with demonstrated problems in both New Jersey and Pennsylvania.

The study examined potential improvement strategies that could increase the safety and mobility of all road users traveling along Buck Road in the village of Holland. Background data such as turning movement counts, levels of service and travel speeds were gathered at key intersections and road segments within the Holland area. Existing conditions for bicyclists and pedestrians, along with land use information was also examined in detail.

This report provided analysis and recommendations for five intersections within the Holland area. The recommended strategies include both safety and operational improvements. The operational improvements are related to the signalized intersections at Buck Road and Old Bristol Road and Buck Road and Holland Road. The operational improvements were modeled and the results compared to existing conditions. While it was not possible to model the safety improvements, they were developed based on professional knowledge and discussion among state, regional, county, and local officials.

Level of Service

A review of the existing conditions and of the various improvement scenarios was conducted using Synchro traffic signal software for the project intersections. Information for determining delay and Level of Service measures included turning movement counts, roadway geometry, signal timing, and signal actuation plans. The turning movement counts were gathered by DVRPC staff and the signal timing, actuation data, and roadway geometrics were obtained from PennDOT. Table 5 shows the results of the level of service analysis.

The study results indicate that most of the intersections within the study area function acceptably during the morning and evening peak-hours. However, certain “legs” of some of the intersections function poorly. Specifically, the southbound leg of Buck Road at the Holland Road intersection and the northbound leg of Buck Road at Old Bristol Road function at level or service “D” or less in the morning peak-hour. In addition, the southbound leg of Buck Road at the Holland Road intersection also performs poorly in the evening peak-hour.

Table 5. Holland Area Roads, Level of Service

Holland Road and Rocksville Road Intersection		
Direction	Morning LOS	Evening LOS
Holland Road-Southbound	A	A
Holland Road-Northbound	A	A
Rocksville Road-Westbound	C	C
<i>Overall Level of Service</i>	A	A
Rocksville Road and Buck Road Intersection		
Direction	Morning LOS	Evening LOS
Buck Road-Southbound	A	A
Buck Road-Northbound	A	A
Rocksville Road-Westbound	B	D
Rocksville Road-Eastbound	B	C
<i>Overall Level of Service</i>	A	A
Holland Road and Buck Road Intersection		
Direction	Morning LOS	Evening LOS
Buck Road-Southbound	E	D
Buck Road-Northbound	A	B
Holland Road-Southbound	B	A
<i>Overall Level of Service</i>	C	B
Chinquapin Road and Buck Road Intersection		
Direction	Morning LOS	Evening LOS
Buck Road-Southbound	B	A
Buck Road-Northbound	A	A
Chinquapin Road-Eastbound	D	C
<i>Overall Level of Service</i>	A	A
Old Bristol Road and Buck Road Intersection		
Direction	Morning LOS	Evening LOS
Buck Road-Southbound	C	B
Buck Road-Northbound	D	C
Old Bristol Road-Westbound	C	B
<i>Overall Level of Service</i>	C	B

Source: Northampton Township, Bucks County Congestion and Crash Site Analysis Program Study, 2009

Crash Data

The feasibility study also analyzed crash data for the study area to determine problematic locations and to identify potential crash trends. The crash data used in this analysis was from *reportable* crashes provided by PennDOT and *non-reportable* crash reports provided by the Northampton Township

Police Department. In Pennsylvania, a crash is considered reportable if a person is injured or killed, or if a vehicle needs to be towed from the scene. During the years 2003 to 2007, there were 215 total crashes in the study area. There were no fatalities during this period of time for the study area.

According to the report, there were 58 total crashes in the vicinity of Rocksville Road and Buck Road and Rocksville Road and Holland Road. Forty-three percent of these crashes were angle crashes. Sixteen percent were rear-end crashes and fourteen percent were crashes associated with left-hand turns. In the vicinity of Holland and Buck roads, there were 104 total crashes, which is the highest number of accidents within the study area. Rear-end crashes accounted for 47 percent of the crashes, with another 19 percent being angle crashes. The relatively high number of rear-end and angle crashes can most likely be attributed to the greater number of driveways located in the vicinity of the intersection. This conclusion is not surprising since access to the various businesses is not currently well-managed.

In the vicinity of Old Bristol Road and Buck Road, there were 53 total accidents according to the report. Sixty percent of the accidents were rear-end type crashes. Rear-end crashes were very high on Old Bristol Road and the Buck Road approach, most likely due to the steep slope leading to Buck Road. The safety of this intersection is also compromised by poor sight distance and frequent queue lengths. The narrow bridge just north of the intersection contributes to increased frequency of sideswipe crashes as southbound vehicles on Buck Road attempt to squeeze by vehicles turning left onto Old Bristol Road.

Recommendations

Based upon the crash trends and level of service calculations, the feasibility study recommended the following potential improvements:

Rocksville Road and Holland Road Intersection

- Add an intersection-ahead sign along northbound and southbound Holland Road warning of the intersection with Rocksville Road; and
- Add pavement markings at the intersection and along Rocksville Road to delineate traffic movements.

Rocksville Road and Buck Road Intersection

- Add pavement markings at the intersection and along Rocksville Road to delineate traffic movements; and
- Consider a signal warrant analysis, especially if the southwest quadrant of intersection is developed.

Holland Road and Buck Road Intersection

- Provide better access management at Wawa/shopping center by installing “don’t block the driveway” sign and “don’t block the box” pavement marking along southbound Holland Road at the driveway;
- Provide better access management at gas station:
 - At the driveway closest to the intersection along Buck Road, convert the driveway to right-in and right-out only; the second driveway furthest away from the intersection will remain the same, as a two-way entrance and exit for the gas station;
 - At the driveway closest to the intersection along Holland Road, convert the driveway to right-in and right-out only; the second driveway furthest away from the intersection will remain the same, as a two-way entrance and exit for gas station;
- Just south of the intersection, create two lanes (the left lane will be dedicated for northbound Holland Road traffic; the right lane will be dedicated for northbound Buck Road traffic);
- Eliminate the right-turn lane along southwestbound Buck Road approaching the intersection; and
- Optimize the timing of the traffic signal.

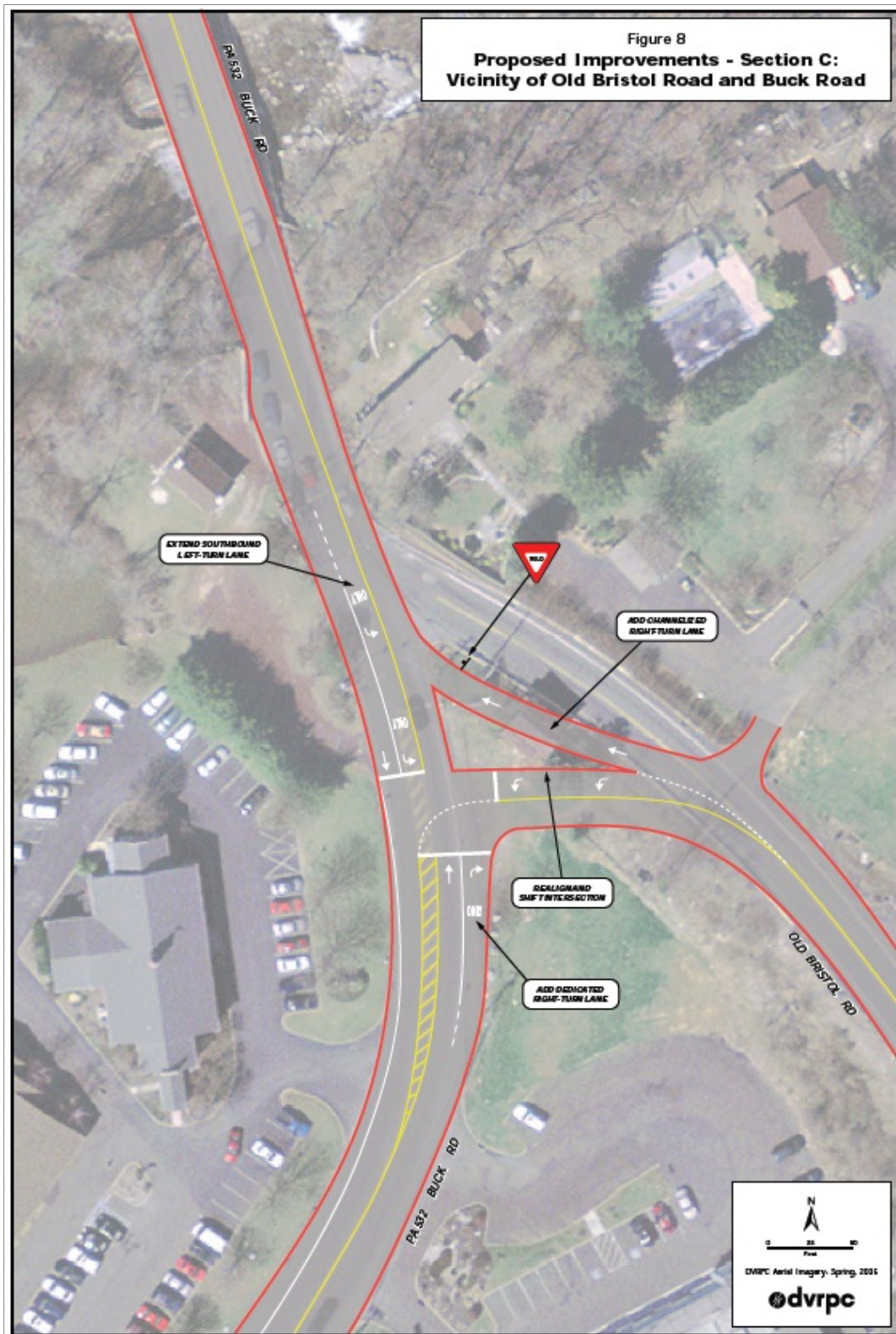
Chinquapin Road and Buck Road Intersection

- Add a dedicated northbound left-turn lane on Buck Road at the intersection for vehicles turning left onto Chinquapin Road.

Buck Road and Old Bristol Road Intersection Area

- Optimize the timing of the traffic signal;
- Realign the intersection to allow for dedicated turning lanes of appropriate length;
- Install channelized westbound Old Bristol Road right-turn lane;
- Extend the southbound left-turn lane along Buck Road; and
- Add a dedicated right-turn lane for northbound Buck Road.

Figure 8: Proposed Improvement to Buck Road and Old Bristol Road Intersection



Source: Northampton Township, Bucks County Congestion and Crash Site Analysis Program Study, DVRPC, 2009

Congestion and Crash Site Analysis Program Conclusions

The majority of the strategies identified as recommended potential improvements are short-term and could be implemented with ease and minimal labor requirements. There are two medium-term recommendations and one long-term recommendation which are located in the areas with the most congestion. Although these improvements are longer term, more expensive, and will require negotiations with adjacent property owners, they will likely provide the most benefit in providing safer traffic operations and relieving congestion in the area. However, modification to the Buck Road and Old Bristol Road Intersection Area recommendations would be needed, as the recently developed Estates Chimney building is now located in the middle of the analysis's proposed realigned intersection.

Holland Area Traffic Simulation, 2012

As a precursor to the *Holland Village Master Plan*, Northampton Township contracted with McMahon Associates, Inc., to conduct traffic modeling for the roadway network in Holland. McMahon used the traffic modeling software Synchro 7 plus SimTraffic to analyze the existing conditions in the roadway network. They also modeled several potential improvement scenarios to determine their impact. Traffic simulation models play an important role in the evaluation of complex traffic situations that cannot be analyzed through other means. The model allows the opportunity to evaluate traffic control and design strategies without committing the expensive and time-consuming resources necessary to implement the strategies.

According to the traffic simulation, there are heavy traffic delays along the roadway network during the commuter peak-hours, specifically in the southbound direction during the weekday morning peak-hour and in both directions during the weekday afternoon peak-hour. A lack of turning lanes and access management along Buck Road causes delays to occur near its intersection with Chinquapin Road. Additionally, the two-lane bridge along Buck Road over Mill Creek is located in such close proximity to Old Bristol Road that it adds to congestion in the area since it limits the ability to provide an adequate left-turn lane for southbound Buck Road vehicles waiting to turn left onto Old Bristol Road.

As a result of the insufficient bridge width, vehicles traveling southbound on Buck Road often queue in a single lane across the bridge extending back beyond the Holland Road/Buck Road intersection. This line of vehicles also often blocks the unsignalized Chinquapin Road intersection, preventing northbound Buck Road vehicles from turning left onto Chinquapin Road, which results in congestion on the northbound approach. The lack of an adequate northbound right-turn lane on Buck Road at its intersection with Holland Road also adds to congestion on this northbound approach, as vehicles desiring to turn right onto Buck Road are often stuck in the queue of vehicles waiting to stay straight on Holland Road.

McMahon also conducted peak-hour traffic counts at the Wawa shopping center and gas station near the Wawa to account for the impact these driveways have on the overall roadway network. McMahon ran the model on five intersections in the study area. These intersections include:

- Buck Road and Rocksville Road;
- Buck Road and Holland Road;
- Buck Road and Chinquapin Road;
- Buck Road and Old Bristol Road; and
- Holland Road and Rocksville Road.

After calibrating the model to existing conditions, potential alternative traffic improvements were modeled to observe the impact of those improvements on the overall traffic operations. Based on a review of the improvements listed in the DVRPC report, as well as through discussions with Township staff and other representatives, the following improvement scenario alternatives were considered:

- Alternative A: DVRPC *Northampton Township, Bucks County Congestion and Crash Site Analysis Program Study* Improvements;
- Alternative B: Improvements to the Buck Road/Old Bristol Road Intersection;
- Alternative C: Roundabout at the Buck Road/Old Bristol Road Intersection;
- Alternative D: One-way operation on Buck Road, north of the Holland Road intersection (includes Alternative B improvements); and
- Alternative E: Holland Road Realignment (includes Alternative B improvements).

Alternative A: DVRPC Improvements

If all of the recommended improvements in the DVRPC *Northampton Township, Bucks County Congestion and Crash Site Analysis Program Study* were constructed, the traffic simulation predicts a significant reduction in delay and queue lengths experienced by vehicles throughout the study area during the weekday morning and weekday afternoon peak-hours as compared to existing conditions. The simulation results for the recommended DVRPC improvements, while encouraging, are somewhat unrealistic. In order to implement the DVRPC recommendations, significant costs would have to borne by the region, state and Northampton Township.

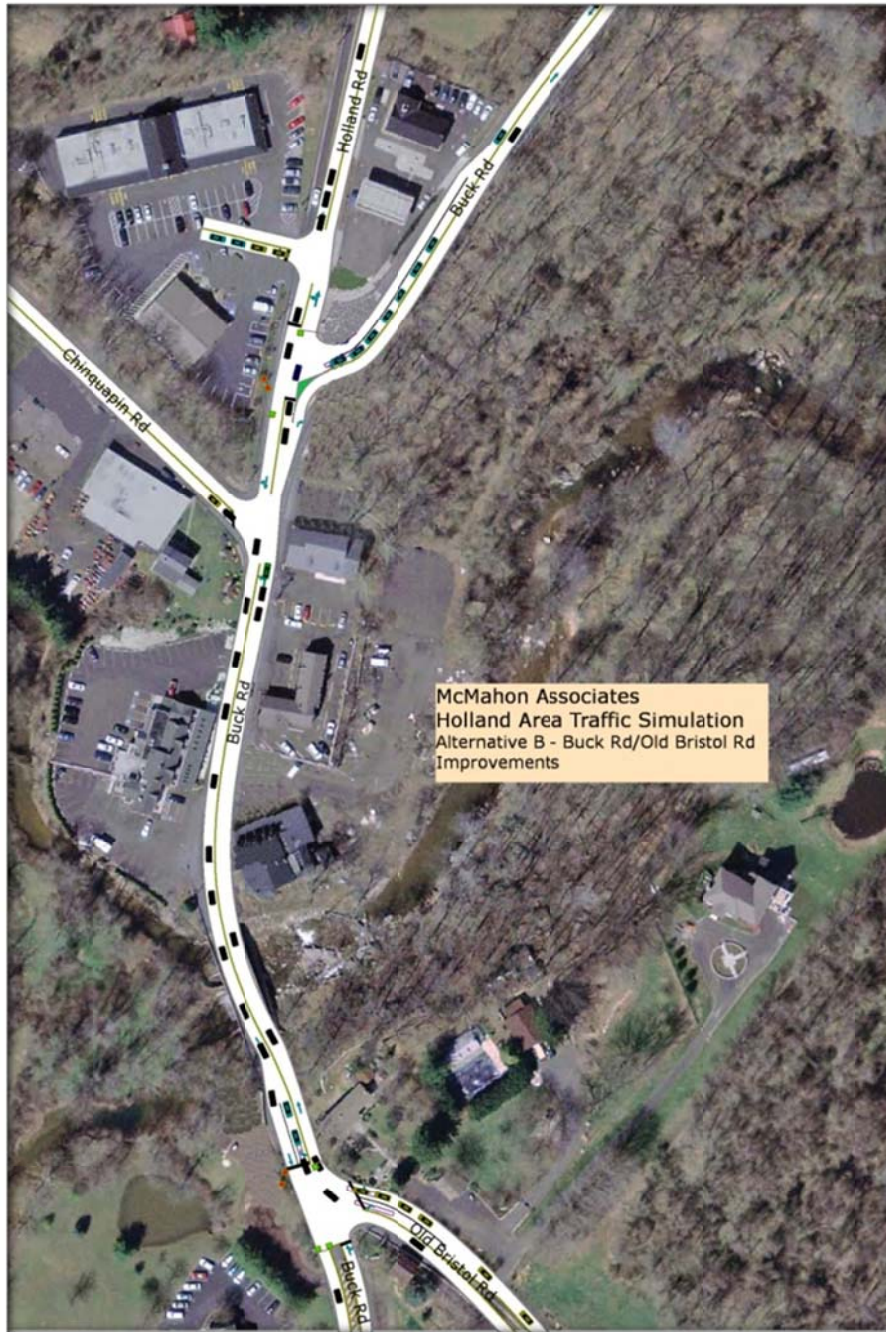
The improved operation of the corridor can be mainly attributed to the extension of the southbound left-turn lane at the intersection of Buck Road and Old Bristol Road. This allows the southbound left-turn queue to be accommodated in the storage area, therefore minimizing interference with vehicles that are continuing south on Buck Road. However, in order to construct this improvement, significant engineering, right-of-way and construction costs would be involved due to steep slopes at this intersection.

Alternative B: Improvements to the Buck Road/Old Bristol Road Intersection

This alternative focuses solely on improvements to the intersection of Buck Road and Old Bristol Road and involves the installation of a separate, but not channelized, right-turn lane on the Old Bristol Road approach at the intersection of Buck Road and Old Bristol Road. The improvement allows for a right-turn overlap phase, thereby allowing opposite turning movements to occur at the same time. This reduces the specific green time needed for the Old Bristol Road left-turn movement, a movement that has relatively low traffic volume during the peak-hours, allowing more green time to be given to the Buck Road approaches.

With this alternative, the simulation analysis indicates a measurable improvement to the traffic operations along Buck Road during the weekday morning and weekday afternoon peak-hours as compared to existing conditions. The improved operation can be attributed to the additional capacity provided along the westbound Old Bristol Road at its intersection with Buck Road. It should be noted that the delay reduction at the intersection of Buck Road and Holland Road is not as great as under the full improvements in Alternative A, but the Alternative B improvement to the Old Bristol Road intersection would reduce the overall queues in the area and reduce the impact of queues extending into adjacent intersections. In addition, this alternative is far less expensive than Alternative A.

Figure 9: McMahon Holland Area Traffic Simulation Alternative B: AM Peak



Alternative C: Roundabout at the Buck Road/Old Bristol Road Intersection

Alternative C involves construction of a roundabout at the Buck Road/Old Bristol Road intersection. According to the simulation, the roundabout would provide an increase in capacity at the intersection, but an unacceptable delay would remain for the southbound approach during the morning peak-hour. Furthermore, this alternative would require additional right-of-way, which would increase the cost of the improvement.

Alternative D: One-way Operation on Buck Road, north of the Holland Road Intersection

Alternative D would include the improvements of Alternative B, but also add one-way (northbound-only) operation of Buck Road in the area north of the current Buck Road/Holland Road intersection. Southbound traffic on Buck Road destined to stay on Buck Road would be directed to turn right onto Rocksville Road and then turn left onto Holland Road. Northbound traffic only would be allowed on Buck Road from Holland Road to Rocksville Road. This alternative would allow for the elimination of the traffic signal at Buck Road and Holland Road since there will be no more conflicting traffic movements.

With this option, the simulation analysis indicates a significant improvement to the traffic operations along Buck Road during both peak-hours as compared to the existing conditions. As under Alternative B, the proposed improvements to the Buck Road intersection with Old Bristol Road provide a significant improvement to delays and queue lengths. This improvement reduces the queue lengths extending toward the north near Holland Road from the Buck Road/Old Bristol Road intersection. With that queue reduction and the additional improvements proposed at the northern end of the study area as part of this alternative, queues and delays will be reduced throughout the study area. Since this improvement includes the removal of the traffic signal at the Buck Road/Holland Road intersection, it eliminates delay and queues at that location.

Alternative E: Holland Road Realignment

This alternative, which includes Alternative B improvements, involves a more extensive improvement at the northern end of the study area involving a realignment of the northern leg of Holland Road to intersect Buck Road at a point north of the current intersection. This would move the Holland Road/Buck Road intersection to a point further north allowing for more distance between the Holland Road intersection and Old Bristol Road. This alternative is based on the expectation that the undeveloped area within the triangle bounded by Holland Road, Buck Road, and Rocksville Road (Wright Property) will likely be developed at some point in the future. This new realignment could provide access to this undeveloped land and could be constructed as part of this potential development project for the site. With the alternative, the traffic signal at the existing intersection of Holland Road and Buck Road would be removed and the abandoned portion of Holland Road could be reconfigured to maintain access to the gas station, Wawa, and Holland Shopping Center.

With the improvements included in Alternative E, the simulation analysis indicates that the Buck Road/Holland Road intersection operates with less delay and queues during the weekday morning and weekday afternoon peak-hours. This improvement, however, combined with improvements at the Old Bristol Road/Buck Road intersection will provide a significant benefit for both northbound and southbound traffic flow in both peak-hours. It should be noted that this option would likely be the most expensive option due to the cost of constructing a new road alignment.

Conclusions of Traffic Modeling Simulation

Based upon existing conditions of the study area, high delays will continue and most likely increase along Buck Road as the area develops and redevelops. Each alternative discussed above will provide varying levels of traffic improvements in Holland. However, the traffic modeling simulation proves that any improvements to the roadway network must begin at the Buck Road/Old Bristol Road intersection. The modeling proves that this intersection is the main choke point for traffic in the study area. Because of this, any improvements that don't include improving the Buck Road/Old Bristol Road intersection first, may only have minimal effect in reducing traffic congestion.

The simulation demonstrates that larger-scale improvements provide the most congestion relief for the study area. However, there are significant cost and right-of-way impacts associated with each of these alternatives. Considering the current economic conditions and the lack of state and federal funds available to implement these improvements, it is highly unlikely that all of these recommended improvements will be constructed in the near future. Therefore, these improvements should be considered as long-term solutions to the congestion problems currently experienced in the corridor.

BUCK ROAD BRIDGE

The Buck Road bridge crosses over Mill Creek near its confluence with Ironworks Creek and is located near the center of the study area. It is a state-owned bridge that was built in 1932 and was widened in 1983. The bridge is a two-span, prestressed, pretensioned composite spread box beam structure. The length of the bridge is 114 feet and the deck width is 33.5 feet. According to PennDOT, it is a structurally deficient bridge, but does not currently have any weight restrictions placed on it. Additionally, there are no immediate plans by PennDOT to rehabilitate the bridge. The bridge is one lane with no shoulder in the northbound direction and one lane with a minimal shoulder in the southbound direction. There are no accommodations for pedestrians on the bridge.



Route 531 (Buck Road), looking south



Route 532 (Buck Road), looking southbound



Buck Road Bridge, looking west

The bridge's proximity to the Buck Road/Old Bristol Road intersection creates logistical problems to providing improvements to resolve the congestion problems currently experienced at this intersection. The primary issue identified through the *Northampton Township, Bucks County, Congestion and Crash Site Analysis Program, DVRPC, 2009* and *Village of Holland Traffic Modeling Study, McMahon Associates, 2012* was traffic backups, mainly in the southbound direction, at the Buck Road/Old Bristol Road intersection. Traffic congestion at this intersection can be so severe at times that it can affect the Buck Road/Holland Road intersection.

One of the main contributors to congestion at the Buck Road/Old Bristol Road intersection is that vehicles using this intersection are split nearly evenly by direction. Since the number of vehicles turning left onto southbound Old Bristol Road from southbound Buck Road are approximately the same as those wishing to continue south on Buck Road, the provision of a dedicated left-turn lane of appropriate length is imperative to the proper operation of this intersection.

Unfortunately, due to constraints of the dimensions of the existing bridge, it is infeasible to extend the length of left turn lane without impacting vehicles wishing to continue on southbound Buck Road. According to the previously mentioned studies, vehicles traveling southbound on Buck Road often queue in a single lane across the bridge when vehicles attempting to turn left onto Old Bristol Road are unable to do so.

Figure 10: Overhead View of Mill Creek Bridge

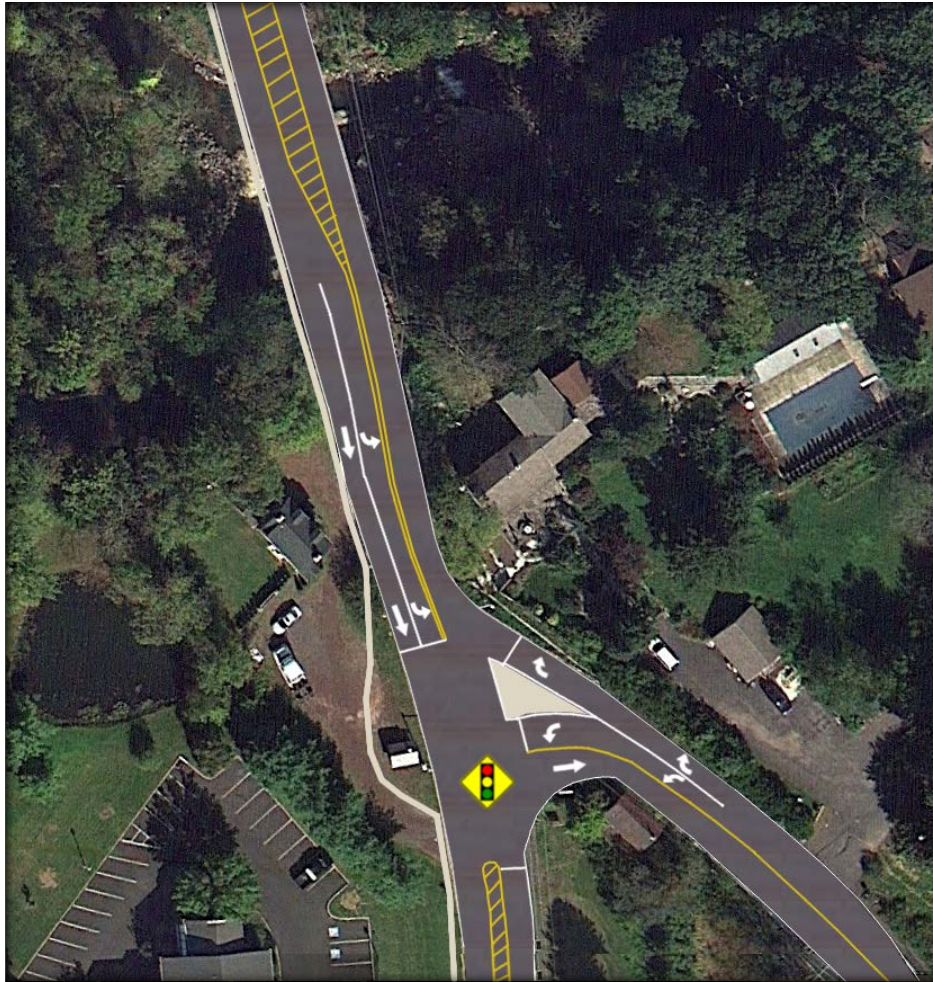


Aerial Source: Bing Maps, Microsoft Corporation

The obvious solution to improve this situation would be to reconstruct the bridge to provide a wider bridge deck that would allow for the provision of appropriate turning and through lanes, as well as pedestrian facilities. Widening the roadway on the bridge to allow for longer turning and through lanes would involve obtaining additional right-of-way to construct the larger bridge deck. Regrettably, obtaining this right-of-way would be extremely difficult due to steep slopes and existing buildings on the south side of the bridge.

Reconstructing the bridge to allow for proper turning and through lanes is extremely expensive and not feasible at this point. Hence, any potential improvements to the bridge must be considered to be the ultimate improvement or “long-term” solution, which means any reconstruction of the bridge would probably not occur for at least 10 years, possibly longer. However, when the reconstruction of the bridge does occur, every effort should be made to ensure that the complications caused by the Buck/Old Bristol roads intersection are included in the final design of the new bridge, as well as the provision of pedestrian accommodations. Figure 11 depicts a conceptual drawing of a potential solution involving a larger bridge deck and longer turning lanes.

Figure 11: Mill Creek Bridge Reconstruction Ultimate Improvement, Aerial



Source: Bing Maps, Microsoft Corporation

DVRPC TRANSPORTATION IMPROVEMENT PROGRAM

The Delaware Valley Regional Planning Commission (DVRPC) produces an annual Transportation Improvement Program (TIP) for Bucks, Montgomery, Chester, Delaware and Philadelphia counties. The program lists projects that responds to the needs of the region and at the same time complies with federal and state policies. This list of transportation priorities must be financially constrained per the requirements of the *Moving Ahead for Progress in the 21st Century* (MAP-21).

In southeastern Pennsylvania, the current TIP contains approximately 370 projects which total almost \$3.7 billion over the four years of the program. There is only one project currently programmed for funding in Northampton Township. This project involves a bridge rehabilitation or replacement of a state-owned bridge over the Neshaminy Creek on Worthington Mill Road, which is not located within the limits of the village of Holland.

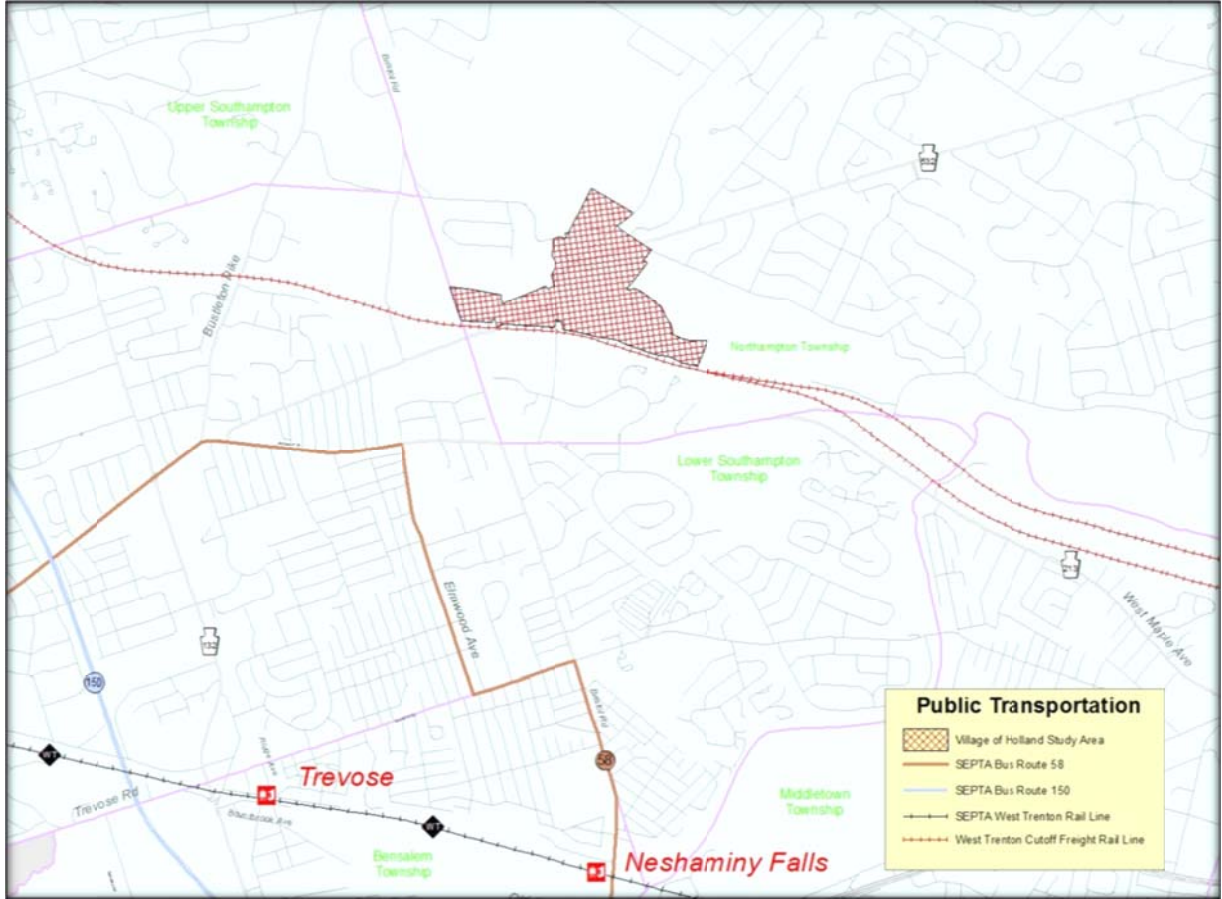
Since most of the alternatives studied thus far for the village would cost more than the Township could afford to implement, the DVRPC TIP is the most logical source for funding. However, since none of these alternatives has been on the TIP in previous years, any improvement would be considered a “new” project for the TIP. Unfortunately, funding for the TIP in the previous 10 years has been extremely financially constrained. Due to these circumstances, the region has not added many new projects to the TIP in recent years. Therefore, the likelihood that any of these alternatives is added to the TIP is very low. However, the Township should continue to work with the County to ensure that potential construction projects for the village are ready for implementation should funding become available. Potential funding scenarios are discussed in greater detail later in this document.

PUBLIC TRANSPORTATION

The village of Holland is not directly served by public transportation. The closest Southeastern Pennsylvania Transportation Authority (SEPTA) bus service is Route 58, which is located about 1.5 miles from the village. The Route 58 bus route provides service from the Neshaminy Mall, through Upper Southampton Township and Somerton to the Frankford Transportation Center in Philadelphia. The nearest commuter rail stations are located in Bensalem Township. They are *Neshaminy Falls Station*—West Trenton Regional Rail Line, which is 2.5 miles from the village and *Trevoze Station*—West Trenton Regional Rail Line, which is 3 miles from the village.

Currently, SEPTA does not have any plans to extend bus service into the village. If redevelopment occurs within the village, it may prove to be a cost-effective option for employees and customers of the businesses within the village. At such time that public transportation (most likely bus service) is a feasible option, it is important that proper infrastructure is in place to allow for the safe pick-up and discharge of passengers. The most appropriate infrastructure would be bus turnouts, which is a location for buses to pull over and allow the riders to exit or enter the bus safely. Areas for future bus turnouts should be investigated as redevelopment occurs within the village.

Figure 12: Public Transportation



PEDESTRIANS AND BICYCLISTS

According to the 2009 National Household Travel Survey by the Federal Highway Administration, roughly 40 percent of all trips taken by car are less than 2 miles in length. By making some of these short trips on foot or by bicycle, rather than in a car, citizens can have a substantial impact on local traffic and congestion, environmental quality, as well as their physical health. In addition, the opportunity to travel by foot and bicycle is important both for recreational purposes and for members of the community who do not drive.

For many, bicycling is a form of recreation. Biking is a modest type of exercise that most people are capable of performing. A bike-friendly town is typically associated with a high quality of life and a sense of community. In many communities, bicycle systems are important and much appreciated facilities. Furthermore, bicycling improves the quality of community life by increasing the social connections that take place when residents are active and spend time outdoors in their community.

Through the provisions of the subdivision and land development ordinance, the township is able to ensure that new developments, both residential and nonresidential, have sidewalks to allow for pedestrian circulation. The township should continue to require sidewalks on all proposed and existing streets within the village of Holland.

Bucks County recently adopted the *Bucks County Bicycle Master Plan, 2013*. The purpose of the Plan is to inventory existing conditions, advance opportunities for the improvement and expansion of a broader network of multimodal routes serving existing residential and business areas of the County, enhance the outreach and education of bicycle safety, and leverage the existing recreational resources in the communities at large.

This document is a master plan for an interconnected network of bicycle facilities for Bucks County and the region. It is a valuable resource for municipalities in planning and implementing bicycle facilities across the county. It identifies priority roadways for bike lanes and shared-use paths. The plan identifies an on-road spine that follows Route 532 (Buck Road) from Lower Southampton, through the village of Holland to Washington Crossing State Park in Upper Makefield Township.

Providing the connection to the spine located along Route 532 (Buck Road) will also allow the village of Holland to connect to the “Neshaminy Creek Greenway”. This spine, as identified in the County Bike Plan, would eventually connect Neshaminy State Park in Bensalem Township to central Bucks County and beyond to Peace Valley Park in New Britain Township. The on-road bicycle spine along Route 532 should be included in any improvements to the roadway system as they are implemented in the township.

Chapter 3

INTEGRATING LAND USE AND TRANSPORTATION

Improving the linkage between land use and transportation planning is essential for the future of Holland. Inappropriate land uses coupled with inadequate transportation services create congestion and traffic impacts. They also cause worsening air quality conditions, decreased safety, and reduced community access. Inefficient transportation access and unplanned land use patterns can be aesthetically displeasing in addition to being a significant hindrance to economic growth and productivity.

Chapter 1. Land Use and Natural Resources presented an analysis of identified planning areas in Holland, specifically focusing on land use and aesthetic considerations. Chapter 2. Transportation examined the road network, reviewed recommendations from previous transportation studies, evaluated the need for new road and intersection designs, and discussed the need to include pedestrians and bicyclists in the transportation system. This chapter attempts to address the challenges of Holland's land use and transportation environment through recommended design and planning strategies. Chapter 3. Integrating Land Use and Transportation presents concept plans implementing techniques and improvements as they apply to identified planning areas (see Figure 13). Recommended strategies for planning areas include:

Figure 13: Planning Areas



- Alternative road and intersection layouts and improvements
- Access management
- Traffic calming
- Connectivity
- Street improvements
- Improved signage

ALTERNATIVE ROAD AND INTERSECTION LAYOUT AND IMPROVEMENTS

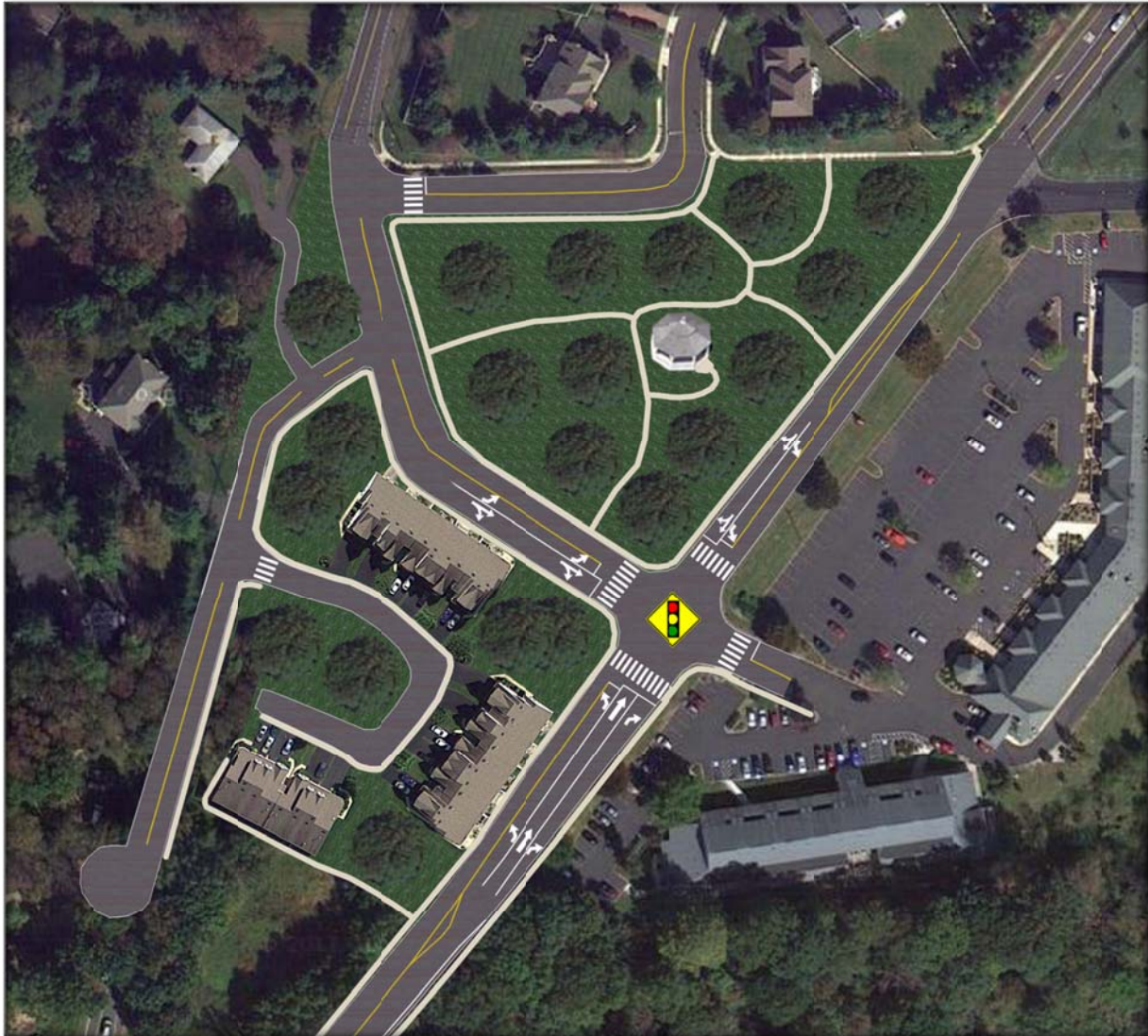
Planning Area 1: Buck Road/Holland Road Intersection Realignment

McMahon’s Alternative E investigates the scenario in which the existing intersection of Buck Road and Holland Road would be abandoned and a new intersection would be built between Rocksville Road and the current Buck Road and Holland Road intersection. Relocating this intersection northward would allow for more distance between the Holland Road intersection and Old Bristol Road which would allow for better traffic flow through the village. This alternative is based on the expectation that the Wright Property will likely be developed at some point in the future.

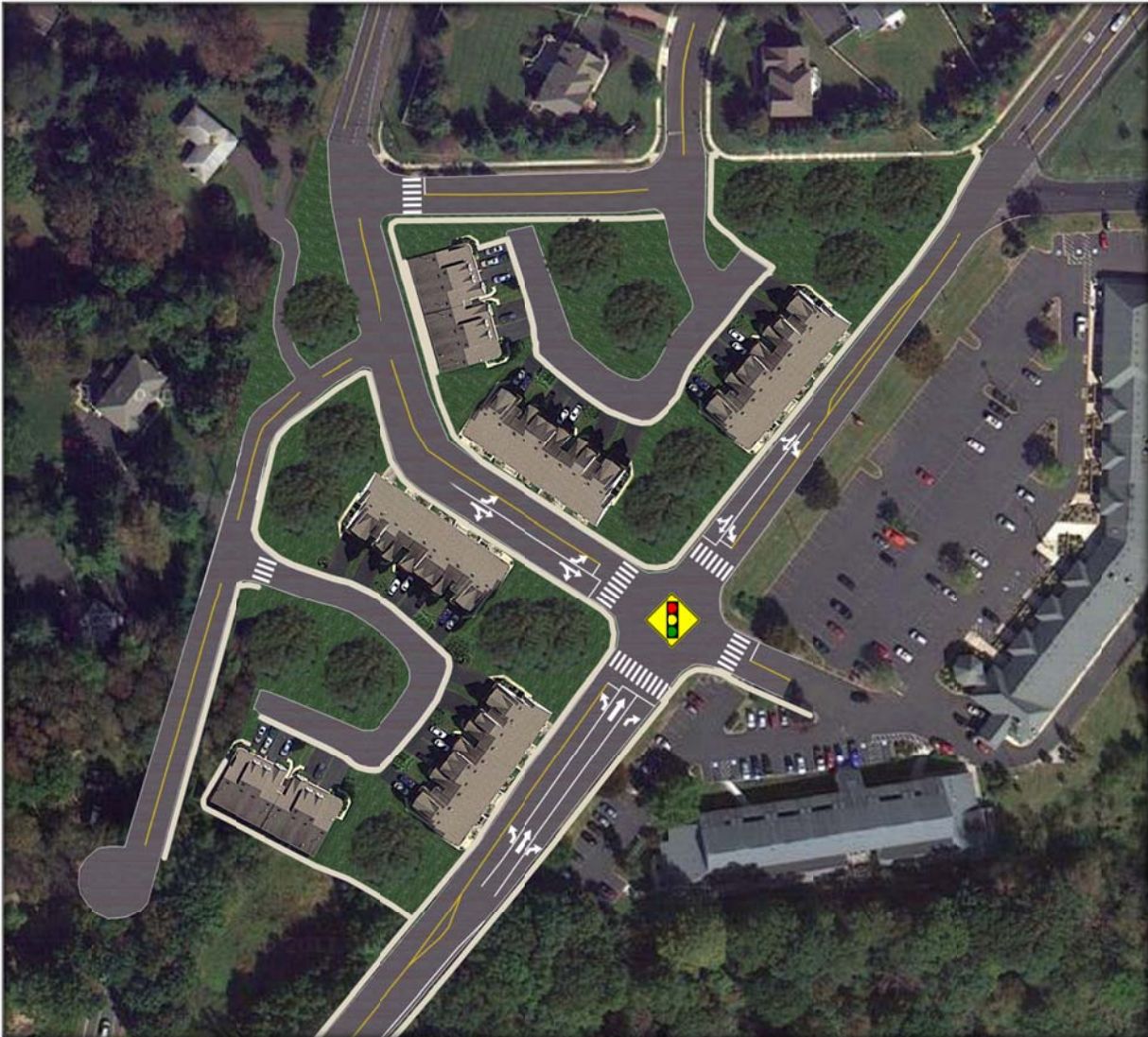
If Holland Road was realigned, the portion of Rocksville Road from Buck Road to Hope Road could be abandoned. Through this realignment scenario, two tracts of land would be created by the realignment of Holland Road. The upper portion could be developed as a park, which would act as a transitional area from the current residential development north of Rocksville Road to the village of Holland. The tract below the newly created roadway could be then developed as residential units or commercial buildings. New residential development could be a medium density multifamily use, such as townhouses. Another potential scenario would be combination of both residential and commercial uses.

Any proposed development should be developed to be consistent with the intent of the village zoning. The layout of the development is critical since it will act as the northern gateway to the village. Therefore, in keeping with village-style development, dwelling units or commercial buildings should be placed near the roadways and parking for the units should be placed behind the units. In addition, sidewalks and pedestrian amenities should be provided. Figures 14, 15, 16 and 17 depict several potential alternatives for developing the Wright site along with the realignments of Buck, Holland, and Rocksville roads. However, the scenarios shown (and accompanying density) may not be permitted by the dimensional requirements of the zoning ordinance; a full examination of the Village Overlay District will be required to determine if the densities, as currently permitted in the district, are adequate to economically support private development efforts.

*Figure 14: Planning Area 1:
Potential Redevelopment of Wright Site: Alternative 1: Townhouses with Park*



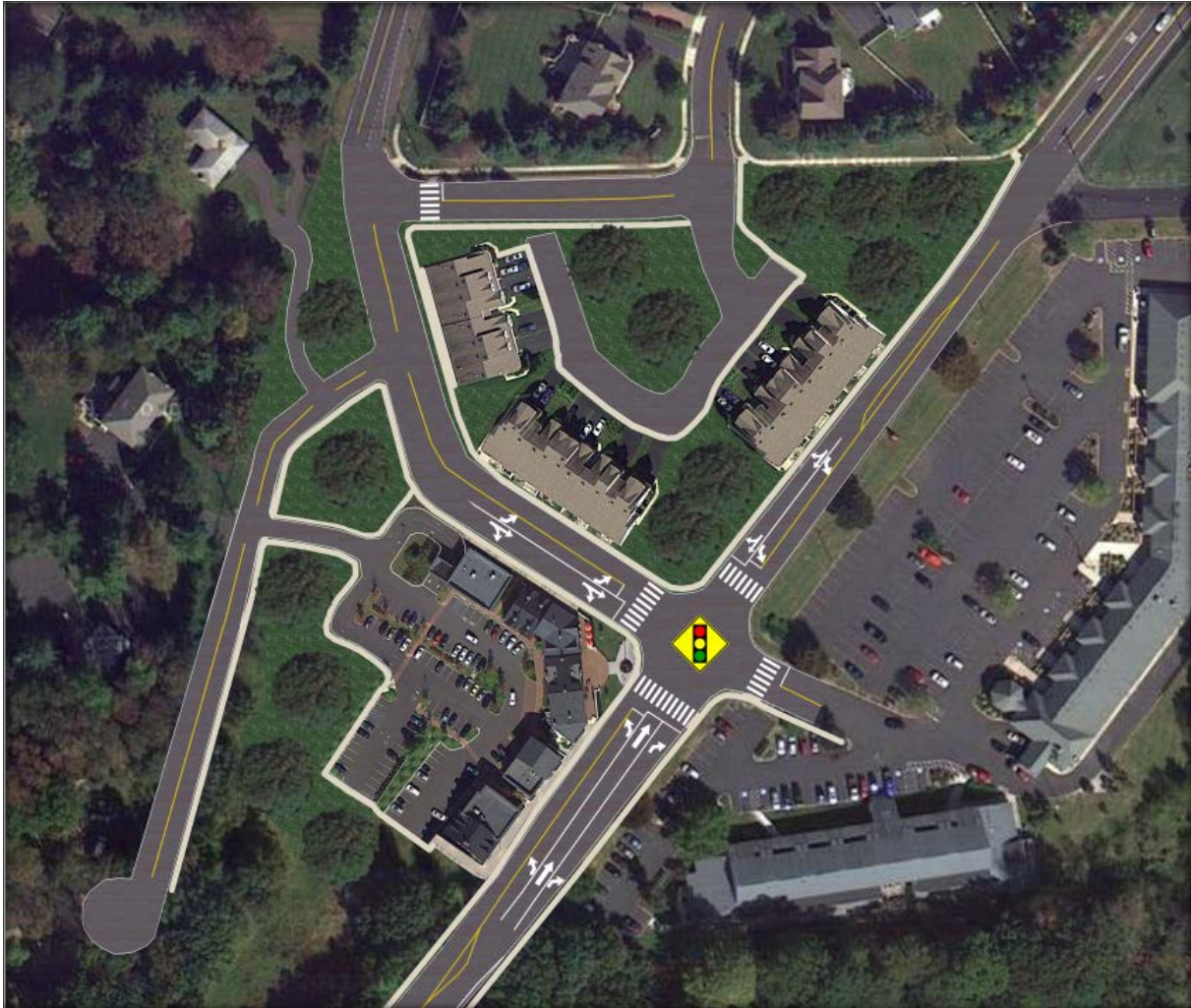
*Figure 15: Planning Area 1:
Potential Redevelopment of Wright Site: Alternative 2: Townhouses*



*Figure 16: Planning Area 1: Potential Redevelopment of Wright Site:
Alternative 3: Commercial Development*



*Figure 17: Planning Area 1: Potential Redevelopment of Wright Site:
Alternative 4: Village Style Commercial with Residential*



Planning Area 2: Buck Road/Holland Road Intersection Realignment Enhancement

An enhancement to Alternative E: Holland Road Realignment could consist of combining the two existing parcels at the Holland Shopping Center/Gas Station (tax map parcels 31-26-23 and 31-26-25) and improving access to the newly created site. This scenario would include adding the vacated portion of Holland Road to this newly created site.

The site would be redesigned to enable development of businesses which are more consistent with the village setting. The gas station would be removed and the new buildings would be situated closer to the roadway with parking located behind the buildings (see Figure 19).

The location and scale of the buildings are key to projecting a “village” image to motorists traveling along Buck Road. By locating properly-scaled buildings along the road, motorists will become aware that they are entering the village of Holland and should slow down since there could be pedestrian

activity associated with the commercial area. In order to encourage appropriate redevelopment of the site, the overlay zoning district should be modified to permit suitable uses, as well as the proper setbacks and densities consistent with a village setting.

Another potential redevelopment scenario could involve redeveloping the site to maintain the existing gas station and provide a commercial building below the nearly created intersection. This option may prove to be more appealing if Wawa is interested in redeveloping the site.

A potential variation of Alternative E: Holland Road Realignment under this proposed scenario would be to abandon Holland from Buck Road to a point just north of the Holland Shopping Center, rather than realigning Holland Road to intersect with Buck Road north of its current intersection. Southbound traffic on Holland Road would be directed onto Rocksville Road and then onto Buck Road to continue their journey southward. The portion of Holland Road from Rocksville Road southward would become a cul-de-sac and still provide access to the parcels from Rocksville Road to just north of the Holland Shopping Center, but would not provide access to the shopping center. This scenario would be less expensive to implement since a realigned portion of Holland Road and new intersection with Buck Road would not have to be constructed.

BUCK ROAD BRIDGE OVER MILL CREEK

Chapter 2. Transportation identified the long-term need to reconstruct the Buck Road Bridge over Mill Creek to provide a wider bridge deck that would allow for the provision of appropriate turning and through lanes, as well as pedestrian facilities. When the reconstruction of the Mill Creek bridge does occur, every effort should be made to ensure that the complications caused by the Buck/Old Bristol roads intersection are included in the final design of the new bridge, as well as the provision of pedestrian accommodations. The township should coordinate with DVRPC and Bucks County to ensure that the Buck Road Bridge over Mill Creek Rehabilitation Project is programmed for funding when appropriate.

Figure 18: Planning Area 2: Existing Holland Shopping Center, Aerial



Source: Bing Maps, Microsoft Corporation

Figure 19: Planning Area 2: Holland Shopping Center Potential Redevelopment, Aerial



Source: Bing Maps, Microsoft Corporation

*Figure 20: Planning Area 2:
Holland Shopping Center Potential Redevelopment with Gas Station, Aerial*



Source: Bing Maps, Microsoft Corporation

ACCESS MANAGEMENT

Controlling the number of access points allows roads to perform their intended function. When access is not controlled, the number of conflict points with roadway traffic increases. A conflict point is a place where two vehicles come together or their paths cross and one or both drivers must take evasive action to avoid collision. An increase in conflict points places serious demands on the roadway capacity, as well as making conditions unsafe for vehicles entering or exiting the highway.

The conflict between safe and efficient movement of traffic and access to abutting properties has long been recognized as a limiting constraint in traffic operations and transportation systems management. The basic approach of access management is to minimize the number of conflict points along these roads and to provide safe and efficient access to properties along roads. Access management includes such techniques as shared driveways and parking, providing access to secondary roadways, driveway spacing, planted median strips, protected left turn lanes, and any other appropriate access control measures.

Access management is both a land use and traffic issue. It calls for land use controls and incentives that are keyed to the development policies of the community and the capabilities of the transportation system. The planning challenge is not merely how to provide driveways or how to

design roadways, storage areas, or parking. The challenge is how to not limit new development in order to expedite traffic flow. Therefore, the township must also take into account the access requirements of businesses that may relocate into the area, as well as those vehicles traveling through the area.

Northampton Township should develop an access management plan. This plan should include an analysis of current and projected land uses and their associated traffic conditions. The plan should include an implementation plan that establishes priorities and the responsible agencies for completing the roadway improvements or municipal ordinance amendments. PennDOT has recently completed developing model ordinance language for access management. PennDOT's Center for Program Development should be consulted during development of the plan. This plan should be adopted by the township and should be referred to during the subdivision and land development review process.

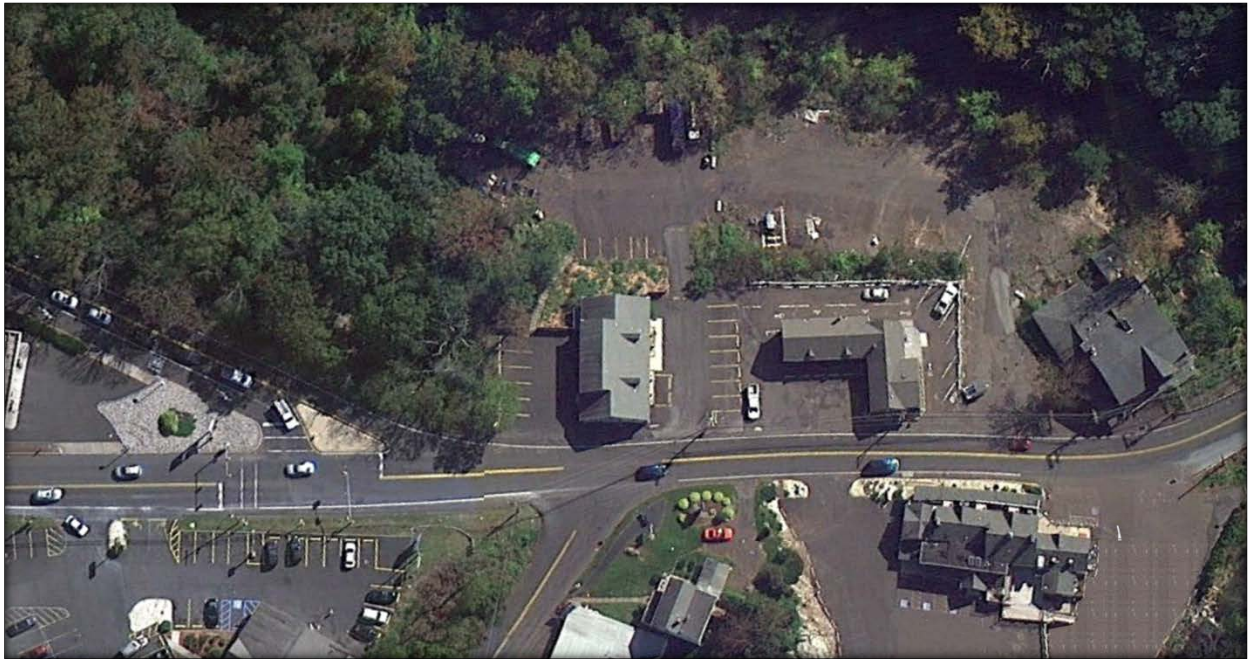
Planning Area 2: Mill Race Inn Parking Lot

The village of Holland contains several sites which do not have a defined driveway. One such example is a site comprised of tax map parcel #31-26-59-2, which contains the vacant Mill Race Inn; tax map parcel #31-26-59-1, which contains the stone building housing Munz Construction; and tax map parcel #31-26-59-4, which contains the 207 Buck Road offices. All three structures are located within close proximity to Buck Road, which is consistent with a village setting. However, there are no defined driveways to serve these buildings. In fact, some of the parking for the Munz Construction building is designed in such a way as to encourage vehicles to back out onto Buck Road. While none of the parking for 207 Buck Road is designed in this fashion, there is no defined management of access to the site either.

Since egress to and from the site is poor, several forms of access management are appropriate for the site. Since most of the site has no defined driveways, the addition of curbing with planted islands to denote the location of the driveways would improve safety for vehicles entering and exiting the site. The planted islands also provide the additional benefit of acting as a streetscape improvement, which is an aesthetic benefit for the village.

Most of the lower part of the site consists of an unstriped parking lot. When the Mill Race Inn is finally redeveloped, it may be possible to use this area for parking, not only for the Inn, but also as spillover parking for businesses located in close proximity to the site. This parking area could also be used as trailhead parking if a trail was formally developed in the Pheasant Valley and Bellwood sites. Figure 21 is a computer-generated image of the potential parking area and access management facilities once the site is developed.

Figure 21: Planning Area 2: Mill Race Inn Existing Conditions, Aerial



Source: Google Maps

Figure 22: Planning Area 2: Mill Race Inn Potential Parking Lot Redevelopment, Aerial



Source: Google Maps

Shared parking arrangements, as shown at the Mill Race Inn site, can reduce the number of parking spaces required by individual uses, allowing greater flexibility in site design and intensity. As

revitalization occurs, the township should coordinate other shared parking arrangements in the village to permit the use of parking spaces for adjacent uses.

TRAFFIC CALMING

Traffic calming measures are used to address speeding and high cut-through traffic volumes on neighborhood streets. These issues can create an atmosphere in which non-motorists are intimidated, or even endangered by motorized traffic. By addressing high speeds and cut-through volumes, traffic calming can increase both the real and perceived safety of pedestrians and bicyclists, and improve the quality of life within the neighborhood.

The role of physical measures in traffic calming is usually emphasized because these measures are self-policing, motorized vehicles will slow down in absence of a police presence. Some potential traffic calming measures include: speed humps, speed tables, chicanes, planted medians, roundabouts and curb extensions. These techniques should affect driver behavior and improve the safety of the street for all roadway users, including pedestrians and bicyclists, but they must be designed so they do not impede emergency access by police, fire, ambulance or rescue personnel.

Planning Area 1: Rocksville and Holland Road Closures

Traffic calming in the village of Holland begins with changing the overall context of the village from strip commercial development to village commercial. The Buck Road/Holland Road Intersection Realignment concept plan effectively calms traffic adjacent to the Holland Road residences and Rocksville Road residences by cutting off non-local traffic. Road noise and safety concerns are substantially reduced under the proposed realignment because through-traffic is redirected to arterials serving commercial areas.

Other, less expensive improvements will also help change the context of the area and lessen the impacts of vehicles on the quality of life of the village. These include pedestrian-scale improvements such as street lights, banners, gateways, sidewalks, and landscaping. Connectivity and Streetscape Improvements provide further information on these types of improvements (see below).

CONNECTIVITY

One of the major issues identified through the public outreach process for the plan is the lack of walkability in the village due to poor connectivity. Steep slopes, wetlands, streams and insufficient road right-of-way have combined to prevent adequate connectivity within the village. There are no sidewalks anywhere along Buck Road throughout the village. In addition, the high volume of vehicles creates unsafe conditions for any pedestrians interested in walking along Buck Road since there aren't any safe facilities for them.

The Buck Road bridge over Mill Creek does not include any pedestrian access. This separates properties north of the bridge from those properties south of the bridge for pedestrians. Therefore, any business patrons interested in visiting businesses on both sides of the bridge are forced to use their vehicle to make the trip. This condition adds to the congestion problems already being experienced in the corridor.

Any future roadway improvements and development in the village should include pedestrian and bicycle connections, including sidewalks, crosswalks, and bike trails. By striving to provide better connectivity in the village, people would have the option of walking or biking to businesses. This would reduce congestion in the village since fewer vehicles would be used for these trips.

The *Bucks County Bicycle Master Plan* (2013) identifies a trail spine that follows Route 532 (Buck Road) from Lower Southampton, through the village of Holland to Washington Crossing State Park in Upper Makefield Township. This spine, as identified in the County Bike Plan, will eventually connect Neshaminy State Park in Bensalem Township to central Bucks County and beyond to Peace Valley Park in New Britain Township. The on-road bicycle spine along Route 532 should be included in any improvements to the roadway system as they are implemented in the township.

PROPERTY MAINTENANCE

The image of a neighborhood often depends on how well property owners maintain their properties. Township codes, including building codes, require that owners address issues such as yard maintenance, rehabilitation of substandard properties, security of vacant structures, and prevention of health and safety hazards like broken windows, vermin, and littered grounds. Usually, code enforcement is notified of noncompliance by complaint or is discovered by staff when on other township business. However, a well-communicated vision and plan for the village of Holland should make the involvement of code enforcement less necessary. A common understanding that property maintenance and investment not only benefits the individual business owner but the entire district will go a long way in making Holland a more pleasant place to shop and do business.

STREETSCAPE IMPROVEMENTS

In conjunction with the addition of sidewalks to aid pedestrian safety, streetscape improvements should be included in any roadway improvements or land developments. Aesthetic issues such as lighting, signage, and pedestrian amenities are important components of streetscape planning within the community. Streetscape improvements are an integral part of village revitalization. Streetscape improvements combine roadways with sidewalks, signage, village-style lighting, landscaping and other elements in the public right-of-way to create public space for pedestrians, residents, and traffic.

Design guidelines (see box: *Improving Village Design*) can be helpful in determining the context and materials appropriate for proposed streetscaping in the village.

Planning Area 3: Streetscape Improvements

Figure 23 shows a number of potential streetscape improvements in Planning Area 3. Sidewalks allow pedestrians to comfortably walk along Buck Road. Village-style lighting and banners provide a historic context and setting to visitors and shoppers. The existing shoulder is converted to a bike path, slowing traffic and permitting bicyclists to comfortably travel through the south part of the village. In addition to their environmental value, street trees help calm traffic by providing an edge to the street and further separating pedestrians from vehicles.

Figure 23: Planning Area 3: Streetscape and Connectivity Improvements



Planning Area 3: Gateways

One such streetscape improvement that should be investigated for the village is a gateway. A gateway is a physical or geometric landmark that indicates a change in environment from a higher speed road to a lower speed residential or commercial district. Gateways send a clear message to motorists that they have reached a specific place and should reduce their speeds.

Gateways often place a higher emphasis on aesthetics and are frequently used to identify neighborhood and commercial areas within a larger urban setting. Gateways may be a combination of street narrowing, medians, signing, archways, planting strips, or other identifiable features. This can help achieve the goal of meeting expectations and preparing motorists for a different driving environment. Landscaped areas with appropriate signage would indicate to drivers that they are entering the village area of the Township. The gateway will encourage motorists to drive more slowly and watch for pedestrians since they are now aware of the fact that they are entering a village commercial district. To alert drivers that they are entering the village of Holland, gateways should be constructed at both ends of the village.

Figure 24 is a computer-enhanced photograph of a potential gateway design at the limit of the study area. This sign will be among the first things drivers see as they enter the village heading north along Buck Road. The materials, lettering, and surrounding landscaping are meant to welcome visitors to the village and give a taste of Holland's unique character.

Figure 24: Planning Area 3: Gateway Potential



IMPROVING VILLAGE DESIGN

Quality design and construction not only make individual stores attractive and inviting, but also add to overall attractiveness of a village. An attractive village area will increase retail sales, raise property values and tax revenue, create a sense of community pride, and set itself apart from the uninspired commercial districts of many of its suburban neighbors.

The Village Overlay District includes reduced lot size and setback requirements, and design standards that are intended to integrate and enhance the visual, historic, and cultural character of the district. Section 22–619 of subdivision and land development ordinance provides standards for the VOD, are divided into 13 general categories: land use and development, architecture, site and building design, pedestrian and vehicle circulation, off–street parking and loading, curbs sidewalks, and crosswalks, landscaping, lighting, streetscape design, outdoor storage and refuse disposal, and signs. While such standards will help create more compatible and better designed building—as evidenced by the new Estates Chimney project—they have no effect on existing properties, only those undergoing the subdivision or land development process.

Thus, buildings and properties under new ownership or undergoing renovations should be encouraged to improve their property in accordance with the character of the village. Design guidelines are very helpful in carrying out a vision of what commercial uses should look like in the future. They describe and illustrate preferred design approaches to developers and property owners a better sense of what the community is looking for. In Pennsylvania design guidelines must be voluntary; municipalities cannot mandate the design of a building. However, the visual standards provided by Section 22–619 of the subdivision and land development ordinance provide an excellent basis for design guidelines in Holland Village.

A design guideline will usually consist of a one- or two-sentence statement that describes a preferential treatment of a specific aspect of the design of a building or site. For instance, a design guideline might specifically address a storefront: “Ground floor retail should have large pane display windows.” Another might address service areas: “Use fencing and landscaping to screen dumpster and service areas.”

Such guidelines, especially when illustrated, can be helpful in maintaining and enhancing the character of the community. Design guidelines should be promoted to all business and property owners, especially those considering renovations.

SIGNAGE

Signage is important for any business so that location and services are clear to motorists and pedestrians. However, signage in the village has an inconsistent design that is often not compatible with a village setting. The township zoning ordinance limits signs to freestanding or ground, wall or parallel, projecting, window, and directional signs in the Village Overlay District. Freestanding and

projecting signs may be as high as 16 feet. Wall or parallel signs may be as high as 30 feet or to the permitted building height. The subdivision and land development ordinance requires signs in the VOD to be constructed out of a durable material such as wood, metal, or stone. The design, material, color, size, location, and illumination of the sign shall be selected considering the architecture of the buildings and streetscape characteristics.

While the subdivision and land development ordinance provides a general idea of what the township is looking for in the design of signage in the Village Overlay District, the ordinance should be revised to limit signage to a more pedestrian scale. For example, the ordinance permits free-standing signs in the district to be 16 feet high. Prohibiting free-standing signs would emphasize a smaller scale, village oriented design. In addition, the ordinance should more clearly require indirect illumination of business signage.



A Village Scale Ground Sign

Chapter 4

PLANNING FOR ECONOMIC DEVELOPMENT

Economic development is the process of improving a community's well-being through job creation, business growth, and income growth, as well as through improvements to the community that enhance quality of life and strengthen the economy. Too often economic development efforts become simplified exercises in attracting new businesses with the hopes of good jobs, taxes, and local investment. Successful economic development requires a multi-pronged, nuanced approach that understands the local market and business environment, engages business owners and residents, and builds on a community's strengths.

The village of Holland has a unique opportunity to reinvent itself into a thriving destination for shopping and leisure. Previous chapters have put forward possible solutions to the land use and transportation issues that have held back Holland from realizing its potential. This chapter looks at the village of Holland from an economic development perspective.

MARKET ANALYSIS

Maintaining and enhancing commercial development is important to the vitality of Holland. Evaluating the local retail market is useful to identify potential economic opportunities in the retail sector. The assessment of local market conditions for Holland begins by gathering relevant population, household, and other demographic data. By drawing on available Census and analysis tools, the boundaries of the Holland market can be based on drive times and demographic trends summarized using the 2000, 2010, and 2015 time periods. Such tools are used to determine consumer expenditures within the market, understand which market segment these consumers occupy, and show areas of potential economic opportunity.²

Market Boundaries

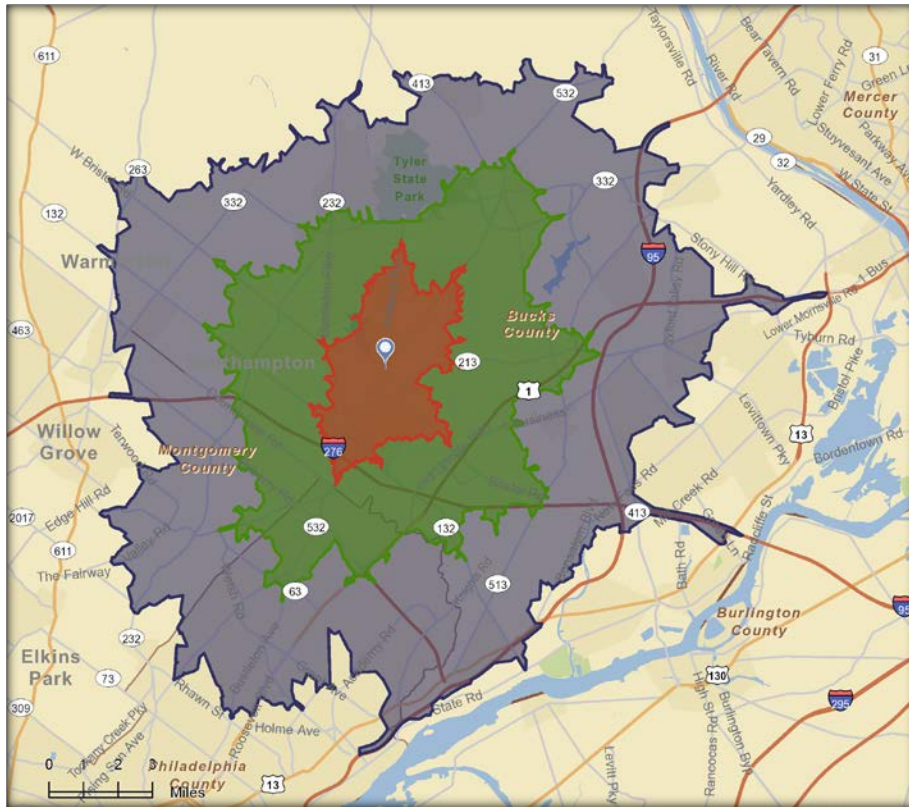
Using the ESRI Business Analyst³ tool the boundaries of the Holland Market are divided into 0–5, 0–10, and 0–15-minute drive times⁴ from the center of the village. (See Figure 25).

² The market analysis is summarized here for brevity. For a complete report, see Appendix C.

³ ESRI Community Analyst is a web-based mapping and analytic tool that allows for analysis of demographic, economic, education, and business data.

⁴ Drive time intervals are areas defined by distance that can be driven away from a specific location within a specified time (in minutes) assuming posted speed limits for the road network. Barriers such as mountains, rivers, bridges, or highways under normal traffic conditions are taken into account when establishing the boundaries.

Figure 25: Holland Village 5-, 10-, and 15-Minute Drive Time Market Areas



Source: ESRI Community Analyst, 2013.

Market Demographics

Market demographics were determined for the village of Holland based on the three drive times. Trends include:

- Population in the three drive-time categories will decrease slightly by the year 2015.
- Household size will drop to 2.79 persons in the 0–5-minute drive-time category by 2015. Household sizes continue to drop due to an aging population, a decline in the birth rate, and more singles living alone.
- Over 82 percent of households in the 0–5-minute drive-time market are family households, compared to 74.7 percent in the 0–10-minute drive-time market and 73.8 percent in the 0–15-minute drive-time market.
- About 84 percent of units in 2010 were owner-occupied in the 0–5-minute drive time area. This percentage reached 78.1 percent and 73.2 percent in the 0–10-minute and 0–15-minute areas, respectively.
- Residents within a 5-minute drive time out-earn residents in the 0–10-minute and 0–15-minute markets.

- The highest median age as of 2010 were residents living within 5 minutes of the village (43.1 years), followed by residents living within 10 minutes (42.4 years) and residents living within 15 minutes (41.1 years).
- Household incomes within a 5-minute drive in the three categories over \$100,000 will represent over 50 percent of the households by 2015.
- The percentage of white collar, services, and blue collar occupations for the three market areas is remarkably consistent. White collar occupations make up almost three quarters of the occupations, with services hovering around 11 to 12 percent, and blue collar occupations making up the remaining 14 to 15 percent.

Retail Goods and Expenditures

A Spending Potential Index (SPI) was developed from the ESRI Business Analyst and represents the amount spent for a product or service relative to a national average of 100. Consumer spending data are derived from the 2006 and 2007 Consumer Expenditure Surveys from the Bureau of Labor Statistics.

The Spending Potential Index shows a significant amount spent on consumer spending categories compared to the national average. The spending index is greater in the 0–5-minute area than the 0–10-minute and 0–15-minute market areas in every retail and service expenditure category. Areas of potential spending in the village include:

- Entertainment and Recreation—Fees and Admissions, SPI 180, \$4.98 million spent in the 0–5-minute market.
- Entertainment and Recreation—Pets, SPI 159, \$22.9 million spent in the 0–5-minute market.
- Food, SPI 147, \$50.6 million spent in the 0–5-minute market.
- Food—Food Away from Home, SPI 150, \$21.6 million spent in the 0–5-minute market.
- Financial—Investment, SPI 176, \$13.7 million spent in the 0–5-minute market.
- Home—Maintenance and Remodeling Services, SPI 191, \$16.9 million spent in the 0–5-minute market.
- Household Furnishings and Equipment—Furniture, SPI 163, \$4.4 million spent in the 0–5-minute market.

Retail Marketplace Profile

The retail marketplace profile is a snapshot of the supply and demand of retail sales in the 0–5-minute market surrounding the center of Holland. This analysis can assist in determining whether Holland is meeting local demand for products in specific industry groups. Demand estimates the expected amount spent by consumers at retail establishments. A positive value represents “leakage” of retail opportunity outside the trade area.

Total retail leakage for the market is over \$42 million. Among industry groups that might fit well in a village setting, leakages exist for Electronics & Appliance Stores (\$1.5 million), Home Furnishing Stores (\$645,000), Beer, Wine, & Liquor Stores (\$1.5 million), Clothing Stores (\$3 million), Shoe Stores (\$386,000), Book, Periodical, and Music Stores (\$660,000), Sporting Goods, Hobby, and Musical Instrument Stores (\$721,000), Department Stores (\$6.4 million), Limited-Service Eating Places (\$1.7 million), and Special Food Services (\$1.8 million).

BUSINESS SURVEY SUMMARY

A good plan for economic revitalization must involve the business operators of the village. Their opinions can provide insight into local conditions and help form a vision of future desired outcomes. A survey was distributed to every business operator in the village during the month of October 2012. The results of the survey are summarized below. Appendix B contains a full report of the survey results.

- Almost 50 percent of operators responding to the survey have had their business in the village for more than 20 years. Over two-thirds of respondents have had their business in the village over 10 years.
- Almost 60 percent of the businesses responding to the survey comprise retail service or professional offices. Of the 38 respondents, only 5 were restaurants and 4 were retail shops. “Other” respondents included a non-profit club and healthcare facility for a senior living facility.
- Among the businesses returning surveys, most are open every weekday. Seventy percent (21) of businesses are open on Saturday, only 30 percent (9) are open on Sunday. However, 80 percent of surveyed businesses have hours after 5 p.m. during the week. Only 7 businesses have hours after 5 p.m. on one or more weekend days.
- Traffic (11 number 1 responses) topped the list of concerns for business operators when asked what the three biggest challenges Holland would face in the next 5 years. The “Cost of Doing Business” had more responses in total with 10 number 1’s, 4 number 2’s, and 6 number 3’s. Taxes had 15 overall responses with 6 number 1’s and 9 number 2’s. Other top concerns included “Attracting new and different types of businesses” (9 overall responses) and “Retaining Businesses” (12 overall responses).
- Responses from surveyed owners over whether they own or rent favored leasing by almost 2 to 1. This is likely due to the large number of professional offices in the village.
- Four out of five business operators live in Bucks County and 43 percent live in Northampton Township. We can surmise from this that most business operators in the village have a vested interest in Holland’s well-being beyond its profitability.

- Two responses stood out when business operators were asked to rank the 3 things that could help improve their ability to operate their business: Traffic Calming and Beautify Street. Also receiving solid responses were Coordinate/Beautify Signage, Enhance Pedestrian Circulation, and Special Events.
- Clearly, respondents think that money for physical improvements would best be spent on improving roads and traffic control in the village. When asked how they would divide \$100 worth of improvements among several choices, the average amount of \$41.35 for Roads and Traffic Control was more than twice the amount for Streetscape Beautification (\$17.50). All other allocations for physical improvements averaged less than ten dollars.
- Almost 40 percent of respondents would choose to lower taxes and receive a reduced level of public services. Only 1 respondent chose higher taxes with improved public services.

When asked which service respondents would reduce, no consensus was reached on which service would be most appropriate to reduce. However, none of the respondents chose Street Maintenance, which would have the most visible effect on the operation of a business.

Results of this survey paint a picture of successful, local business operators who are concerned about taxes and business costs and believe that circulation improvements and street beautification are the things that would most help their ability to operate their business.

TOWN HALL MEETING

The purpose of the Town Hall Meeting held on December 4, 2012, was to discuss key issues affecting the village that will help shape a shared community vision for its future. Two data collection activities occurred at this meeting: a development preference exercise and resident survey. Appendix B contains a full report of the exercise and survey results.

Development Preference Exercise

Attendees were asked to give their opinions on development preferences by placing a sticker on a display board on attributes they thought were most suitable to Holland's character. The results of this exercise are as follows:

- Display Board 1 asked what types of nonresidential development should be strongly encouraged in Holland. Attendees overwhelmingly chose "Adaptive Reuse" (35 responses). Other popular responses included "Other—No Development" (19 responses), "Mixed-Use Development" (14 responses) and "Locally Owned Stores" (11 responses).
- Display Board 2 asked what present or potential attributes residents thought are most important for Holland. Leading responses included "Historic Character" (24 responses), "Streetscape" (17 responses), "Open Space and Parks" (12 responses), "Sense of Community" (12 responses), and "Walkability" (11 responses).

- Display Board 3 asked what should be done to improve the business environment in Holland. Popular responses to this question included “Streetscape Improvements” (22 responses), “Enhance Pedestrian Circulation” (16 responses), “Other—Traffic, Curb Cut, and Circulation Improvements” (16 responses), and “Improve Safety” (10 responses).

Survey Summary

Attendees were also asked to fill out a brief survey to gather the opinions and comments of residents and interested parties on the future of Holland. The following is a summary of the survey’s results.

- 29 people returned surveys from the Town Hall Meeting. Only 3 persons identified themselves as business owners and 2 of these business owners were also residents. No respondents identified themselves as a township official.
- “Small Town Character” best described people’s vision for Holland’s future community character with 12 responses out of 27 total. This was followed by “Mixed-Use Walkable Community” which had 8 responses. “Status Quo” received 4 responses, “Retail Destination” had 3, and “Play and Shop” had none.
- In response to what people think must be done to promote greater collaboration and cooperation for businesses, residents, and township officials, people think it is most important to establish a common goal or vision (20 responses). This is followed by fostering volunteerism (13 responses), and appointing liaisons for communicating between groups (10 responses).
- Respondents ranked the most needed businesses in the village. Businesses with the most responses include Neighborhood Retail and Restaurants. Among the four with the next most responses Boutique shopping received the highest average ranking. While Gas Stations averaged a high ranking, only 3 respondents thought it is needed in the village.
- Most respondents think that more pedestrian connections within the village are needed (60 percent).
- However, most people felt there shouldn’t be better connections between the village and amenities in the surrounding area. Some property owners attending the Town Hall meeting expressed concern about trail connections running through or adjacent to their properties.
- Most people think that pedestrian safety could be improved with striping and signage. Improving pedestrian circulation also received high marks on Question 5 and 8.
- Beautifying the Street and Traffic Calming are the top responses when asked what the five most important things the township could do to help generate economic development and revitalization in Holland. Other popular responses include Improving Infrastructure, Enhancing Pedestrian Circulation, and Better Coordination with Township Government.

Based on the results of the development preference exercise and survey, attendees appear to desire investment in the village of Holland in the form of street, pedestrian, and safety improvements, but not at the expense of its historic resources and intimate character.

MARKETING AND COORDINATION

Marketing is the process of enhancing the public image of a commercial area. Marketing can be carried out by means of retail promotions, special events, and image-building promotions. Retail promotions typically involve sales or some other customer-oriented event. Retail promotions are designed to produce immediate sales. Special events, such as festivals, are designed to produce eventual sales and establish a long-term relationship with the community and customer base. Image-building promotions are public relations campaigns aimed at enhancing a commercial area's overall image. Image-building promotions help establish a marketing identity and are a means for promoting revitalization successes.

For example, a simple marketing activity that would tie in the village's history with business promotion would be a celebration of the anniversary of the village's founding. Special banners celebrating the anniversary could be hung at key locations throughout the village. Businesses could run promotional sales. Parties or cultural events honoring the village could also be held at individual establishments.

Coordination is the process of fitting all the pieces together. Coordination activities should ideally be carried out by one entity whose main responsibility is the improvement of the business district. Without such an entity or person to coordinate activities, revitalization efforts will stagnate and fall short of desired outcomes. A coordinating entity should engage property and business owners to understand their needs and convey the concepts and vision of the plan, develop and coordinate marketing efforts, secure funding for improvements, and ensure the activities and recommendations of the plan continue to be carried out in accordance with the principles of the plan.

STRATEGIES FOR ECONOMIC DEVELOPMENT

A clearer picture of Holland Village has emerged from the discussion and analysis above. Holland's success as an economic center has been limited by:

- A mismatch between goods and services the village provides and the market it serves;
- A lack of coordinated public investment in the village's infrastructure and failure to understand the local business environment; and
- Longstanding quality of life issues that need to be addressed to make the village a more desirable area to visit and shop.

The market study and survey results have offered a way forward in mapping out a path toward economic revitalization. As previously stated, successful economic development requires a multi-pronged, nuanced approach that understands the local market and business environment, engages business owners and residents, and builds on a community's strengths. Accordingly, the village of Holland's economic development policy should incorporate the following planning and improvement strategies:

1. **Support a common vision**—Chapter 5. Putting It All Together: A Master Plan for Holland begins with a vision of the ideal Holland along with ten principles to guide future decisions. These form the basis for the actions of the plan and, when implemented, ensure the plan is carried out in a manner that is consistent with the vision for the village of Holland. A common vision will also help lay the groundwork in establishing a marketable identity to be promoted to potential customers.
2. **Designate a coordinating entity**—A coordinating person or entity should be appointed soon after plan adoption. Coordinating activities consist of the following responsibilities:
 - Act as a champion for the village and plan;
 - Engage property and business owners to understand their needs (e.g., helping to lower business costs) and develop public-private partnerships;
 - Promote the concepts and vision of the plan;
 - Develop and coordinate marketing efforts;
 - Secure funding for improvements; and
 - Ensure the activities and recommendations of the plan continue are carried out in accordance with the principles of the plan.
3. **Market the area**—Marketing Holland by means of retail promotions, special events, and image-building promotions should be a primary activity of the coordinating entity. The idea of Holland as a destination and a place to do business should be clear in the minds of potential customers.
4. **Improve the streetscape**—A common theme in both the resident and business survey was that improved streetscaping and landscaping could make the village a much more attractive place to visit. The analysis in this plan identified several areas where street improvements, such as gateways, streetlights, street trees, curbing, and sidewalks could make a real difference in how the business district of Holland is perceived. Chapter 3. Integrating Land Use and Transportation details locations and provides photographic mock-ups of potential improvements in the village.
5. **Improve signage**—Along with streetscaping, a lack of consistent, well-designed signage was identified in many areas of the village. Signage should be consistent with the design requirements of the subdivision and land development ordinance, without resorting to themes.

Chapter 3. Integrating Land Use and Transportation recommends that free-standing signs be prohibited to emphasize a smaller scale, village oriented design. In addition, the ordinance should more clearly require indirect illumination of business signage.

6. **Make it a place**—Most residents desire Holland to exhibit a small-town character but are open to creating mixed-use opportunities. Stores suggested by the market analysis that would be compatible with this ideal include:
 - Entertainment and recreation uses
 - Specialty food stores
 - Financial institutions
 - Home furnishings
 - Clothing and shoe stores
 - Books, periodical and music stores
 - Hobby and musical instrument stores
 - Restaurants

The Village Overlay District currently permits all of the above uses by right with dimensional standards designed to emulate traditional village patterns. However, even with the proper zoning in place, potential business owners may be unaware of the plan for the village and the market it serves. Marketing and attracting compatible businesses will be a main activity of coordinating entities.

7. **Support code enforcement efforts**—The image of a neighborhood often depends how well property owners maintain their properties. Township codes, including building codes, require that owners address issues such as yard maintenance, rehabilitation of substandard properties, security of vacant structures, and prevention of health and safety hazards like broken windows, vermin, and littered grounds. Usually, code enforcement is notified of noncompliance by complaint or is discovered by staff when on other township business. However, a well-communicated vision and plan for the village of Holland should make the involvement of code enforcement less necessary. A common understanding that property maintenance and investment not only benefits the individual business owner but the entire district will go a long way in making Holland a more pleasant place to shop and do business.
8. **Encourage weekend and evening hours**—Twenty percent of surveyed businesses do not have hours after 5 p.m. during the week. Thirty percent of businesses are not open on Saturday and 70 percent are not open on Sunday. To become the vibrant economic center that Holland strives to be, businesses must be available to potential customers during the evenings and on

weekends. Holland must maintain a perception of being “open for business” to keep the area in the minds of potential customers.

9. **Support transportation improvement efforts**—Traffic congestion is the number one issue in Holland and a primary reason people have a negative view of the area. Economic development efforts should support improvements to intersection improvements, vehicle capacity, pedestrian and vehicle circulation patterns, traffic calming, and access management.
10. **Plan for the pedestrian**—Any future roadway improvements and development in the village should include pedestrian facilities. By striving to provide better connectivity and safety in the village, people would have the option of walking or biking to businesses. This would reduce congestion in the village since fewer vehicles would be used for these trips.

Chapter 5

PUTTING IT ALL TOGETHER: A MASTER PLAN FOR HOLLAND

The first parts of this plan examined existing land use, transportation, and economic conditions and the potential opportunities presented by the village of Holland. The following puts together this plan's vision and principles, summarizes key recommendations, and provides concepts that can help the village begin to solve its biggest problems.

VISION AND PRINCIPLES

A Vision Statement exemplifies where the Holland is going and what it could look like in the future. Principles identify the priorities of the Master Plan and serve to guide future decisions. These form the basis for the actions of the plan and, when implemented, ensure the plan is carried out in a manner that is consistent with the vision for the village of Holland.

The visioning process is designed to set direction and to create an inspirational image for the future. The Vision Statement and Principles that follow were developed as an outgrowth of discussions with the Northampton Township Planning Commission and Economic Development Corporation and the results of the Holland Master Plan Business Survey, Holland Village Town Hall Survey, and Town Hall Meeting land-use preference exercise.

Vision Statement

Small-town character, a sense of community, and a business-friendly environment make the village of Holland a distinct and special place. With its visible links to the past and vibrant mix of shops, offices, and restaurants, Holland is both pleasantly walkable and a great destination to shop and do business. Conveniently accessible from adjoining areas, Holland is a physical and social hub, tying together the surrounding community and nearby amenities.

Principles

1. **Design roadway improvements for all users**—As improvements occur to the roadway system, the needs of pedestrians and bicyclists, as well as motorists, should be included.
2. **Provide connectivity**—Efforts should be made to provide pedestrian connections to each distinct area of the village.

3. **Use what's there**—New development should take place on previously developed sites, taking advantage of existing infrastructure and access points.
4. **Recognize the past**—What makes Holland distinct and special is its place in Northampton Township's history. Revitalization efforts should respect and honor the buildings and ways that represent the past.
5. **Mix uses**—A mix of residential and commercial uses should be encouraged to promote alternatives to driving and create a more diverse community identity and commercial base.
6. **Plan for the pedestrian**—Walkability is key to the economic health of the village. With that in mind, a safe pedestrian environment should be included in all redevelopment plans for the village.
7. **Make it a destination**—Holland should be a place people drive to, not through. Future revitalization efforts should focus on uses, events, and improvements that encourage people to take advantage of multiple retail and service destinations.
8. **Recognize resources**—Mill Creek has been the heart of Holland for over 200 years, serving as a source of power for a gristmill and visual attraction for restaurant patrons. The steep topography of the valley and rocky banks of the creek define the village and provide it with its unique character, as evidenced by the nearby Churchville Reservoir and Bellwood Preserve. The village's natural and recreational resources should be recognized for their contribution to quality of life and potential economic value.
9. **Celebrate distinction**—A unique identity can help the village of Holland distinguish itself from surrounding areas. Holland's history, natural and recreational resources, and vibrant business environment should be promoted and celebrated.
10. **Keep it local; keep it friendly**—One of the great things about Holland is the number of local businesses. When attracting new businesses, an emphasis should be placed on developing small businesses with local ties. Strong relationships between the township and business are another important aspect of revitalization. The township should continue to develop an open line of communication to ensure the needs of the business community are being met.

A MASTER PLAN FOR HOLLAND

The following maps illustrate strategies and concept plans that form an actionable plan for improving Holland's transportation, land use, and business environment. Each map will focus on a designated Planning Area as described in the previous chapters by showing concepts, resources, and potential improvements.

The maps and images shown in the following pages are meant to provide concrete examples but also provide inspiration for more detailed small-scale projects that are keeping with the plan's principles. In addition to a plan of action, the appendix of this document includes a list of funding sources to be explored to help make these concepts a reality.

**Holland Village Master Plan
Implementation
Figure 26: Planning Area 1**



Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

**Holland Village Master Plan
Implementation
Figure 27: Planning Area 2**



Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

**Holland Village Master Plan
Implementation
Figure 28: Planning Area 3**



Mill Creek

Expanded Bridge

Realigned Intersection

Gateway

Sidewalks

Streetlights

Gateway



Source: Esri, i-cubed, USDA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

APPENDIX A: FUNDING AND ASSISTANCE

Any improvements to the village will involve some cost. However, these costs can be typically offset through a variety of funding sources. The following list will describe potential funding sources, as well as the requirements of each program. The list is not meant to be all-inclusive, as other programs and funding sources may also be available.

TRANSPORTATION AND COMMUNITY DEVELOPMENT INITIATIVE

The Transportation and Community Development Initiative (TCDI) is a grant program offered by the Delaware Valley Regional Planning Commission (DVRPC) that supports local development and redevelopment efforts in qualifying municipalities of the Delaware Valley. TCDI was begun in 2002 to reverse the trends of disinvestment and decline in many of the region's core cities and developed communities.

TCDI provides a mechanism for municipalities to undertake locally-directed actions to improve their communities, which in turn implements their local and county comprehensive plans and supports the goals and vision of the DVRPC long-range land use and transportation plan, Connections 2035. TCDI seeks to support and leverage state and county programs by providing funding in selected areas to undertake planning, analysis, or design initiatives for projects or programs which enhance development or redevelopment and enhance or improve the efficiency of the regional transportation system. More information about the TCDI program can be found at <http://www.dvrpc.org/TCDI/>.

AUTOMATED RED LIGHT ENFORCEMENT (ARLE) PROGRAM

The state-funded program distributes revenue generated from automated red light enforcement systems. The program is specifically designed to fund low-cost road safety and mobility projects. Examples of eligible projects include, but are not limited to, the following:

- Retiming of existing traffic-control signals;
- Upgrading, modernization, or improvements to traffic-control signals;
- The interconnection and coordination of traffic-control signals to improve mobility;
- The installation of a traffic-control signal system or the expansion of an existing system to improve mobility;
- Revisions to traffic-control signal operational modes to improve safety or mobility;
- Improvements to traffic-control signals or other official traffic-control devices to reduce energy consumption;

- The installation of new or improved detection systems for traffic-control signals;
- Roadway capacity upgrades such as auxiliary turning lanes;
- Roadway or intersection signing and pavement restriping projects which will either increase capacity or improve safety;
- Local Technical Assistance Program (LTAP) Local Safe Roads Communities Program and implementation of recommendations;
- LTAP Walkable Communities Program and implementation of recommendations;
- Pedestrian safety improvements at signalized intersections such as countdown timers, easily accessible and quick response pushbuttons, crosswalk striping, and pedestrian signing;
- Pedestrian mobility improvements, particularly projects with a combination of eligible features;
- Removal of roadside fixed objects and/or clearing of vegetation for sight distance improvements;
- Improvements to correct drop-off issues along local roadways;
- Minor drainage improvements to improve safety;
- New regulatory or warning signs that meet the minimum retroreflectivity requirements; and
- Radii improvements at intersections.

Unfortunately, this program does not fund large highway improvement projects such as new roads, bridges, or interchanges. Other ineligible projects include decorative street appurtenances and preventive maintenance. More information on the ARLE Program can be found at <http://www.dot.state.pa.us/Portal%20Information/Traffic%20Signal%20Portal/arle.html>.

HOME TOWN STREETS PROGRAM

This program is sponsored by the Pennsylvania Department of Transportation (PennDOT). The goal of this program is to create economic opportunities that revitalize our existing communities. The Home Town Streets program is designed to benefit commercial/business districts/areas (downtowns) in municipalities. Therefore, only projects within the central business district are eligible for this program. The maximum grant from the program is \$1,000,000 and a 20 percent local match is required. Information on this program can be found online at www.dot.state.pa.us.

TRANSPORTATION ALTERNATIVES PROGRAM

Transportation Alternatives (TA) are Federal highway and transit funds set-aside under the Surface Transportation Program (STP) for community-based “non-traditional” projects designed to strengthen the cultural, aesthetic, and environmental aspects of the nation's intermodal transportation system. The TE funding category, which has historically funded many pedestrian and bicycle supportive projects such as streetscape improvements, was originally established by Congress

in 1991 under the ISTEA transportation authorization legislation, and was most recently affirmed as TA under the *Moving Ahead for Progress in the 21st Century Act* (MAP-21).

The term "transportation alternatives" means any activities that are carried out as part of any program or project authorized or funded under this title, or as an independent program or project related to surface transportation. Eligible activities include construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990. More information on the Transportation Alternatives Program can be found at www.dvrpc.org/TA/.

CONGESTION MITIGATION AND AIR QUALITY PROGRAM

DVRPC's Congestion Mitigation and Air Quality (CMAQ) Program funds transportation-related projects that can help the region reduce emissions from mobile sources and meet the National Clean Air Act Standards. CMAQ eligible projects need to demonstrate that they reduce air pollution emissions and reduce traffic congestion.

Examples of eligible CMAQ projects include pedestrian and bicycle projects, transit improvement programs, congestion reduction and traffic flow improvements, diesel retrofit projects, and the funding of transportation demand management programs. For more information on the CMAQ Program, please visit the DVRPC website at www.dvrpc.org/CMAQ/.

DVRPC TRANSPORTATION IMPROVEMENT PROGRAM

DVRPC produced the *FY 2013 Transportation Improvement Program (TIP) for Pennsylvania* for Bucks, Montgomery, Chester, Delaware and Philadelphia counties. DVRPC and its member governments prepare a program of projects that responds to the needs of the region and at the same time complies with federal and state policies. This list of transportation priorities must be financially constrained per the requirements of the *Moving Ahead for Progress in the 21st Century* (MAP-21).

In southeastern Pennsylvania, the TIP contains approximately 370 projects which total almost \$3.7 billion over the four years of the program. The TIP is updated every two years by the region.

BUILDING BLOCKS FOR SUSTAINABLE COMMUNITIES PROGRAM

The purpose of this program offered by the Office of Sustainable Communities, U.S. Environmental Protection Agency, is to provide technical assistance for communities interested in utilizing sustainable tools and methods in order to revitalize local economies, create jobs, protect clean air and water, and improve the quality of life for residents. Seeking to apply livability principles

at the local level, this program intends to help communities that are new to implementing sustainable community development approaches. Technical assistance projects will involve a one- to two-day visit including:

- Public engagement, such as a meeting or workshop;
- Direct consultation with decision-makers whose work relates to implementing smart growth approaches; and
- A memo outlining the next steps the community should take to implement the ideas and suggestions generated during the visit.

The following technical assistance tools are available:

- Tool 1: Planning bikeshare programs
- Tool 2: Supporting equitable development
- Tool 3: Neighborhood planning for healthy aging
- Tool 4: Parking audit
- Tool 5: Creating a green streets strategy
- Tool 6: Using smart growth to produce fiscal and economic health
- Tool 7: Green building toolkit
- Tool 8: Sustainability strategies for small cities and rural areas
- Tool 9: Land use strategies to protect water quality

More information on the Building Blocks for Sustainable Communities Program can be found at <http://www.epa.gov/smartgrowth/buildingblocks.htm>.

SMART GROWTH IMPLEMENTATION ASSISTANCE (SGIA)

The purpose of this U.S. Environmental Protection Agency (Office of Sustainable Communities) program is to support innovative projects that protect the environment, use resources efficiently, create economic opportunities, and improve community quality of life. Successful applicants will receive contractor assistance to address community development needs. Projects may analyze policies, create partnerships, and conduct outreach activities to address community development issues. In addition, projects are encouraged to adopt a local focus, and be directly adaptable on a larger scale to address neighborhood-, city-, county-, and state-wide needs.

Projects must address at least one of the following categories:

- Community resilience to disasters and climate change
- Redevelopment for job creation
- Role of manufactured and modular homes in sustainable neighborhood design
- Medical and social service facilities siting

More information on the Smart Growth Implementation Assistance program can be found at <http://www.epa.gov/smartgrowth/sgia.htm>.

COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) PROGRAM: ENTITLEMENT COMMUNITIES

The purpose of this U.S. Department of Housing and Urban Development program is to support the development of viable urban communities by funding entitled cities and counties to provide decent housing, a suitable living environment, and expanded economic opportunities for primarily low- and moderate-income individuals. Funds will support local priority community development activities aimed at neighborhood revitalization, economic development, and improvement of community facilities and services.

Award recipients must develop and follow a detailed plan that provides for and encourages citizen participation, particularly by persons of low- or moderate-income residing in lower income, slum, or blighted areas, or areas in which program funds will be utilized. More information on the Community Development Block Grant program can be found at http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/entitlement.

MUNICIPAL ASSISTANCE PROGRAM (MAP) (PART A): SHARED SERVICE AND COMMUNITY PLANNING ACTIVITIES

The purpose of this Department of Community and Economic Development (DCED) program is to assist municipalities in planning and implementing community improvement activities, and managing development activities. Projects may address shared service, community planning, or floodplain management needs.

The purpose of the Shared Service and Community Planning Activities component is to:

- Encourage the formation of new partnerships involving local governments, nonprofit organizations, for-profit businesses, and other agencies
- Advance performance-based initiatives
- Encourage the use of new approaches to planning and implementation
- Support projects that demonstrate long-term commitment
- Support projects that create cost-savings, measurable improvements in community services, attractive/livable communities, and sound land-use practices
- Fund the most competitive/effective projects

Shared service projects may address need pertaining to:

- High-impact activities

- Regionalization/consolidation/merging of services
- Boundary changed
- Shared capacity
- Shared vehicles/motorized equipment

Community planning projects may address need pertaining to:

- Community plans
- Plan implementation
- Transit revitalization district (TRID) planning

More information on the Municipal Assistance Program can be found at <http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/municipal-assistance-program-map>.

KEYSTONE COMMUNITIES PROGRAM

The purpose of this Department of Community and Economic Development (DCED) program is to support physical improvements to communities that are undertaking revitalization activities. This program also supports the "designation" of a community with an identified specific need and developed strategy to fulfill that need. Designated communities will receive technical assistance and preference for funding requests.

Supported project funding categories are:

- Planning: projects that address a particular need, evaluate the need, address a circumstance within a community, undertake a study relevant to an identified need within a community, or study the results of implementing a specific activity.
- Implementation: one-time assistance to help a designated community undertake the critical components of its five-year strategy
- Keystone Communities Development Grants: financial assistance for a wide variety of physical improvements including housing, residential and building construction, improvements or redevelopment, infrastructure, property acquisition, grant-to-loan assistance, and costs related to any of the eligible activities.
- Keystone Facade: projects to stimulate private investment in properties, foster an attractive environment, and preserve the architectural heritage of properties
- Anchor Building: renovations to a significant downtown building
- Enterprise Zone Revolving Loan Funds: projects to provide loan funding to businesses located within a designated enterprise zone
- Redevelopment: rehabilitation and/or new construction of a structure(s) on previously developed sites or locations experiencing blighting conditions

- Public Improvement: support for a variety of development projects to help eliminate decline, provide gap financing for proposed projects, and assist in a community's emergency efforts to recover from a natural disaster

Funding is also available for accessible housing projects to provide accessibility improvements to housing units for people with permanent physical disabilities.

Community designations may be made in the following categories:

- Keystone Main Street: community downtown revitalization
- Keystone Elm Street: residential and mixed use areas in proximity to a central business district
- Keystone Enterprise Zone: disadvantaged industrial/manufacturing and business sites
- Keystone Community: alternative approaches to revitalization

This program incorporates three discontinued appropriations: Housing and Redevelopment Assistance, the Pennsylvania Accessible Housing Program, and the New Communities Appropriation, which was comprised of three programs: Main Street, Elm Street, and Enterprise Zone. More information on the Keystone Communities Program can be found at <http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/keystone-communities-program-kcp>

TAX INCREMENT FINANCING GUARANTEE PROGRAM

The purpose of this Department of Community and Economic Development (DCED) program is to provide credit enhancement for tax increment financing (TIF) projects to promote general economic welfare of local communities and various regions in Pennsylvania. This program aims to improve market access and lower capital costs for local governments by providing guarantees to issuers of bonds or other obligations. This program focuses on assisting in and stimulating the development, redevelopment, and revitalization of brownfield and greenfield sites.

Projects must be for the redevelopment, reuse, or revitalization of previously developed land, including previously mined areas, or development of undeveloped land that may be the subject of future development pursuant to any existing comprehensive municipal plan (and is zoned for that development at the time of application).

Priority will be given to projects that:

- Are located in areas with a high unemployment rate, declining population, significant inventory of brownfields or vacant housing, or other indicators for economic development
- Are located in an urban or core community, and are designed to redevelop a site that is not utilized at the time of application

More information on the Tax Increment Financing Guarantee Program can be found at <http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/tax-increment-financing-tif-guarantee-program>.

REDEVELOPMENT ASSISTANCE CAPITAL PROGRAM

The purpose of this Pennsylvania Governor's Office program is to attract and retain jobs in Pennsylvania by providing support to large, economically transformative projects for development. This program will prioritize projects that will have the greatest financial impact on Pennsylvania, and are large, regional economic development projects that will create and retain jobs, generate new tax revenue, and can demonstrate long-term sustainability. Projects with cultural, historic, or civic significance are eligible.

Eligible costs for reimbursement include:

- Construction
- Interest during construction
- Permits
- Land
- Work related to abatement of hazardous materials
- Acquisition costs

More information on the Redevelopment Assistance Capital Program can be found at http://www.portal.state.pa.us/portal/server.pt/community/redevelopment_assistance_capital_program/4602.

APPENDIX B: SURVEY RESULTS

HOLLAND VILLAGE MASTER PLAN: BUSINESS SURVEY SUMMARY⁵

A good plan for economic revitalization must involve the business operators of the village. Their opinions can provide insight into local conditions and help form a vision of future desired outcomes. A survey was distributed to every business operator in the village during the month of October 2012. What follows are the results of this survey as well as a short analysis of each question.

Question 1

How long have you operated a business in Holland?		
Answer Options	Response Percent	Response Count
Less than one year	5.9%	2
1–5 years	11.8%	4
6–10 years	11.8%	4
11–15 years	11.8%	4
16–20 years	11.8%	4
More than 20 years	47.1%	16

Almost 50 percent of operators responding to the survey have had their business in the village for more than 20 years. Over two-thirds of respondents have had their business in the village over 10 years.

Question 2

What is the general nature of your business?		
Answer Options	Response Percent	Response Count
Retail Shop	9.3%	4
Restaurant	11.6%	5
Industrial/manufacturing	2.3%	1
Professional office (e.g., CPA, lawyer, physician, etc.)	25.6%	11
Retail service (e.g., dry cleaner, shoe repair, etc.)	32.6%	14
Other (please specify)	7.0%	3

Almost 60 percent of the businesses responding to the survey comprise retail service or professional offices. Of the 38 respondents, only 5 were restaurants and 4 were retail shops. “Other” respondents included a non-profit club and healthcare facility for a senior living facility.

⁵ Several surveys returned were not included in the results because the place of business represented fell outside the boundaries of the study area.

Question 3

What days of the week is your business regularly open and what are your business hours? (Please list hours.)

Answer Options	Response Percent	Response Count
Monday	80.0%	24
Tuesday	100.0%	30
Wednesday	93.3%	28
Thursday	100.0%	30
Friday	93.3%	28
Saturday	70.0%	21
Sunday	30.0%	9
Open after 5 p.m., one or more weekdays	80.0%	24
Open after 5 p.m., one or more weekend days	23.3%	7

Among the businesses returning surveys, most are open every weekday. Seventy percent (21) of businesses are open on Saturday, only 30 percent (9) are open on Sunday. However, 80 percent of surveyed businesses have hours after 5 p.m. during the week. Only 7 businesses have hours after 5 p.m. on one or more weekend days.

Question 4

From a business perspective, what are the three biggest challenges Holland will face in the next five years? (Select the three greatest challenges, ranking them from 1 to 3, with 1 being the greatest challenge.)

Challenges, Ranked 1 to 3	Response			Count
	1	2	3	
Traffic (circulation, congestion, etc.)	11	2	2	15
Taxes and other costs	6	9	0	15
Maintaining competitiveness with malls and national retailers	0	1	2	3
Crime	0	3	1	4
Attracting new and different types of businesses	1	5	3	9
Adequate and convenient parking	1	2	0	3
Infrastructure	0	0	4	4
Costs of doing business: energy, health care, rent, personnel costs, etc.	10	4	6	20
Appropriate mix of business types	0	0	1	1
Retaining businesses	2	3	7	12
Regulatory environment	0	1	0	1

Traffic (11 number 1 responses) topped the list of concerns for business operators when asked what the three biggest challenges Holland would face in the next 5 years. The “Cost of Doing Business” had more responses in total with 10 number 1’s, 4 number 2’s, and 6 number 3’s. Taxes had 15 overall responses with 6 number 1’s and 9 number 2’s. Other top concerns included “Attracting new and different types of businesses” (9 overall responses) and “Retaining businesses” (12 overall responses).

Question 5

Do you own or rent your place of business?		
Answer Options	Response Percent	Response Count
Own	42.9%	15
Rent	57.1%	20

Responses from surveyed owners over whether they own or rent favored leasing by almost 2 to 1. This is likely due to the large number of professional offices in the village.

Question 6

Where do you live?		
Answer Options	Response Percent	Response Count
Northampton Township	42.9%	15
Elsewhere in Bucks County (specify municipality)	37.1%	13
New Jersey (specify municipality)	5.7%	2
New York	0.0%	0
Philadelphia	2.9%	1
Montgomery County (specify municipality)	5.7%	2
Other (specify)	5.7%	2

Four out of five business operators live in Bucks County and 43 percent live in Northampton Township. We can surmise from this that most business operators in the village have a vested interest in Holland's well-being beyond its profitability.

Question 7

How would you describe the climate for business in the village? (Check one)		
Answer Options	Response Percent	Response Count
Excellent	3.0%	1
Very Good	27.3%	9
Good	48.5%	16
Fair	21.2%	7
Poor	0.0%	0

Comments regarding the business climate in Holland focused on issues respondents felt were holding back the economic success of the village. Comments can be found on page 104.

Question 8

List the three most important things Northampton Township could do to improve your ability to operate a successful business in Holland? (Select the most important things, ranking them from 1 to 3, with 1 being the most important)

Improvements, Ranked 1 to 3				Response
	1	2	3	Count
Provide more parking	2	2	0	4
Enhance pedestrian circulation	3	4	1	8
Bike paths	1	0	0	1
Better coordination with township government	0	1	0	1
Beautify street-plantings, street cleaning, lighting	4	6	5	15
Special events (holiday lighting, shopping nights, street festivals)	4	1	3	8
Increase police presence	2	2	2	6
Marketing Coordination	1	2	1	4
Expand Business District	2	0	0	2
Arts events	0	1	0	1
Coordinate/beautify signage	0	4	4	8
Better licensing and regulatory environment (e.g, signs, permitting)	3	1	2	6
Traffic calming	7	4	4	15
Other	0	0	2	2

Two responses stood out when business operators were asked to rank the 3 things that could help improve their ability to operate their business: Traffic calming and Beautify Street. Also receiving solid responses were Coordinate/beautify signage, Enhance pedestrian circulation, and Special events.

Question 9

If you had \$100 to spend on township physical improvements, how would you allocate it? (Allot a dollar amount to as a few or as many improvements as you like, until a total of \$100 is expended. For example, \$100 may be allocated to a single activity, or \$50 to one activity and \$10 each to five other activities, etc.)

Answer Options	Response Average	Response Count
Roads and traffic control	\$41.35	16
Recreation facilities	\$ 5.77	4
Sidewalks, pedestrian circulation	\$ 7.88	6
Arts and culture facilities	\$ 5.00	2
Open space	\$ 6.54	3
Streetscape beautification	\$17.50	13
Stormwater improvements	\$ 1.54	2
Street lights village wide	\$ 5.38	5
Improving parking	\$ 0.96	1
Other	\$ 8.08	3

Clearly, respondents think that money for physical improvements would best be spent on improving roads and traffic control in the village. The average amount of \$41.35 for Roads and traffic control was more than twice the amount for Streetscape beautification (\$17.50). All other allocations for physical improvements averaged less than ten dollars.

Question 10.

Of these three choices, which one would you prefer? (Check one)		
Answer Options	Response Percent	Response Count
A. Lower taxes with reduced level of public services.	39.4%	13
B. Same taxes with about the same level of public services.	57.6%	19
C. Higher taxes with improved public services	3.0%	1

Almost 40 percent of respondents chose lower taxes with a reduced level of public services. Only 1 respondent chose higher taxes with improved public services.

If you choose A., which of the following services do you think should be reduced?		
Answer Options	Response Percent	Response Count
Ambulance	18.2%	2
Fire	9.1%	1
Police	18.2%	2
Trash Collection	27.3%	3
Public Water and Sewer	36.4%	4
Street maintenance	0.0%	0
Stormwater Management	9.1%	1
Parks and Recreation	36.4%	4

When asked which service respondents would reduce, no consensus was reached on which service would be most appropriate to reduce. However, none of the respondents chose Street maintenance, which would have the most visible effect on the operation of a business.

If you chose C., which of the following services do you think should be improved?		
Answer Options	Response Percent	Response Count
Ambulance	0.0%	0
Fire	0.0%	0
Police	0.0%	0
Trash Collection	0.0%	0
Public Water and Sewer	0.0%	0
Street maintenance	0.0%	0
Stormwater Management	100.0%	1
Parks and Recreation	0.0%	0

Stormwater management was the one service chosen to be improved with a higher level of taxes.

Comments

Question 4

Another challenge worth mentioning is the increasing population of strip-mall rats. Young adults who disrupt the businesses during core hours of operation.

Kids hanging out in front of shops annoying customers.

Infrastructure and traffic limit new business attraction.

Question 6

Buckingham Township

New Hope

Abington

Readington

Lower Southampton

Doylestown

Newtown

Lower Makefield Township

Middletown Township

Horsham

Newtown

Buckingham (Furlong)

Newtown

Doylestown

New Hope

Lower Makefield

Question 7

Lower rent increases

Holland

Signage

WaWa Rockville Buck Road

Along Buck Road

Encourage development of commercial (land at Rockville & Buck/Holland Roads).

Question 9

Loss of business due to the economy. 2012 is up 4 percent.

Kids hanging out in front of shops annoying customers.

Do something with the Old Mill Race. It is a disgrace entering into Northampton (Council Rock “it is a black eye!” Knock it down or make it a mini rest stop. with fishing, snack shop, something like that or a welcome to Northampton monument. Thank you.

There is much more crime, such as theft, burglary, robbery, vandalism, now as compared to 5–10 years ago. The township needs to realize that the total number of people has increased dramatically and the level of crime (as listed above) and traffic accidents has increased.

Lack of businesses renting in the village is causing reduction in buses in our center. Traffic limits trips to Holland area. Customers are more inclined to travel to Newtown (north or Richboro for their needs).

Traffic congestion at Bristol-Buck/Rt. 332. Sidewalks on Rt. 532/Buck and Holland roads before someone gets hit by a car.

Question 11 General Comments

The number one thing I hear from contractors is that they do not want to build or do repairs in Northampton. They ALL say that doing business in Newtown is easier, so if business is brisk, they will take the Newtown job over the Northampton job. Permits need to be easier to obtain, and code enforcement eased.

“Holland” is difficult because there is no center; there are areas here and there.

Clean up Mill Race property.

Question 9 response: Fix Pot Holes. Ease up on the sign law; how do you think we generate revenue, for you and me! Question 10. Would like street maintenance improved.

Would like reduced parks and recreation service and increased police protection.

Disregard \$10 under Other in question 9 survey response did not add up to \$100.

Question 10: would like police and parks and recreation services reduced.

Intersection at Rocksville & Buck is DEADLY! We need a light. Do we need any more accidents? Stop saying it’s a state road and not our problem. It is our problem!

I have practiced in Holland for 35 years and have enjoyed just about every minute of it. The above changes would have had very little effect on my practice. I think Holland is very nice as it is.

Would like stormwater management addressed.

What's with the Mill Race Inn? What a terrible eyesore that is.

Change our zip code from Feasterville/Trevese to Holland. Our pond at Breezy Point has been damaged over the years due to run-off from the East Ridge development which I have had to pay for personally. Glad you went to one trash pick up per week. Thanks for reaching out to get our opinion.

Question 10: Every time a road is paved, I would contact Verizon, PECO, & Comcast to contribute to the process of burying wires to eliminate poles. This would beautify the area and reduce costs of outages.

Traffic as you probably guessed is the crux of this area. Any plan for this area has to include the use of the large parcel of commercial land at Rocksville & Buck/Holland roads. There is no room for major improvement without it.

Question 11: Would like to see eye sore-Old Mill Race Inn taken down—if only the addition-not the historical part.

Question 10: Would like lower taxes with same level of public services.

Community events to advertise local businesses would help keep locals in the area. Notify business by mail about participation in Northampton Days. Also for physical improvements: Signs as you enter "Holland" i.e., Holland Village-est. 1870.

HOLLAND VILLAGE MASTER PLAN: TOWN HALL MEETING SURVEY SUMMARY

The purpose of the Town Hall Meeting held on December 4, 2012, was to discuss key issues affecting the village that will help shape a shared community vision for its future. Attendees were asked to fill out a brief survey to help gather the opinions and comments of residents and interested parties. The following is a summary of the survey's results.

Question 1

I am a: (check all that apply.)		
Answer Options	Response Percent	Response Count
Resident	89.7%	26
Business Owner	10.3%	3
Township Official	0.0%	0

29 people returned surveys from the Town Hall Meeting. Only 3 persons identified themselves as business owners and 2 of these business owners were also residents. No respondents identified themselves as a township official.

Question 2

Which BEST describes your vision for Holland's future community character? (Select only one.)		
Answer Options	Response Percent	Response Count
Small Town Character	44.4%	12
Mixed-Use Walkable Community	29.6%	8
Retail Destination	11.1%	3
'Play and Shop' Destination	0.0%	0
Status Quo	14.8%	4
Other	0.0%	0

“Small Town Character” best described people's vision for Holland's future community character with 12 responses out of 27 total. This was followed by “Mixed-Use Walkable Community” which had 8 responses. “Status Quo” received 4 responses, “Retail Destination” had 3, and “Play and Shop” had none.

Question 3

In order promote greater collaboration/cooperation for businesses, residents, and township officials, which actions are appropriate? (Select all that apply.)		
Answer Options	Response Percent	Response Count
Establish a Common Goal or Vision	40.8%	20
Appoint Liaisons for Communicating Between Groups	20.4%	10
Foster Volunteerism and Stewardship	26.5%	13
Other	12.2%	6

In response to what people think must be done to promote greater collaboration and cooperation for businesses, residents, and township officials, people think it is most important to establish a common goal or vision (20 responses). This is followed by fostering volunteerism (13 responses), and appointing liaisons for communicating between groups (10 responses).

Question 4

Please rank the following businesses as most needed in the village. (Rank the 5 most needed businesses from 1 to 5, with 1 being the most needed. Rank only five.)							
Answer Options	1	2	3	4	5	Response Count	Avg. Rank
Neighborhood retail (greeting card store, dry cleaner, deli)	3	3	5	3	4	18	2.9
Medium-sized retail (CVS, grocery store)	3	0	0	2	3	8	3.3
Boutique shopping (antiques, furniture, clothing)	6	1	3	1	1	12	2.2
Restaurant (sit down, eat in)	1	10	2	3	2	18	2.7
Fast food/take out restaurant	0	0	3	2	1	6	3.7
Convenience store	2	1	2	3	0	8	2.8
Gas station with/ without convenience store	0	3	0	0	0	3	2.0
Entertainment/ cultural attraction (theater, gallery, art/dance studio, museum)	2	1	3	2	0	9	2.7
Other						8	–

Respondents ranked the most needed businesses in the village. Businesses with the most responses include Neighborhood Retail and Restaurants. Among the four with the next most responses Boutique shopping received the highest average ranking. While gas stations averaged a high ranking, only 3 respondents thought it is needed in the village.

Question 5

Should there be stronger pedestrian connections within the village?		
Answer Options	Response Percent	Response Count
Yes	60%	15
No	40%	10

Most respondents think that more pedestrian connections within the village are needed (60 percent).

Question 6

Should there be better connections between the village and amenities in the surrounding areas? (e.g., Churchville Nature Preserve, Playwicki Park)		
Answer Options	Response Percent	Response Count
Yes	37.5%	9
No	62.5%	15

However, most people felt there shouldn't be better connections between the village and amenities in the surrounding area. Some property owners attending the Town Hall meeting expressed concern about trail connections running through or adjacent to their properties.

Question 7

Are there places where safety could be improved for pedestrians, for example, by providing striping or signage at crosswalks?

Answer Options	Response Percent	Response Count
Yes	72.7%	16
No	17.3%	6

Most people think that pedestrian safety could be improved with striping and signage. Improving pedestrian circulation also received high marks on Question 5 and 8.

Question 8

Please rank the five most important things Northampton Township could do to help generate economic development and revitalization in Holland. (Select the most important things, ranking them from 1 to 5, with 1 being the most important. **Rank only five.**)

Answer Options						Response	
	1	2	3	4	5	Count	Avg. Rank
Provide more off-street parking	0	1	0	0	1	2	3.5
Enhance pedestrian circulation	3	2	3	1	1	10	2.5
Bike paths/bike racks	3	3	1	0	0	7	1.7
Better coordination with township government	0	2	2	1	5	10	3.9
Beautify street-plantings, street cleaning, lighting	2	4	3	7	0	16	2.9
Special events (<i>holiday lighting, shopping nights, street festivals, etc.</i>)	1	0	4	0	1	6	3.0
Increase police presence	1	0	1	0	0	2	2.0
Enhance communication with business community	2	1	2	1	1	7	2.7
Expand Village Overlay zoning	0	0	0	4	0	3	4.0
Improve infrastructure (<i>roads, utilities</i>)	4	2	2	1	1	10	2.3
Better licensing and regulatory environment (<i>e.g., signs, permitting</i>)	1	2	0	0	0	4	2.5
Improve signage to village's attractions/businesses	0	1	0	1	0	2	3.0
Traffic calming	5	4	3	2	3	17	2.6
Other (Specify)						4	—

Beautifying the street and Traffic calming are the top responses when asked what the five most important things the township could do to help generate economic development and revitalization in Holland. Other popular responses include improving infrastructure, enhancing pedestrian circulation, and better coordination with township government.

Question 9

Would you be interested in being contacted by the township for follow-up on any of your questions or comments from this survey and meeting?

Answer Options	Response Percent	Response Count
Yes	72%	18
No	18%	7

Comments

Question 2

Practice support of Good Commercial Practices (GCP) routinely survey passers-thru (drivers), businesses and residents regarding specific issues pluses and minuses.

Traffic

Question 3

Create communications channels for interested parties using social media.

Communicate more effectively.

Additional town meetings.

Any expense to taxpayer must have prior ok.

Resident input first, business than township officials, make TV broadcast current and up to date. Allow ads for local businesses to community.

See notes.

Question 4

None—no more development.

No additional business needed.

Post Office.

Nothing more.

No big box high volume store drawing high traffic volume to that area. No grocery store drug store only.

Community Park.

Family recreation-mini golf.

Drugstore.

Local retail hardware, old general store (Holland flair).

See notes.

Question 5

Sidewalks would help.

Pedestrian bridge across creek.

Accessible sidewalks.

Between old Bristol and Holland across the bridge.

Walking trails through the grass (turn to gravel or pavers).

Easements from developments to shopping centers.

For most people, walking takes too much time!

Question 6

Walking trails through the grass (turn to gravel or pavers).

Again, walking is too much time.

Question 7

Fix traffic first.

Buck Road and Old Bristol Road.

Sidewalks and crosswalks would help.

There are no places for walking at this time.

Across the bridge.

At intersections.

Near shopping center and bank on Route 532.

Striping, signage and speed bumps might help.

Wherever convenient.

Not sure.

However area in question is 25 mph little to no enforcement now!

Way to walk across the bridge.

Question 8

Improve Traffic Flow.

Fix Mill Race and traffic.

Tear down or redevelop the Mill Race Inn. It is an eyesore!

Traffic improvements *less controls, better timed traffic lights, keep traffic flowing.

Question 9. Contact Information

Question 10. Additional Comments:

Traffic flow needs to be addressed first.

Square off the light/intersection of Bucks, Holland and Chinquapin roads.

Reroute Chinquapin behind and above the WaWa to come out at Holland & Rocksville roads.

Close Holland Road and reroute that traffic out to Buck via Rocksville Road.

Empty Bristol Road onto Buck via Conservancy land.

Encourage and reward courteous drivers to highlight improvements via driver cooperation. I see lots of it more would be better (positive reinforcement for desired behavior).

Thanks for doing this.

More business/residential government cooperation.

I'd like to envision an entrance into Holland that is more pleasing visually! Clean it up!!!

Thank you.

A very nice thought-out presentation. Thank you.

Please don't waste money on a fountain like Richboro. Have you noticed when the traffic lights are out there is no traffic backup?

Street lighting should be improved old fashioned light would look nice. A small parklet would be nice.

Accept reality—Northampton is a bedroom community. Holland Village area including Pheasant Valley stores and offices should be analyzed as to historic success, failure and need. Small changes will not make a difference. Big changes including State roads and the County will cost big \$. Also zoning code and SALDO need clarification in certain sections.

Thank you for looking into this it would be great to see Holland become more of a town.

As mentioned at the meeting, traffic is the biggest problem. I believe a major improvement in this area could be done by moving the stone wall at south bound lane as you exit the bridge over the creek. As it is now 2 cars waiting to turn left onto Old Bristol Road prevent any one going south on Buck. A little more space there would make a big difference. And I believe would be easier and less costly than major ??? improvements. Also better speed enforcement most of traffic is way in excess of 25 mph limit throughout this entire area. And establish and enforce no "blocking the box" regulations especially at Buck and Holland roads. I believe that until traffic issues are corrected—any

business options are going to be limited due to people not wanting to fight the traffic to enter/exit any business it is easier to go elsewhere.

Village of Holland needs visual improvement. Some businesses, their lots, and property looks too commercial and blighted. Clean up Holland, increase road paving, keep traffic flowing. Stop wasting time and energy (gas) on traffic signals that are uncoordinated especially during rush hours and off hours when traffic is very light. (Flashing Red is OK) Holland needs a central well known meeting place, (diner restaurant) that says "small town, real people" Improve township meetings...less embarrassing bickering—other folks in other communities may also be watching—do it with pride. Thanks for your efforts—improvements to Holland is overdue.

Traffic is such a problem, nothing else is worth mentioning. Suggestions:

- Is there any other path to get from Newtown (or up Buck Road) to the train Stations or into Philadelphia? How would one find out? MapQuest and Google Maps don't help. A great use of your web page. Bucks County or Northampton.
- For the tunnel under the train.
- Can the drain be repaired so you are not battling deep water or ice in addition to the other problems?
- Large trucks and buses which require the center of the tunnel are supposed to honk so the traffic from the other direction knows to stop. They do not honk. There must some way to enforce this.
- Periodically, a large vehicle approaches the tunnel and discovers they should not be giving it a try. Turning around is not an option. There appears to be enough space on the sides of the road to set up a "turning basin" and allow them to avoid either trying to get through or backing up to where they can turn.
- The area just north of the tunnel is posted at 25 mph. Driving at 25 is difficult and dangerous. I get a backup behind me, a lot of honking, hand gestures, and then someone passing over the double yellow line. Frequently, a police car is sitting in the bank parking lot and does nothing.
- Even minimal mass transit would solve so many problems. I'm told people have seen buses around but can't find any info as to where, when, where they go, etc. Another good use for your web sites.
- There are many traffic conventions in this area I do not know and several spots I do not travel as I can't figure to navigate them safely/legally and functionally. The intersection of Holland Rd and Buck Rd is one of them. Sitting there for long periods of time and watching the other drives shows I am not the only one with that problem. If all the drivers were following the same conventions at that intersection, traffic would move faster and certain faster. Could the Northampton web page host a “Frequently Asked Questions” where traffic

officers could answer questions drivers have about how to handle situations? A good start would be protocols for traffic lights with no power. Not everyone would read it but if a few drivers start following the same conventions.

- Many of the problems are not Northampton Township's problem. They are problems to the residents. And we would pursue these problems if we could figure out who. Could the township website host a list of problems and points of contact?

Examples:

1. Holland needs its own zip code. I'm told it's a Post Office problem. Any help in finding a POC, web site, etc. would be greatly appreciated.
2. For a traffic problem (big truck not making it through the tunnel), do we call Northampton or state? I called 911 and couldn't convince them where Holland was. Is there an emergency number for Northampton police?

HOLLAND VILLAGE TOWN HALL MEETING

Development Preference Exercise

Attendees at the December 4, 2012, town hall meeting were also asked to give their opinions on development preferences by placing a sticker on a display board on attributes they thought were most suitable to Holland's character. The results of this exercise are as follows:

Display Board 1:

What types of non-residential development should be strongly encouraged in Holland?	
Types	Responses
Large Retail	0
Medical Office	0
Shopping Centers	2
Adaptive Reuse	35
Chain Stores	0
Locally-Owned Stores	11
Restaurants	5
Culture and Entertainment	9
Manufacturing/Industrial	0
Office Space	1
Mixed Use Developments	14
Other—no development	19

Display Board 2:

What present or potential attributes do you think are most important for Holland?	
Attributes	Responses
Walkability	11
Historic Character	24
Open Space and Parks	12
Sense of Community	12
Cultural Events	0
Diversity of Businesses	2
Retail Destinations	4
Streetscape	17
Outdoor Recreation	2
Environmental Enhancements	8
Trees and Landscaping	6
Public Amenities	0
Entertainment and Tourism	2
Other—Traffic cop at intersection of Buck and Holland to keep Holland traffic from blocking the box.	2

Display Board 3:

What should be done to improve the business environment in Holland?	
Improvements	Responses
Enhance Pedestrian Circulation	16
Create a Town Commons	4
Promote Public Transportation	6
Provide More Area for Businesses	3
Streetscape Improvements	22
Encourage Business Diversity	5
Improve Parking	1
Marketing Coordination	5
Improve Signage	3
Improve Safety	10
Enhance Communication with Businesses	6
Other—Traffic, Curb Cut, and Circulation Improvements	16
Encourage Courteous Driving	1
Traffic	1

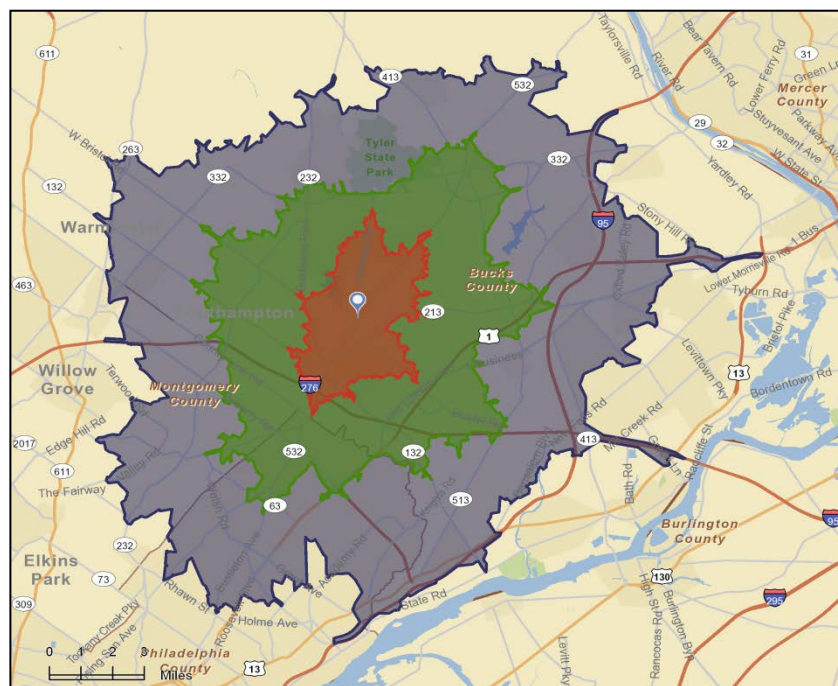
APPENDIX C: MARKET ANALYSIS

Maintaining and enhancing commercial development is important to the vitality of Holland. Evaluating the local retail market is useful to identify potential economic opportunities in the retail sector. The assessment of local market conditions for Holland begins by gathering relevant population, household, and other demographic data. By drawing on available Census and analysis tools, the boundaries of the Holland market can be based on drive times and demographic trends summarized using the 2000, 2010, and 2015 time periods. Such tools are used to determine consumer expenditures within the market, understand which market segment these consumers occupy, and show areas of potential economic opportunity.

Market Boundaries

Using the ESRI Business Analyst⁶ tool the boundaries of the Holland Market are divided into 0–5, 0–10, and 0–15-minute drive times⁷ from the center of the village. (See Figure 29). The following tables provide demographic and analytic data within the boundaries of these drive times.

Figure 29: Holland Village 5-, 10-, and 15-Minute Drive Time Market Areas



Source: ESRI Community Analyst, 2013.

⁶ ESRI Community Analyst is a web-based mapping and analytic tool that allows for analysis of demographic, economic, education, and business data.

⁷ Drive time intervals are areas defined by distance that can be driven away from a specific location within a specified time (in minutes) assuming posted speed limits for the road network. Barriers such as mountains, rivers, bridges, or highways under normal traffic conditions are taken into account when establishing the boundaries.

Population Summary					
	0–5 minutes	0–10 minutes	0–15 minutes	Northampton Twp.	Bucks County
2000 Total Population	12,870	101,612	309,253	39,384	597,636
2010 Total Population	12,768	101,474	315,415	39,726	625,249
2015 Total Population	12,594	100,344	314,435	40,107*	634,879*
2010–2015 Annual Rate	-0.27%	-0.22%	-0.06%	0.95%	1.54%

*DVRPC, May 2012.

The market population in the three drive-time categories looks to be significant. However, this must be tempered by the fact that market for many of the types of goods and services offered by the village as it currently composed will be within the 0–5-minute drive-time category. Population within the target markets has seen a slight drop-off since 2000 and it appears this drop-off will continue into 2015.

Household Summary			
	0–5 minutes	0–10 minutes	0–15 minutes
2000 Households	4,431	37,491	113,327
2000 Average Household Size	2.87	2.67	2.68
2010 Households	4,496	38,132	117,297
2010 Average Household Size	2.81	2.62	2.64
2015 Households	4,461	37,889	117,453
2015 Average Household Size	2.79	2.61	2.63
2010–2015 Annual Rate	-0.16%	-0.13%	0.03%

As with population, a small drop-off in the number of households is occurring. Household sizes are decreasing too. In 2000, the average household size was 2.87 persons in the 0–5-minute drive-time market. By 2015 it is expected to drop to 2.79 persons. Household size has been decreasing all over Bucks County. This is due largely to an aging population, a decline in the birth rate, and more singles living alone.

2000 Households by Type			
	0–5 minutes	0–10 minutes	0–15 minutes
Total	4,430	37,491	113,326
Family Households	82.1%	74.7%	73.8%
Married-couple Family	71.7%	63.4%	61.3%
With Related Children	34.8%	29.8%	29.5%
Other Family (No Spouse)	10.4%	11.3%	12.6%
With Related Children	5.4%	6.0%	6.9%
Nonfamily Households	17.9%	25.3%	26.2%
Householder Living Alone	14.5%	21.1%	21.7%
Householder Not Living Alone	3.4%	4.2%	4.4%
Households with Related Children	40.2%	35.8%	36.4%
Households with Persons 65+	24.0%	24.0%	24.3%

Household composition varies across the three drive-time markets. Over 82 percent of households in the 0–5-minute drive-time market are family households, compared to 74.7 percent in the 0–10-

minute drive-time market and 73.8 percent in the 0–15-minute drive-time market. About 34.8 percent of households in the 0–5-minute market have related children living in the household. This drops to 29.8 percent in the 0–10-minute drive-time market and 29.5 percent in the 0–15-minute drive-time market. Conversely, the percentage of Householders Living Alone increases as the market area expands from the center of the village. Only 14.5 percent of households have a Householder Living Alone in the 0–5-minute drive-time market. In the 0–10-minute and 0–15-minute drive-time markets this rises to 21.1 and 21.7 percent, respectively.

Housing Unit Summary			
	0–5 minutes	0–10 minutes	0–15 minutes
2000 Housing Units	4,524	38,395	116,339
Owner Occupied Housing Units	84.3%	78.1%	73.2%
Renter Occupied Housing Units	13.8%	19.6%	24.2%
Vacant Housing Units	1.9%	2.3%	2.6%
2010 Housing Units	4,654	39,541	122,078
Owner Occupied Housing Units	82.3%	76.3%	71.5%
Renter Occupied Housing Units	14.3%	20.1%	24.6%
Vacant Housing Units	3.4%	3.6%	3.9%
2015 Housing Units	4,677	39,737	123,592
Owner Occupied Housing Units	81.0%	75.5%	70.7%
Renter Occupied Housing Units	14.3%	19.8%	24.4%
Vacant Housing Units	4.6%	4.7%	5.0%

Housing tenure differs in the three markets. About 82 percent of units in 2010 were owner-occupied in the 0–5-minute drive time area. This percentage only reached 76.3 percent and 71.5 percent in the 0–10-minute and 0–15-minute areas, respectively. Vacancy rates increased as the drive times increased from the center of the market area. Each market area experienced a decline in the percentage of owner-occupied units from 2000 to 2010 and this is expected to further decline to the year 2015.

Median Household Income			
	0–5 minutes	0–10 minutes	0–15 minutes
2000	\$68,038	\$62,229	\$59,683
2010	\$88,637	\$79,590	\$76,873
2015	\$102,590	\$92,686	\$87,576

A clear difference in markets emerges when examining household income. Residents within a 5-minute drive time out-earn residents in the 0–10-minute and 0–15-minute markets. By 2015, there is expected to be a \$15,000 difference between the median household income of the 0–5-minute market and 0–15-minute market.

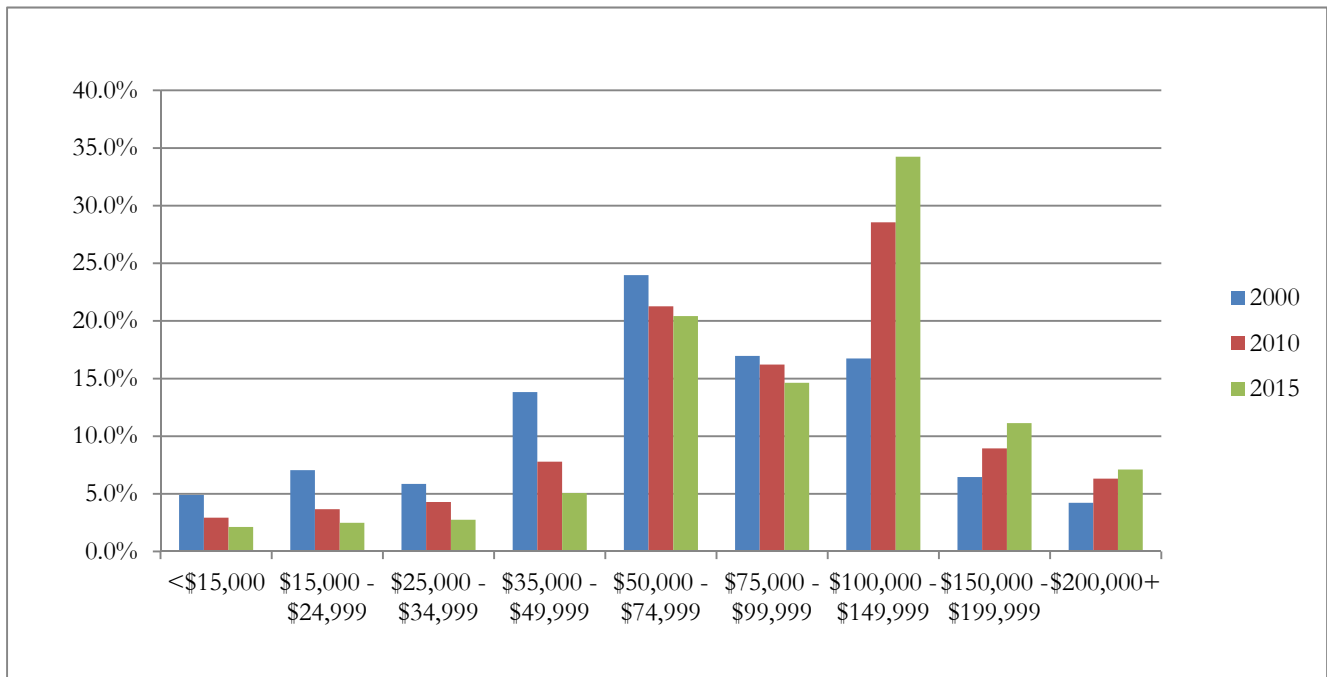
	Median Home Value		
	0–5 minutes	0–10 minutes	0–15 minutes
2000	\$187,431	\$169,933	\$155,892
2010	\$333,953	\$301,592	\$282,147
2015	\$416,339	\$380,003	\$361,554

Home values are also greater close to the village. By 2015, median home values are expected to \$416,000 within a 5-minute drive of the village. In the 0–10-minute and 0–15-minute markets, they rise to \$380,000 and \$362,000, respectively.

	Median Age		
	0–5 minutes	0–10 minutes	0–15 minutes
2000	39.8	39.2	38.3
2010	43.1	42.4	41.1
2015	43.5	42.9	41.5

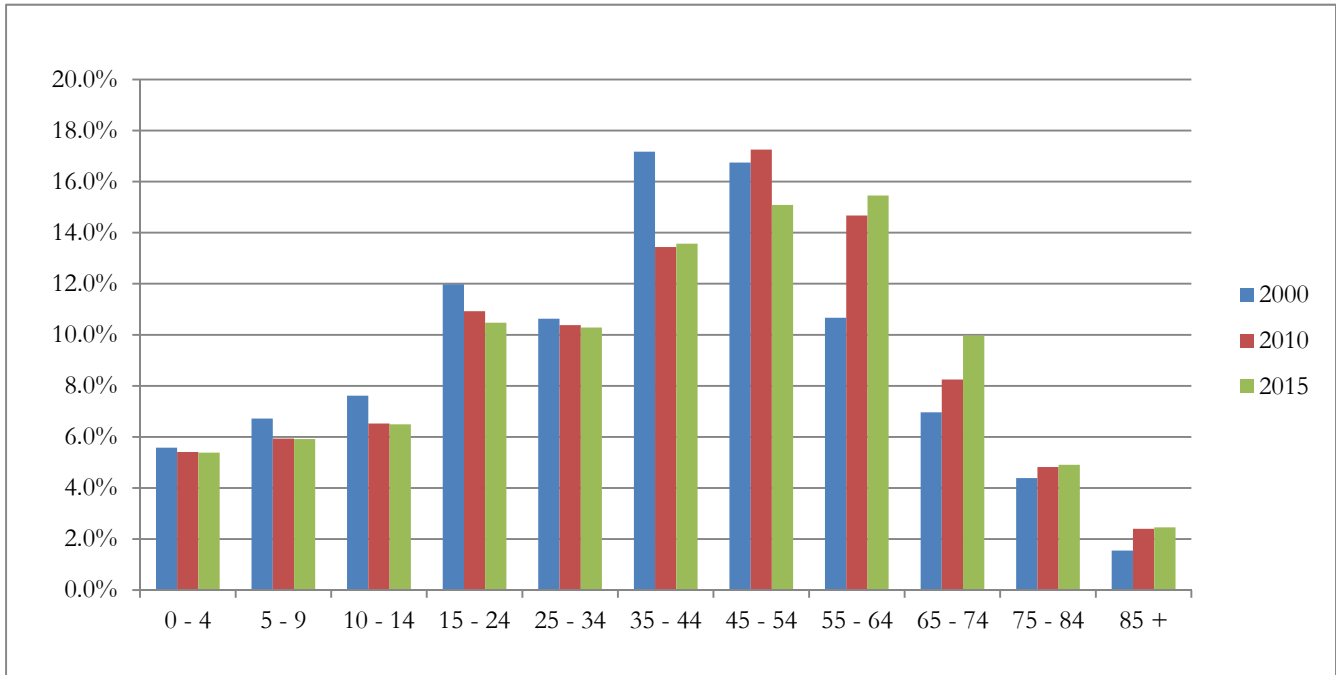
Much like the rest of Bucks County, residents within the 0–5-minute, 0–10-minute, and 0–15-minute boundaries are getting older. The highest median age as of 2010 were residents living within 5 minutes of the village (43.1 years), followed by residents living within 10 minutes (42.4 years) and residents living within 15 minutes (41.1 years).

Figure 30: Median Household Income by Income Bracket, 5-Minute Drive



The rise in median household income looks promising, but is even more promising when household income is divided into income brackets. Household incomes within a 5-minute drive in the three categories over \$100,000 will represent over 50 percent of the households by 2015.

Figure 31: Population Percentage by Age, 5-minute Drive



While the population maybe becoming wealthier, it is not growing nor is it becoming any younger. In 2000 the market consisted of a good portion of middle-aged residents and has since skewed toward retiring baby boomers and will further move in this direction as the population continues to age. Baby boomers will likely handle retirement differently than the previous generation of retirees. Demographers suggest that boomers will spend more time and money on personal needs and desires, be less civically engaged, more physically active, and more interested in living in a diverse and urban environment.

2010 Population by Race/Ethnicity			
	0–5 minutes	0–10 minutes	0–15 minutes
Total	12,769	101,474	315,415
White Alone	94.4%	90.8%	86.5%
Black Alone	1.0%	3.4%	4.0%
American Indian Alone	0.0%	0.1%	0.2%
Asian or Pacific Islander Alone	3.2%	3.7%	6.3%
Some Other Race Alone	0.6%	0.8%	1.5%
Two or More Races	0.9%	1.2%	1.5%
Hispanic Origin	2.1%	2.7%	4.3%

Population diversity is limited in the three market areas, but increases as one drives from the center of the village. Whites account for over 94 percent of the population within the 5-minute drive boundary. The Asian population rises from 3.2 percent to 6.3 percent moving from the 5-minute to the 15-minute market area. The Hispanic population increases from 2.1 percent to 4.3 percent.

2010 Population 25+ by Educational Attainment				
	0–5 minutes	0–10 minutes	0–15 minutes	Bucks County
Total	9,093	72,435	221,321	429,091
Less Than 9th Grade	1.5%	1.7%	2.2%	2.4%
9th to 12th Grade, No Diploma	5.3%	5.1%	6.0%	5.7%
High School Graduate	32.6%	29.7%	30.3%	31.6%
Some College, No Degree	16.5%	18.0%	17.5%	18.4%
Associate Degree	7.0%	7.5%	7.6%	7.3%
Bachelor's Degree	22.4%	22.9%	22.1%	21.2%
Graduate/Professional Degree	14.8%	15.1%	14.4%	13.4%

Interestingly, the differences in household income and home prices are not reflected in the educational attainment of the three market areas. About 38 percent of residents in the 0–10-minute market have obtained a bachelor's or graduate/professional degree, compared to 37.2 percent of residents in the 0–5-minute market and 36.5 percent of residents in the 0–15-minute market. These percentages are similar to Bucks County as a whole, of which 34.6 percent of residents have earned bachelor's or graduate/professional degrees.

2010 Employed Population 16+ by Occupation			
	0–5 minutes	0–10 minutes	0–15 minutes
Total	6,498	52,117	157,809
White Collar	74.1%	74.6%	72.6%
Management/Business/Financial	18.6%	17.7%	17.3%
Professional	25.8%	27.4%	26.6%
Sales	15.0%	14.4%	13.4%
Administrative Support	14.6%	15.1%	15.4%
Services	11.2%	10.9%	12.1%
Blue Collar	14.7%	14.5%	15.4%
Farming/Forestry/Fishing	0.0%	0.0%	0.1%
Construction/Extraction	5.6%	4.4%	4.2%
Installation/Maintenance/Repair	3.1%	3.5%	3.6%
Production	3.4%	3.3%	3.8%
Transportation/Material Moving	2.6%	3.2%	3.8%

The percentage of white collar, services, and blue collar occupations for the three market areas is remarkably consistent. White collar occupations make up almost three quarters of the occupations, with services hovering around 11 to 12 percent, and blue collar occupations making up the remaining 14 to 15 percent.

Retail Goods and Expenditures

The following data represents average household expenditures for retail goods and services within the specified market areas. A Spending Potential Index (SPI) was developed from the ESRI Business Analyst and represents the amount spent for a product or service relative to a national average of 100. Consumer spending data are derived from 2006 and 2007 Consumer Expenditure Surveys from the Bureau of Labor Statistics.

	5-Minute Drive Time			10-Minute Drive Time			15-Minute Drive Time		
	SPI	Average Amount Spent	Total	SPI	Average Amount Spent	Total	SPI	Average Amount Spent	Total
Apparel and Services	108	\$2,517.27	\$11,625,684	98	\$2,274.51	\$88,638,961	95	\$2,210.31	\$267,809,862
Men's	103	\$456.80	\$2,109,666	93	\$411.72	\$16,045,053	90	\$399.15	\$48,362,241
Women's	98	\$789.08	\$3,644,259	89	\$711.88	\$27,742,533	86	\$689.28	\$83,516,192
Children's	110	\$426.26	\$1,968,607	100	\$387.77	\$15,111,555	97	\$378.15	\$45,818,660
Footwear	72	\$291.79	\$1,347,586	66	\$266.81	\$10,397,740	65	\$260.90	\$31,611,899
Watches & Jewelry	169	\$317.69	\$1,467,188	150	\$281.57	\$10,973,027	143	\$269.60	\$32,666,371
Apparel Products and Services (1)	260	\$235.66	\$1,088,378	237	\$214.75	\$8,369,054	235	\$213.22	\$25,834,498
Computer									
Computers and Hardware for Home Use	151	\$280.25	\$1,294,297	137	\$254.95	\$9,935,445	134	\$247.90	\$30,036,104
Software and Accessories for Home Use	150	\$41.54	\$191,842	137	\$37.90	\$1,477,038	134	\$36.96	\$4,478,226
Entertainment & Recreation	159	\$4,955.53	\$22,886,526	143	\$4,472.07	\$174,279,345	138	\$4,301.02	\$521,129,120
Fees and Admissions	180	\$1,077.45	\$4,976,076	158	\$945.26	\$36,837,212	150	\$900.80	\$109,144,749
Membership Fees for Clubs (2)	184	\$291.57	\$1,346,572	161	\$255.35	\$9,951,124	153	\$242.67	\$29,402,647
Fees for Participant Sports, excl. Trips	167	\$172.93	\$798,647	149	\$154.32	\$6,013,751	143	\$147.94	\$17,924,611
Admission to Movie/Theatre/Opera/Ballet	165	\$241.99	\$1,117,579	147	\$216.48	\$8,436,460	143	\$209.46	\$25,378,518
Admission to Sporting Events, excl. Trips	174	\$100.48	\$464,069	153	\$88.45	\$3,447,083	146	\$84.35	\$10,219,590
Fees for Recreational Lessons	204	\$269.31	\$1,243,759	174	\$229.59	\$8,947,055	163	\$215.33	\$26,090,563
Dating Services	157	\$1.18	\$5,450	143	\$1.07	\$41,739	142	\$1.06	\$128,820
TV/Video/Audio	145	\$1,749.44	\$8,079,561	133	\$1,605.53	\$62,568,574	130	\$1,564.81	\$189,598,763
Community Antenna or Cable TV	144	\$1,005.96	\$4,645,893	133	\$928.24	\$36,174,049	129	\$903.66	\$109,491,029
Televisions	157	\$294.19	\$1,358,675	141	\$264.89	\$10,322,749	137	\$256.49	\$31,077,764
VCRs, Video Cameras, and DVD Players	141	\$27.80	\$128,410	130	\$25.71	\$1,001,950	129	\$25.36	\$3,072,630
Video Cassettes and DVDs	136	\$69.17	\$319,464	127	\$64.64	\$2,518,998	125	\$63.90	\$7,742,253
Video and Computer Game Hardware/Software	149	\$80.69	\$372,641	136	\$73.72	\$2,872,902	134	\$72.30	\$8,759,755
Satellite Dishes	147	\$1.79	\$8,286	134	\$1.63	\$63,558	128	\$1.56	\$189,402
Rental of Video Cassettes and DVDs	136	\$54.44	\$251,444	127	\$50.75	\$1,977,574	126	\$50.18	\$6,080,303
Streaming/Downloaded Video	171	\$2.32	\$10,728	152	\$2.06	\$80,365	147	\$2.00	\$242,834
Audio (3)	141	\$201.42	\$930,254	129	\$183.40	\$7,147,088	126	\$179.19	\$21,710,883
Rental/Repair of TV/Radio/Sound Equipment	158	\$11.64	\$53,766	143	\$10.50	\$409,342	139	\$10.17	\$1,231,910
Pets	186	\$776.90	\$3,588,025	169	\$705.25	\$27,483,899	162	\$675.93	\$81,898,672
Toys and Games (4)	149	\$210.55	\$972,374	136	\$191.63	\$7,468,064	132	\$185.61	\$22,489,440
Recreational Vehicles and Fees (5)	156	\$487.24	\$2,250,269	139	\$434.63	\$16,937,808	130	\$407.21	\$49,339,019
Sports/Recreation/Exercise Equipment (6)	123	\$216.30	\$998,948	111	\$194.67	\$7,586,269	106	\$186.25	\$22,567,268
Photo Equipment and Supplies (7)	157	\$157.01	\$725,124	141	\$141.57	\$5,517,091	136	\$136.44	\$16,531,591
Reading (8)	162	\$243.68	\$1,125,410	146	\$219.72	\$8,562,444	141	\$211.00	\$25,565,747
Catered Affairs (9)	155	\$36.97	\$170,739	142	\$33.82	\$1,317,982	138	\$32.96	\$3,993,872

	5-Minute Drive Time			10-Minute Drive Time			15-Minute Drive Time		
	SPI	Average Amount Spent	Total	SPI	Average Amount Spent	Total	SPI	Average Amount Spent	Total
Food	147	\$10,963.21	\$50,632,247	135	\$10,043.11	\$391,386,213	131	\$9,798.65	\$1,187,244,968
Food at Home	145	\$6,282.13	\$29,013,244	133	\$5,776.27	\$225,104,691	130	\$5,643.13	\$683,744,952
Bakery and Cereal Products	146	\$846.45	\$3,909,244	134	\$776.75	\$30,270,267	131	\$756.17	\$91,621,139
Meats, Poultry, Fish, and Eggs	145	\$1,454.45	\$6,717,197	133	\$1,337.22	\$52,112,345	130	\$1,308.47	\$158,539,570
Dairy Products	144	\$695.21	\$3,210,736	133	\$639.54	\$24,923,260	129	\$623.66	\$75,565,393
Fruits and Vegetables	149	\$1,134.74	\$5,240,679	136	\$1,037.13	\$40,417,426	133	\$1,013.25	\$122,770,100
Snacks and Other Food at Home (10)	142	\$2,151.27	\$9,935,388	131	\$1,985.64	\$77,381,392	129	\$1,941.57	\$235,248,751
Food Away from Home	150	\$4,681.08	\$21,619,003	137	\$4,266.84	\$166,281,523	133	\$4,155.52	\$503,500,016
Alcoholic Beverages	154	\$849.24	\$3,922,100	140	\$774.23	\$30,172,125	137	\$755.89	\$91,586,816
Nonalcoholic Beverages at Home	142	\$601.35	\$2,777,275	131	\$555.29	\$21,639,807	128	\$543.81	\$65,890,043
Financial									
Investments	176	\$2,967.41	\$13,704,617	154	\$2,594.20	\$101,097,404	144	\$2,422.99	\$293,579,219
Vehicle Loans	136	\$6,467.99	\$29,871,629	126	\$5,994.77	\$233,619,751	122	\$5,832.63	\$706,706,038
Health									
Nonprescription Drugs	133	\$133.00	\$614,259	125	\$124.50	\$4,851,990	122	\$121.50	\$14,721,318
Prescription Drugs	135	\$650.60	\$3,004,735	127	\$612.39	\$23,865,338	123	\$594.05	\$71,977,778
Eyeglasses and Contact Lenses	156	\$116.15	\$536,414	141	\$105.14	\$4,097,462	136	\$101.05	\$12,243,726
Home									
Mortgage Payment and Basics (11)	180	\$16,380.10	\$75,649,509	158	\$14,301.39	\$557,333,993	148	\$13,461.60	\$1,631,063,983
Maintenance and Remodeling Services	191	\$3,665.53	\$16,928,803	165	\$3,166.39	\$123,396,196	154	\$2,955.65	\$358,118,863
Maintenance and Remodeling Materials (12)	167	\$599.95	\$2,770,803	147	\$529.14	\$20,620,725	137	\$494.46	\$59,910,931
Utilities, Fuel, and Public Services	147	\$6,456.12	\$29,816,784	135	\$5,913.95	\$230,470,037	130	\$5,724.51	\$693,605,651
Household Furnishings and Equipment									
Household Textiles (13)	156	\$201.65	\$931,299	141	\$181.95	\$7,090,825	136	\$175.12	\$21,217,636
Furniture	163	\$950.72	\$4,390,788	146	\$847.87	\$33,042,008	140	\$813.77	\$98,599,635
Floor Coverings	186	\$135.43	\$625,456	163	\$118.25	\$4,608,216	153	\$111.38	\$13,495,442
Major Appliances (14)	155	\$455.79	\$2,105,025	140	\$410.53	\$15,998,766	133	\$391.18	\$47,396,629
Housewares (15)	134	\$111.69	\$515,803	122	\$101.65	\$3,961,485	118	\$98.89	\$11,981,671
Small Appliances	148	\$47.11	\$217,548	136	\$43.14	\$1,680,982	132	\$41.82	\$5,066,890
Luggage	166	\$14.92	\$68,903	148	\$13.28	\$517,501	142	\$12.75	\$1,545,284
Telephones and Accessories	93	\$38.57	\$178,119	87	\$35.81	\$1,395,460	86	\$35.34	\$4,282,432
Household Operations									
Child Care	161	\$719.94	\$3,324,950	143	\$642.03	\$25,020,194	139	\$622.33	\$75,403,763
Lawn and Garden (16)	168	\$682.97	\$3,154,197	149	\$604.49	\$23,557,148	140	\$568.90	\$68,930,709
Moving/Storage/Freight Express	146	\$85.85	\$396,475	134	\$78.83	\$3,071,857	131	\$77.26	\$9,360,966
Housekeeping Supplies (17)	146	\$989.12	\$4,568,140	134	\$907.59	\$35,369,283	130	\$881.19	\$106,768,128
Insurance									
Owners and Renters Insurance	156	\$700.14	\$3,233,530	141	\$630.98	\$24,589,570	134	\$599.54	\$72,642,515
Vehicle Insurance	150	\$1,690.19	\$7,805,927	137	\$1,542.75	\$60,121,963	132	\$1,494.02	\$181,022,056
Life/Other Insurance	165	\$667.76	\$3,083,946	147	\$594.45	\$23,165,882	139	\$561.91	\$68,083,363
Health Insurance	145	\$2,720.50	\$12,564,281	134	\$2,513.26	\$97,943,128	130	\$2,430.27	\$294,461,654
Personal Care Products (18)	145	\$562.18	\$2,596,378	133	\$515.89	\$20,104,572	130	\$503.44	\$60,999,211
School Books and Supplies (19)	135	\$139.76	\$645,477	126	\$130.33	\$5,078,848	125	\$128.86	\$15,613,556
Smoking Products	122	\$503.99	\$2,327,627	117	\$485.92	\$18,936,659	116	\$481.34	\$58,321,524
Transportation									
Vehicle Purchases (Net Outlay) (20)	143	\$6,091.66	\$28,133,592	131	\$5,589.36	\$217,820,849	128	\$5,424.84	\$657,296,374
Gasoline and Motor Oil	137	\$3,816.31	\$17,625,177	127	\$3,539.08	\$137,920,107	124	\$3,447.40	\$417,700,924
Vehicle Maintenance and Repairs	150	\$1,373.51	\$6,343,403	137	\$1,251.02	\$48,752,869	133	\$1,210.67	\$146,690,340
Travel									
Airline Fares	180	\$801.53	\$3,701,786	158	\$703.48	\$27,415,024	151	\$671.87	\$81,406,285
Lodging on Trips	180	\$760.07	\$3,510,280	158	\$666.13	\$25,959,365	149	\$629.39	\$76,258,932
Auto/Truck/Van Rental on Trips	182	\$65.27	\$301,443	160	\$57.20	\$2,229,217	152	\$54.57	\$6,611,633
Food and Drink on Trips	170	\$716.09	\$3,307,160	150	\$634.63	\$24,731,846	143	\$603.99	\$73,181,559

The Spending Potential Index shows a significant amount spent on consumer spending categories compared to the national average. The spending index is greater in the 0–5-minute area than the 0–10-minute and 0–15-minute market areas in every retail and service expenditure category. Areas of potential in the village include:

- Entertainment and Recreation—Fees and Admissions, SPI 180, \$4.98 million spent in the 0–5-minute market.
- Entertainment and Recreation—Pets, SPI 159, \$22.9 million spent in the 0–5-minute market.
- Food, SPI 147, \$50.6 million spent in the 0–5-minute market.
- Food—Food Away from Home, SPI 150, \$21.6 million spent in the 0–5-minute market.
- Financial—Investments, SPI 176, \$13.7 million spent in the 0–5-minute market.
- Home—Maintenance and Remodeling Services, SPI 191, \$16.9 million spent in the 0–5-minute market.
- Household Furnishings and Equipment—Furniture, SPI 163, \$4.4 million spent in the 0–5-minute market.

Caution must be given in that this data source is over 5 years old. Consumers’ tastes and desires can change quickly in today’s retail environment, particularly in Entertainment-TV/Video/Audio. However, these data can still provide a glimpse of the retail potential in the three drive-time markets surrounding Holland.

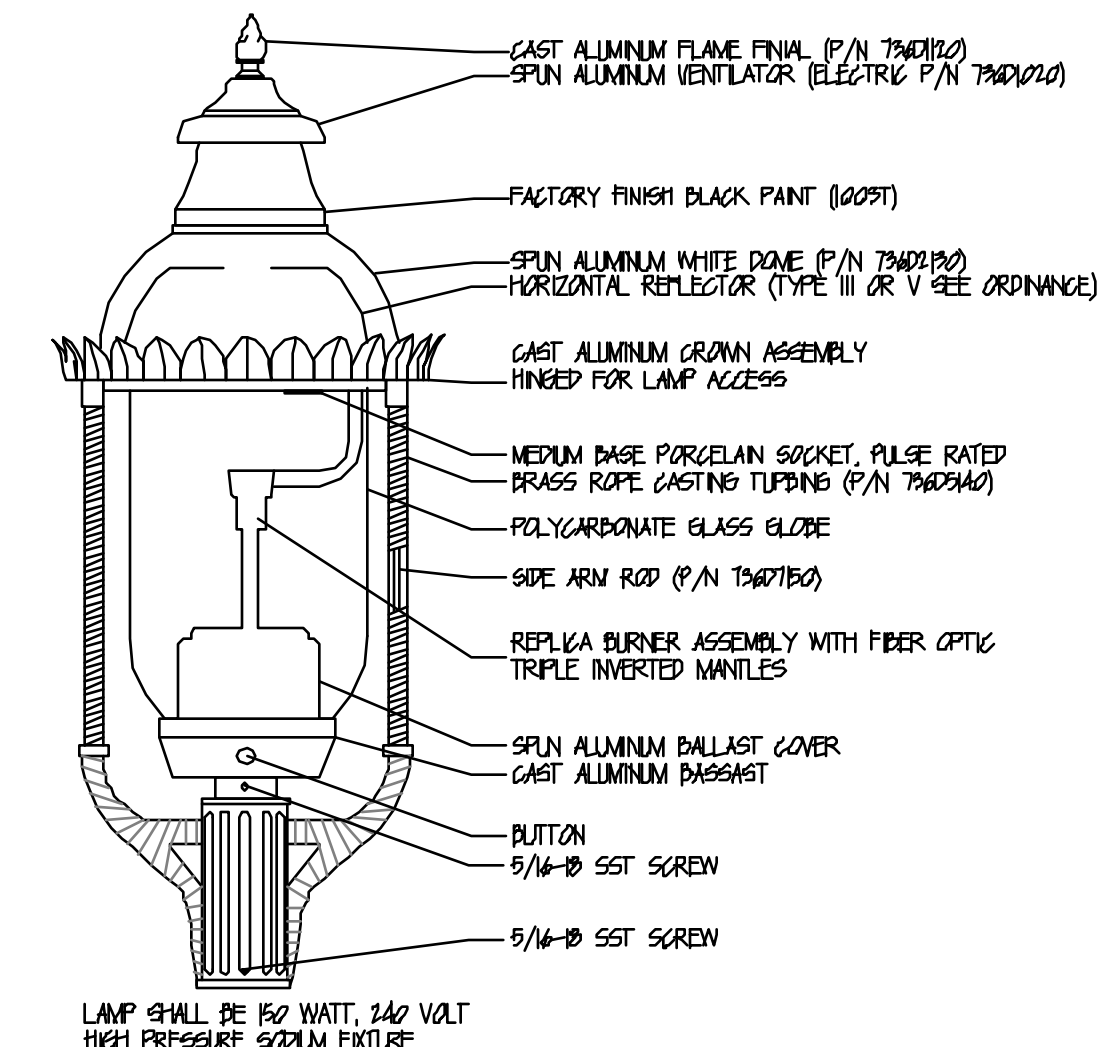
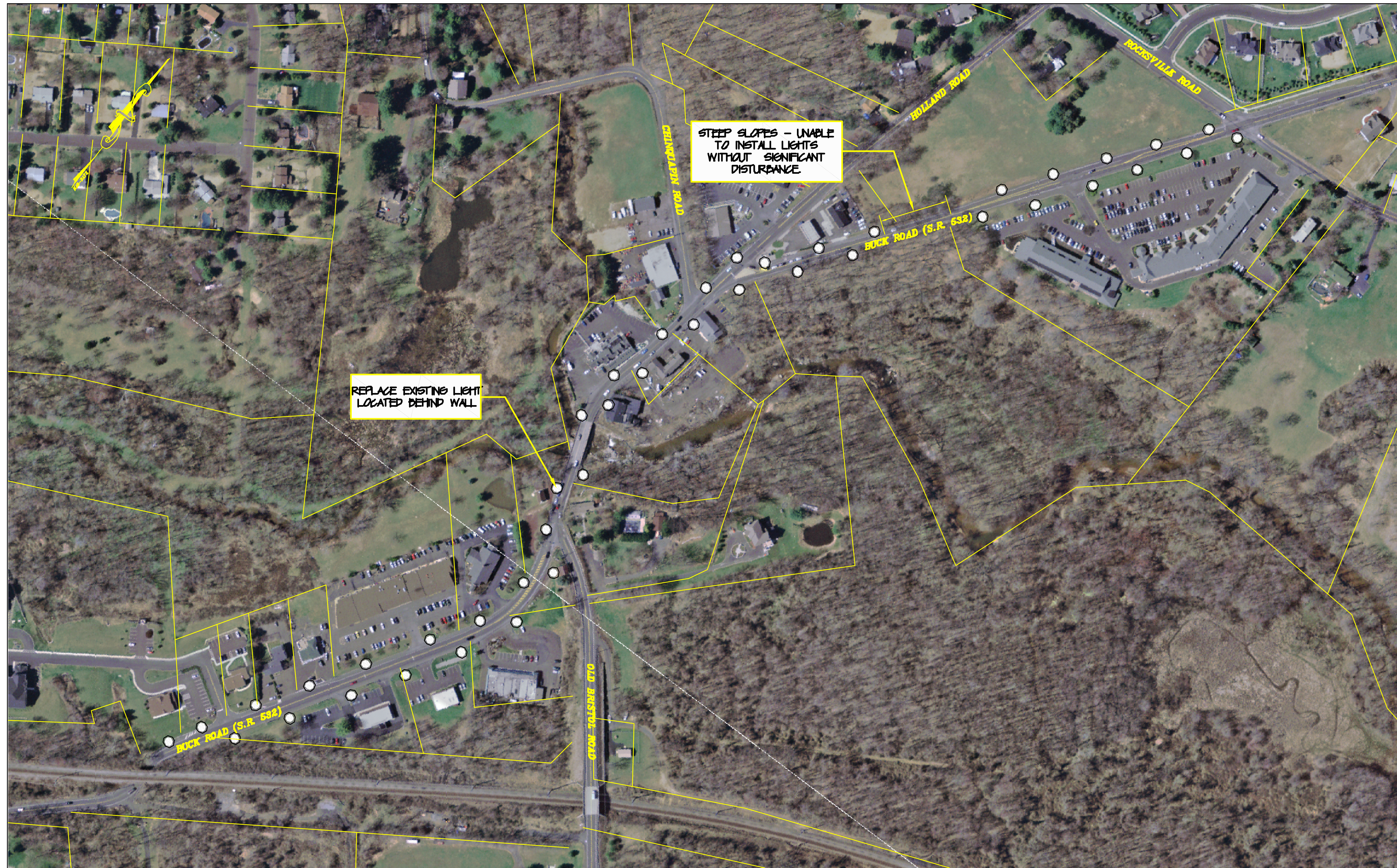
Retail Marketplace Profile

The retail marketplace profile is a snapshot of the supply and demand of retail sales in the 0–5-minute market surrounding the center of Holland. This analysis can assist in determining whether Holland is meeting local demand for products in specific industry groups. Demand estimates the expected amount spent by consumers at retail establishments. The leakage/surplus factor is a measure of the relationship between supply and demand that ranges from +100 (total leakage) to –100 (total surplus). A positive value represents “leakage” of retail opportunity outside the trade area. A negative value represents a surplus of retail sales, a market where customers are drawn in from outside the trade area. The tables are limited to the 0–5-minute market, as this report is focused on businesses within the village’s boundaries.

Industry Summary	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Total Retail Trade and Food & Drink	44-45,722	\$167,456,067	\$125,031,479	\$42,424,588	14.5	125
Total Retail Trade	44-45	\$145,031,693	\$104,237,551	\$40,794,143	16.4	86
Total Food & Drink	722	\$22,424,373	\$20,793,928	\$1,630,445	3.8	39
Industry Group	NAICS	Demand (Retail Potential)	Supply (Retail Sales)	Retail Gap	Leakage/Surplus Factor	Number of Businesses
Motor Vehicle & Parts Dealers	441	\$33,169,070	\$17,397,374	\$15,771,696	31.2	8
Automobile Dealers	4411	\$28,663,573	\$13,816,016	\$14,847,557	35.0	2
Other Motor Vehicle Dealers	4412	\$2,479,818	\$731,946	\$1,747,872	54.4	1
Auto Parts, Accessories & Tire Stores	4413	\$2,025,679	\$2,849,412	-\$823,733	-16.9	5
Furniture & Home Furnishings Stores	442	\$5,249,383	\$4,854,674	\$394,710	3.9	10
Furniture Stores	4421	\$3,041,880	\$3,292,404	-\$250,524	-4.0	5
Home Furnishings Stores	4422	\$2,207,503	\$1,562,270	\$645,233	17.1	5
Electronics & Appliance Stores	4431	\$4,509,658	\$3,008,856	\$1,500,802	20.0	8
Bldg Materials, Garden Equip. & Supply Stores	444	\$7,107,266	\$4,142,822	\$2,964,444	26.4	15
Bldg Material & Supplies Dealers	4441	\$6,382,624	\$2,919,735	\$3,462,889	37.2	12
Lawn & Garden Equip & Supply Stores	4442	\$724,642	\$1,223,087	-\$498,445	-25.6	3
Food & Beverage Stores	445	\$35,452,742	\$40,674,682	-\$5,221,940	-6.9	9
Grocery Stores	4451	\$32,621,838	\$38,630,175	-\$6,008,337	-8.4	5
Specialty Food Stores	4452	\$534,954	\$1,227,431	-\$692,477	-39.3	4
Beer, Wine & Liquor Stores	4453	\$2,295,950	\$817,076	\$1,478,874	47.5	1
Health & Personal Care Stores	446,4461	\$5,002,785	\$5,523,484	-\$520,699	-4.9	6
Gasoline Stations	447,4471	\$20,124,027	\$1,039,178	\$19,084,849	90.2	0
Clothing & Clothing Accessories Stores	448	\$6,101,862	\$2,411,222	\$3,690,641	43.4	7
Clothing Stores	4481	\$4,851,781	\$1,806,081	\$3,045,700	45.7	5
Shoe Stores	4482	\$740,398	\$353,686	\$386,711	35.3	1
Jewelry, Luggage & Leather Goods Stores	4483	\$509,684	\$251,454	\$258,230	33.9	1
Sporting Goods, Hobby, Book & Music Stores	451	\$1,880,904	\$498,988	\$1,381,916	58.1	4
Sporting Goods/Hobby/Musical Instr Stores	4511	\$1,194,770	\$473,357	\$721,413	43.2	4
Book, Periodical & Music Stores	4512	\$686,134	\$25,631	\$660,503	92.8	0
General Merchandise Stores	452	\$14,622,351	\$11,914,947	\$2,707,404	10.2	3
Department Stores Excluding Leased Depts.	4521	\$7,292,537	\$853,562	\$6,438,976	79.0	1
Other General Merchandise Stores	4529	\$7,329,814	\$11,061,385	-\$3,731,572	-20.3	3
Miscellaneous Store Retailers	453	\$2,668,257	\$2,954,011	-\$285,755	-5.1	11
Florists	4531	\$237,361	\$188,742	\$48,619	11.4	2
Office Supplies, Stationery & Gift Stores	4532	\$1,183,447	\$2,223,045	-\$1,039,598	-30.5	4
Used Merchandise Stores	4533	\$66,898	\$41,844	\$25,055	23.0	1
Other Miscellaneous Store Retailers	4539	\$1,180,551	\$500,381	\$680,170	40.5	4
Nonstore Retailers	454	\$9,143,390	\$9,817,313	-\$673,924	-3.6	4
Electronic Shopping & Mail-Order Houses	4541	\$5,958,366	\$0	\$5,958,366	100.0	0
Vending Machine Operators	4542	\$631,224	\$792,501	-\$161,277	-11.3	1
Direct Selling Establishments	4543	\$2,553,800	\$9,024,813	-\$6,471,012	-55.9	3
Food Services & Drinking Places	722	\$22,424,373	\$20,793,928	\$1,630,445	3.8	39
Full-Service Restaurants	7221	\$10,421,216	\$10,694,361	-\$273,146	-1.3	19
Limited-Service Eating Places	7222	\$8,877,688	\$7,211,278	\$1,666,411	10.4	16
Special Food Services	7223	\$2,555,056	\$775,521	\$1,779,535	53.4	1
Drinking Places-Alcoholic Beverages	7224	\$570,414	\$2,112,768	-\$1,542,355	-57.5	3

There are a total of 125 retail and food and drink businesses within the 5-minute drive-time boundary of the village. Total retail leakage for the market is over \$42 million. Among industry groups that might fit well in a village setting, leakages exist for Electronics & Appliance Stores (\$1.5 million), Home Furnishing Stores (\$645,000), Beer, Wine, & Liquor Stores (\$1.5 million), Clothing Stores (\$3 million), Shoe Stores (\$386,000), Book, Periodical, and Music Stores (\$660,000), Sporting Goods, Hobby, and Musical Instrument Stores (\$721,000), Department Stores (\$6.4 million), Limited-Service Eating Places (\$1.7 million), and Special Food Services (\$1.8 million). Again, caution must be taken in examining these data; for example, Full-Service Restaurants generally appeared

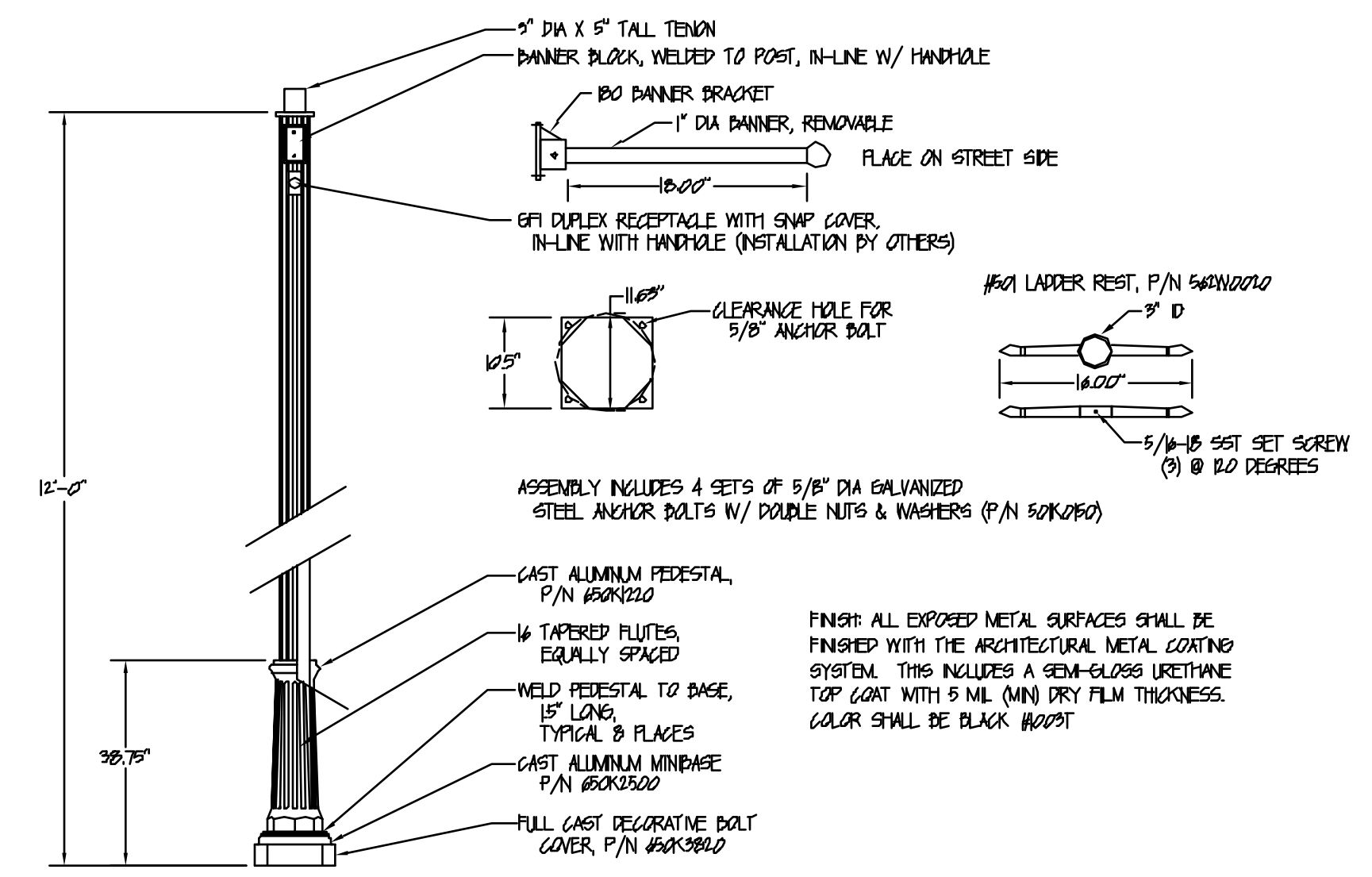
oversupplied but demand could be created were the right kind of restaurant opened for the Holland area market. Indeed, just because a new clothing store opens, does not guarantee its success. It must be the right store for this market and have a solid business model and good management.



LAMP SHALL BE 150 WATT, 240 VOLT HIGH PRESSURE SODIUM FIXTURE

LIGHT FIXTURE SHALL BE MANUFACTURED BY THE PENNSYLVANIA GLOBE LIGHTING COMPANY, 322 SHAW ROAD, NORTH BRANFORD, CT 06461, (203)441-7100, MODEL "BALLEAST" OR APPROVED EQUIV. ALL OTHER INSTALLATION REQUIREMENTS SHALL CONFORM WITH THE NORTHAMPTON TOWNSHIP ORDINANCES.

LIGHT FIXTURE DETAIL



LIGHT POST SHALL BE MANUFACTURED BY THE PENNSYLVANIA GLOBE LIGHTING COMPANY, TRADITIONAL FLUTED POST (P/N 600) OR APPROVED EQUIV. LIGHT FIXTURE SHALL BE MOUNTED AT A HEIGHT OF TWELVE (12) FEET. ALL OTHER INSTALLATION REQUIREMENTS SHALL CONFORM WITH THE NORTHAMPTON TOWNSHIP ORDINANCES.

LIGHT POST DETAIL

NOTE: WHERE PROPOSED LIGHTING CAN NOT BE PLACED AS SHOWN ON THIS PLAN DUE TO EXISTING PHYSICAL INFRASTRUCTURE (DRIVEWAYS, UTILITIES, SIGNAGE, ETC.) THE LIGHTING SHALL BE INSTALLED AS CLOSE TO THE LOCATION SHOWN AS POSSIBLE. TO ENSURE UNIFORM LIGHTING DISTRIBUTION THE SPECIFIED LIGHTING SHALL NOT BE SPACED AT INTERVALS GREATER THAN 175 FEET APART, AND NOT LESS THAN 105 FEET. WHERE EXISTING LIGHTING FIXTURES EXIST, THEY SHALL BE REPLACED WITH THE SPECIFIED LIGHTING FIXTURE EXCEPT WHEN THE LIGHTING FIXTURE IN QUESTION IS INSTALLED AS A MEANS OF SECURITY LIGHTING.

* LOT LINE LOCATIONS ARE APPROXIMATE, BASED ON AVAILABLE TAX PARCEL INFORMATION

LEGEND

○ PROPOSED NORTHAMPTON TOWNSHIP LAMP POST

PENNSYLVANIA ONE CALL SYSTEM, INC.

325 14th Run Road
West Mills, Pennsylvania
19122 - 1074



BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA, CALL 1-800-242-1776. NON-MEMBERS MUST BE CONTACTED DIRECTLY. PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH.

ONLY THOSE PLANS INCORPORATING THE RAISED PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED. © COPYRIGHT 2006 GILMORE & ASSOCIATES, INC. ALL RIGHTS RESERVED.

APPENDIX D

OWNER: NORTHAMPTON TOWNSHIP 55 TOWNSHIP ROAD RICHBORO, PA 18954	REV.:	DESCRIPTION:	DATE:	BY:
MUNICIPAL FILE NO.:	TAX MAP PARCEL NO.:	HOLLAND STREET LIGHT IMPLEMENTATION PLAN		
	TOTAL AREA: TOTAL LOTS:	NORTHAMPTON TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA		
	DATE: SCALE:	GILMORE & ASSOCIATES, INC. ENGINEERING & CONSULTING SERVICES		
	9-10-07 1"=150'			
		JOB NO.: 2007-07071 SHEET NO.: 1 OF 1		
	DESIGNED BY: MPR	DRAWN BY: MPR	CHECKED BY: CEG	