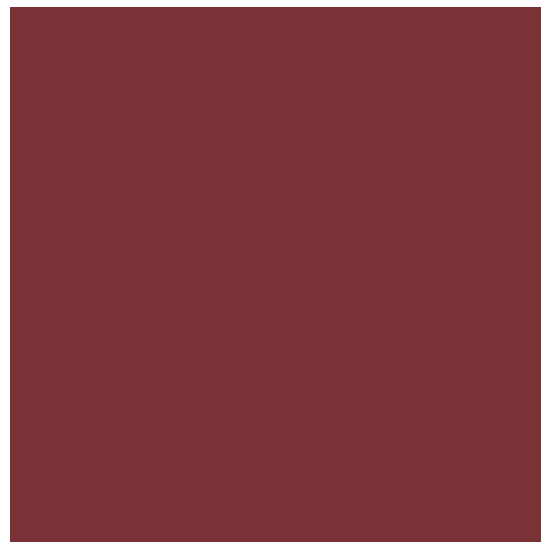
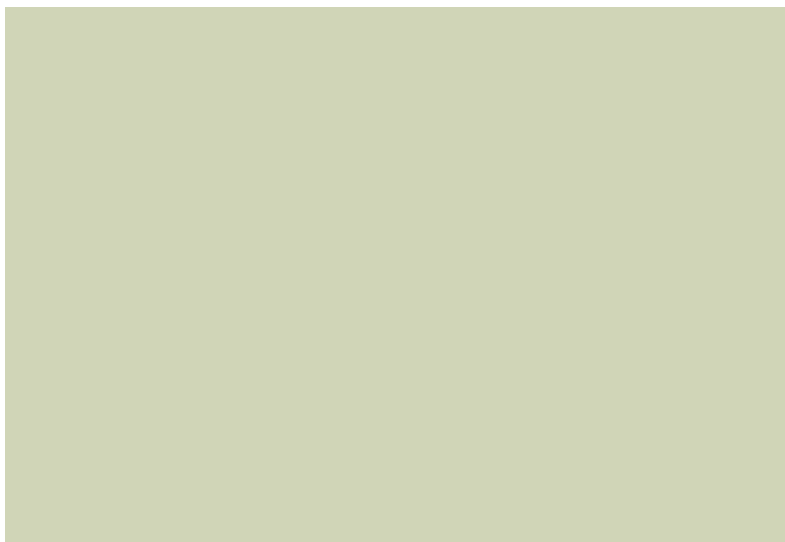


LONDON BRITAIN TOWNSHIP 2019
COMPREHENSIVE PLAN UPDATE APPENDICES



Page left intentionally blank.

TABLE OF CONTENTS

APPENDIX A DEMOGRAPHICS & POPULATION FORECASTS	5
APPENDIX B 2018 COMMUNITY VISIONING SESSION	17
APPENDIX C 2018 COMMUNITY PLANNING SURVEY	27
APPENDIX D 2018 COST OF COMMUNITY SERVICES STUDY	55
APPENDIX E AGRICULTURAL AND NATURAL RESOURCES INVENTORY	63
APPENDIX F HISTORIC RESOURCES INFORMATION FROM 2008 PLAN.....	75
APPENDIX G EXISTING LAND USE AND ZONING ANALYSIS	89
APPENDIX H TRANSPORTATION DATA	99
APPENDIX I RECREATION AND TRAILS INVENTORY.....	109
APPENDIX J OPEN SPACE.....	115
APPENDIX K COMMUNITY FACILITIES AND SERVICES.....	119

Page left intentionally blank.

APPENDIX A

DEMOGRAPHICS & POPULATION FORECASTS

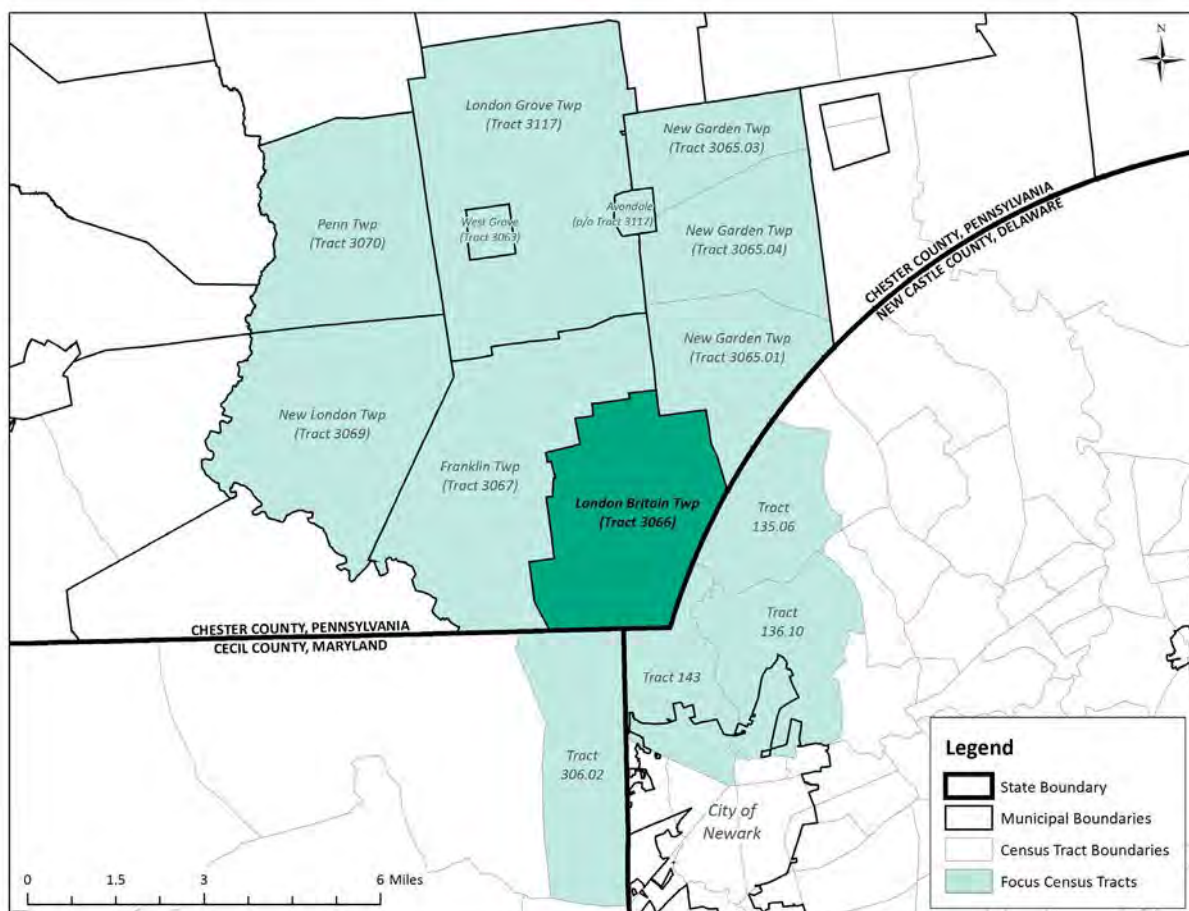
Introduction

Demographic analysis is fundamental to the planning process. Trends in population, income, employment, and housing are major drivers of land use change and have important implications for the quality of life in London Britain Township. Demographic data offers one source of reliable data that provides valuable insights about a community’s future infrastructure needs, resource allocation, and demand for municipal and other services. Underlying several elements of this Comprehensive Plan, demographic information provides the needed context for deliberation of proposed policies and programs, including those related to land use, housing, resource protection, and municipal service delivery.

Demographic data was presented to the Township Comprehensive Plan Task Force early in the planning process. Data on current and historic population, income, employment, and housing was presented at their February 2018 meeting. This appendix summarizes demographic information discussed at Task Force meetings and later used in the preparation of various Comprehensive Plan elements.

Most of the data comes from the U.S. Census Bureau’s decennial Census of Population and Housing, as well as the 2012 American Community Survey 5-year estimates. Where available, data from the Delaware Valley Regional Planning Commission (DVRPC), Chester County Planning Commission, Avon Grove School District, and London Britain Township were used to supplement Census data.

The map below illustrates the surrounding census tracts that London Britain Township is compared to in certain figures within this appendix.



Population

Historic Trends

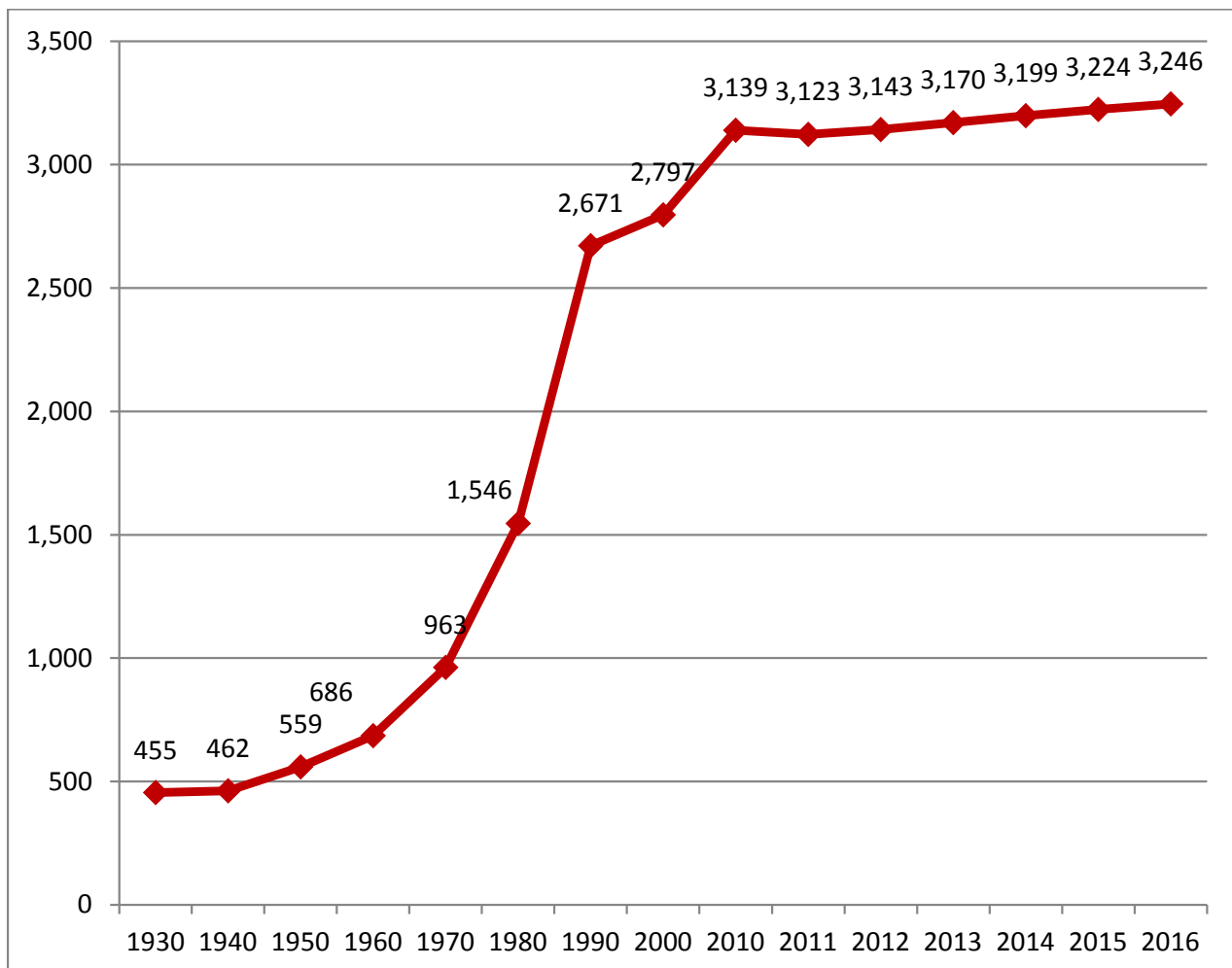
As of 2010, the population of London Britain Township was 3,139 people. Figure A-1 depicts population growth in London Britain Township between 1930 and 2016. London Britain Township experienced most of its population growth between 1960 and 2000, with the most intense population growth concentrated between 1990 and 2000, when the population increased by 1,125 people or 42%.

Regional Change

Between 2000 and 2010, London Britain Township's population grew by 12.2 percent, which is slightly less than Chester County (15 percent) and more than the Commonwealth as a whole (3 percent). London Britain and Franklin Townships and Avondale Borough all grew at similar rates in the ten-year period between 2000 and 2010. In contrast, New Garden (31.9 percent), London Grove (42 percent), New London (22.9 percent), and Penn (90.8 percent) Townships all experienced much more extreme population growth in the same ten-year period. Only West Grove Borough experienced more modest population growth of 7.6 percent between 2000 and 2010.

Figure A-1: Historic Population Change

(Source: U.S. Census Bureau; 2010 Census of Population and Housing; Summary File 1A.)



Population Density

Population density in London Britain Township in 2010 was 321 persons per square mile, representing an increase of 34 people per square mile from 2000. Indicative of a rural settlement pattern, this density is far below the County average (657) and is also less than most of the Township's neighboring municipalities other than New Garden Township (736) and Avondale (2,562) and West Grove (4,401) Boroughs.

Median Age and Age Structure

Like most communities in Chester County, median age in London Britain Township is increasing. Median age in 2010 was 44.1, up from 40.5 in 2000. Surrounding municipalities, as well as the County and Commonwealth, exhibit the same general trend. Only Avondale and West Grove Boroughs had a decline in the median age between 2000 and 2010.

Population by age group and sex as a percent of total population in 2000 and 2010 for London Britain Township are presented in Figures A-2 and A-3 on the following pages. In London Britain Township, age structure across the population between 2000 and 2010 showed a population aging in place with children growing up in the Township and a modest amount of the youngest age group being born. In addition, the proportion of 10 to 14-year-olds and 15 to 19-year-olds also increased. Both the 15-19 and the 40-49 age groups are the overall largest population groups, perhaps indicating a large amount of families with older children living in the Township. The general trend also appears to show an aging of the overall population, as indicated by the increase in median age of approximately four years.

Figure A-2: Population by Age and Sex, 2000; London Britain Township

(Sources: U.S. Census Bureau; 2000 Census of Population and Housing; Summary Tape File 1)

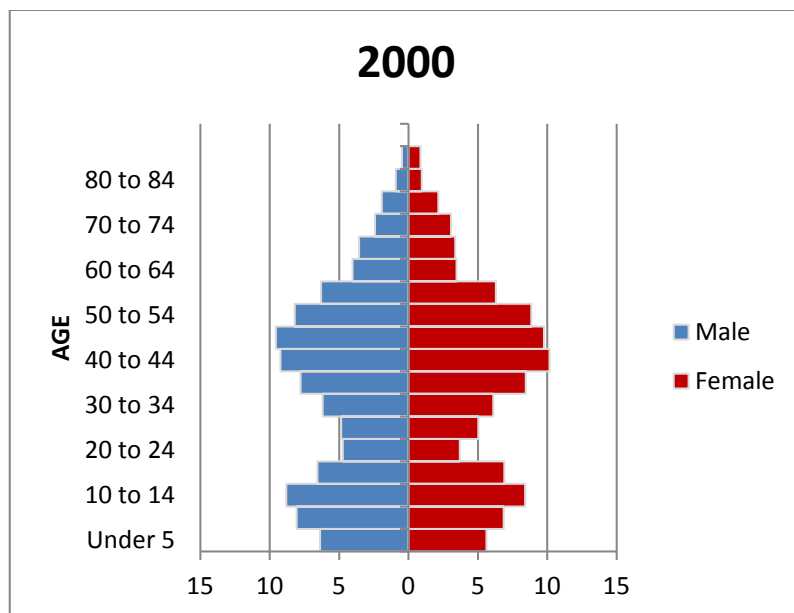
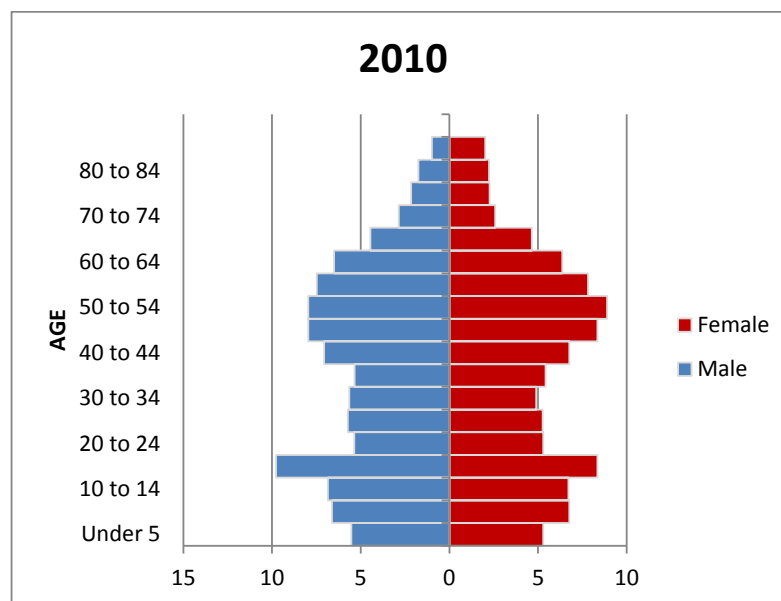


Figure A-3: Population by Age and Sex, 2010; London Britain Township

(Sources: U.S. Census Bureau; 2010 Census of Population and Housing; Summary File 1A)



Household Size

The average number of persons per household is declining slightly in London Britain Township, from 2.92 in 2000 to 2.87 in 2010. Though mimicking a national trend, average household size in London Britain Township has not dropped to the level it has in Chester County (2.65) or the US (2.58).

Educational Attainment and School Enrollment

Roughly 97 percent of Township residents in 2010 had a high school diploma, while 57 percent had a bachelor's degree or higher. These figures are both slightly higher than County educational attainment levels, and among neighboring municipalities, especially compared to Avondale Borough where 57 percent of residents have a high school degree and 19 percent have a bachelor's degree or higher.

London Britain Township is part of the Avon Grove School District, which includes New London, London Britain, Penn, and Franklin Townships, and Avondale and West Grove Boroughs. Enrollment in the Avon Grove School District in 2010 was 5,380 students.

Income and Poverty

Family and Household Income

Median family income in London Britain Township in 2016 was \$131,172, up from \$97,013 in 2000. Median household income (which is not inflation adjusted) for London Britain Township was \$115,469 in 2016 and \$93,521 in 1999. Compared to its neighboring municipalities, London Britain has a higher median family income than all of its neighboring municipalities and census tracts in Delaware and Maryland except Franklin Township and Census Tract 135.06 in Delaware. Only New London Township, Franklin Township, and Delaware Census Tract 135.06 have higher median household incomes than London Britain Township in comparing 2016 figures. London Britain also has a higher median family income and median family household income than

Chester County’s averages of 108,663 in 2016 for median family income and \$88,995 for median household income in 2016.

Poverty

Given the economic recession of 2007/8, it’s no surprise that the level of poverty rates at the household level for many communities in the region has risen over recent years. London Britain Township was very lucky to see the percentage of families below the poverty level reduce from 2.1 percent in 1999 to 1.2 percent in 2016. Comparatively, Chester County experienced an increase in the poverty level from 3.1 percent in 1999 to 4.3 percent in Chester County and all of London Britain’s surrounding communities also had higher levels of poverty except for Census Tract 135.06 in Delaware which also had a 2016 poverty level of 1.2 percent.

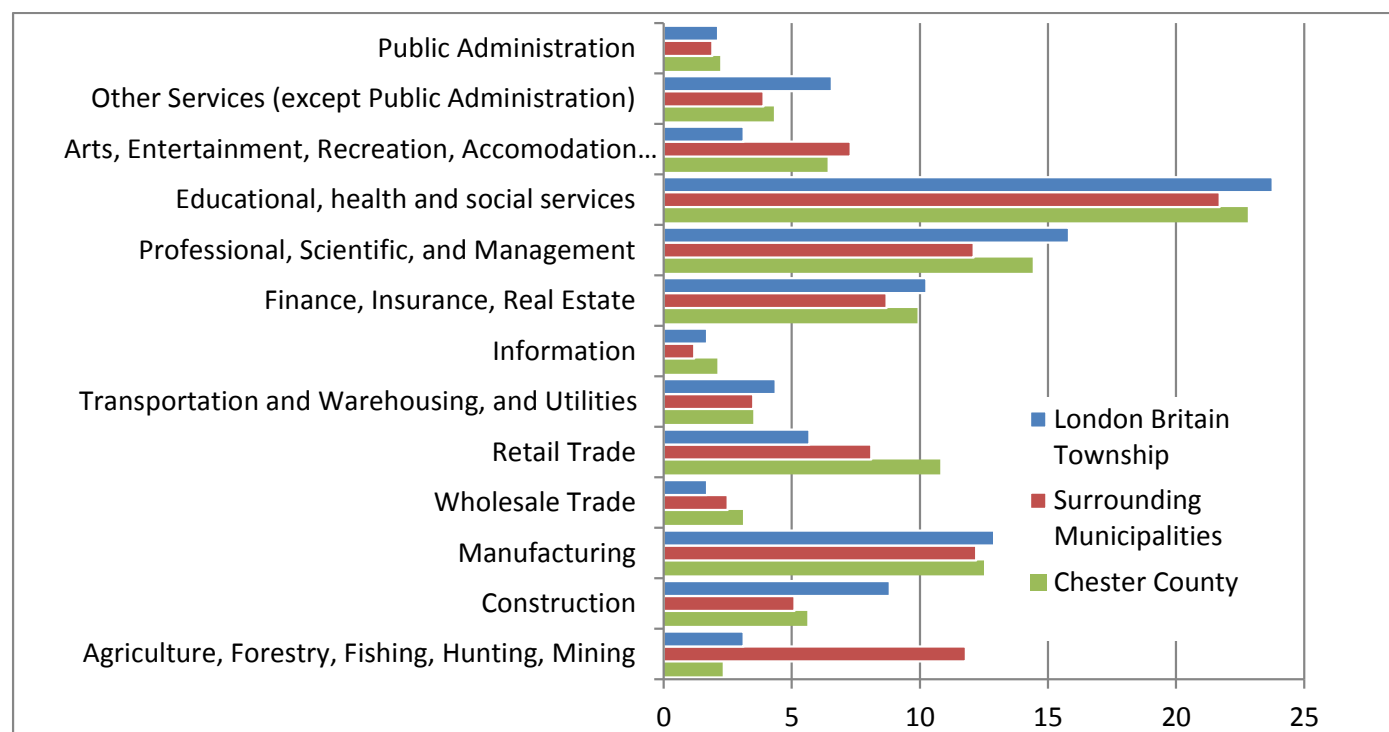
Employment by Industry

The distribution of employment by industry in the Township is presented in Figure A-4. The largest source of employment for Township residents is educational, health, and social service (23.8 percent), followed by professional, scientific, and management (15.8 percent), manufacturing (12.9 percent), and finance, insurance, and real estate (10.3 percent).

Figure A-4: Distribution of Employment by Industry

(Sources: U.S. Census Bureau; 2008-2012 American Community Survey 5-Year Estimates)

**Surrounding Municipalities include Franklin, New Garden, New London, London Grove, and Penn Townships, Chester County, and Avondale and West Grove Boroughs in Pennsylvania, Census Tract 306.02 and Cecil County in Maryland, and Census Tract 136.10, Census Tract 135.06, Census Tract 143, and New Castle County in Delaware.



Unemployment

The unemployment rate is calculated by dividing the total labor force by unemployed persons. It excludes people 16 years and older "not in labor force" (students, housewives, retirees, off-season seasonal workers, unpaid family labor, etcetera). As of 2016, the unemployment rate in the Township was 3.8 percent, up from 1.0 percent in 2000, which is not surprising given the economic recession of 2007/8. Rates also increased in most of the surrounding communities and for the County as a whole. London Britain Township's 2016 unemployment rate was slightly higher than Chester County's 2016 unemployment rate of 3.7 percent.

Housing

Occupancy and Quantity

There were 1,175 homes in the Township in 2016, 196 more than there were in 2000 (see Table A-1). The majority of these homes are owner occupied (91.3 percent), while approximately 9 percent are rented. 4.6 percent of homes in London Britain are vacant. Most surrounding municipalities have a similar owner/renter breakdown, except for Avondale Borough and West Grove Boroughs which have a much higher percentage of renter occupied homes at 34.5 percent and 33.3 percent respectively.

The growth rate of 15.2 percent in housing stock between 2000 and 2010 in the Township is lower than that of Chester County's 17.5 percent average growth during the same time period. This can be attributed both to economic recession during that time period as well as to the Township's efforts to protect open space and conserve land and farms.

Table A-1: Housing Unit Characteristics, London Britain Township and Surrounding Municipalities, 2000 to 2016

Municipality	Total Housing Units		% Owner Occupied		% Renter Occupied		% Vacant*	
	2000	2016	2000	2016	2000	2016	2000	2016
<i>London Britain Township</i>	979	1,175	94.0	91.3	6.0	8.7	2.2	4.6
Franklin Township	1,237	1,594	91.2	89.4	8.8	10.6	2.2	2.6
New Garden Township	2,831	3,995	77.3	74.0	22.7	26.0	4.6	2.5
London Grove Township	1,698	2,634	85.3	84.2	14.7	15.8	3.8	4.3
New London Township	1,390	1,924	91.9	91.3	8.1	8.7	1.8	4.2
Penn Township	1,093	2,290	85.7	77.5	14.3	22.5	6.1	0.0
Avondale Borough	361	407	58.8	65.5	41.2	34.5	4.4	1.7
West Grove Borough	889	977	97.2	66.7	2.8	33.3	2.8	4.7
Chester County	163,773	195,720	73.5	75.3	22.9	24.7	3.6	4.6
Census Tract 306.02 (MD)	1,546	1,998	81.4	66.5	18.6	33.5	6.1	9.0
<i>Cecil County, MD</i>	34,461	42,629	75.0	72.8	25.0	27.2	9.4	12.5
Census Tract 136.10 (DE)	1,916	2135	76.8	78.7	23.2	21.3	0.9	0.4
Census Tract 135.06 (DE)	NA	1645	NA	98.3	NA	1.7	NA	3.1
Census Tract 143 (DE)	1601	1727	82.8	79.5	17.2	20.5	2.6	5.2
<i>New Castle County, DE</i>	199,521	220,459	70.1	68.7	29.9	31.3	5.3	8.1

*Vacancy rate Defined as percentage of housing units not occupied

Sources: U.S. Census Bureau; 2000 Census of Population and Housing; Summary File 1.

U.S. Census Bureau; 2012-2016 American Community Survey 5-Year Estimates

Diversity of Housing Stock

Most of the Township's housing units are single-family detached (98 percent), with a very small portion of attached single-family homes (.3 percent) and multi-family homes (1.7 percent) as of 2016. There are no mobile homes in the Township. This distribution of housing types is very different than that of Chester County which has 62 percent single-family detached homes, 18 percent attached single-family homes, 18 percent multi-family homes, and 3 percent mobile homes. London Britain Township's limited diversity of housing stock is not surprising given its relatively rural location with larger parcel sizes than other areas of the County.

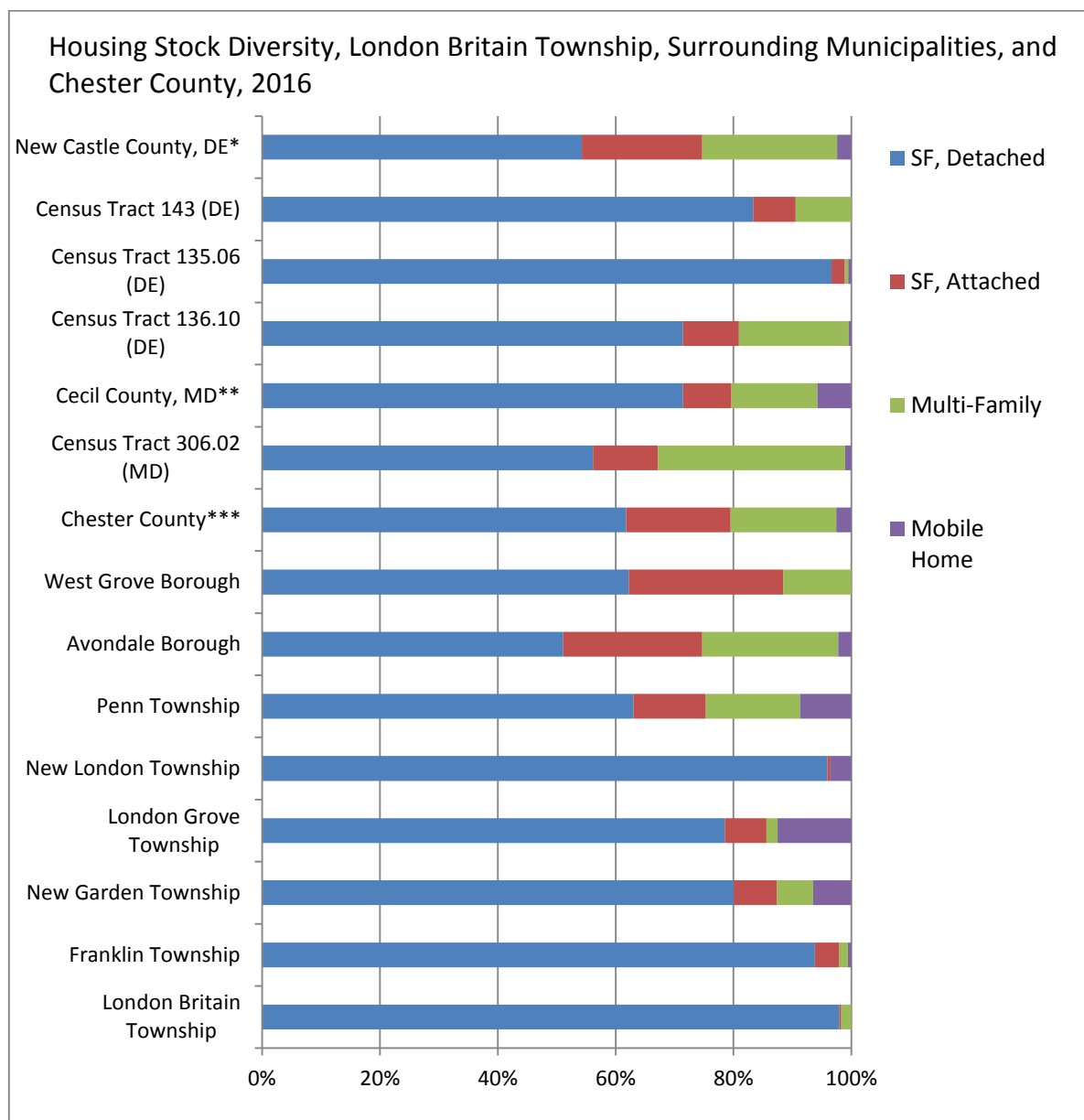
Figure A-5: Housing Stock Diversity, London Britain Township, Surrounding Municipalities, and Chester County, 2016

* Total includes 56 Boat, RV, van, etc. which are not present in any other municipality listed in the table.

** Total includes 45 Boat, RV, van, etc. which are not present in any other municipality listed in the table

***Total includes 25 Boat, RV, van, etc. which are not present in any other municipality listed in the table.

Source: U.S. Census Bureau, 2012-2016 American Community Survey



Age of Housing Stock

As of 2014, more than one quarter of London Britain Township's housing units were built between 1980 and 1999 (see Table A-2). Only 3 percent of homes were built between 2010 and 2014 and 15 percent of homes were built between 2000 and 2009, again reflecting the slowing growth in residential properties within the Township.

Table A-2: Age of Housing Stock, London Britain Township and Surrounding Municipalities, 2014

Source: U.S. Census Bureau, 2012-2016 American Community Survey

Municipality	2010 to 2014		2000 to 2009		1990 to 1999		1980 to 1989		1970 to 1979		1960 to 1969		1950 to 1959	
	#	% of Total	#	% of Total	#	% of Total	#	% of Total	#	% of Total	#	% of Total	#	% of Total
London Britain Township	37	3.1	172	14.6	132	11.2	327	27.8	205	17.4	81	6.9	77	6.6
Franklin Township	18	1.1	253	15.9	449	28.2	328	20.6	282	17.7	59	3.7	74	4.6
New Garden Township	86	2.2	1052	26.3	1,339	33.5	481	12.0	234	5.9	198	5.0	172	4.3
London Grove Township	220	8.4	898	34.1	393	14.9	277	10.5	243	9.2	131	5.0	217	8.2
New London Township	86	4.5	429	22.3	526	27.3	481	25.0	163	8.5	37	1.9	39	2.0
Penn Township	42	1.8	1073	46.9	406	17.7	294	12.8	245	10.7	70	3.1	55	2.4
Avondale Borough	75	18.4	11	2.7	12	2.9	56	13.8	27	6.6	15	3.7	37	9.1
West Grove Borough	0	0.0	115	11.8	133	13.6	46	4.7	85	8.7	88	9.0	145	14.8
Chester County	4310	2.2	30714	15.7	30,824	15.7	31,344	16.0	27,221	13.9	19,715	10.1	17,764	9.1
Census Tract 306.02 (MD)	177	8.9	368	18.4	436	21.8	255	12.8	524	26.2	181	9.1	50	2.5
Cecil County, MD	1279	3.0	7910	18.7	8,368	19.8	6,098	14.4	5,792	13.7	3,313	7.8	3,257	7.7
Census Tract 136.10 (DE)	0	0.0	251	11.8	829	38.8	266	12.5	247	11.6	330	15.5	130	6.1
Census Tract 135.06 (DE)	12	0.7	114	6.9	580	35.3	628	38.2	200	12.2	68	4.1	15	0.9
Census Tract 143 (DE)	0	0.0	44	2.5	267	15.5	325	18.8	320	18.5	405	23.5	135	7.8
New Castle County, DE	4296	1.9	24,398	11.1	31,169	14.1	29,549	13.4	27,815	12.6	30,938	14.0	32,580	14.8

Housing Value

In 2016, the estimated median value of owner-occupied housing in London Britain Township (excluding homes on lots greater than 10 acres or that include business uses) was \$362,800, slightly higher than Chester County's median home value (\$331,000). Honey Brook Borough, on the other hand, has the lowest median home value amongst the region, a third lower than the County as a whole. Other than West Grove Township, London Britain Township saw the lowest increase in median home value in the years between 2000 and 2012 in the region (64.3 percent), and significantly lower than Chester County's 81.4 percent.

With so few rental properties in London Britain Township, the 2016 data has too high of a margin of error to be considered accurate and therefore will not be discussed.

Table A-3: Median Value of Owner Occupied Housing, London Britain Township and Surrounding Municipalities, 2000 to 2016

*"Value" is defined as each respondent's estimate of how much their home would sell for. "Specified" owner occupied housing excludes housing on lots greater than 10 acres or that include business uses. NA indicates not available value due to Census data.

U.S. Census Bureau; 2000 Census of Population and Housing; Summary File 3A

U.S. Census Bureau; 2012-2016 American Community Survey 5-Year Estimates

Municipality	2000	2016	% Change
London Britain Township	220,800	362,800	64.3
Franklin Township	198,700	358,200	80.3
New Garden Township	230,500	390,900	69.6
London Grove Township	179,100	316,700	76.8
New London Township	187,900	348,000	85.2
Penn Township	172,400	318,900	85.0
Avondale Borough	118,800	229,500	93.2
West Grove Borough	122,800	191,100	55.6
Chester County	182,500	331,000	81.4
Census Tract 306.02 (MD)	146,500	267,400	82.5
Cecil County, MD	132,300	239,900	81.3
Census Tract 136.10 (DE)	220,300	373,900	69.7
Census Tract 135.06 (DE)	NA	447,100	NA
Census Tract 143 (DE)	189,400	329,600	74.0
New Castle County, DE	136,000	244,300	79.6

Housing Affordability

Housing affordability can be measured a variety of ways. Generally, expenditure of 30 percent or more of one's income on housing – for both owner-occupied and rental housing – is considered the threshold for overpayment. Data Tables A-3 through A-5 describe housing value, median household income, poverty, and unemployment in London Britain Township, surrounding municipalities, and Chester, Cecil, and New Castle Counties.

In 2016, 22 percent of London Britain homeowners with a mortgage spent 35 percent or more of their income on housing. 6.4 percent of London Britain homeowners spent between 30 and 24 percent of their household income on their monthly owner costs, resulting in nearly a third of Township homeowners overpaying for their housing in 2016. Many of the municipalities surrounding London Britain experienced similar levels of overpayment; Chester County had 21.6 of people paying 35 percent or more on their mortgage.

The proportion of renters paying 30 percent or more on housing remains high for the township (55.6 percent) as of 2016. However, this remains below that of Chester County as a whole (61 percent).

Without considering the incomes of homeowners and renters, it is difficult to gauge just how severe the affordability problem is. Measuring the gap between median family income and the median value of homes in 2016 is one reasonable way of doing so. In 2016, the estimated median family income in London Britain and Chester County was \$131,172 and \$108,663, respectively. The estimated median value of owner-occupied homes in

2016 in London Britain Township was \$363,800, and in Chester County, \$331,000. The difference between income and home value in Honey Brook (\$232,628) is less than the difference between income and home value in the County (\$222,337), indicating that it costs relatively more to buy a home in London Britain for the average London Britain family than it does to buy a home in Chester County for the average Chester County family.

Table A-4: Median Household Income, London Britain and Surrounding Municipalities

Not inflation adjusted, NA indicates not available due to Census data

U.S. Census Bureau; 2000 Census of Population and Housing; Summary File 3

U.S. Census Bureau; 2010-2014 American Community Survey 5-Year Estimates

Municipality	Median Household Income (\$)		
	1999	2016	% Change
<i>London Britain Township</i>	93,521	115,469	23.5
Franklin Township	81,085	121,310	49.6
New Garden Township	75,307	110,259	46.4
London Grove Township	74,337	84,306	13.4
New London Township	77,468	122,524	58.2
Penn Township	57,949	68,958	19.0
Avondale Borough	46,875	72,868	55.5
West Grove Borough	56,875	60,625	6.6
Chester County	65,295	88,995	36.3
Census Tract 306.02 (MD)	67,076	84,884	26.5
<i>Cecil County, MD</i>	50,510	67,938	34.5
Census Tract 136.10 (DE)	85,631	98,792	15.4
Census Tract 135.06 (DE)	NA	140,213	NA
Census Tract 143 (DE)	75,296	92,574	22.9
<i>New Castle County, DE</i>	52,419	66,283	26.4

Table A-5: Income and Unemployment Characteristics, London Britain Township and Surrounding Municipalities, 1999 to 2016

Not inflation adjusted

*Federal poverty guidelines are based on minimum nutrition requirements for families, adjusted annually using the Consumer Price Index. In 2016, the poverty threshold for a three person family was \$20,160. In 1999, the poverty threshold for a three person family was \$13,880.

**Unemployment rate calculated by dividing the total labor force by unemployed persons. Excludes people 16 years and older "not in labor force" (students, housewives, institutionalized, retirees, off-season seasonal workers, and unpaid family labor)

U.S. Census Bureau; 2000 Census of Population and Housing; Summary File 3

U.S. Census Bureau; 2012-2016 American Community Survey 5-Year Estimates

Municipality	Median Family Income (\$)			% of Families Below the Poverty Level*		Unemployment Rate**	
	2000	2016	% Change	1999	2016	2000	2016
<i>London Britain Township</i>	97,013	131,172	35.2	2.1	1.2	1.0	3.8
Franklin Township	89,718	142,434	58.8	1.2	3.1	1.2	3.9
New Garden Township	89,812	120,192	33.8	5.7	5.7	8.0	2.7
London Grove Township	78,635	98,359	25.1	1.5	1.5	2.0	3.2
New London Township	79,929	126,838	58.7	1.4	3.2	1.9	3.4
Penn Township	68,938	94,706	37.4	3.0	5.9	4.9	1.4
Avondale Borough	48,833	73,173	49.8	9.7	10.1	7.3	3.6
West Grove Borough	60,274	72,925	21.0	4.7	1.4	2.6	3.3
<i>Chester County</i>	76,916	108,663	41.3	3.1	4.3	2.5	3.7
Census Tract 306.02 (MD)	72,109	94,683	31.3	4.1	4.3	1.9	2.7
<i>Cecil County, MD</i>	85,631	82,113	-4.1	5.4	7.3	2.8	4.3
Census Tract 136.10 (DE)	96,271	122,315	27.1	1.3	3.4	2.0	1.3
Census Tract 135.06 (DE)	NA	145,161	NA	NA	1.2	NA	1.5
Census Tract 143 (DE)	86,083	117,614	36.6	2.2	3.8	17.8	2.4
<i>New Castle County, DE</i>	62,144	81,762	31.6	5.6	7.2	3.5	4.5

APPENDIX B

2018 COMMUNITY VISIONING SESSION

Introduction

On June 7, 2018, the Township Task Force hosted a Community Visioning Session at the Township meeting hall to kick-off the public's participation in the Comprehensive Plan development efforts. This meeting was advertised via a flyer on the Township website and in other locations in the weeks before the Visioning Session. The Township Task Force used the meeting to listen to the community's priorities regarding quality of life, future improvements, and spending. This session was attended by over 50 residents, and included broad representation from all geographic areas of the Township.

Summary of Presentation Board Comments and Voting

BOARD 1: What issues are most important to you? (Vote for a maximum of 3)

Issue	# Votes
Retaining rural character	24
Open space and farmland preservation	16
Water and resource protection	12
Traffic and township road improvements	9
Management of development & growth	8
More walking and biking trails	6
Scenic and historic resource protection	3
More local shops and entertainment opportunities	2
Housing needs (cost, availability, variety)	1
Provision of services and facilities (recreation, EMS, code enforcement, stormwater management)	1
More local employment opportunities	0
Other (please list)	0

BOARD 2: What 1 thing would you change about London Britain Township?

Improve cell service	Improve high speed internet
Improve cell service	Improve high speed internet
Improve cell service	Allow Verizon TV service (Fios)
Improve cell service	Ban trucks (18 wheelers) from township roads
Additional cell service	Improve cell service
Farmers market	Have our own police force
No cell towers except on 896; keep beauty of the area	Wider shoulders on roads
Put cell towers in commercial areas	Improve roads
Improve high speed internet	Control invasive plants
	Less trash on roadways

**BOARD 3: What 1 word of phrase would you use to describe your wish for London Britain in 20 years?
(word list)**

Preserve our Eden as it is	Keep it rural
Take back our roads (trucks)	Rural
Open and scenic	Keep it rural
Retain rural character	Rural
Bike and hike on roads	Retain current rural character
Keep it natural	Bike lanes everywhere
Wooded and serene	Wild and scenic (x 3)
Maintain mother nature's gifts	Walkable Community (not just in the preserve)
Maintain natural areas	Unchanged, except for high speed internet
Retain rural setting and sense of community	

**BOARD 3: What 1 word of phrase would you use to describe your wish for London Britain in 20 years?
(word cloud)**



Board 4: Summary of Input on Transportation Issues and Needs

<u>Pri- ority Rank</u>	<u>Location</u>	<u>Priority Dot Votes</u>	<u>Comments and Potential Solution(s)</u>
1	PA Route 896 and Strickersville Road	8 Top Priority	Sight distance is an issue. Residents avoid the intersection due to safety concerns and lack of sight distance. Demolish house on corner to improve sight distance Oppose a traffic signal as a solution. Realign intersection
2	Good Hope Road and Flint Hill Road	6 Top Priority, 1 Other	Traffic signal Oppose a traffic signal as a solution. (3 attendees)
3	State Route 896 and Chambers Rock Road	1 Top Priority, 2 Other	
4	State Route 896 and Southbank Road	1 Top Priority, 1 Other	
5 (tie)	Mercer Mill Road and North Creek Road	1 Other	Wall of the nearby bridge blocks sight distance.
5 (tie)	Good Hope Road and North Creek Road	1 Other	Sight distance is an issue.
5 (tie)	Chambers Rock Road and Bill's Way / Arc Corner Road	1 Other	Cut-through traffic and speeding are issues on Chambers Rock Road.
5 (tie)	Good Hope Road and Northbank Road	1 Other	Issues include speeding on Good Hope Road and lack of sight distance.

Note: Good Hope Road/Penn Green Road and PA Route 896/Flint Hill Road were listed but did not receive any priority votes.

Other Priority Transportation Issues Identified

Improvements to Good Hope Road, particularly in the area between North Creek Road and the Good Hope Trailhead near Crestwood Drive. Potentially provide shoulders along Good Hope Road for bicyclists and pedestrians.

- Cut-through traffic and speeding are noted as issues on the following roadways:
 - Good Hope Road
 - Chambers Rock Road

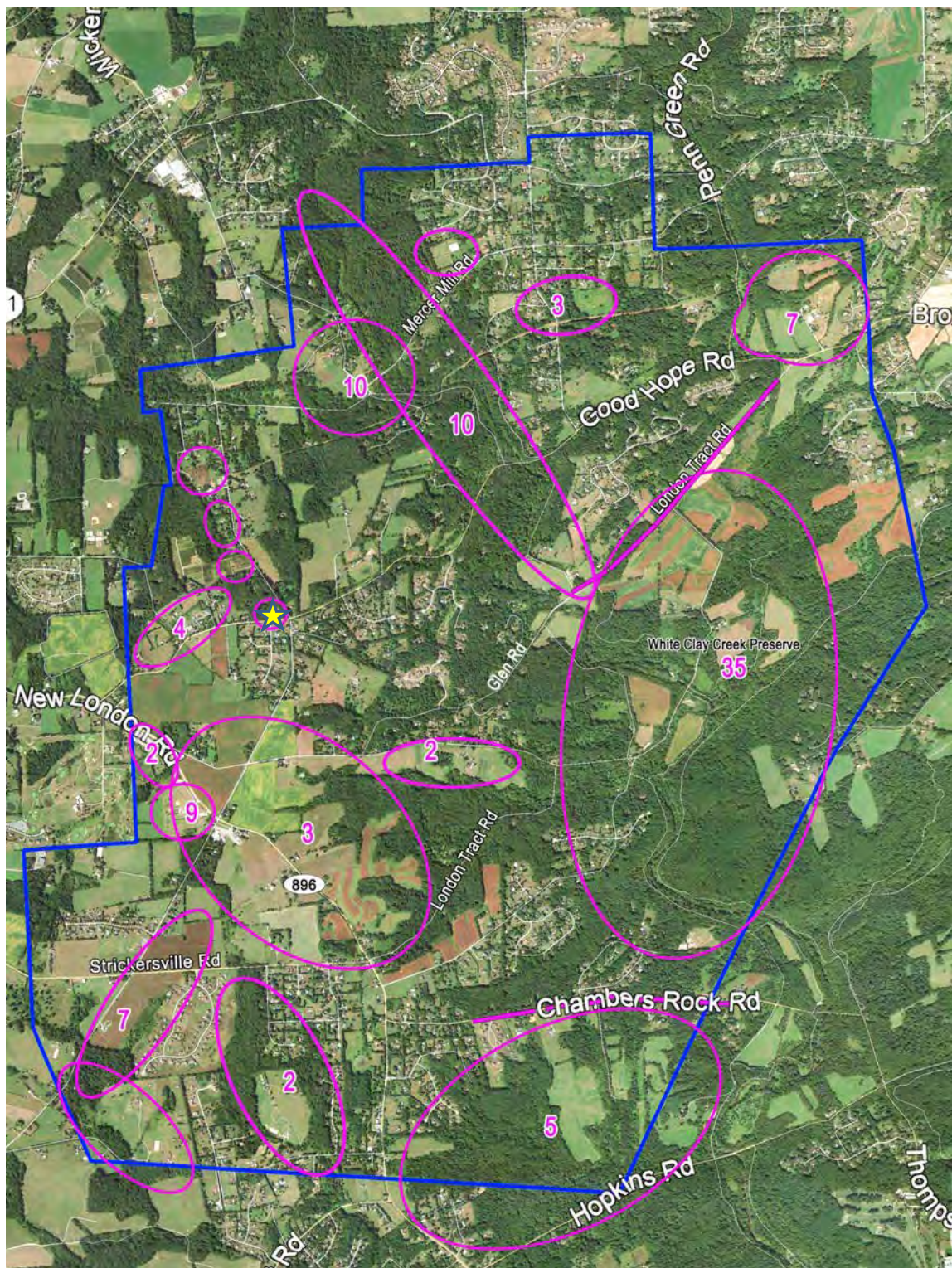
- Flint Hill Road
- Strickersville Road
- Consider traffic calming measures, such as speed humps, speed enforcement (if the Township joins the Southern Chester County Regional police), enhanced pavement markings and/or signs (especially on Flint Hill Road)
- Consider adding appropriate width shoulders to some roadways to improve safety and to provide space for people to walk or bike.
- Focus on improving sight distance.
- Note that improvements or modifications at one intersection on PA Route 896 can impact the traffic flow and patterns at adjacent intersections. (For example, the all way stop at PA Route 896 and Flint Hill Road made it more difficult to turn onto PA Route 896 from adjacent side streets.)
- Oppose traffic signals as an intersection improvement in the Township.
- Focus on maintaining and paving existing roadways.

Spending Priorities (Ranked within Category)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Transportation- \$1,760 <ul style="list-style-type: none"> • General maintenance, repair and improvements - \$1,320 • Specific projects - \$320 <ul style="list-style-type: none"> o Good Hope Road (\$180) o Chambers Rock Road (\$60) o Rt 896 (\$60) o Sharpless Road (\$20) • Address truck traffic and speeding - \$120 2. Open space and farmland preservation - \$860 <ul style="list-style-type: none"> • Open space and farmland preservation – \$700 • Specific connection between White Clay Creek Preserve & Fair Hill – \$100 3. Trails and paths (bike, pedestrian, and equine) - \$540 4. Natural and historic resource protection - \$420 <ul style="list-style-type: none"> • Water quality, storm water management, and flood control - \$200 • Natural resource education at parks – \$140 • Historic resources – \$60 • General natural resource protection - \$20 | <ol style="list-style-type: none"> 5. Other - \$860 <ul style="list-style-type: none"> • Internet access and cell phone coverage - \$280 • Police - \$120 • Defeat the cell tower – \$120 • General Township maintenance² - \$120 • Parks & Recreation (exc. Trails)- \$60 • Small businesses and restaurants - \$60 • Improved communications from township (website, etc.)- \$60 • Snow plowing/salting - \$20 • Relax permit requirements - \$20 <p>Notes:</p> <ol style="list-style-type: none"> 1. Dollar amounts in parenthesis are included in subcategory totals. 2. Includes tree trimming, clean up roadsides, control invasive plants, reduce herbicides/fertilizers, control deer ticks, better easement mowing |
|---|---|

Summary of “Places Loved” in London Britain Township

Comprehensive Plan Update – Visioning Session June 7, 2018



Source: Google Earth Images, 9/2015; TCA 6/2018

Summary of "Places Loved"

Number in parentheses is the number of people who submitted the response

Circled Areas:

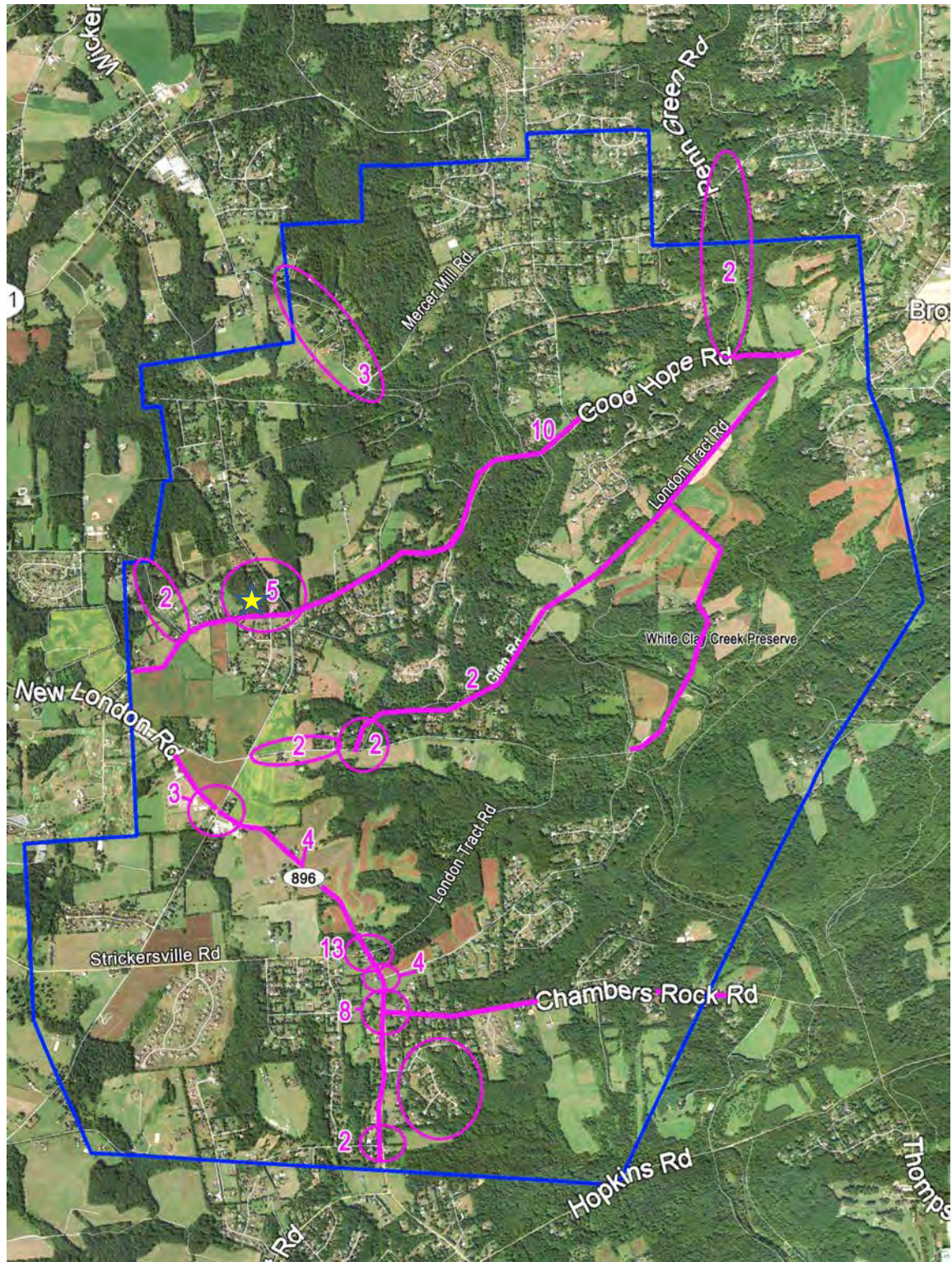
- White Clay Creek Preserve and Trails (35)
- Views at intersection of Mercer Mill Road and Creek Road (Meadowset Farm) (10)
- White Clay Creek and trails (10)
- Nichol Park (9)
- Southern area of White Clay Creek Preserve (5)
- Farms along 896 (3)
- Chisel Creek Golf Club (2)
- Farmland and Nature
- My neighborhood
- Township building
- Entrance to Fair Hill
- Walking trails
- White Clay Creek swimming hole
- Nivendel Farm
- Views along London Tract Road
- Views along Chambers Rock Road
- Schmidt Tree Farm
- Tri-State Trail

Written Comments:

- Proximity to shopping, Univ of Delaware (2)
- Love the creek
- Love running in Landenberg
- Love the farms
- Neighbors
- Great views and nature
- All woodland trails, especially connecting my neighborhood
- Walking
- Library/Post Office
- Daddy's Kitchen

Summary of “Places to be Improved” in London Britain Township

Comprehensive Plan Update – Visioning Session June 7, 2018



Source: Google Earth Images, 9/2015; TCA 6/2018

Summary of "Places to be Improved"

Number in parentheses is the number of people who submitted the response

Circled areas:

- Intersection of State Route 896 and Strickersville Road (13)
- Good Hope Road (10)
- Intersection of State Route 896 and Chambers Rock Road (8)
- Intersection of Good Hope Road and Flint Hill Road (5)
- Intersection of State Route 896 and S. Bank Road (4)
- Intersection of State Route 896 and Flint Hill Road (3)
- N. Creek Road area needs better internet service (3)
- London Tract Road (2)
- Intersection of State Route 896 and Elbow Lane (2)
- Parsons Road (2)
- Penn Green Road (2)
- Intersection of Glen Road and Indiantown Road (2)
- Indiantown Road between Glen Road and State Route 896 (2)
- Sharpless Road
- Messy property at corner of State Route 896 and Flint Hill Road

Written Comments:

- Improve cell service and high speed internet (13)
- Stop 18-wheel truck traffic on township roads (5)
- Need more shoulders on designated roads for walking/biking to the preserve (3)
- Traffic speed on Good Hope Road/rumble strips/speed bumps (3)
- New bridge at Mercer Mill and N Creek: walls are too high to see (2)
- Make State Route 896 safer to walk and bike (2)
- Need trail connector from Mason Dixon park to White Clay Creek Preserve
- No stop lights (maintain rural character)
- Need more police patrolling roads/traffic/speeding
- Paint lines on roads
- Improve entrance to township building
- Improve parking lot to preserve (Good Hope Rd)
- Pot holes
- Need more trails to connect residential to the Park
- Proactively maintain roads
- Need speed bumps on S. Bank Rd.
- Prevent conventional suburban development (such as that on Talbot Dr/Durham Dr/Sienna Dr)
- Bring Verizon in for TV service
- Better walking access to Good Hope trail head
- Create a greenway across State Route 896
- Lower school taxes
- Fight the cell tower
- Keep trees trimmed along roadways
- Nichols Park needs attention and new equipment
- Consider joining Southern Chester County Regional Police

Page left intentionally blank.

APPENDIX C

2018 COMMUNITY PLANNING SURVEY

The full 2018 Community Planning Survey as it was mailed out to residents is included on pages 29-34 with the raw results inputted into the space for answer selection..

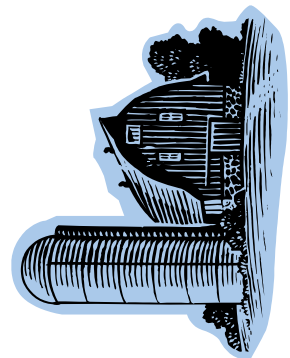
Quality of Life

1. What are the reasons you chose to live in London Britain Township? (check up to 3 responses)

	Convenience to doctors, shopping, entertainment	28	Lifetime resident
153	Quality of schools	86	Convenience to work
48	Family and friends in the area	128	Safety/security/low crime rate
263	Attractiveness of the area (including proximity to White Clay Creek Preserve, natural areas, and rural character)	31	Other _____ please specify
44	Housing affordability and low cost of living		

2. What are the reasons you would leave the Township? (check up to 3 responses)

156	Area becoming over-developed	217	Taxes too high
21	Better employment opportunities available elsewhere	26	Limited shopping/entertainment opportunities
12	Cost/lack of variety of housing	17	Commuting distance/time to work
42	Quality of public schools	20	Lack of community services/facilities
195	Retirement/downsizing	40	Other _____ please specify



3. To maintain and improve general quality of life in the Township, which of the following are the most important overall planning objectives for the Township to focus on? (check up to 5 responses)

247	Overall retention of rural character	13	More local employment opportunities
180	Water and natural resources protection (e.g. steep slopes, floodplains, wetlands)	153	Management of development and growth
216	Open space and agricultural preservation	12	Housing needs (cost, availability, variety)
144	Scenic and historic resources protection (vistas, historic structures, etc.)	30	More local shopping and entertainment opportunities
186	Traffic and Township road improvements (maintenance/safety)	78	More walking and bike trails
72	Provision of services/facilities (emergency, recreation, trails, stormwater management, ordinance enforcement)	35	Other _____ please specify

Resource Protection and Land Preservation

4. Please rank the following Township resources based on their importance to you for protection through Township regulations (zoning and subdivision). (With 1 being most important, and 5 being least important)

3	Land resources (soils, geology, slopes)
2	Water resources (streams, ponds, aquifers, floodplains)
3	Biological resources (woodlands, wetlands, wildlife habitat)
4	Historic resources (buildings, structures, sites)
3	Scenic resources (views, vistas, landscapes)
1	All are equally important

5. Please indicate the level to which you would support each of the following conservation measures in terms of Township funding? (Please rank the following from 1 to 4 with 1 being the most important or desirable in terms of importance for Township facilities)		
Permanent open space preservation	(1)	2.95
Agricultural land preservation	(3)	2.24
Natural and scenic land preservation	(2)	2.83
Open space maintenance and invasive plant control	(4)	2.11

Land Use, Housing, and Development

6. Where is the best location for retail and commercial uses? (Check one response)		
176	Limited to a specifically designated commercial area on: (if this is your response to this question, please check as many as apply from the following)	
	119 Rt 896	59 Rt 896 & Good Hope
	56 Rt 896 & Flint Hill	
151	No new commercial development in the Township/ rely on other areas	
6	Other _____ please specify	

7. Is London Britain Township a good place for seniors to live? (Please check one reply and write in any comments)		
Yes	177	No 115
Comments:		

8. Is London Britain Township a good place for young people to live? (Please check one reply and write in any comments)		
Yes	273	No 29
Comments:		

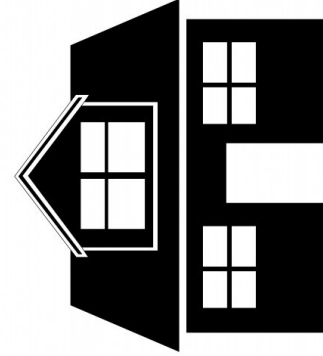
9. Please indicate your opinion about future Township policy for each of the below statements. (check one reply for each statement)		
	Agree	Disagree
Support landowner efforts to retain and preserve their farms	311	14
Support workforce housing development (i.e. more affordable housing for people who work in the Township)	95	212
Enable residents to age in place by permitting accessory dwellings ("granny flats" or in-law units) on existing lots	271	51
Support housing that accommodates multi-generational families in one home	189	121
Encourage development of commercial uses that serve the local community	143	169
Support the establishment of eco- and agri-tourism uses	199	108
Increase potential cell tower sites to improve signal strength	188	126

Community Services and Facilities

10. Rate the following facilities or services in meeting the needs of Township residents. (check one for each facility or service)	For which of these would you support additional funds to improve their provision to residents? (check all that apply)			
	Adequate	Inadequate	No opinion	Support additional funding
Maintenance of Township roads	180	132	8	139
Roadside maintenance	220	76	17	44
Snow removal	311	16	3	22
Parks and recreation space	297	13	14	62
Township building and offices	227	24	76	10
Code enforcement	186	27	104	12
Other please specify	17	34	4	13

11. How important is it for London Britain Township to provide the following parks and recreation facilities and services? (check one for each facility/service)

	Extremely Important	Somewhat Important	Not Important
Trails-hiking	153	135	44
Trails- biking	110	148	71
Trails-horse	57	145	122
Playgrounds/tot lots	115	155	60
Athletic Fields	83	152	92
Athletic Courts	66	159	100
Walking/jogging paths and trails	181	116	37
Dog Park	66	117	146
Picnic Area	72	149	106
Recreational programming	59	133	132



12. How important is it to provide parks and recreation facilities for the following age groups in London Britain? (please check one response per age group)			
	Extremely Important	Somewhat Important	Not Important
Pre-school and younger	133	125	67
Kindergarten through middle school	148	121	54
High School and college	89	149	86
Adults 21-65	95	173	58
Adults 65 and older	103	158	68

Are you interested in volunteering to help with any of the following?
(please circle as many as you are interested in):

- Fire protection 0
- Ambulance services 1
- Township commission/Township activity 13
- Neighborhood watch 11
- Trails, open space clean-up, or maintenance of natural areas 39
- Historic preservation 15
- Road clean-up 21

If you are interested in being added to the Township e-mail list and/or applying to volunteer for any of the above, please contact Township Secretary, Carolyn Matalon at 610-255-0388 or carolyn.londonbritaintwp@comcast.net.

13. Rank the top 3 priority intersections where transportation improvements are needed in the Township with 1 being the most important.			
**Black Bold: Listed in previous survey and PennDOT crash history data			
Grey Bold: Listed in previous survey but no PennDOT crash history (not available on local roads)			
58	PA 896 and Flint Hill Rd	28	Good Hope Rd and N Creek Rd
161	PA 896 and Strickersville Rd/London Tract Rd	36	Good Hope Rd and Northbank Rd
62	PA 896 and S Bank Rd	10	Good Hope Rd and Penn Green Rd
127	PA 896 and Chambers Rock Rd	14	N Creek Rd and Mercer Mill Rd
3	PA 896 and Morgan Hollow Rd	19	Indiantown Rd and Flint Hill Rd
11	PA 896 and Elbow Rd	17	Chambers Rock Rd and Bills Way
36	Flint Hill Rd and Strickersville Rd	12	Chesterville Rd and Northbank Rd
9	Good Hope Rd and Parsons Rd	2	Chesterville Rd and Skycrest Dr
115	Good Hope Rd and Flint Hill Rd	14	Other location (please specify):
2	Good Hope Rd and Spitfire House Ln		



14. Beyond the intersection improvements listed in Question 13, rank 3 additional transportation needs that you believe should be addressed with 1 being the most important:			
	Gateways, traffic calming, and improved appearances along State Route 896	248	Shoulder widening to improve safety for both driving and biking on roadways
248	Maintenance of township roads	31	New Park-n-Ride facilities
62	New public transit service to Delaware	10	Other location (please specify):

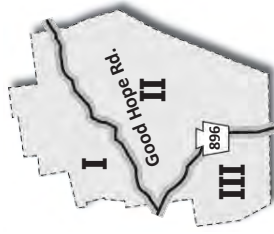
General Information

The following questions help determine if this survey receives responses from a representative cross-section of the community. Your responses are completely anonymous. Responses to anonymous surveys cannot be traced back to the respondent. Your responses are combined with all other respondents and summarized to further protect your anonymity.

15. How long have you lived in the Township? (check 1 response)			
10	Less than 1 year	28	5 years—less than 10 years
21	1 year—less than 3 years	85	10 years—less than 20 years
15	3 years—less than 5 years	174	More than 20 years

16. What is the approximate size of your property? (check 1 response)			
3	Less than ½ acre	36	3 acres—less than 5 acres
17	½ acre—less than 1 acre	26	5 acres—less than 10 acres
167	1 acre—less than 2 acres	22	10 acres—less than 50 acres
63	2 acres—less than 3 acres	1	More than 50 acres

17. How many people live in your residence in each of the following age categories? (Indicate number of persons in each category)			
25	Under 5 years of age	141	25–44 years of age
133	5–18 years of age	295	45–64 years of age
46	19–24 years of age	223	65 years and older



18. In which general area of the Township do you live? (check 1 response using the graphic to the right of this question)			
82	Area I	76	Area III
171	Area II	5	Unsure

19. For those members of your household currently working, please indicate the number of persons who work in the following locations:			
72	In the home (home occupation)	7	West Chester
4	In the Township	26	Chester County (other area)
39	Southern Chester County	29	Maryland
86	Wilmington	6	Delaware County
92	Newark	12	Philadelphia
65	Delaware (other area)	16	Other—please specify



20. Please indicate the number of persons in your household who currently work in the following occupations:			
63	Business Administration	6	Housekeeper
14	Construction	30	Manufacturing
15	Farming	161	Retired
47	Financial Services	50	Sales/Trade
21	Government	125	Services
42	Student	11	Transportation/Utility
7	Unemployed		

21. How would you prefer to be made aware of Township information, issues, meetings, or updates? (check all that apply)			
265	Newsletter	16	Newspaper
154	Township website	5	TV Access Channel
		36	Other please specify Social Media

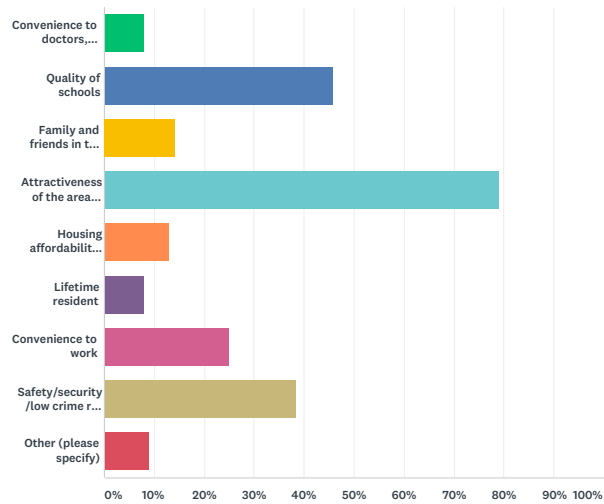
22. Do you have any other concerns about planning in the Township?
Please use the space below and additional sheets if necessary to elaborate your thoughts.

Thank you very much for your responses!

On pages 36-44 is an analysis of the 2018 Community Planning Survey results both graphically and numerically.

Q1 What are the reasons you chose to live in London Britain Township? (check up to 3 responses)

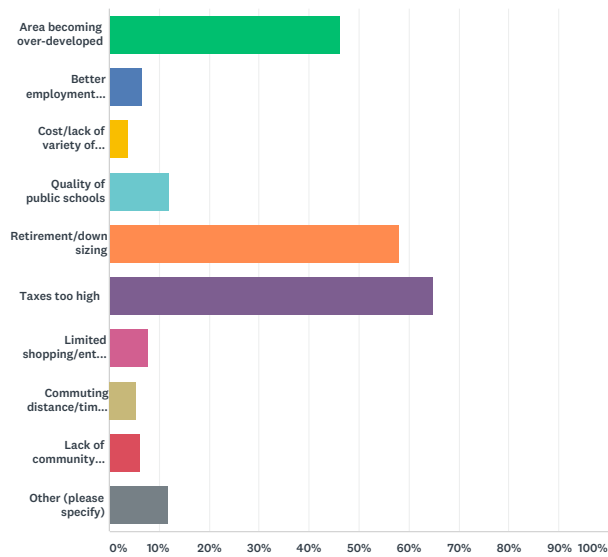
Answered: 352 Skipped: 3



ANSWER CHOICES	RESPONSES	
Convenience to doctors, shopping, entertainment	7.95%	28
Quality of schools	45.74%	161
Family and friends in the area	14.20%	50
Attractiveness of the area (including proximity to White Clay Creek Preserve, natural areas, and rural character)	78.98%	278
Housing affordability and low cost of living	13.07%	46
Lifetime resident	7.95%	28
Convenience to work	25.00%	88
Safety/security/low crime rate	38.35%	135
Other (please specify)	9.09%	32
Total Respondents: 352		

Q2 What are the reasons you would leave the Township? (check up to 3 responses)

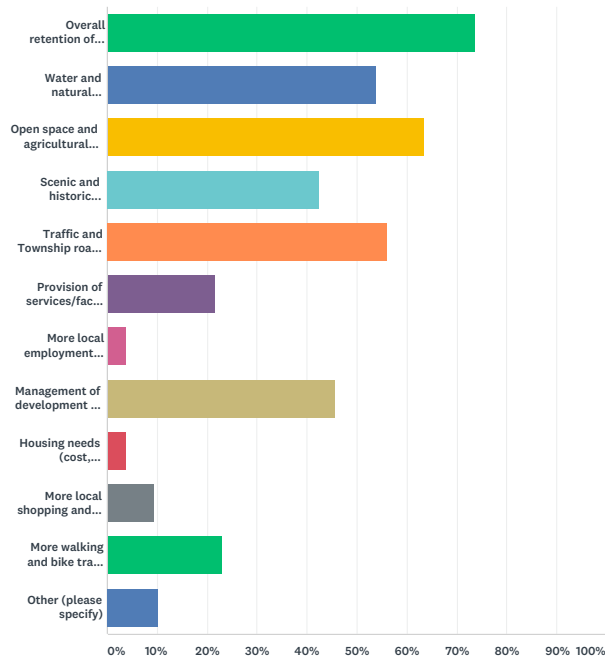
Answered: 352 Skipped: 3



ANSWER CHOICES	RESPONSES	
Area becoming over-developed	46.31%	163
Better employment opportunities available elsewhere	6.53%	23
Cost/lack of variety of housing	3.69%	13
Quality of public schools	11.93%	42
Retirement/downsizing	57.95%	204
Taxes too high	64.77%	228
Limited shopping/entertainment opportunities	7.67%	27
Commuting distance/time to work	5.40%	19
Lack of community services/facilities	5.97%	21
Other (please specify)	11.65%	41
Total Respondents: 352		

Q3 To maintain and improve general quality of life in the Township, which of the following are the most important overall planning objectives for the Township to focus on? (check up to 5 responses)

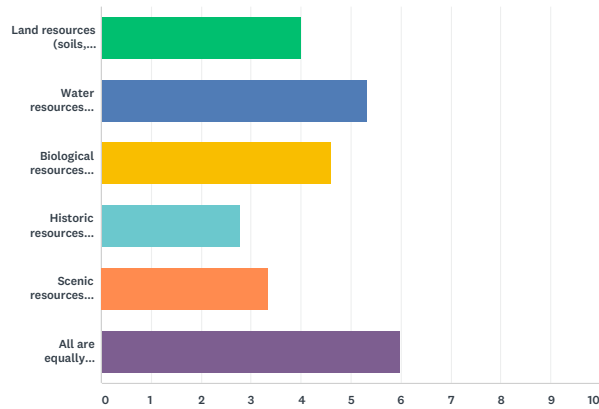
Answered: 353 Skipped: 2



ANSWER CHOICES	RESPONSES
Overall retention of rural character	73.65% 260
Water and natural resources protection (e.g. steep slopes, flood-plains, wetlands)	53.82% 190
Open space and agricultural preservation	63.46% 224
Scenic and historic resources protection (vistas, historic structures, etc.)	42.49% 150
Traffic and Township road improvements (maintenance/safety)	56.09% 198
Provision of services/facilities (emergency, recreation, trails, stormwater management, ordinance enforcement) More local employment opportunities	21.53% 76
More local employment opportunities	3.68% 13
Management of development and growth	45.61% 161
Housing needs (cost, availability, variety)	3.68% 13
More local shopping and entertainment opportunities	9.35% 33
More walking and bike trails	22.95% 81
Other (please specify)	10.20% 36
Total Respondents: 353	

Q4 Please rank the following Township resources based on their importance to you for protection through Township regulations (zoning and subdivision). (With 1 being most important, and 5 being least important)

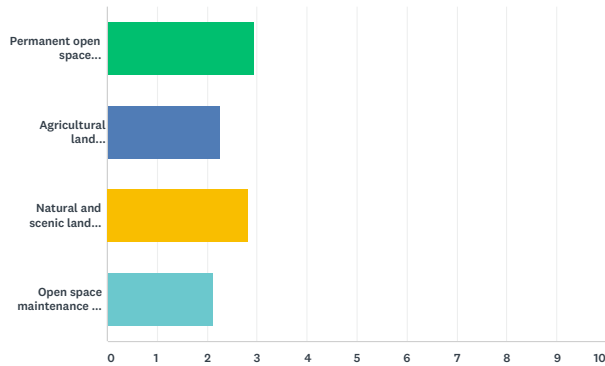
Answered: 346 Skipped: 9



	1	2	3	4	5	6	TOTAL	SCORE
Land resources (soils, geology, slopes)	4.82% 8	25.30% 42	43.98% 73	15.66% 26	10.24% 17	0.00% 0	166	3.99
Water resources (streams, ponds, aquifers, floodplains)	59.06% 101	20.47% 35	13.45% 23	7.02% 12	0.00% 0	0.00% 0	171	5.32
Biological resources (woodlands, wetlands, wildlife habitat)	22.29% 37	36.14% 60	26.51% 44	10.24% 17	4.82% 8	0.00% 0	166	4.61
Historic resources (buildings, structures, sites)	3.73% 6	7.45% 12	6.83% 11	27.33% 44	54.66% 88	0.00% 0	161	2.78
Scenic resources (views, vistas, landscapes)	10.30% 17	12.12% 20	9.09% 15	39.39% 65	29.09% 48	0.00% 0	165	3.35
All are equally important	99.44% 176	0.00% 0	0.00% 0	0.00% 0	0.56% 1	0.00% 0	177	5.98

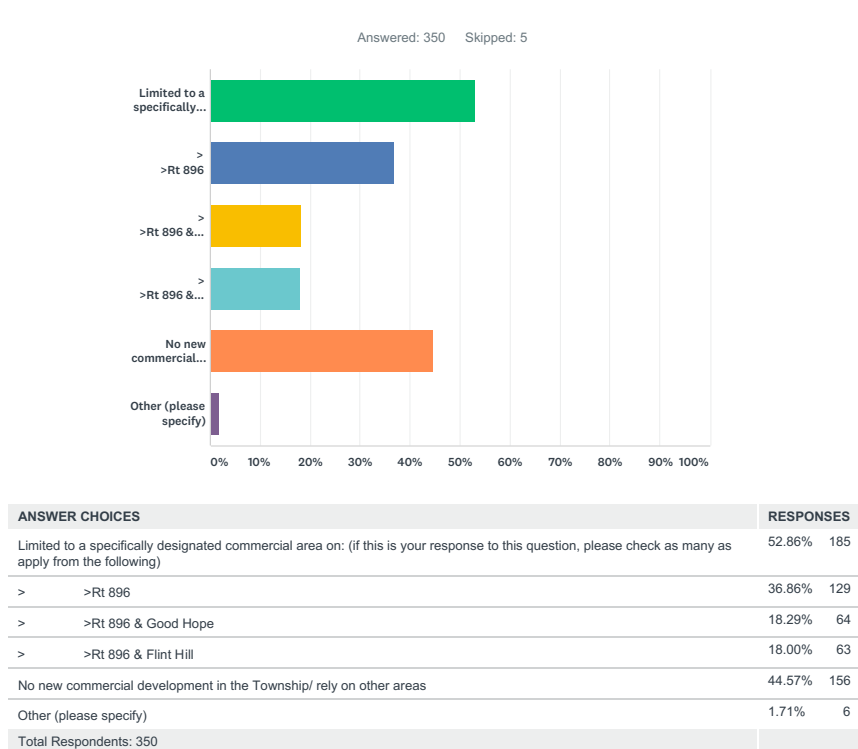
Q5 Please indicate the level to which you would support each of the following conservation measures in terms of Township funding? (Please rank the following from 1 to 4 with 1 being the most important or desirable in terms of importance for Township facilities)

Answered: 332 Skipped: 23

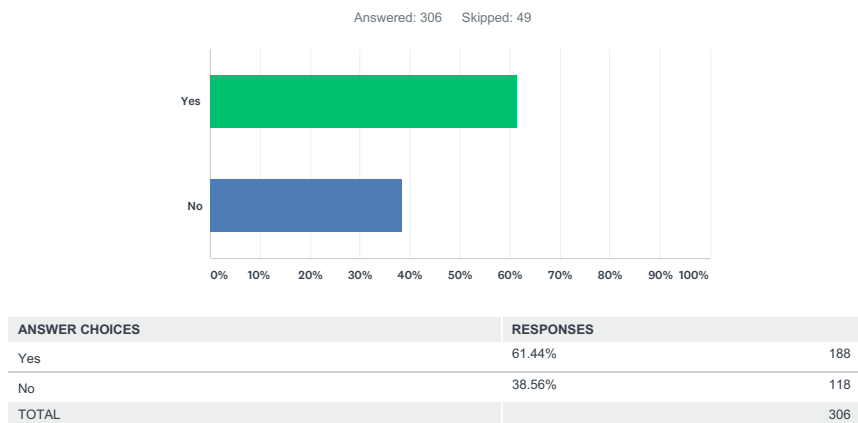


	1	2	3	4	TOTAL	SCORE
Permanent open space preservation	40.37% 130	25.16% 81	22.05% 71	12.42% 40	322	2.93
Agricultural land preservation	16.56% 51	24.35% 75	26.30% 81	32.79% 101	308	2.25
Natural and scenic land preservation	29.17% 91	33.97% 106	27.88% 87	8.97% 28	312	2.83
Open space maintenance and invasive plant control	19.28% 59	16.01% 49	21.24% 65	43.46% 133	306	2.11

Q6 Where is the best location for retail and commercial uses? (Check one response)

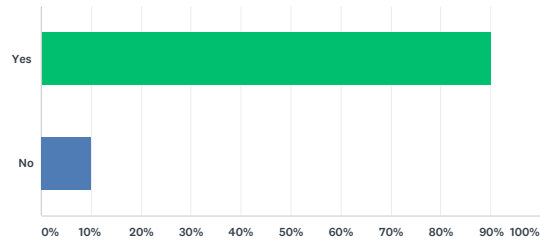


Q7 Is London Britain Township a good place for seniors to live? (Please check one reply and write in any comments)



Q8 Is London Britain Township a good place for young people to live? (Please check one reply and write in any comments)

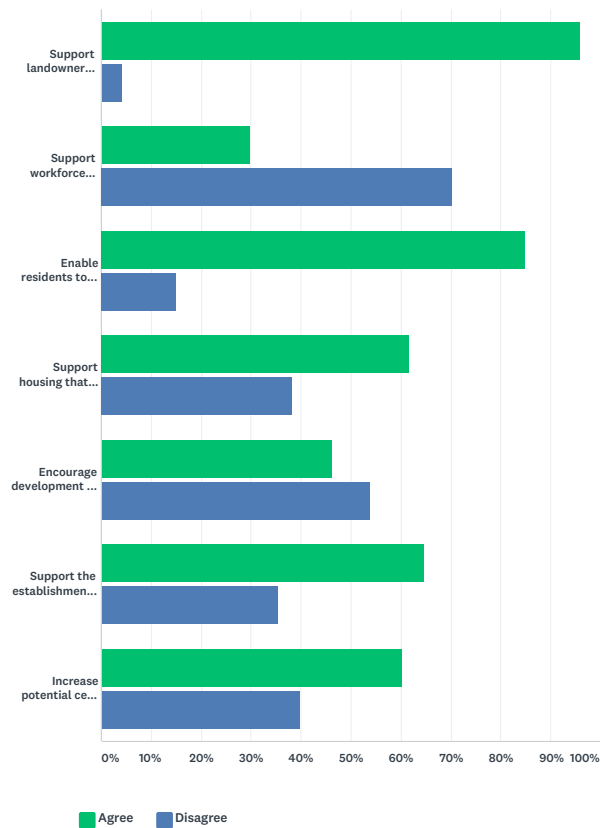
Answered: 318 Skipped: 37



ANSWER CHOICES	RESPONSES	
Yes	89.94%	286
No	10.06%	32
TOTAL		318

Q9 Please indicate your opinion about future Township policy for each of the below statements. (check one reply for each statement)

Answered: 351 Skipped: 4

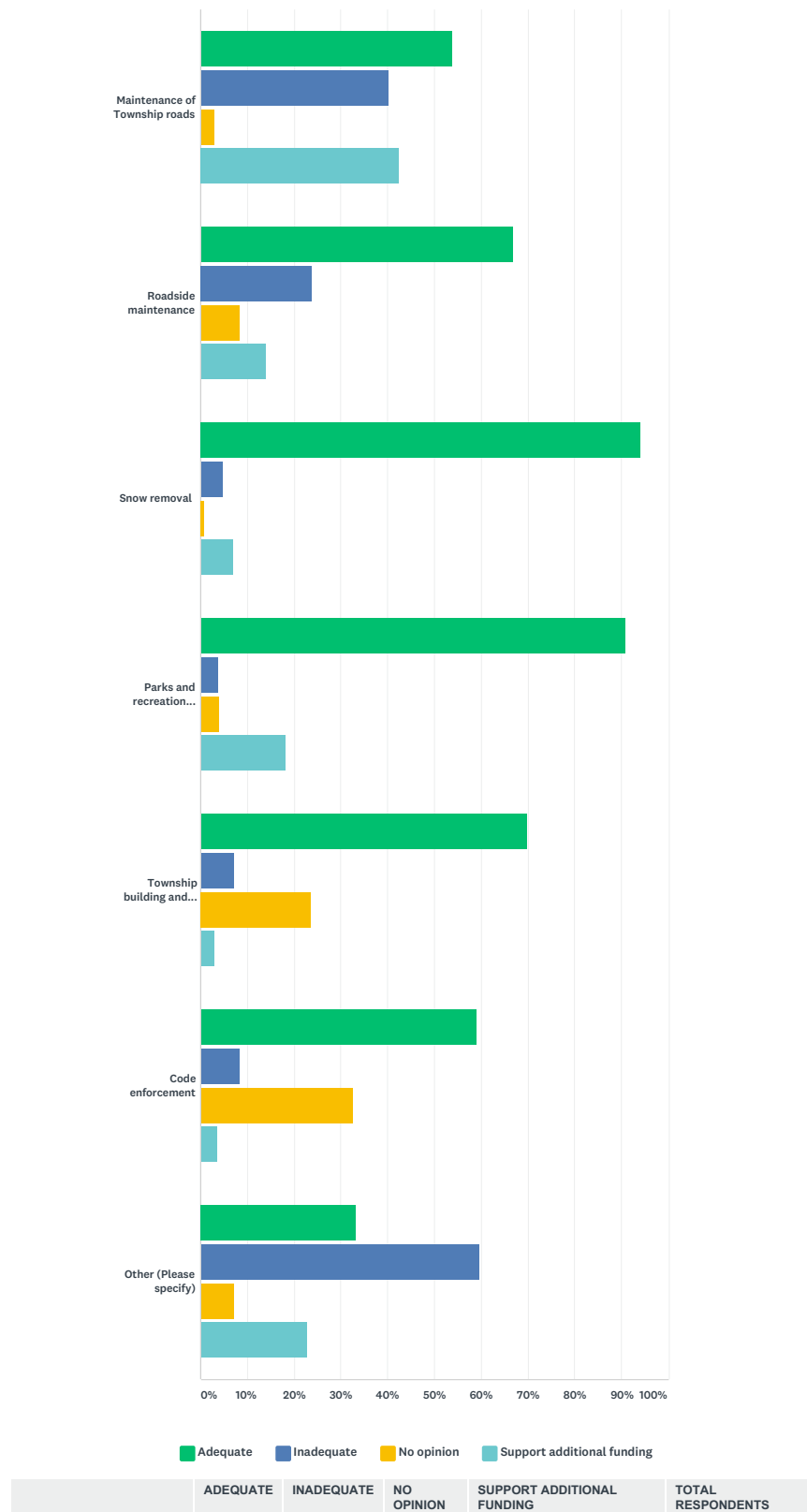


	AGREE	DISAGREE	TOTAL
Support landowner efforts to retain and preserve their farms	95.91% 328	4.09% 14	342
Support workforce housing development (i.e. more affordable housing for people who work in the Township)	29.63% 96	70.37% 228	324
Enable residents to age in place by permitting accessory dwellings ("granny flats" or in-law units) on existing lots	84.91% 287	15.09% 51	338
Support housing that accommodates multi-generational families in one home	61.77% 202	38.23% 125	327
Encourage development of commercial uses that serve the local community	46.20% 152	53.80% 177	329

Support the establishment of eco- and agri-tourism uses	64.60% 208	35.40% 114	322
Increase potential cell tower sites to improve signal strength	60.30% 199	39.70% 131	330

Q10 Rate the following facilities or services in meeting the needs of Township residents. (check one for each facility or service) For which of these would you support additional funds to improve their provision to residents? (check all that apply)

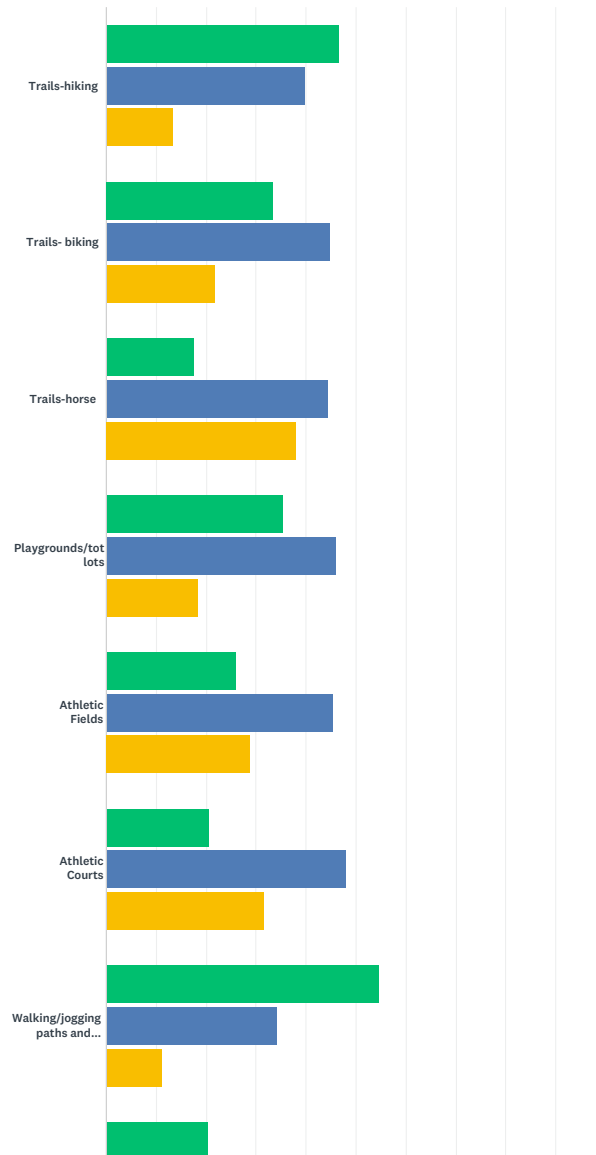
Answered: 351 Skipped: 4

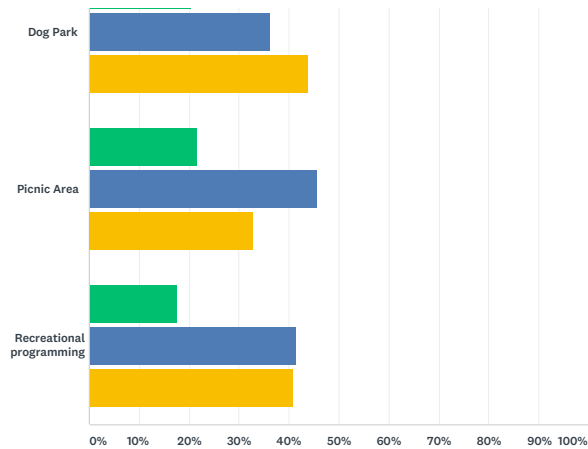


Maintenance of Township roads	53.74% 187	40.23% 140	2.87% 10	42.53% 148	348
Roadside maintenance	66.76% 229	23.91% 82	8.45% 29	13.99% 48	343
Snow removal	94.24% 327	4.90% 17	0.86% 3	6.92% 24	347
Parks and recreation space	90.75% 314	3.76% 13	4.05% 14	18.21% 63	346
Township building and offices	69.88% 239	7.02% 24	23.68% 81	2.92% 10	342
Code enforcement	58.98% 197	8.38% 28	32.63% 109	3.59% 12	334
Other (Please specify)	33.33% 19	59.65% 34	7.02% 4	22.81% 13	57

Q11 How important is it for London Britain Township to provide the following parks and recreation facilities and services? (check one for each facility/service)

Answered: 352 Skipped: 3



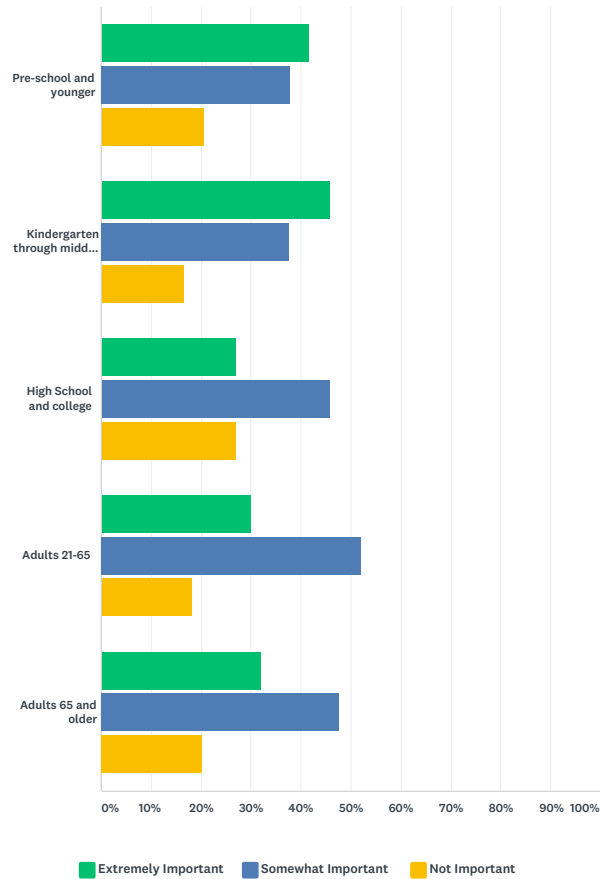


■ Extremely Important
 ■ Somewhat Important
 ■ Not Important

	EXTREMELY IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT	TOTAL	WEIGHTED AVERAGE
Trails-hiking	46.70% 163	39.83% 139	13.47% 47	349	1.67
Trails- biking	33.53% 116	44.80% 155	21.68% 75	346	1.88
Trails-horse	17.60% 60	44.28% 151	38.12% 130	341	2.21
Playgrounds/tot lots	35.45% 123	46.11% 160	18.44% 64	347	1.83
Athletic Fields	25.87% 89	45.35% 156	28.78% 99	344	2.03
Athletic Courts	20.47% 70	47.95% 164	31.58% 108	342	2.11
Walking/jogging paths and trails	54.70% 192	34.19% 120	11.11% 39	351	1.56
Dog Park	20.23% 70	36.13% 125	43.64% 151	346	2.23
Picnic Area	21.51% 74	45.64% 157	32.85% 113	344	2.11
Recreational programming	17.65% 60	41.47% 141	40.88% 139	340	2.23

Q12 How important is it to provide parks and recreation facilities for the following age groups in London Britain? (please check one response per age group)

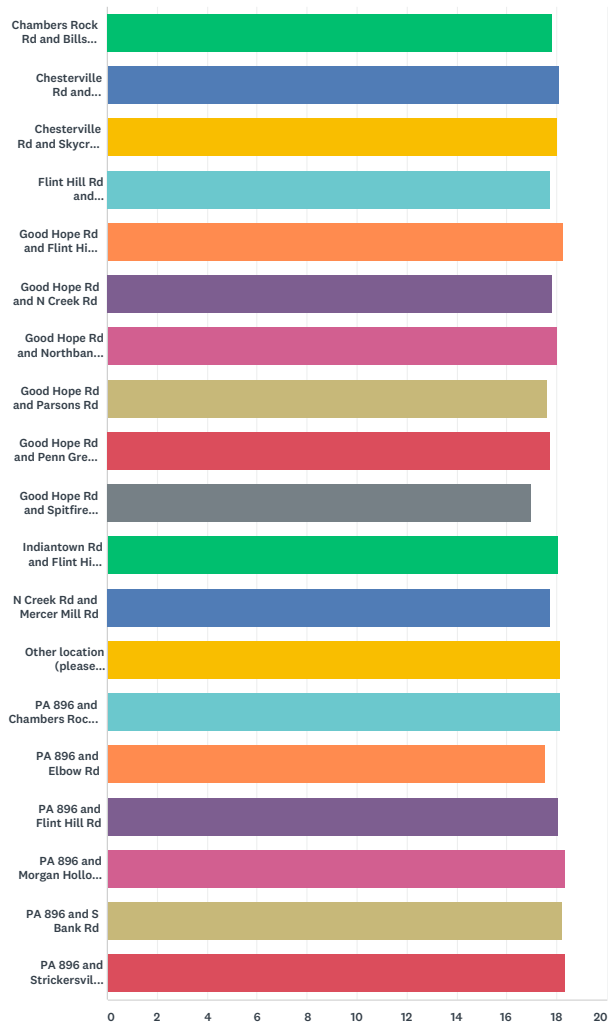
Answered: 347 Skipped: 8



	EXTREMELY IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT	TOTAL	WEIGHTED AVERAGE
Pre-school and younger	41.64% 142	37.83% 129	20.53% 70	341	1.79
Kindergarten through middle school	45.72% 155	37.76% 128	16.52% 56	339	1.71
High School and college	27.06% 92	45.88% 156	27.06% 92	340	2.00
Adults 21-65	29.82% 102	52.05% 178	18.13% 62	342	1.88
Adults 65 and older	31.98% 110	47.67% 164	20.35% 70	344	1.88

Q13 Rank the top 3 priority intersections where transportation improvements are needed in the Township with 1 being the most important. ****Black Bold:** Listed in previous survey and PennDOT crash history data **Grey Bold:** Listed in previous survey but no PennDOT crash history (not available on local roads)

Answered: 296 Skipped: 59

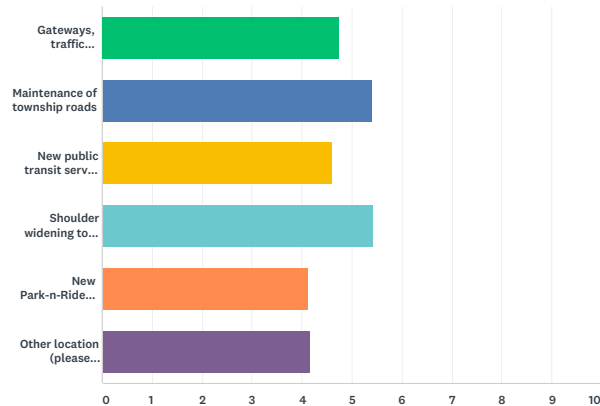


	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Chambers Rock Rd and Bills Way	23.53% 4	35.29% 6	41.18% 7	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Chesterville Rd and Northbank Rd	33.33% 4	41.67% 5	25.00% 3	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Chesterville Rd and Skycrest Dr	50.00% 1	0.00% 0	50.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Flint Hill Rd and Strickersville Rd	13.51% 5	45.95% 17	40.54% 15	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Good Hope Rd and Flint Hill Rd	49.17% 59	24.17% 29	26.67% 32	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Good Hope Rd and N Creek Rd	21.43% 6	39.29% 11	39.29% 11	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Good Hope Rd and Northbank Rd	30.77% 12	38.46% 15	30.77% 12	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Good Hope Rd and Parsons Rd	10.00% 1	40.00% 4	50.00% 5	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0

Good Hope Rd and Penn Green Rd	16.67% 2	41.67% 5	41.67% 5	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Good Hope Rd and Spitfire House Ln	0.00% 0	0.00% 0	100.00% 2	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Indiantown Rd and Flint Hill Rd	42.86% 9	19.05% 4	38.10% 8	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
N Creek Rd and Mercer Mill Rd	18.75% 3	37.50% 6	43.75% 7	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
Other location (please specify):	26.67% 4	60.00% 9	13.33% 2	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
PA 896 and Chambers Rock Rd	33.33% 45	46.67% 63	20.00% 27	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
PA 896 and Elbow Rd	18.18% 2	18.18% 2	63.64% 7	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
PA 896 and Flint Hill Rd	37.29% 22	30.51% 18	32.20% 19	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
PA 896 and Morgan Hollow Rd	66.67% 2	0.00% 0	33.33% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
PA 896 and S Bank Rd	37.50% 24	43.75% 28	18.75% 12	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0
PA 896 and Strickersville Rd/London Tract Rd	54.49% 91	25.15% 42	20.36% 34	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0

Q14 Beyond the intersection improvements listed in Question 13 , rank 3 additional transportation needs that you believe should be address with 1 being the most important:

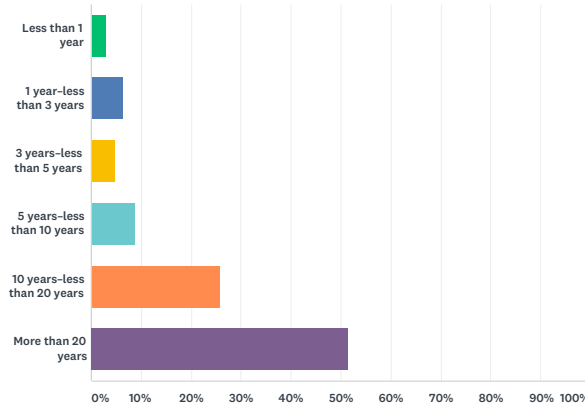
Answered: 323 Skipped: 32



	1	2	3	4	5	6	TOTAL	SCORE
Gateways, traffic calming, and improved appearances along State Route 896	20.69% 36	32.18% 56	47.13% 82	0.00% 0	0.00% 0	0.00% 0	174	4.74
Maintenance of township roads	50.96% 133	36.78% 96	12.26% 32	0.00% 0	0.00% 0	0.00% 0	261	5.39
New public transit service to Delaware	16.92% 11	41.54% 27	33.85% 22	0.00% 0	7.69% 5	0.00% 0	65	4.60
Shoulder widening to improve safety for both driving and biking on roadways	54.02% 141	32.57% 85	13.41% 35	0.00% 0	0.00% 0	0.00% 0	261	5.41
New Park-n-Ride facilities	3.23% 1	22.58% 7	58.06% 18	16.13% 5	0.00% 0	0.00% 0	31	4.13
Other location (please specify):	8.33% 1	0.00% 0	91.67% 11	0.00% 0	0.00% 0	0.00% 0	12	4.17

Q15 How long have you lived in the Township? (check 1 response)

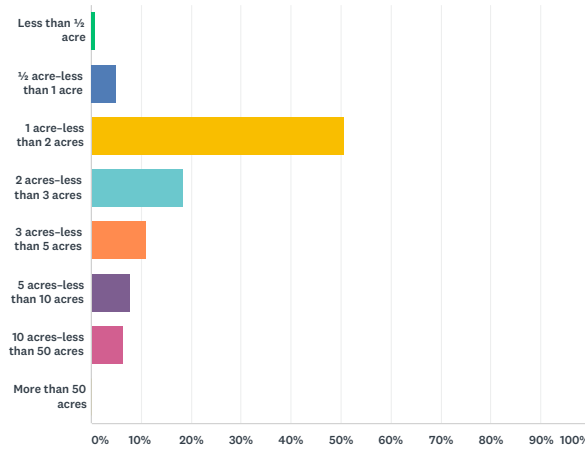
Answered: 350 Skipped: 5



ANSWER CHOICES	RESPONSES
Less than 1 year	2.86% 10
1 year-less than 3 years	6.29% 22
3 years-less than 5 years	4.86% 17
5 years-less than 10 years	8.86% 31
10 years-less than 20 years	25.71% 90
More than 20 years	51.43% 180
TOTAL	350

Q16 What is the approximate size of your property? (check 1 response)

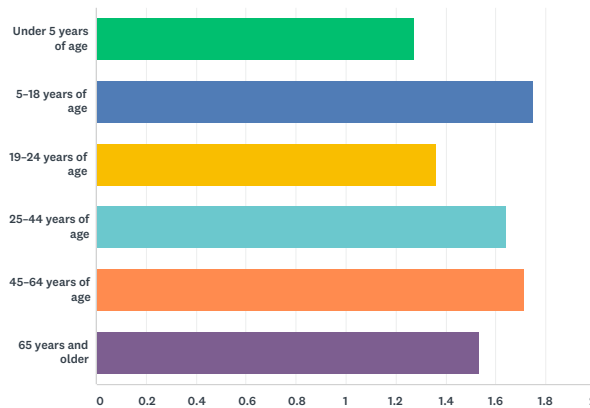
Answered: 352 Skipped: 3



ANSWER CHOICES	RESPONSES
Less than 1/2 acre	0.85% 3
1/2 acre-less than 1 acre	5.11% 18
1 acre-less than 2 acres	50.57% 178
2 acres-less than 3 acres	18.47% 65
3 acres-less than 5 acres	10.80% 38
5 acres-less than 10 acres	7.67% 27
10 acres-less than 50 acres	6.25% 22
More than 50 acres	0.28% 1
TOTAL	352

Q17 How many people live in your residence in each of the following age categories? (indicate number of persons in each category)

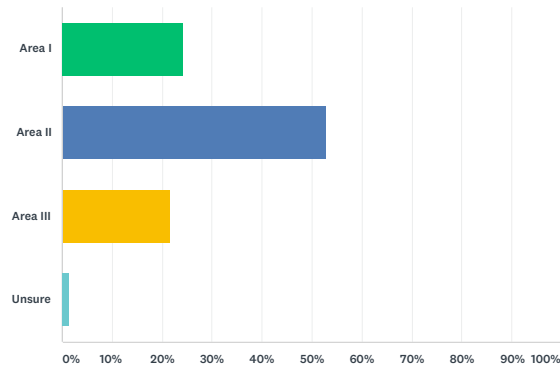
Answered: 349 Skipped: 6



ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Under 5 years of age	1	28	22
5-18 years of age	2	140	80
19-24 years of age	1	49	36
25-44 years of age	2	151	92
45-64 years of age	2	308	180
65 years and older	2	231	151
Total Respondents: 349			

Q18 In which general area of the Township do you live? (check 1 response using the graphic above this question)

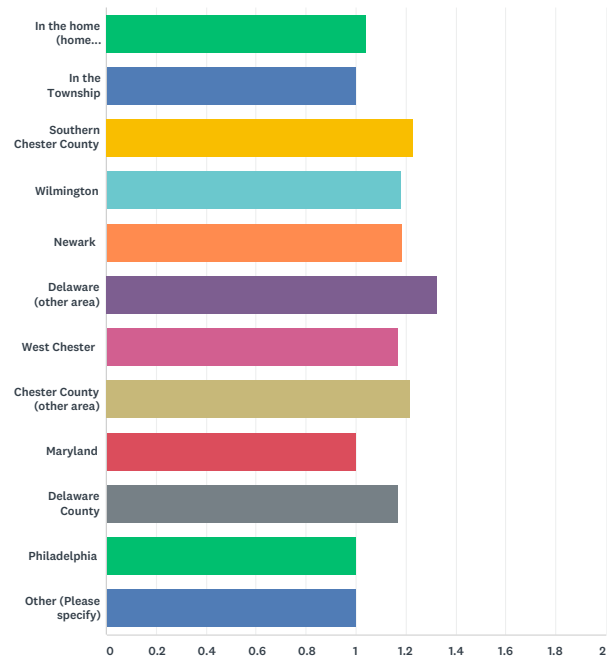
Answered: 351 Skipped: 4



ANSWER CHOICES	RESPONSES
Area I	24.22% 85
Area II	52.71% 185
Area III	21.65% 76
Unsure	1.42% 5
TOTAL	351

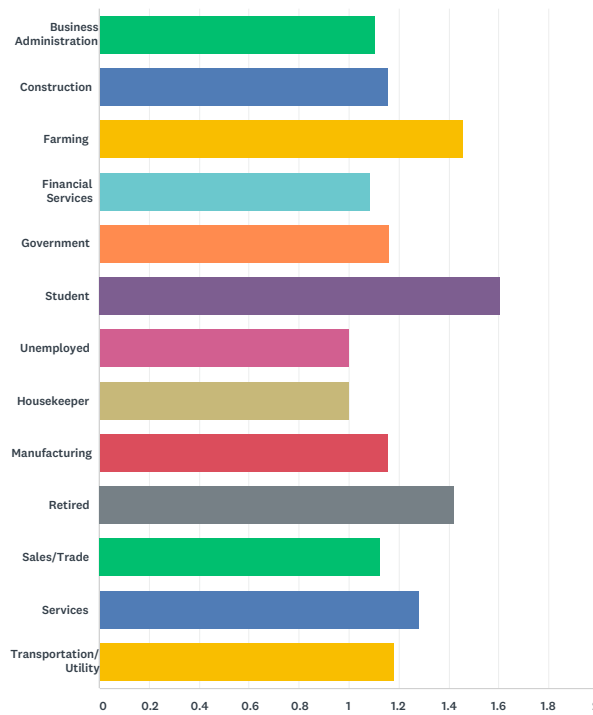
Q19 For those members of your household currently working, please indicate the number of persons who work in the following locations:

Answered: 254 Skipped: 101



Q20 Please indicate the number of persons in your household who currently work in the following occupations:

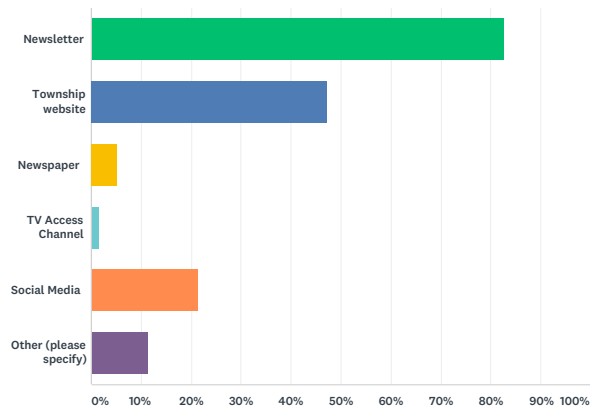
Answered: 313 Skipped: 42



ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Business Administration	1	64	58
Construction	1	15	13
Farming	1	16	11
Financial Services	1	51	47
Government	1	22	19
Student	2	45	28
Unemployed	1	8	8
Housekeeper	1	6	6
Manufacturing	1	30	26
Retired	1	162	114
Sales/Trade	1	54	48
Services	1	132	103
Transportation/Utility	1	13	11
Total Respondents: 313			

Q21 How would you prefer to be made aware of Township information, issues, meetings, or updates? (check all that apply)

Answered: 339 Skipped: 16



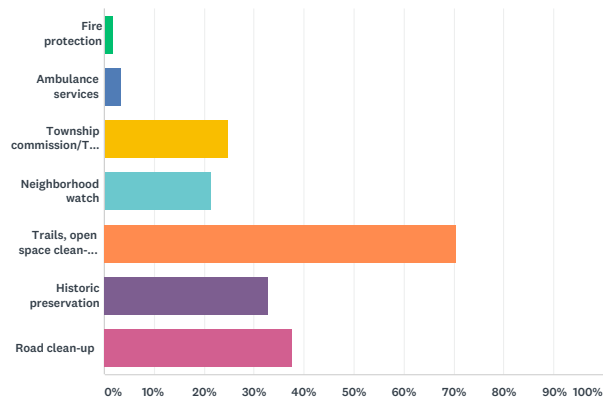
ANSWER CHOICES	RESPONSES	
Newsletter	82.60%	280
Township website	47.20%	160
Newspaper	5.31%	18
TV Access Channel	1.47%	5
Social Media	21.24%	72
Other (please specify)	11.21%	38
Total Respondents: 339		

Q22 Do you have any other concerns about planning in the Township?
Please use the space below and additional sheets if necessary to elaborate your thoughts.

Answered: 124 Skipped: 231

Q23 Are you interested in volunteering to help with any of the following?
(please check as many as you are interested in):

Answered: 61 Skipped: 294



ANSWER CHOICES	RESPONSES	
Fire protection	1.64%	1
Ambulance services	3.28%	2
Township commission/Township activity	24.59%	15
Neighborhood watch	21.31%	13
Trails, open space clean-up, or maintenance of natural areas	70.49%	43
Historic preservation	32.79%	20

Road clean-up	37.70%	23
Total Respondents: 61		

Q24 SURVEY ID NUMBER

Answered: 355 Skipped: 0

APPENDIX D

2018 COST OF COMMUNITY SERVICES STUDY

Overview

In 2000, registered voters in London Britain Township elected to support a 0.5 percent property tax millage for the Board of Supervisors to use for the preservation of local farmland and open space. While this choice undoubtedly contributes to the conservation of London Britain Township's open vistas, mature forests, and prime farmland soils, permanently protecting open lands also positively impacts the financial health of the municipality, as often documented in a Cost of Community Services Study.

A Cost of Community Services Study (COCS) analyzes the financial costs of municipal and educational services required by each of the four land uses: agricultural, residential, commercial, and industrial. The analysis includes a ratio of revenues to expenditures generated by each land use category. This ratio documents whether a land use does, or does not, generate sufficient tax and non-tax revenue to offset its service demands (costs). The study methodology originates from Penn State University's Cooperative Extension Service.

A Cost of Community Services Study was conducted for London Britain Township in 2006. That study concluded that the tax revenues and revenue from other fees paid by the new residential development did not cover the costs of municipal and educational services they required. This study also concluded that the farms and commercial land uses within the Township did generate a net budget surplus, by demanding far fewer service costs compared with the tax and non-tax revenue they generated. (It should be noted that London Britain Township does not currently have any industrial land uses, and so only three land use categories (residential, commercial, and agricultural) were the subject of the COCS.) The COCS was included as an appendix to the Township's 2008 Comprehensive Plan.

The Township is now updating its 2008 Comprehensive Plan and authorized the preparation of a second COCS to support its plan update efforts. The findings of this new COCS are summarized in the following paragraphs.

Introduction

According to the background summary documents recently produced by Chester County Planning Commission for the draft Comprehensive Plan, Landscapes 3, nearly $\frac{1}{4}$ of Chester County or 119,000 acres, consist of unprotected parcels of 10 acres or greater. In the last ten years, an average of 1,143 acres were developed each year, removing critical space for agricultural production, recreation, wildlife habitat, and natural resource protection, and impacting the economic well-being of Chester County residents. Conversion of prime farmland and crucial open spaces into residential subdivisions and commercial strip malls alters the character of a community.

The transition from a rural to a suburban community also places new demands on municipal government, causing growth in size and complexity, and leading to more services, increased expenses, and in many cases, higher taxes. For example, the Avon Grove School District has added 20 modular classrooms over the past 17 years, the School Board approved the construction of a new high school and renovation of the old high school into a new middle school, and, increased the tax rate by 7 mills in the last ten years to the current rate of 30.69 mills.

An active farmland and open space preservation program, in balance with moderate residential land development, can ease local tax and service burdens and permit a municipality to plan for appropriate growth. Like the 2006 COCS, the 2018 London Britain Township Cost of Community Services Study documents an increase in school-related expenses that is attributed to increased residential development (in particular) district-wide. These findings justify continuation of London Britain Township's open space preservation efforts, funded in part through a modest property tax.

Methodology

The 2018 Cost of Community Services Study analyzes the local fiscal impacts of growth within the three existing land use categories in London Britain – residential, commercial, and agricultural. All three land uses generate public revenues through taxes and fees, while at the same time, demand public services that require public money. All land uses place demands (i.e., expenditures) on the Township's and School District's finances and delivery of services. But those demands are far from equal. This study assesses current municipal economic conditions and helps predict future municipal circumstances if current trends continue.

The study utilizes the methodology devised specifically for Pennsylvania communities by Dr. Timothy W. Kelsey, Professor of Agricultural Economics at Penn State University (Calculating a Cost of Community Services Ratio for Your Pennsylvania Community, Penn State Cooperative Extension Service, 1998). As shown in the following listing, applied in the methodology are County property tax, as well as municipal and School District financial data, all from 2016 or 2017, depending on the source; these are the time frames from which the most complete data were available. Chester County taxes and services are not included. Given the use of data from one specific time frame, the study is a "snapshot" of municipal costs related to its land uses. However, use of data from a different time period will simply show a trend in these land use-related costs; i.e., the overall conclusion should not change.

Steps in the Cost of Community Services Study

Background

1. Collect data from the municipality, school district, and county tax assessment office.

Municipal Calculations

2. Determine property tax base percentages by land uses.
3. Determine municipal tax revenues and allocate by land uses.
4. Determine municipal non-tax revenues and allocate by land uses.
5. Determine municipal expenditures and allocate by land uses.

School District Calculations

6. Determine school district tax revenues and allocate by land uses.
7. Determine school district non-tax revenues and allocate by land uses.
8. Determine school district expenditures and allocate by land uses.

Results

9. Calculate the Cost of Community Services ratios and actual dollar differences by land uses.
10. Interpret the results.

Actual tax revenues generated by the individual land use categories are different for a given township and/or school district, depending on the combination of levied taxes (e.g., property, real estate transfer, earned income, per capita). Non-tax revenues include license and permit revenues, public service fees, highway aid, and funds school districts receive from the Commonwealth, called the Equalized Subsidy for Education. The expenditures spent on land uses range from police and fire services to parks and recreation to highway, school, planning and zoning, and other government services.

As called for by the study, municipal and school district revenues and expenditures were allocated or assigned to each of the three land use categories, based either on how the funds were actually generated or spent, or by using a “default” allocation method derived from the property tax base.

In reviewing the spreadsheets, please note that the 2016-2017 Avon Grove School District budget had a revenue surplus: the school district had \$6,469,926 in tax revenues, but only \$6,168,189 in total expenditures. So, all land uses contributed more than they received in services for the study period. However, the Cost of Community Services Study methodology assumes a balanced school district budget, or what the total tax revenues would be if the school district was able to collect exactly what it needed to cover expenses. For the 2018 COCS, the surplus is corrected to adjust the total tax revenues so that they equal the spending, which allows calculation of accurate cost-revenue ratios. Given the uncertainties in local revenues and expenditures, Dr. Tim Kelsey indicated that it isn’t uncommon for an occasional school district budget to show a surplus, especially given the growth pressures on the district.

Results

After all the revenue and expense figures were entered, allocated, and tallied, gross revenues and expenditures for each land use were compared, and cost-revenue ratios were calculated. Specifically, the ratios depict the net impact of each land use as a comparison between how much was spent on that land use for each dollar the land use generated, summarized as follows for London Britain Township:

Residential (e.g., single-family houses, townhouses, mobile homes, farm residences)-- 1 : 1.01

Agricultural (i.e., farms greater than 10 acres)-- 1 : 0.20

Commercial (e.g., stores, gas stations, offices)-- 1 : 0.20

Industrial (e.g., wholesaling, manufacturing)-- not applicable

As shown, for every dollar generated by residential uses, one dollar and one cent were spent. Residential land use in London Britain Township still creates a deficit, generating less revenue than the cost of services it received in return. For every dollar generated by agricultural and commercial uses, only 20 cents were spent. Agriculture and commercial uses therefore continue to contribute substantially more revenue than they demand in service costs. While residential land use experienced a one

percent shortfall, farmland and commercial land generated an 80 percent surplus.

In actual dollar figures, the differences were perhaps even more dramatic, with residential land uses requiring approximately \$51,000 more in expenditures than generated revenues. The Township and school district spent close to \$7,700,000 on residential land uses which only generated \$7,600,000 in revenue in approximate figures. On the other hand, gross revenue from farmland was \$30,786 with net revenue of \$24,595, due to expenditures of only \$6,191. Similarly, commercial land required only \$15,478 in expenditures to \$61,486 in net revenue.

Conclusions

This 2018 update of the 2016 Cost of Community Services Study documents that:

- continued development of most residential uses contributes to a permanent and growing public school budget shortfall;
- additional residential development further challenges the Township budget as demands for municipal services and administrative requirements increase;
- in contrast, the remaining farmland and open space in London Britain Township is an “economic engine” generating budget surpluses by requiring few municipal or educational services.

The figures and ratios in the 2018 COCS reflect 2016-2017 data and will vary from year to year as previously noted. If current development and school enrollment trends in the region continue, the fiscal disparities described here will become more exaggerated, since the great majority of new residential developments are expected to be built on farmland and other open spaces. Regardless, the conclusion of this study should not vary: most residential land uses will consistently fall short of covering their full costs, while farmland uses (in particular) will consistently provide a significant surplus.

These findings correspond to other recent COCS’s performed by the Brandywine Conservancy and are generally consistent with the 2006 Cost of Community Services Study for London Britain Township. Professor Kelsey and the Brandywine Conservancy have reached the same conclusion in Costs of Community Services studies for more than 21 townships across the Commonwealth. The American Farmland Trust and others have reached identical conclusions in 80 other studies in 18 other states.

The London Britain Township Appendix to the Cost of Community Services Study, 2018 Update

In addition to the previous ten steps of the Cost of Community Services Study, an additional four steps can be completed in order to provide additional analysis and interpretation. The steps for farmland and open space implications are:

11. Determine residential tax shortfall per public school student.
12. Calculate the school district-related costs of developing a hypothetical 100-acre farm.
13. Calculate costs of protecting the same hypothetical 100-acre farm.
14. Calculate the preservation costs’ break-even period.

Residential Development and School District Budgets.

The primary, though not the only, reason for the shortfall between residential expenditures and revenues depicted in this report is the residential demand on the public school system. Although residents provide only a portion of the full costs required to support local public school students, they receive all the benefits, for the simple reason that all students come from residential land uses.

In its 2017 audit, total expenses for the Avon Grove School District were reported at \$86,875,905, and the School District reported a total of 5,539 students in the same time period. Therefore, it cost approximately \$15,684 to educate each student that school year. During this same period, the District reported that 394 of the total 5,539 District students came from London Britain Township. Accordingly, it cost a total of about \$6,168,189 to educate Township students that year. As discussed earlier in this study, to complete a proper analysis, we need to first assume that the school district has a balanced budget in the 2017 audit year. With a balanced school district budget, the adjusted total tax revenues would instead be \$3,698,058 for the Township. While the students are fully a product of residential areas, \$9,386 per student came to the School District directly from the residents of London Britain in the form of taxes, a \$2,470,131 total or \$6,298 per student shortfall.

Residential taxes are also subsidized by taxes on other land uses within the Township (i.e. commercial and agricultural) and partly by state and federal government education subsidies. Given the pressures exerted on the school district by residential population growth within the municipalities that contribute to the district, local taxes are increased to make ends meet, and for this fiscal year analyzed, the local taxes collected produced a surplus in the school district's budget. And in fact, the Avon Grove School District property tax levy ranged from 18.10 mills in 1998 to 23.82 mills in 2008 to 30.69 mills in 2018, an average annual increase of approximately 6.5 percent. With continued growth, demand for municipal services (police, fire, roads, libraries, recreation, etc.) will also increase, requiring additional revenue to cover service costs that will likely come from increased municipal taxes.

Slowing Tax Increases through Open Space Preservation.

From this analysis, the preservation of farmland and other open space uses can clearly help slow the rising municipal service and educational costs of rapid development by protecting land that would otherwise be converted to new housing. The expense of protecting farmland and other open space (through purchase of development rights or fee simple purchase of land) may require a modest initial increase in taxes. Yet these expenses can be quickly recouped and surpassed. Not only are new school and municipal costs avoided, but in the case of farmland preservation, farm tax income is maintained. And, local funds to preserve agricultural lands can be used to meet acceptance criteria for publicly-funded farmland preservation programs, as well as to possibly leverage other private sources. London Britain Township has already been incredibly successful in protecting farmland and open space by using its modest property tax millage over the past 18 years for the preservation of farmland and open space.

In dramatic contrast to the permanent increase in taxes caused by new residential development, lands that are preserved normally require a one-time financial commitment. Every dollar spent to purchase land or development rights avoids the greater and repeated costs of municipal and school district services. Any locally-required management or maintenance costs (such as where public access is allowed or for parks) are on a much smaller scale than the preservation costs and can be supplemented by

other funding sources, such as grant programs or private donations.

For example, suppose a property that could produce 75 new homes on what was a 100-acre farm, and those 75 new homes would send 75 students to District schools (conservatively). Using the \$6,298/student shortfall calculated above, these 75 students would generate a total annual shortfall of \$475,350. By purchasing a conservation easement for the farm at an estimated \$5,500 per acre, the municipality and its residents would spend \$550,000, but would enjoy substantial tax savings in the long term:

$$\$5,500 \times 100 = \$550,000$$

$$550,000 \text{ divided by } \$475,350/\text{year shortfall} = 1.16 \text{ years break even period}$$

In other words, and in slightly over a year from the date of the easement purchase, the municipality would have otherwise experienced a school district shortfall amount equal to the purchase cost of the development rights. Beyond this time, the annual shortfall would continue, and would also potentially affect other school district municipalities (Avondale Borough, West Grove Borough, and Franklin, London Grove, New London, and Penn Townships). However, voters in London Grove have approved open space referenda, balancing this latter effect.

As previously noted, funding for agricultural preservation is available through County, State, and Federal farmland preservation programs, rather than sole reliance on local taxes for financing these purchases. In fact, the Chester County Challenge Grant Program requires a 50 percent match of the land's purchase price from the Township and/or other sources (e.g., partial donation of development value by the landowner).

Concerning Preferential Farmland Assessments.

In some areas of Chester County, officials have raised concerns that school district revenues are unfairly decreased by government-funded farm preservation practices. Many school districts derive the majority of their local revenues from a tax on the assessed property values of the lands within their district. Two state laws allow farms to be assessed at a lower value. Act 319 lowers the assessed value of farmland below its "fair market value" to its "agricultural-use value" based on a continuing agricultural land use and the agricultural productivity of the soils. A similar state act, Act 515, also lowers a farm's assessed value, based on its location, size, and use. In areas under significant development pressure, undeveloped land values – and the taxes levied on those lands – tend to climb substantially as their fair market values rise. Acts 319 and 515 are designed to alleviate some of the financial pressures farmers face to sell to developers, but both of these translate into lower real estate tax revenues for a given school district. However, this concern does not recognize that if the farmers did sell their land, most of it would likely produce houses and children instead of crops. Those children would likely strain the schools' financial resources more than the lowered farmland assessment (e.g., supplies, buses, teachers, buildings). Finally, even though farmland assessed under Acts 319 or 515 does receive a property tax reduction, it still provides tax monies to the local school district.

Page left intentionally blank.

APPENDIX E

AGRICULTURAL AND NATURAL RESOURCES INVENTORY

Introduction

This Chapter provides background inventories of London Britain's natural resources. The complex nature of natural resource characteristics significantly influences a wide spectrum of planning issues. Moreover, many of these resources are not static, but dynamic in nature, and the ways in which they change can be influenced by human goals and interests. In particular, many water and biological resources such as water quality and wildlife diversity are renewable and restorable and can be improved over time. Such improvements take the combined effort of the broader community.

This appendix presents a variety of maps depicting the various natural resources contained in the Township and offers a descriptive inventory on their location, condition and importance to the Township. Each natural resource element will be addressed in a separate section of this appendix, even though some may appear on the same map.

Slopes

The slope of the land is largely determined by both underlying geology, and the weathering processes leading to soil formation at the land's surface. Land slope is a significant factor in determining sensitivity to disturbance and suitability for development. Though all soils are subject to erosion when their vegetative cover is disturbed, disturbance of vegetation on steep slopes accelerates runoff and erosion, causing down-gradient sedimentation and water/wetland degradation.

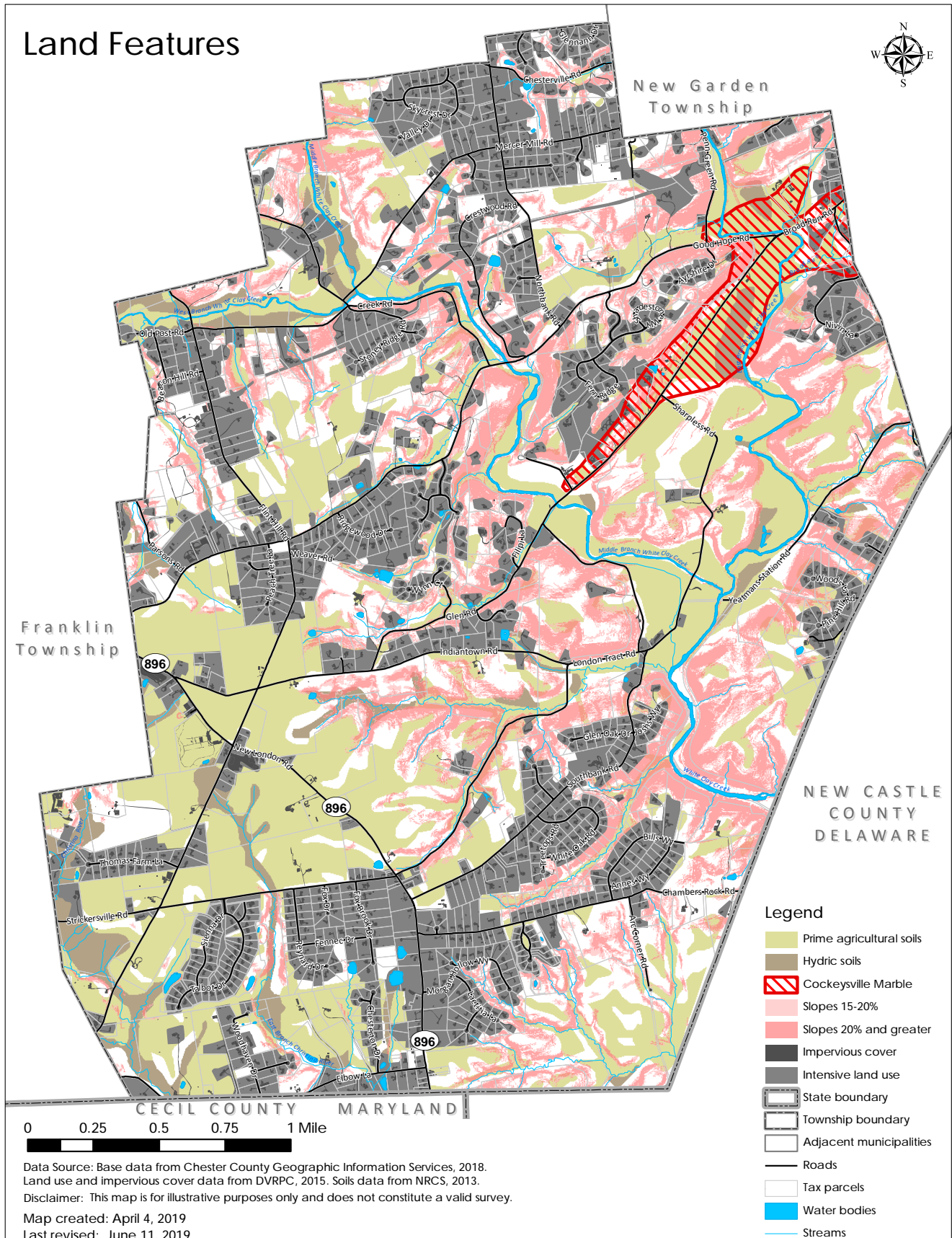
The Land Features Map on the following page shows London Britain's Low Intensity (15-20 percent) and Conservation (20+ percent) slopes. These steeper slopes in London Britain mainly flank the broader floodplain areas of the East and Middle Branches of White Clay Creek on the eastern side of the township. Further steep slopes are found along a tributary of White Clay Creek south of Indiantown Rd. The southwest corner of the township lies within the headwaters of the Christina basin and is characterized by gentle slopes and open farmland. The acreages of Low Intensity and Conservation slopes are, respectively, 584 acres and 1,112 acres. The total acreage of all steep slopes is 1,696 acres, around 27 percent of the Township total.

Many of the steep sloped areas are currently in tree cover, which is appropriate for preventing soil erosion. Steeply sloping lands are especially sensitive to ground disturbance and the removal of vegetative cover that could result in problems with stormwater runoff, erosion, and uncontrolled sedimentation. Concentration of runoff from the installation of impervious surfaces on sloped areas can diminish groundwater recharge. The potential for erosion from earth-moving is heightened on steep slopes, both during and subsequent to the activity, even with substantial erosion control measures. In contrast, the presence of intact vegetation, especially trees, contributes to slope stability and stormwater control. The Township's ZO currently regulates Low Intensity and Conservation slopes, allowing minimal vegetative disturbance and grading, especially on Conservation slopes.

Soils

The suitability of a particular soil type is an important determinant in the location of most land use activities, roadways, and public facilities. Another important characteristic is the ability of a soil type to

Land Features



support on-site sewage facilities. The thickness of the soil (i.e., depth to bedrock), drainage characteristics, erosion potential, and slope factor all combine to determine the potential extent of the limitations on septic systems. Where limitations exist, it is important that they are identified and documented as part of a detailed site investigation. For example, the soil's ability to assimilate and mitigate wastewater disposal (either on-site or from an off-site collector) is a central element of the planning process and a primary determinant in locating land uses. Similarly, a soil's suitability for stormwater management is also important. Due to compaction, permeability, and erodibility qualities, certain soils are better suited for certain management and/or disposal techniques than others.

London Britain's soils generally include both highly productive prime agricultural soils and soils that are constrained by specific characteristics as can be seen on the map on the previous page. Constrained soils include those with a seasonally high water table, alluvial soils that are subject to stream flooding, soils with shallow depth to bedrock or underlain by soft rock, and soils susceptible to erosion.

Almost one-third (31 percent) of London Britain Township is underlain by undeveloped prime agricultural soils – 1,967 acres. These soils are deep, fertile, silty loam soils that are nearly level, well drained, generally devoid of stones and rocks, and are the most productive for traditional agricultural crops. Unfortunately, those characteristics that create high agricultural value also make these lands suitable for development as few physical constraints exist on the land.

Hydric soils, those that are either seasonally or permanently wet, are also present in the Township. Generally located along waterways, these soils are good indicators of the presence of wetlands or former wetlands, which often provide habitat for unique and important plants and wildlife, and can also provide natural storage areas for flood waters. In addition, these areas often supply groundwater to the surface water system, providing the baseflow in headwater streams and define the baseline for stream water quality. Within London Britain, these soils can be found most prominently in the headwaters of the Christina River and likely serve as important source water areas and provide for the storage and slow release of stormwater to these headwater streams.

Soil formation is an ongoing process, a complex interaction among factors such as weather, underlying geology, vegetative cover, and time. In London Britain, this process occurred over millennia under old growth chestnut-oak-hickory-dominated forests where rainfall, runoff, and evaporation were in a balance such that leaching of soil nutrients is not as severe as in other more southerly areas of the United States. Accordingly, the Township contains a significant amount of productive farm soils and as such, agriculture was the historically predominant land use in the Township after settlement. When the original forest vegetation was cleared and plowed as a part of the settlement, soil formation and specifically the creation of prime agricultural soils effectively ceased as a natural process.

Water Resources

This section describes a number of important attributes of London Britain's water resources that can be found on the accompanying Water Features Map. The use of water resources often faces competing interests. Surface water as well as groundwater supplies are used to meet domestic, agricultural, commercial, and industrial needs. Streams are used to assimilate treated (and sometimes untreated) wastewater. At the same time, streams are a critical part of the life needs for many types of wildlife, and aquatic life depends on clean water for its continued survival. Streams can provide attractive

recreational resources where public access is afforded. In order to sustain all of these uses, it is important to protect and restore water resources through proper management of the land uses that directly and indirectly affect adjacent and downstream water resources.

Almost all of London Britain's 41 miles of stream network is considered impaired by the Pennsylvania Department of Environmental Protection (DEP). Within the White Clay Creek watershed in London Britain, only a small tributary to the main branch of White Clay Creek in the far southeast corner of the township (inside of White Clay Creek Preserve) meets its water quality standards for its designated uses. Impairments in the other streams include the presence of mercury and pathogens, the presence of excessive nutrients, and siltation. Given the nature of streams, the source of some of these pollutants may come from outside of the Township. In contrast, the streams that make up the headwaters of the Christina River in the far southwest corner of the Township all meet water quality standards for their designated use and are therefore considered attaining by DEP.

First-order streams/headwater areas

As shown on the Water Features Map, London Britain contains several first-order streams and, therefore, headwater areas, especially on the western side of the township. A first-order stream begins at the location where channelized flow occurs as a result of runoff, melting, springs, or groundwater discharge ("base flow"). These streams are important for many reasons including that they carry the majority of the system's base flow in any watershed to its downstream waterways, contributing significantly to both water quality and quantity in any given stream.

Headwater areas are those lands that drain directly into first-order streams, the smallest tributaries of the larger stream system. First-order streams are significant beyond their size in the overall hydrologic regime. Given their importance to both water quality and quantity and in the context of relatively low flow individually, first-order streams are disproportionately vulnerable to sedimentation and other degradation. The regularity of flow from headwater areas is essential to the health of first-order streams and the wildlife that depend on them, particularly during periods of low flow. Thus, the watersheds of these first-order streams are extremely sensitive to introduction of impervious surfaces, improper grading, discharge of pollutants, or poor agricultural practices. Maintenance or restoration of forested headwater areas, particularly in close proximity to first-order streams, is especially important given the ability of wooded areas to slow and filter flows, control erosion and sedimentation, provide shade and water temperature regulation, and supply wildlife food and cover.

Floodplains

Floodplains are identified in part by the boundary of the area subject to flooding resulting from a storm event occurring with a frequency of once every 100 years, as delineated by the Federal Emergency Management Agency (FEMA). Areas of the Township, in all its watersheds, are subject to periodic flooding (water rising over the stream banks) or wet conditions and have been identified by FEMA as 100-year floodplains. Within London Britain Township, those areas susceptible to the 100-year flood level are primarily along the main stem of White Clay Creek and the East Branch White Clay Creek. Many of these areas fall within White Clay Creek Preserve.

During storm events (whether 100-year or more frequent), floodplains serve to absorb and slow flood waters, and take up water-borne pollutants and flood-carried sediments. Where maintained in a

relatively natural state, these areas also help limit potential for erosion, downstream sedimentation, non-point-source pollution, and obstruction or alteration of the floodway. As with headwater areas, maintenance or establishment of stable, wooded vegetative cover in floodplain areas can help maintain both stream water quality as well as control flooding.

Wetlands

Wetlands are defined as those areas where the soils are saturated for a significant part of the year, where plants typical of saturated soils occur, and where hydrologic conditions provide evidence of surface ponding, flooding, or flow. In London Britain Township, these areas are typically found along streams, where they are often narrow and linear in shape, or in upland depressions in headwater areas. There are currently 17 known individual wetlands in London Britain as identified by the NWI, totaling 80 acres. London Britain's largest remaining wetland area is along the East Branch White Clay Creek in White Clay Creek Preserve and is around 14 acres in size. Several other wetlands are located within the Preserve, while a collection of wetlands can be found in the northwest corner of the Township along White Clay Creek and the West Branch White Clay Creek (some of which are located on lands protected by local land trusts). Additional smaller wetlands are also found in the headwaters of the Christina watershed. It is likely that additional wetlands exist in the Township that went undetected during the NWI assessment given that they are determined through the interpretation of aerial photography.

Wetlands are a key component of watershed management, positively impacting both water quality and quantity issues through regulating different aspects of water on the landscape. By filtering water, they slow it down, allowing sediments to fall to the bottom and allowing plants to uptake nutrients, improving water quality. By storing water during flooding events, they reduce flood damages and moderate high flows. Wetlands, like streams, benefit from vegetated buffers so as not to be overwhelmed by off-site influences.

In addition to their water resources values, wetlands have significant biological value as they provide rich wildlife habitat. These values include the plants and the animals they provide with food and cover, as well as nesting and breeding sites. While a wide range of animal species utilize wetlands, certain amphibian and bird species are wetland specialists.

Given these ecological and public health values, wetlands are regulated by DEP, the U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers. In essence, no development activity may occur within a wetland area without a permit. The permitting process requires investigation of alternatives and may require mitigative action.

The Water Features Map on the following page depicts the Township's watersheds, first order streams, wetlands, floodplains, and water bodies.

Woodlands

Wooded areas are highly significant for their environmental, social, and economic functions and values. Not only are these lands a vital link in watershed management, but, since most of the northern Piedmont was wooded prior to colonization and settlement, woodlands are the defining characteristic habitat type of this region. Woodlands are the best type of land cover for watershed management

Water Features

This map displays the water features of New Garden Township, Delaware. It highlights five watersheds (HUC12): West Branch White Clay Creek (orange), Middle Branch White Clay Creek (green), East Branch White Clay Creek (purple), Upper White Clay Creek (teal), and Upper Christina River (pink). The map also shows attaining streams (blue lines), non-attaining streams (red lines), water bodies (blue shapes), wetlands (green hatched areas), and 100-year floodplains (blue hatched areas). The map includes a legend, a scale bar (0 to 1 mile), and a north arrow. The map was created on April 18, 2018, and last revised on June 11, 2019.

Map created: April 18, 2018
Last revised: June 11, 2019

since trees absorb large amounts of water through their roots which is stored in the stem and leaves and released as evapo-transpiration. Stands of trees also provide natural erosion and flood control by decreasing the speed and amount of stormwater runoff. They are especially valuable along streams (as riparian buffers), on steep slopes, and in headwater areas. Most native plants and animals are adapted to life in or near woodlands. Many beneficial species (e.g., pollinators), soil organisms, and natural predators (e.g., insect-eating birds) live and breed in such areas. Woodlands also have aesthetic and commercial values [e.g., recreation (passive and active), logging, etc.]. Trees also function as natural barriers by reducing the unwelcome impact of noise and of strong winds and wind-transported substances (e.g., dust, snow) and by screening unsightly areas. They also function to reduce temperature extremes and moderate evaporation, acting as the “lungs” of the Township.

London Britain is blessed with considerable woodland resources within its bounds. The Township contains over 3,500 acres of woodland, including some sizeable contiguous tracts on protected lands. Nearly half (43 percent) of the Township’s woodlands are located on protected lands, either within White Clay Creek Preserve or on lands protected by local land trusts. Woodlands also exist on many of London Britain’s slopes, protecting them from excessive erosion. Trees will also intercept and slow rainfall from reaching creeks, which can reduce flooding downstream.

While a good portion of London Britain’s woodlands are permanently protected, some 2,000 acres of woodland remain unprotected and exist on private lands. Of these woodlands, around 25 percent are located on around 50 lots greater than 10 acres in size. Given this distribution of unprotected woodlands, programs that work with private landowners with larger holdings that focus on promoting the economic and ecological value of their woodlands, provide options for permanent protection, and teach appropriate ongoing stewardship of these resources would be beneficial to maintaining the integrity and health of this valuable resource in London Britain. In addition, opportunities exist in the township to reforest small open areas and riparian corridors to reconnect some of the fragmented woodland and further enhance and expand upon the existing resource.

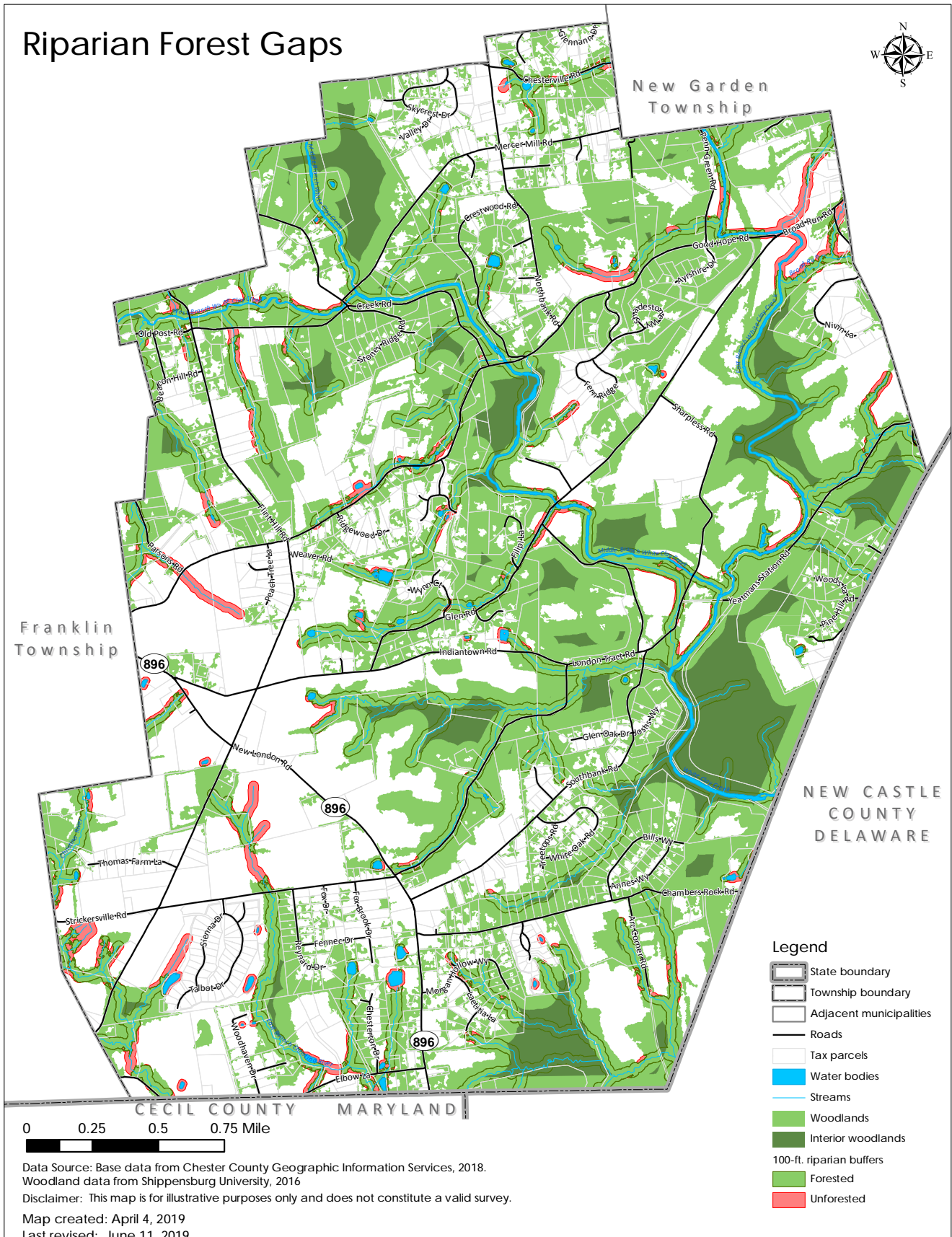
Woodland Interiors

Woodland interiors are ‘deep woods’ areas which lie beyond many of the influences that degrade a forest from the outside – light, wind, noise, and non-native species. These interiors are measured at 300 feet from any outer edge. In other words, forested interiors are the “hole” in a “donut” with a 300-foot wide edge. The Riparian Forest Gaps Map shows the extent of the woodlands that contain forested interiors. Given the ecology of these areas, they are likely to support a considerable variety of native vegetation and wildlife species. Certain species of forest plants and wildlife depend specifically on or do their best using the unique conditions of a healthy forest ecosystem. Many species of songbirds, for example, are specifically adapted to forest-interior conditions and will not nest successfully elsewhere. Similarly, numerous species of spring ephemeral wildflowers will only bloom on the rich, moist soils of the forest floor. There are about 475 acres of forested interiors in London Britain, the vast majority of which (84 percent) are located on protected lands.

Forested Riparian Buffers

Forests along streams (known as forested riparian buffers) represent the combination of two of the Township’s most important resources. These areas are transitional between the flowing waters of streams and rivers, and upland areas. Protecting these land areas is widely recognized as one of the

Riparian Forest Gaps



most important ways to protect a stream's overall health. Given that Chester County's watersheds evolved under primarily forested conditions, riparian buffers function best when they are forested. Wooded stream buffers: cool water temperature; provide wildlife habitat in the form of food, water, and shelter; supply important nutrients from leaves; contribute woody debris to regulate stream flow and to create resting spots; and, filter runoff from surrounding lands through their roots and vegetative growth underlying the trees. Culturally, riparian forests make excellent flood control areas, recreational corridors, and are highly scenic.

Of London Britain's 950+ acres of land within 100 feet of a stream (100 feet is considered optimal for water quality benefits), the vast majority (800 acres) are in woodland cover. However, only about half (51 percent) of these woodlands are currently permanently protected in some way. The Riparian Forest Gaps Map on the previous page highlights those areas in the Township that are within 100' of a stream and are not currently wooded and that provide opportunities for reforestation activities with agreement from private or public landowners. Of the 152 acres of woodland gaps, 38 percent, or 58 acres, are on lands under permanent protection. These lands offer exceptional opportunities for reforestation activities as several grant opportunities exist for the purchase of trees and tree planting supplies on permanently protected lands.

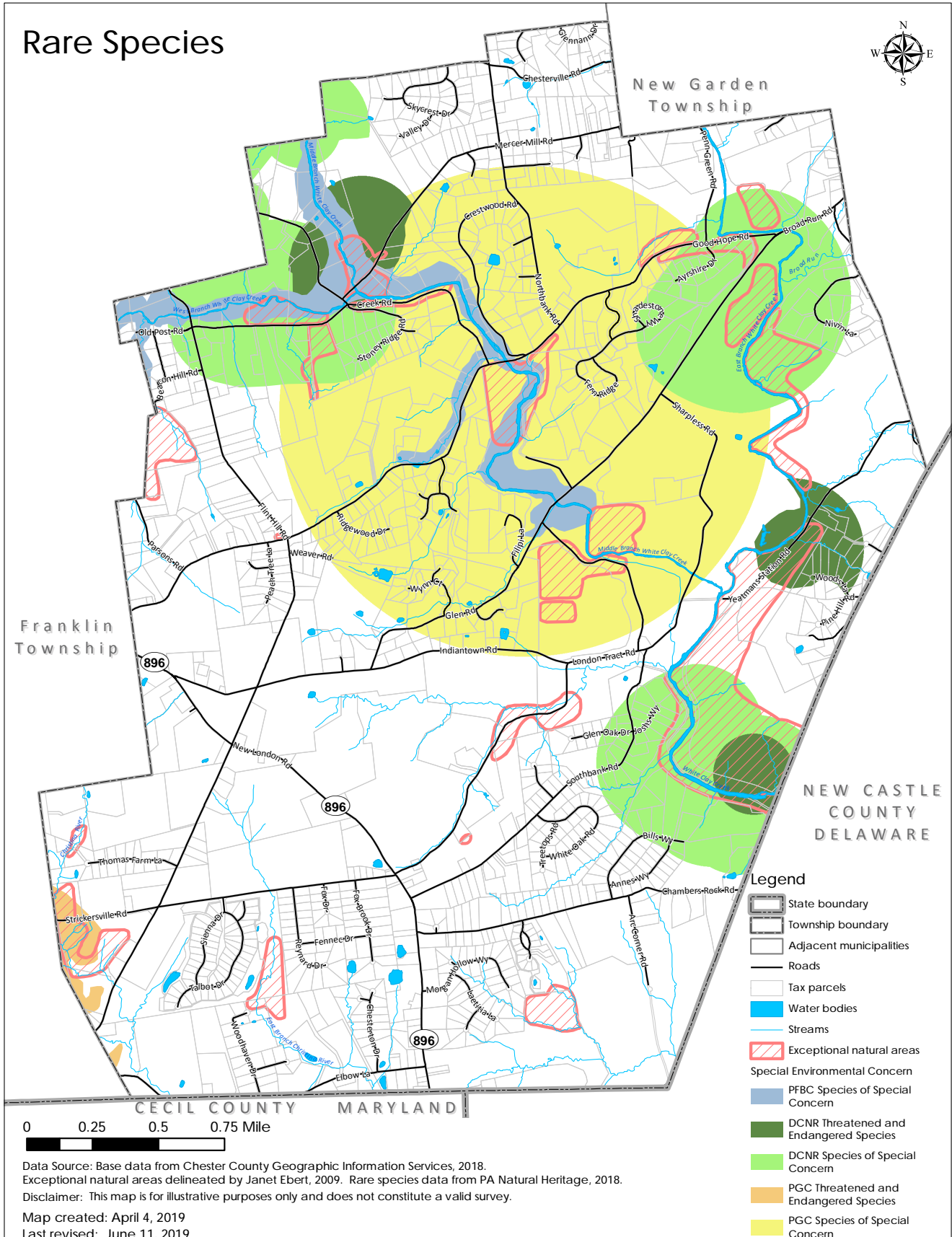
Wildlife and Rare Species

Given London Britain's fairly extensive network of protected lands and woodland, it is home to a variety of plant and wildlife populations. A 2010 botanical survey of the Township identified several areas in the municipality that are considered Exceptional Natural Areas. These areas are comprised of relatively intact, species-rich areas that are dominated by native plant communities. Not unsurprisingly, these areas coincide with much of the protected land and major stream corridors in the Township.

In addition, the survey identified a total of 844 different species, of which 68 percent were native. Of the 281 alien species identified in the survey, 61 are considered invasive in nature and 40 percent of these are widespread throughout the Township. Invasive species out compete native species and often do not support other native wildlife and pollinators that are important for maintaining a healthy ecosystem. The survey also identified four endangered, six threatened, three rare, and sixteen other species of special concern throughout the Township--these are depicted on the Rare Species map on the following page.

Of these Exceptional Natural Areas and Rare Species sites, many fall on protected land (83 percent for Exceptional Natural Areas and almost 90 percent for Rare Species Sites). However, the influence of adjacent land uses and spread of invasive species by birds, other wildlife, and stream flow threaten these populations, even when located on protected lands.

Rare Species



Page left intentionally blank.

APPENDIX F

HISTORIC RESOURCES INFORMATION FROM 2008 PLAN

(The following 13 pages of text have been excerpted from the 2008 London Britain Township Comprehensive Plan, and were prepared by the Chester County Planning Commission. This text remains relevant to the Township's historic resource protection efforts, goals, and strategies contained in the 2019 Comprehensive Plan.)

What is a Historic Resource?

The physical evidence of human settlement and the Township’s development patterns lies within its historic resources. These resources are not limited to the traditional architecturally significant buildings, but include other types of resources, such as historic walls, hedgerows, and roads. “Historic Resources” are collectively considered to be those buildings, sites, districts, objects, or structures evaluated as historically significant. The National Park Service, the federal agency that administers several primary historic preservation programs generally defines historic resource categories as follows, and these categories and definitions are often used as the standard in local preservation programs:

<i>Building:</i>	A house, barn, church, hotel, or similar construction created principally to shelter any form of human activity.
<i>Site:</i>	The location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined or vanished, where the location itself possess historic, cultural or archaeological value.
<i>Structure:</i>	A building used for purposes other than sheltering human activity.
<i>Object:</i>	A form of simple construction that is primarily artistic in nature and relatively small in scale. It may be movable, but is generally associated with a specific setting or environment.
<i>District:</i>	A significant concentration, linkage, or continuity of site, buildings, structures, or objects united historically or aesthetically by plan or physical development.

It is important to note that historic resources change over time and, depending on the type and degree, the change should be respected as part of the natural evolution of that resource.

Historic Resource Surveys

A comprehensive historic resource protection program begins with the identification, data collection, and evaluation of historic resources, so that the nature and types of resources to be protected in the community is understood. This is accomplished through a “Historic Resource Survey.” Once historic resources have been systematically identified, strategies to implement their protection can be determined and then undertaken.

The Historic Resource Survey, as the first step in an historic resource protection program, is key for local resource protection efforts as it provides for the systematic collection and organization of information on historic resources.

Chester County Historic Sites Survey and Township Updates

The Chester County Historic Sites Survey (CCHSS) was conducted in most communities throughout the county between 1979 and 1982. These community surveys are considered “preliminary” or “reconnaissance” surveys: they are a list of sites, focusing primarily on residential properties, with general information, such as location and owner.

The CCHSS for the Township was completed by M.L. Wolf on behalf of the Township in June 1982, and 75 locally significant historic resources and one National Register site was identified. Out of the 75 locally significant identified resources, 13 potential resources were recommended for further consideration for possible National Register eligibility. Sites documented in the original CCHSS survey

are on file at the Chester County Historical Society, with the Township, as well as stored with the Chester County Parks and Recreation Department.

The CCHSS was considered a preliminary inventory of potential historic resources, which the London Britain Township Historical Commission had been working to update until 1998 when the Historical Commission became inactive. The Commission updated documentation on about one-half to three-quarters of the properties, and additional properties were also added to the survey.

Historic landscape features were not considered in the original survey or its update, but the Township may consider these features in future survey updates. Also, when completed, the Township should consider adding the survey as an amendment to this Comprehensive Plan.

Significant local historic resources include those resources not considered to be eligible for listing on the National Register, however, nonetheless still hold significance to local or regional history. As these resources are locally or regionally significant, it is important to note that they should still receive consideration during the planning process. For example, when a change of land use or other zoning permit item occurs, a new land development or subdivision is proposed, or a roadway improvement is planned, which may affect the historic integrity of the resource or site.

Chester County GIS Historic Resource Atlas

Chester County initiated a countywide digital update to the CCHSS in 2004 using a Geographical Information System (GIS). This initiative, the *Chester County Historic Resource Atlas*, is a county-wide effort between the Chester County Parks and Recreation Department and GIS Departments in partnership with the Chester County Historic Preservation Network and municipalities. The Atlas is to include historic resources 50 years or older, following general National Register criteria, and is being completed on a municipality-by-municipality basis with the primary assistance from municipal historical commission members and interested volunteers. The project was conceived in 2004 and it is ongoing. Following National Register guidelines, structures 50 years or older are being considered for inclusion in the Atlas. Structures include principal buildings, outbuildings, walls, and other accessory structures, as is possible through time and knowledge. The Township is not participating in the GIS Historic Atlas project as of 2008; however the Township would like to participate in the project in the future.

National Register of Historic Places Listed and Eligible Sites

Authorized under the National Historic Preservation Act of 1966, the National Register of Historic Places is the Nation's official inventory of historic resources that should be preserved. The National Register is part of an overall national program "to coordinate and support public and private efforts to identify, evaluate, and protect historic and archeological resources." The National Register program is further described under *Legal Foundation and Historic Preservation Programs, Federal Level* section of this Chapter.

The Township has both National Register listed and eligible sites. Figure 6-1 identifies the latest inventory (May 11, 2006) of properties in the Township that are listed on or eligible for the National Register. Based on National Register criteria, properties listed on the Register include: districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

Figure 6-1: National Register Listed and Eligible Historic Properties

Historic Site Name	Address/ Location	Status	Status Date
Lunn's Tavern	Rt. 896, 300ft. west of intersection with L.R. 15016	Listed	10/25/1979
Thompson Farm	632 Chambers Rock Rd.	Listed	07/14/1983
Benjamin Sharpless House	Sharpless Rd.	Eligible	09/26/1985

Source: Pennsylvania Historical Museum Commission (PHMC), 5/11/06. More information can be found on the PHMC website: http://www.phmc.state.pa.us/bhp/Inventories/NR_Reports/overview.asp?secid=25.

There was a recent attempt made in 2005 to nominate an area of London Britain Township as a Historic District. The group of interested parties included members of the White Clay Creek Wild and Scenic Management Committee and area residents. The White Clay Creek Wild and Scenic Management Committee spent \$6,000 to have Wise Preservation Planning write an application for the nomination of the London Tract Road Historic District to include property around the Headquarters of the White Clay Creek Preserve along London Tract Road, Sharpless Road, Indiantown Road, Broad Run, and a small part of South Bank Road. The area under consideration contains historic farms and buildings. Unfortunately the PHMC determined the district to be ineligible for the designation. It may be possible that several modern buildings located within the designated area prevented a successful nomination at this time. An appeal process is ongoing as of February 2007.

Legal Foundation and Historic Preservation Programs

There are various historic preservation techniques and programs available to facilitate the protection of historic resources. Although they differ in approach, most either evolved directly out of federal or state laws or are enabled by federal or state legislation. An understanding of the legal foundation of and programs for historic preservation, as described below, is necessary to determine what techniques and programs are available and appropriate for future preservation planning efforts. Understanding legal and other obligations associated with carrying out preservation activities is also essential for successful preservation efforts.

Federal Level

The National Historic Preservation Act of 1966 (NHPA) earmarked the beginning of a broad scale federal historic preservation policy and created a strong legal basis for the protection of historic resources through a framework of measures to be used at the federal, state, and local levels. The NHPA was a response to public outcry against the severe loss of historic resources (because of urban renewal and blight reduction) in larger cities and boroughs. The legislation's purpose was to create a comprehensive framework for protecting historic resources throughout the nation through a system of reviews, regulations, and incentives that focused on preserving historic resources. The NHPA encouraged cooperation among federal, state, and local governments as well as between individual agencies to address the protection of historic resources.

Key National Historic Preservation Act Programs and Mandates:

- The NHPA formalized the National Register of Historic Places.
- Section 106 of the NHPA requires that any project that receives federal funds, sponsorship, or assistance review its impact on historic properties.
- A State Historic Preservation Office (SHPO), authorized by the NHPA, helps to facilitate cooperation among governmental levels by coordinating preservation activities and administers preservation activities contained in the NHPA on a state level. In Pennsylvania, this agency is the Pennsylvania Historical and Museum Commission (PHMC).
- The Certified Local Government (CLG) Program, authorized by the NHPA, enables municipalities to participate directly in federal preservation programs and to access (through the state) certain funds slated for historic preservation activities.

National Register of Historic Places

The National Register of Historic Places is the official, comprehensive listing of districts, sites, buildings, structures, and objects of historical, architectural/engineering, or cultural significance to the prehistory and history of the locality, state, or nation that are deemed worthy of preservation. The list is maintained by the National Park Service (NPS) under the US Department of the Interior; and in Pennsylvania, the National Register program is managed by the Pennsylvania Historical and Museum Commission (PHMC), Bureau for Historic Preservation (BHP). Properties do not need to have national significance to be listed on the National Register.

Sites on the National Register of Historic Places are termed ‘National Register listed’ sites. Through a preliminary review process, sites also may be determined to be eligible for listing, referred to as ‘National Register eligible’ sites or as having received a ‘Determination of Eligibility’ (DOE). In the case of a National Register Historic District, proposed District boundaries are delineated to include areas and properties determined to be significant; these properties are ‘contributing’ to the district. Within those boundaries may also be properties which are not considered significant to the district, and these properties are considered ‘non-contributing’.

As stated above, listing is mainly honorary and does not affect the rights of property owners nor place obligations or restrictions on the use or disposition of property. It does, however, impact the use of federal funds or assistance, in that federal or federally assisted projects need to be reviewed for their potential impact on National Register listed or eligible sites as described below under *Section 106 Process*.

To determine significance, there is a set of established criteria against which a property will be reviewed to determine whether it could be on the National Register.

Criteria for Evaluation are:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- That are associated with events, activities, or patterns that have made a significant contribution to the broad patterns of our history; or
- That are associated with the lives of persons significant in our past; or
- That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- That has yielded, or may be likely to yield, information important in prehistory or history.

National Register listed and eligible properties are included on a listing that is updated frequently and can be found on PHMC's website: <http://www.phmc.state.pa.us/bhp/NR/>.

National Historic Landmarks Program

National Historic Landmarks (NHL) “are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States” and include buildings, sites, districts, structures, and objects that have been determined by the Secretary of the Interior to be nationally significant in American history and culture.

There is a nomination process to become an NHL, and a set of criteria are used to determine the level of national significance. The NHL designation automatically places a resource on the National Register. Once designated, the NPS NHL Assistance Initiative assists in NHL preservation through technical assistance to NHL owners/managers and through education of the public about the importance of NHLs. The NHL Stewards Association, a group of owners and managers, also work to preserve, protect, and promote NHLs. Relatively speaking, few properties hold this national distinction. As of June 2006, there were only 9 NHLs in Chester County, and 164 NHLs statewide in Pennsylvania.

Highlights of the National Historic Landmark designation from the National Park Service:

- NHL designation recognizes that properties are important to the entire nation.
- NHLs are listed on the National Register.
- Owners of NHLs are free to manage their property as they choose, provided no federal license, permit, or funding is involved.
- As with other National Register listings, federal agencies whose projects affect a NHL must give the Advisory Council on Historic Preservation an opportunity to comment on the project and its effects on the property.
- Owners of NHLs may be able obtain federal historic preservation funding, when funds are available. Federal investment tax credits for rehabilitation and other provisions may apply.
- A bronze plaque bearing the name of the NHL and attesting to its national significance is presented to the owner upon request.

Benefits of National Historic Landmark designation include:

- Required review under the Section 106 process as to the impact projects involving federal funding or assistance;
- Limited federal grants through the Historic Preservation Fund, and certain funding sources may give NHLs higher funding priority; and
- The NPS provides technical preservation assistance to NHL owners.

Section 106 Review Process

The Section 106 review process was one of the most effective components of the National Historic Preservation Act (NHPA) in reducing the loss of historic resources. This section of the NHPA requires that any federally sponsored, funded or assisted project, including those requiring a federal permit, license, or approval, is reviewed for its impact on historic resources either listed on, or determined eligible for, the National Register. The federal agency directly or indirectly responsible for the project is responsible for insuring compliance with the review process. This review can be delegated to federal field offices or passed through to the state, county or municipal governmental agency responsible for administering the federal funds. Conducting the review at the local level can encourage local input on projects and provide for a high degree of participation on the part of those who may be directly impacted by an activity. This is important as the Section 106 process also stipulates that the public be notified of

such projects and their effects, which in turn is key as public involvement helps leads to more acceptable community solutions.

Section 106 does not necessarily protect historic resources from demolition or alteration, however, it requires an investigation of alternatives and consideration of mitigation measures. For example, for Community Development Block Grant funding, administered by Chester County's Department of Community Development, National Register listed and eligible sites and historic districts are reviewed for a project's potential impact on resources prior to project initiation.

Certified Local Government Program

The Certified Local Government (CLG) Program, enabled under the NHPA, was established to facilitate greater participation in historic preservation at the local level. It strives to encourage local, state, and federal partnerships to protect historic resources and address historic preservation issues. A CLG is one that meets certain criteria including:

- The adoption and enforcement of historic preservation regulations,
- Establishment of an historical commission or similar body, and
- Engaging in the survey of historic properties.

One of the most important incentives of the CLG program is increased access to federal preservation funds. Ten percent of each state's allocation of historic preservation funds (as authorized by the NHPA) must be allocated to the CLG's. In Pennsylvania, funds are administered by PHMC. As of November 2006, London Britain was not a CLG.

Investment Tax Credits for Historic Preservation

The availability of federal income tax credits for the rehabilitation of historic resources has proven to be a very effective means of encouraging their voluntary preservation. Investment tax credits first became available for historic preservation in 1976, and for the next 10 years, they served as a major incentive as billions of dollars were expended in the rehabilitation of historic properties. Although the program was scaled back in 1986, investment tax credits remain available and may result in substantial savings in rehabilitation costs, often making rehabilitation more financially feasible than new construction.

Section 47 of the Internal Revenue Code, promulgated after the Tax Reform Act of 1986, provides a rehabilitation tax credit of 20% for the rehabilitation of certified historic structures *or* a rehabilitation tax credit of 10% for non-historic buildings constructed before 1936. A 'certified historic structure' is one that is either individually listed on the National Register or is certified as "contributing" to a National Register Listed District. More information on the process may be obtained from PHMC. As of February 2007, it appears that no property owners have used tax credits for historic rehabilitation in the Township.

Preservation Easement Programs

For historic preservation purposes, a preservation easement is in general terms a legal agreement designed to protect a significant historic, archaeological, or cultural resource, or a portion thereof. Preservation easements can also be used to protect a historic landscape or battlefield. Under an easement, a property owner grants a portion of the property rights to a qualified organization. Many times easements are specifically for the preservation of a historic building's façade – called a façade easement - whereby the focus is to ensure that the historic building's façade will be maintained, protected, and

preserved in perpetuity. There are potential financial benefits for a property owner from the charitable donation of a facade easement to a tax-exempt organization (IRS Code Section 501(c)(3)). The donation of a facade easement must be made for conservation purposes, such as the protection of a National Register listed historic structure, and must be made in perpetuity. Unlike properties eligible for the rehabilitation tax credit, an easement donation can be for a structure used for *either* business *or* non-business use. More information is available at the NPS Technical Preservation Services website: <http://www.cr.nps.gov/hps/tps/>.

While there are several conservation easement on properties in the Township, it does not appear that any of those easements specifically focus on the preservation of historic resources, nor are they facade easements.

Other Federal Programs and Entities

The **National Trust for Historic Preservation** for more than 50 years has helped protect historic resources. The Trust provides leadership, education, and advocacy to save America's diverse historic places and revitalize communities. The Trust owns and operates a collection of nationally significant house museums and provides a wide range of preservation services across the country, including grant programs. More information can be found at their website, <http://www.nationaltrust.org>.

The **SAFETEA-LU**, the federal surface transportation and funding act (formerly known as TEA-21) provides 10% of funds apportioned to Pennsylvania for the Surface Transportation Program for special "enhancement" activities, which may include historic preservation activities.

Founded in 1989, **Partners for Sacred Places**, based in Philadelphia, is the nation's only non-denominational, non-profit organization devoted to helping Americans embrace, maintain and make good use of older and historic religious structures. Partners for Sacred Places provides assistance and serves as an information clearinghouse for groups interested in finding out more information on how to maintain historic structures, outreach to children, fundraising, sharing property and uses, and more on their website <http://www.sacredplaces.org>.

While pivotal federal legislation and programs for historic resource protection have been discussed or indirectly referenced in this Chapter, information about **other Federal laws** affecting historic resources is available on the PHMC's website.

The National Trust for Historic Preservation provides tracking of **prospective federal legislation** on their website: <http://www.nationaltrust.org/advocacy>.

State Level

The NHPA authorizes the creation of a State Historic Preservation Office to administer provisions of the Act at the state level. In Pennsylvania, the agency assigned this responsibility is the Pennsylvania Historical and Museum Commission. The Pennsylvania Historical and Museum Commission (PHMC) is responsible for maintaining and administering the state's sites and museums, making determinations of eligibility (DOEs) for the National Register, managing the State Archives, and administering a wide variety of historic preservation programs.

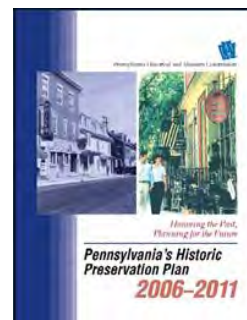
Pennsylvania History Code

Many of the federal mandates required through NHPA are reiterated in the Pennsylvania History Code, Title 37 of the Pennsylvania Consolidated Statutes. The code pertains to the conservation, preservation, protection, and management of historical and museum resources and identifies PHMC as the responsible agency. It outlines Pennsylvania's legal framework for historic preservation and also mandates cooperation among other state entities in identifying and protecting historic and archeological resources. Additional state legislation addresses preservation, supplementing the provisions of the History Code.

Pennsylvania Preservation Plan

In 1999, PHMC and its partners developed a 5-year preservation plan for Pennsylvania. PHMC just recently completed an update to this plan entitled, *Honoring the Past, Planning for the Future: Pennsylvania's Historic Preservation Plan 2006-2011*. Focus groups were convened around the state, and an online survey was developed. The responses of both are reflected in the priorities of this plan through 3 plan goals and implementing objectives/actions. The 3 main goals of the plan are as follows:

- *Goal 1:* Recognize, sustain, and support historic resource as viable components of local community environments.
- *Goal 2:* Secure stable public policy and public funding supports at all levels for the preservation of historic and cultural resources.
- *Goal3:* Identify and celebrate preservation accomplishments through recognition, leadership, stewardship, and outreach.



The full plan can be found on PHMC's website, specifically at: <http://www.phmc.state.pa.us/bhp>.

Act 167, The Historic District Act of 1961

This Act authorizes municipalities to create local historic districts and protect historic and architectural character through regulating the erection, reconstruction, alteration, restoration, demolition, or razing of buildings within a certified local historic district. Local historic districts established under the auspices of Act 167 must be formally certified through PHMC. Act 167 also requires the appointment of an historic architectural review board (HARB) to advise the local governing body on the appropriateness of building activity in the district. Requirements for HARB membership are outlined in the Act 167 legislation. As of November 2006, there were no Act 167 Certified Historic Districts or HARBs in the Township.

Act 247, Pennsylvania Municipalities Planning Code of 1968, as amended (MPC)

The MPC authorizes the use of municipal land use controls such as use regulations and area and bulk requirements to protect historic resources. MPC enabled regulations primarily focus on land use-oriented provisions. This differs from Act 167 regulations, which specifically focus on control of architectural character. The MPC regulates places having unique historical, architectural, or patriotic interest or value through the creation of a specific zoning classification, as is indicated below. In Chester County, the MPC has been often applied to protect historic resources through adoption of municipal-wide historic overlay zoning. However, other incentive measures have been implemented though zoning in some municipalities – for example, allowing additional uses for historic resources in order to promote their reuse and continuation. (The Township's MPC enabled regulations related to historic resource protection are discussed under *Township Policy and Regulations*.)

Article I of the MPC establishes General Provisions for the Act

- Section 105, Purpose of Act - “It is the intent, purpose and scope of this act to protect and promote safety, health and morals; ...to promote the preservation of this Commonwealth’s natural and historic resources and prime agricultural land;to encourage the preservation of prime agricultural land and natural and historic resources through easements, transfer of development rights and rezoning;....”
- Section 107, Definitions - “Preservation or protection,” when used in connection with natural and historic resources, shall include means to conserve and safeguard these resources from wasteful or destructive use,....”
- Section 107, Definitions - “Public grounds,” includes:(3) publicly owned or operated scenic and historic sites.

Article III of the MPC establishes the basis for comprehensive planning in municipalities:

- Related to historic resource protection planning, Section 301(a)(6) states “The municipal, multi-municipal or county comprehensive plan...shall include...a plan for the protection of natural and historic resources...This clause includes.... historic sites.”

Article VI of the MPC establishes the basis for zoning ordinances and provides for the protection of historic resources through zoning:

- *Section 603(a)* – “Zoning ordinances should reflect the policy goals of the statement of community development objectives [which should generally reflect municipal policy goals of the comprehensive plan, as feasible] and give consideration to the character of the municipality, the needs of the citizens, and the suitabilities and special nature of particular parts of the municipality.”
- *Section 603(b)(2)* – “Zoning ordinances...may permit, prohibit, regulate, restrict and determine [among other provisions]...size, height, bulk, location, erection, construction, repair, maintenance, alteration, razing, removal and use of structures...”
- *Section 603(b)(5)* - “Zoning ordinances ...may permit, prohibit, regulate, restrict and determine [among other provisions]...protection and preservation of natural and historic resources and prime agricultural land and activities.”
- *Section 603(c)(7)* – “Zoning Ordinances may contain: [among other provisions]...provisions to promote and preservation prime agricultural land, environmentally sensitive areas and areas of historic significance.”
- *Section 603(g)(2)* – “Zoning ordinances shall provide for protection of natural and historic features and resources.”
- *Section 604(1)* – “The provisions of zoning ordinances shall be designed to promote, protect and facilitate any or all of the following: ...[among other provisions] preservation of the natural, scenic and historic values in the environment...”
- *Section 605(2)(vi)* – “...Where zoning districts are created, all provisions shall be uniform for each class of uses or structures, within each district, except that additional classifications may be made within any district: [among other provisions] ...for the regulation, restriction or prohibition of uses and structures at, along or near: [among other provisions] ...places having unique historical, architectural or patriotic interest or value...”

Act 537, Sewage Facilities Planning – Review for Historic and Archeological Resources

Act 537, the Pennsylvania Sewage Facilities Act, requires each municipality in Pennsylvania to have an Official Sewage Facilities Plan that addresses existing and future sewage disposal needs. In most cases, the Pennsylvania Department of Environmental Protection (PaDEP) requires the completion of formal sewage facilities planning modules for new subdivision and/or land development to update or to revise the municipal Act 537 plan before a subdivision is created, thus ensuing a consistent means of sewage disposal. The package of completed forms and its supporting documentation is called a “sewage facilities planning module” or “planning module.”

Once a planning module has been completed by an applicant, it is given to the municipality in which the project is proposed for review, plus PaDEP, Chester County Health Department and Planning

Commission, and sometimes Chester County Conservation District. A planning module is required to be submitted for all land development projects with the general exception of projects 1) that PaDEP grants exceptions (such as projects using public sewage systems which contain adequate capacity to accommodate the proposed project) or 2) that propose 10 lots or less using individual on-lot sewage disposal systems. Permitted activities which may affect Historic Resources on the National Register of Historic Places are not exempt from DEP permits regardless of size.

State regulations establish procedures for planning module approvals and permit reviews. PHMC reviews project activities for their potential effect on significant historical and archeological resources and provides comments on a planning module prior to PaDEP's acceptance of it for PaDEP review. In turn, PaDEP is to consider this review and implement PHMC's recommendations for the site. An applicant is required to submit a Cultural Resources Notice form to PHMC if a proposal involves 10 acres or more of earth disturbance; and/or if a 50 year old or older structure(s) is on the site of the proposed development. Procedural gaps can occur in the process and the Township may need to take steps to ensure that they receive PHMC comments.

PHMC's Historical Marker Program

Established in 1946, the Historical Marker Program is one of the PHMC's oldest, most popular, and recognized state programs. Located throughout Pennsylvania, the blue and gold markers highlight people, places, and events significant in history. New markers are approved and erected along Pennsylvania roadways every year.



PHMC owns and maintains the markers after they are installed and dedicated. At present, markers are repaired and repainted approximately every 7 years. A picture of an existing historical marker is shown here to illustrate its design as well as the type of historical information contained on the marker itself. There are over 2,000 markers statewide. The following State Historic Marker is located in the Township:

Marker Name:	Minguannan Indian Town
Date Dedicated:	1924/10
Marker Type:	Plaque
Location:	Intersection SR 3006 (Yeatman Station Rd.) & SR 3034 (London tract Rd.), 1.5 miles NE of Strickersville
Category:	Early Settlement, Native American, William Penn
Marker Text:	Minguannan Indian Town was located here. The chief Machaloha or Ow hala and his people of the Unami group - Their totem the tortoise - of the Lenni-Lenape or Delaware Indians sold to William Penn the lands between Delaware River and Chesapeake Bay...

There are also other markers in the Township:

- Markers for the Mason Dixon Line are located off of Elbow Lane and Rt. 896.
- There is a marker designating 'the Arc' where Pennsylvania, Delaware, and Maryland meet on Arc Corner Road.
- A marker is located in the Meeting House graveyard at the end of Indiantown Road. This marker designates an old Lenape Indian Village.

Other State Legislation

While pivotal state legislation and programs for historic resource protection has been discussed or indirectly referenced in this Chapter, additional information can be found at PHMC's website.

County Level

Chester County Historic Preservation Network

The Chester County Historic Preservation Network (CCHPN) is a non-profit organization that provides support to grassroots historic preservation efforts. CCHPN strives to build connections between professional and avocational preservationists and to be a countywide network allowing exchange of historic preservation information.

Specifically, CCHPN's mission is to be an affiliation of local organizations and individuals dedicated to protecting and preserving Chester County's historic resources and landscapes through education, facilitation, and public and private advocacy.

Activities include: two educational meetings in the autumn and a workshop in the spring on current historic preservation issues and regional architectural styles; a summer picnic that highlights a successful preservation project in the county; publishing a quarterly newsletter, *The Chester County Ledger*; beginning in 2004 providing support to the Chester County GIS Historic Resources Atlas; and in 2005 co-sponsoring the Chester County Town Tours and Village Walks program that has received one of two state historic preservation awards.

***Landscapes* Historic Preservation Policy**

The loss of important historic resources is one of the concerns addressed by the Chester County Comprehensive Plan, *Landscapes*. These resources include the historic villages in the county. The Plan was developed in response to concerns over sprawling development patterns, and the high land consumption rate resulting in reduction of open space and resources. *Landscapes* identifies the protection of historic resources as important to preserving the quality of life, and a Plan goal calls for sustaining and enhancing resources while accommodating planned growth in appropriate areas. The Plan includes specific resource protection objectives and policies as well as actions to carry Plan goals. As of November 2006, a plan update to *Landscapes* had begun.

Preserving Our Places: An Historic Preservation Planning Manual for Chester County Communities

Preserving Our Places (1998) promotes the implementation of the historic preservation goals and objectives in *Landscapes*. It does this through providing general background information about historic preservation, providing an outline of core elements of a comprehensive historic resource protection plan, and through describing historic resource protection planning for Urban, Suburban, and Rural settings in the context of a preservation plan.

Vision Partnership Program (VPP) Grants

The Chester County Commissioners through their VPP Grant program provide matching grants funds for eligible projects to qualified municipalities in the County. Historic Preservation plan projects and ordinance and special study implementation projects may be eligible for funding under this program. See

the Vision Partnership Program Grant Manual at www.chesco.org for further information about this grant program and the specific types of projects that may be funded.

Glossary of Acronyms

ACT 167 (Historic District Act) - Pennsylvania enabling legislation which protects historic resources through authorizing counties and municipalities to create historic districts within their boundaries through local ordinances, and to regulate building activity including demolition, within the district. PHMC must certify the historic district in the form of National Register eligibility. The Act requires the creation of a HARB to advise on building activity within the district. A certificate of appropriateness must be granted before building activity continues.

ACT 247 - The "Pennsylvania Municipalities Planning Code", Act 247 of 1968, as amended (53 P.S. §10101 et seq.).

BHP – Bureau for Historic Preservation, PHMC

CCHPN – Chester County Historic Preservation Network

CDBG – Community Development Block Grant

CLG - Certified Local Government

DOE (Determination of Eligibility) - An action through which the eligibility of a property for National Register listing is decided, but the property is not actually listed on the Register. Nominating authorities and federal agencies commonly request determinations of eligibility for federal planning purposes and in cases where a majority of private owners object to National Register listing. Obtaining a determination of eligibility is the first step of the National Register nomination process.

FHWA – Federal Highway Administration

GIS – Geographic Information System

HARB – Historical Architectural Review Board

MPC – see Act 247.

NHPA – The National Historic Preservation Act of 1966

NPS – National Park Service

PaDEP - Pennsylvania Department of Environmental Protection

PennDOT – Pennsylvania Department of Transportation

PHMC – Pennsylvania Historical and Museum Commission

SHPO (State Historic Preservation Officer) - The official designated by the Governor to administer the state's historic preservation program and the duties defined in the NHPA and Pennsylvania History Code.

In Pennsylvania, the State Historic Preservation Office is the Pennsylvania Historical and Museum Commission (PHMC) and the executive director of PHMC is the SHPO.

APPENDIXG

EXISTING LAND USE AND ZONING ANALYSIS

Existing Land Use Inventory

The map entitled "DVRPC Land Use, 2015" on page 89 depicts existing land use in London Britain Township as of 2015 using the land use area as derived from aerial imagery as the unit of measurement. Land uses on parcels are grouped into one of ten categories based primarily on land use data provided in the DVRPC's 2015 GIS layer.

Table G-1 summarizes land use in London Britain Township in 2015. The vast majority of land in London Britain Township is wooded (43 percent), single-family residential (28 percent), and agricultural (26 percent). Keep in mind that *land use* (land as functional space devoted to various uses) differs from *land cover* (vegetation and other material that occurs on the earth's surface).

Table G-1 Existing Land Use: London Britain Township, 2015

Land Use	London Britain Township	
	Acres	% of Township
Agriculture	1,608.5	26%
Commercial	20.7	0%
Community Services	5.5	0%
Recreation	75.7	1%
Residential: Multi-Family	.5	0%
Residential: Single-Family	1,757.7	28%
Utility	11.7	0%
Vacant	46.5	1%
Water	59	1%
Wooded	2,680.8	43%
Total	6,266.8	100%

An existing land use inventory was created in 2006 as part of London Britain Township's 2008 Comprehensive Plan. That land use inventory depicted existing land use (at that time), using tax parcels as the unit of measure. For the 2019 Plan, land use area derived from aerial imagery was selected as the methodology on which to base the land use inventory, due to the level of detail and refinement it offers. In order to compare the 2006 inventory with the inventory based on 2015 DVRPC data, the land uses above were further analyzed and separated into the land use categories of the 2006 inventory, to provide a picture of what has changed in the Township since that time. It is worth noting that numbers may vary due to the change in land use inventory methodology. Below is a summary of the 2006 inventory categories, and the 2015 land use inventory categories, for comparison purposes.

In 2006, 70 percent of London Britain Township fell into the agriculture and residential land use categories. That number has increased since then, with a total of 78 percent of the Township falling into the agriculture and residential land use categories. Land used for residential purposes, consisting primarily of single-family detached dwelling units, is located in the north, west, and southern portions of the township. Protected open space is concentrated in the east and southern sides of London Britain. Land used for commercial purposes is limited to parcels along State Route 896/New London Road and Good

Hope Road, on the western side of the Township. Potentially developable land is located across the Township, concentrated in the northwestern and western portions of the Township.

Table G-2 Existing Land Use: London Britain Township, 2006, from 2008 Comprehensive Plan

Category	Acres	Percent of Total
<i>Open Land/Agricultural Lands:</i>		
Agriculture/Pasture	1,055	17%
Vacant or Fallow Land	799	13%
<i>Total Open Lands</i>	1,854	30%
<i>Parks and Protected Open Space:</i>		
Parks and Recreation	1,341	21%
Open Space	263	4%
<i>Total Parks and Protected Open Space</i>	1,604	26%
<i>Residential Uses:</i>		
Single-Family Detached	2,515	40%
Two-Family	23	0%
Multi-Family/Apartments	2	0%
<i>Total Residential</i>	2,540	40%
<i>Transportation:</i>		
Street Rights-of-Way	216	3%
<i>Total Utility and Transportation</i>	216	3%
<i>Institutional Uses:</i>		
Institutional (Public)	26	0.4%
<i>Total Institutional Uses</i>	26	0.4%
<i>Commercial Uses:</i>		
Commercial Retail/Office/Service	38	0.6%
<i>Total Commercial Uses</i>	38	0.6%
<i>Total Land</i>	6,278	100.00%
Woodlands*	3,921	62%

Source: Chester County Planning Commission, Chester County GIS, London Britain Comprehensive Plan Taskforce, 2006. Numbers reflect land use as of July 2006. All numbers are rounded.

* Woodlands comprised 2,779 acres or 43.2% of the Township in the 1990 Comprehensive Plan but are no longer considered a land use. The figures provided yield only a general comparison as the method of calculating woodlands between the two plans is not consistent.

Table G-3 Existing Land Use: London Britain Township, 2015, for 2019 Comprehensive Plan

Existing Land Use, as of 2015		
Category	Acres	Percent of Total
<i>Open Land/Agricultural Lands:</i>		
Agriculture/Pasture	1,579	25%
Vacant/Fallow/Undeveloped Land	879	14%
Total Open Lands	2,458	39%
<i>Parks and Open Space:</i>		
Parks and Recreation	40	0.6%
Open Space	1,064	17%
Total Parks and Open Space	1,104	18%
<i>Residential Uses:</i>		
Single-Family Detached	2,464	39%
Multi-Family/Apartments	0.5	0%
Total Residential	2,465	39%
<i>Transportation:</i>		
Street Rights-of-Way	213	3%
Total Transportation	213	3%
<i>Institutional Uses:</i>		
Institutional (Public)	8	0.1%
Total Institutional Uses	8	0.1%
<i>Commercial Uses:</i>		
Commercial Retail/Office/Service	20	0.3%
Total Commercial Uses	20	0.3%
Total Land	6,267	100%
Woodlands*	2,681	42.8%

Source: DVRPC. Numbers reflect land use as of 2015. All numbers are rounded.

* Woodlands separate from land use categories.

Current Land Use Regulations

London Britain Township's major land use regulations consist of a zoning ordinance (enacted in 2017), subdivision and land development ordinance, and an Act 167/MS4 stormwater management ordinance. All of these regulatory tools are being used by the Township to implement the recommendations of its 2008 comprehensive plan. Of these three ordinances, zoning has the greatest influence on the use of land. Therefore, the zoning was assessed to determine its effectiveness in helping to achieve the new goals of the 2019 Comprehensive Plan Update.

Zoning Districts Summary

The map that follows this appendix depicts existing zoning in London Britain Township as of 2018 using tax parcels as the unit of measurement. Base data from 2018 was derived from Chester County Geographic Information Services, while aerial data from 2015 was derived from DVRPC.

Summary of the applicable uses of the Township's base zoning districts:

Residential/Agricultural District

Single-family detached dwelling (before May 22, 2000), agricultural use, residential and agricultural accessory uses, bed-and-breakfast, veterinary hospital, and governmental uses are allowed by right. Religious, non-profit, mushroom house, animal boarding, landfill, and utilities are allowed via the conditional use process. The minimum lot size for a subdivision within the Residential/Agricultural District is 1 acre, with a maximum lot coverage of 15 percent.

C-1 Commercial District

All uses allowed in the Residential/Agricultural District, and retail and commercial accessory uses are allowed by right. Communications structures and manufacturing, storing, or distribution of hazardous materials are allowed via the conditional use process. The minimum lot size for a subdivision within the C-1 is 1 acre, with a maximum lot coverage of 30 percent.

C-2 Commercial District

All uses allowed in the C-1 Commercial District, and light manufacturing, office, and wholesale goods and services are allowed by right. All conditional uses in C-1 Commercial District and any lawful use not in any zoning district are allowed via the conditional use process. The minimum lot size for a subdivision within the C-2 is 3 acres, with a maximum lot coverage of 50 percent.

Summary of the applicable uses of the Township's overlay zoning districts:

Flood Hazard Overlay District

This district applies to all land in London Britain Township within the floodplain. Residential and non-residential uses are allowed, if the base flood elevation is no increased by more than one foot. Hospitals, nursing homes, jails, manufactured homes and parks are prohibited from this zoning district.

Low Intensity Slope District

Tree farming, forestry, agricultural, arboretum, woodland preserve, conservation, recreation, storm-water management, single-family detached, residential and agricultural accessory uses are allowed by right. The Low Intensity Slope District applies to land with steep slopes between 15-20 percent and is intended to protect hillsides from excessive development. The minimum lot size for a subdivision on land with steep slopes classified in the Low Intensity Slope District is 2.5 acres, with a maximum impervious coverage of 7 percent.

Conservation Slope District

Tree farming, forestry, agricultural, arboretum, woodland preserve, recreational uses are allowed by right. Agricultural, conservation, and recreation with structures, single-family detached dwelling or addition, and utilities are allowed via the conditional use process. The Conservation Slope District applies to land with steep slopes over 20 percent and is intended to limit development on land with steep

slopes. The minimum lot size for a subdivision on land with steep slopes classified in the Conservation Slope District is 4 acres, with a maximum impervious coverage of 4 percent.

Conservation Design Overlay District

This district applies to all land in London Britain Township. Its regulations are optional in commercially zoned districts and required in the residential/agricultural district.

Residential and non-residential uses are allowed, including agricultural and nurseries (excluding mushroom houses), arboreta; governmental or public use; conservation, wildlife sanctuary, and preserves (woodlands, game), greenspace, home occupations, room rentals, bed-and-breakfast, and the following, depending on the development option:

- Options 1 – 4: Single-family detached, major subdivisions
- Options 1 and 2: Single-family detached, minor subdivisions
- Options 5 and 6: Multi-family dwellings of 2 - 4 households, subdivisions

By right applies to Neutral Density and Basic Conservation, Enhanced Density with Greater, Conservation, Conservancy Lot Properties, and Country Properties. Conditional use applies to Hamlets and Villages and Village Mixed Use/Commercial Areas.

The minimum lot size for a subdivision within the Conservation Design Overlay District is as follows:

- Option 1 - Neutral Density and Basic Conservation – 1.75 acres
- Option 2 - Enhanced Density with Greater Conservation – 1.35 acres
- Option 3 - Conservancy Lot Properties – 10 acres
- Option 4 - Country Properties – 5 acres
- Option 5 – Hamlets and Villages – 1.3 acres
- Option 6 – Village Mixed Use/Commercial Areas – 1.3 acres

Greenspace requirements for a subdivision within the Conservation Design Overlay District is as follows:

- Option 1 - Neutral Density and Basic Conservation – 50 percent or more
- Option 2 - Enhanced Density with Greater Conservation – 60 percent or more
- Option 3 - Conservancy Lot Properties – At least 50 percent, up to 80 percent with permanent conservation easement
- Option 4 - Country Properties – 40 percent or more with permanent conservation easement
- Option 5 – Hamlets and Villages – 70 percent or more
- Option 6 – Village Mixed Use/Commercial Areas – 70 percent or more

Zoning Residential Build-out Analysis

A zoning residential build-out analysis models the scenarios of the future development potential of the Township if all landowners pursued development of their properties as permitted by zoning. This build-out analysis was conducted for the Township in 2018 as a component of the Plan update.

The build-out analysis considered the existing zoning of London Britain Township and an inventory of

potentially developable lands. Potentially developable lands were defined as those lands remaining after the following areas are excluded:

- Parcels under five acres in size
- Parcels which have been developed
- Parcels which are permanently protected (eased)
- Parcels which are commercially zoned
- Parcels viewed to have low development potential
- For parcels large in size with an existing dwelling unit, two acres were removed to estimate residential yield, modeling the assumption that the owner may retain the dwelling and subdivide the remaining area
- Constrained lands, including floodplains, floodways and water bodies, wetlands, and steep slopes
- Road rights-of-way and other infrastructure

Existing zoning was applied to the potentially developable lands as follows:

For those lands zoned Residential/Agriculture, two scenarios were modeled, according to the Conservation Design Overlay District requirements: Option 1, Neutral Density and Basic Conservation and Option 2, Enhanced Density with Greater Conservation.

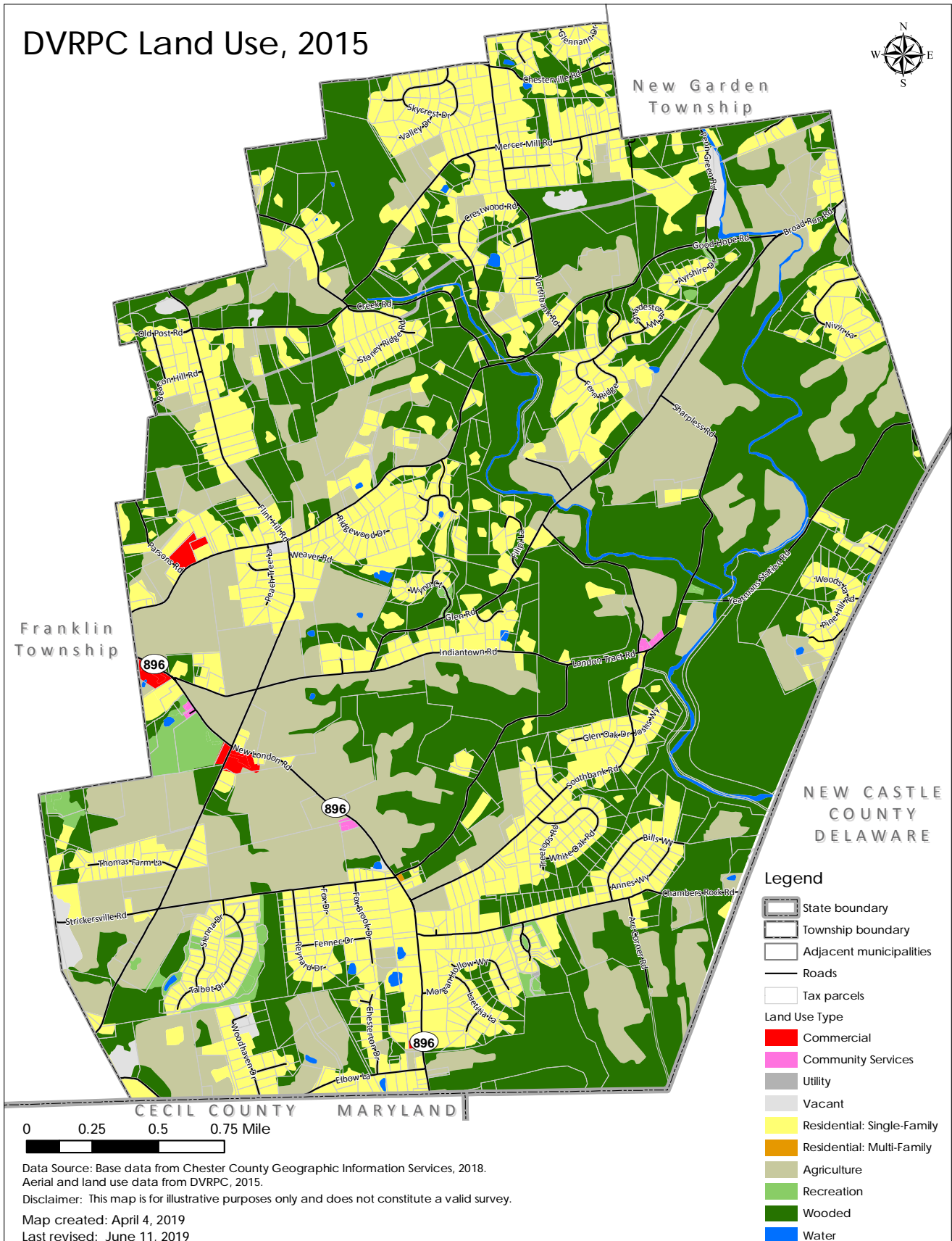
1. **Conservation Design Option 1, Neutral Density and Basic Conservation**, used a density factor of 1.75 on net tract area after all constrained land acreage was calculated (with the appropriate protection factors applied) and road ROWs and infrastructure was removed. 50% of the tract area was assumed as dedicated for open space. On some parcels, the natural resource constraints exceeded the greenspace requirements modeled in this scenario.
 - a. Sample: 10-acre net tract area after natural resource constraints removed. 10% infrastructure and ROW allowance removed); resulting area divided by 1.75 (density factor) equals potential number of dwelling units.
2. **Conservation Design Option 2, Enhanced Density with Greater Conservation**, used a density factor of 1.35 on net tract area after all constrained land acreage was calculated (with the appropriate protection factors applied) and road ROWs and infrastructure was removed. 60% of the tract area was assumed as dedicated for open space. On some parcels, the natural resource constraints exceeded the greenspace requirements modeled in this scenario.
 - a. Sample: 10-acre net tract area after natural resource constraints removed. 10% infrastructure and ROW allowance removed); resulting area divided by 1.35 (density factor) equals potential number of dwelling units.

Analysis Results

Future Development Potential for London Britain Township, (May 2018)

Zoning District	Option 1: Neutral Density and Basic Conservation	Option 2: Enhanced Density and Greater Conservation
Agricultural/Residential	431 dwelling units	567 dwelling units

DVRPC Land Use, 2015



APPENDIXH

TRANSPORTATION DATA

Transportation Features

Key features of London Britain Township's transportation system are highlighted below:

- Regional highway access:
 - o State Route 896
 - o approximately eight miles to US 1
 - o approximately nine miles to I-95
 - o approximately three miles to PA 41
- Rural, scenic character of local roads

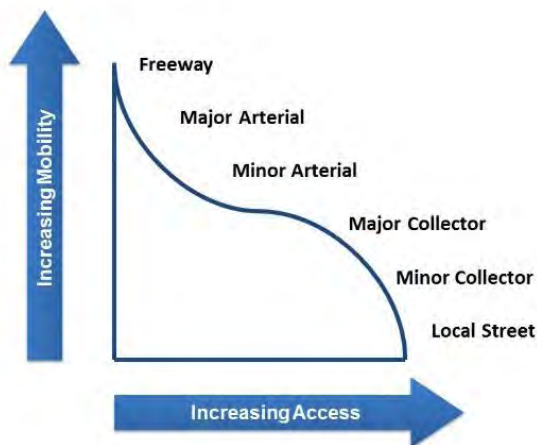
London Britain Township is responsible for ownership and maintenance of 39.35 miles of roads (out of 41.96 total miles of roads).

Generally, bicycle and pedestrian facilities in London Britain Township are limited. Keeping with the rural character, there are no sidewalks in the Township. However, some low volume, low speed roads are appropriate for pedestrian and bicycle travel. Note: Trails are covered in a separate section of the Comprehensive Plan update. Additionally, there is currently no fixed route public transit service in the Township.

Policies and priorities related to the Township's transportation network for consideration in the Comprehensive Plan update include:

- A safe and efficient multimodal transportation network
- Improving safety and operations at priority intersections
- Reducing vehicle speeds and cut-through traffic
- Expanding infrastructure and connections for walking, biking, and ride sharing
- Ensuring ordinances and policies are aligned with goals
- Supporting and participating in regional transportation planning

Roadway Functional Classification



Functional classification refers to the categorization of roadways according to the function they serve. Different roadways serve varying traffic volumes, trip lengths, and accommodate different travel speeds. Functional classification can be used to establish roadway design guidelines, access management policies, and prioritize improvements. Function also reflects the relationship between access and mobility. Typically, the higher the roadway's capacity to facilitate traffic flow, the lower its ability to provide efficient access to adjacent properties, and vice versa.

PennDOT has a statewide roadway functional classification that is used to identify appropriate roadway design guidelines, as well as federal funding

Chester County Planning Commission Road Functional Classification—Variables and Criteria

Variables	Expressway	Major Arterial	Minor Arterial	Major Collector	Minor Collector	Local Distributor	Local
Daily Traffic Volume Range (1)	15,000 to over 100,000 vehicles	10,000–60,000 vehicles	8,000–20,000 vehicles	4,000–10,000 vehicles	1,000–5,000 vehicles	Less than 1,500 vehicles	Less than 1,000 vehicles
Mobility	Strict priority to moving vehicles	Mobility more critical than property access	Mobility more critical than property access	Even priority to mobility and access	Even priority to mobility and access	Access more important than mobility	No priority to mobility
Access	Only at interchanges	Strict median access control	Some control of property access	All roads and properties have access	All roads and properties have access	Priority is given to property access	Priority is given to property access
Corridor Length	Over 15 miles	Over 15 miles	Over 10 miles	4–15 miles	2–10 miles	Less than 4 miles	Less than 2 miles
Connections (Relationship to LANDSCAPES)	Connects states, regions, counties, cities and landscapes urban centers	Connects regions, counties and multiple landscapes centers	Connects multiple landscapes centers some inter-county trips	Connects landscapes centers and villages, primarily intra-county trips	Connects villages and multiple neighborhoods primarily intra-county trips	Connects neighborhoods some intermunicipal trips	Links individual properties to distributors and collectors
Truck Traffic	Highest truck mobility	High truck mobility	High truck mobility	Moderate truck mobility	Moderate truck mobility	Local delivery only	Local delivery only
Basic Geometry and Design	Wide lanes and shoulders; medians; more than 2 through lanes	Wide lanes and shoulders; occasional median; turning lanes	Wide lanes and shoulders; no medians; turning lanes	Two lanes; no medians; limited turning lanes	Two lanes; no medians; limited turning lanes	Narrow Lanes	Narrow Lanes
On-Street Parking	Prohibited	Only in urban areas	Only in urban areas	Discouraged outside "centers"	Discouraged outside "centers"	Limited use outside "centers"	Appropriate on selected streets
Through Traffic (2)	Over 50%	Over 50%	Over 50%	25–50%	25–50%	Less than 25%	Less than 10%
Vehicle Speed (Posted)	55–65 mph 40 mph minimum	35–55 mph	35–55 mph	35–55 mph	35–55 mph	Less than 45 mph	Less than 35 mph
Bicycle Pedestrian Access	Only through separate facilities	Specially designed facilities	Adjacent facilities and crossings	Adjacent facilities and crossings	Adjacent facilities and crossings	High priority to bike and pedestrian access	High priority to bike and pedestrian access

(1) Wide range of traffic volumes accounts for differences between urban, suburban, and rural areas.

(2) Through traffic has no origin or destination in the immediate neighborhood, community, village or center.

Source: Adopted by Chester County Planning Commission, 2003

eligibility. Chester County Planning Commission also has roadway functional classification for the County that reflects local conditions and has been used to promote consistency across municipal borders. The table below presents Chester County’s Road Functional Classification Variables and Criteria from the Multimodal Transportation Handbook (2016), which identifies key differences between the roadway classifications.

Based on the 2008 Comprehensive Plan, updated traffic volumes available from PennDOT, and other information, the **Recommended Roadway Functional Classification is listed on page 95 and the map on page 99**. The table highlights key changes from the 2008 Comprehensive Plan in yellow and includes a comparison with the PennDOT and Chester County roadway functional classifications. Please note, “Distributor” as defined in the 2008 Comprehensive Plan is equal to “Local Distributor” in this document. This change was made to better match the terminology used by the Chester County Planning Commission.

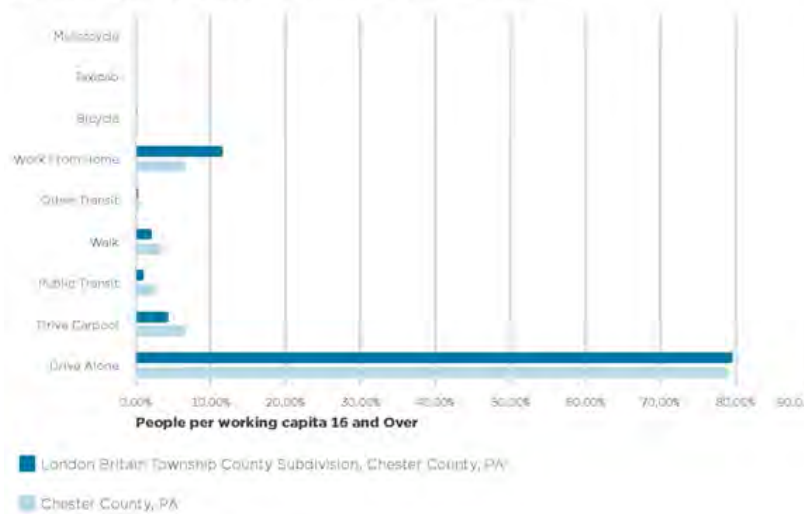
Roadway Functional Classification Table

Focus Roadways	Recommended Functional Classification Comp Plan 2019	Township Functional Classification Comp Plan 2008	Chester County Functional Classification	PennDOT Functional Classification
State Route 896 (New London Road) ADT: 7,500	Minor Arterial	Minor Arterial	Major Arterial	Minor Arterial
Good Hope Road (east of Flint Hill Road) ADT: 2,000	Minor Collector	Minor Collector	Minor Collector	Rural Minor Collector
Broad Run Road	Minor Collector	Minor Collector	Minor Collector	Rural Minor Collector
Penn Green Road	Minor Collector	Minor Collector	Minor Collector	Rural Minor Collector
Flint Hill Road	Local Distributor	Distributor	Local Distributor	Local
Good Hope Road (west of Flint Hill Road) ADT: 2,000	Minor Collector	Distributor	Local Distributor	Rural Minor Collector
Chesterville Road	Local Distributor	Local	Local Distributor	Local
Northbank Road	Local Distributor	Distributor	Local Distributor	Local
London Tract Road	Local	Distributor	Local Distributor	Local
Strickersville Road	Minor Collector	Distributor	Local Distributor	Local
Chambers Rock Road	Minor Collector	Distributor	Local Distributor	Local
Mercer Mill Road	Local Distributor	Distributor	Local	Local
Southbank Road	Local	Local	Local	Local
Indiantown Road	Local	Local	Local	Local
Elbow Lane	Local	Local	Local	Local
North Creek Road	Local Distributor	Local	Local	Local
All other roads in the township	Local	Local	Local	Local

Transportation Related Demographics Highlights

The graphs below highlight demographic data related to transportation and compares London Britain Township to Chester County overall.

Commute Type by Percent of Residents Who Commute



Sources: US Census 2012-2016 ACS

This chart only represents individuals who commute.

A higher percentage of residents of London Britain Township work from home compared to Chester County overall. A smaller percentage London Britain Township residents walk, take public transit, or carpool compared to Chester County overall. The percentage of people who drive alone is comparable to Chester County overall.

Commute Mean Travel Time

London Britain Township County Subdivision, Chester County, PA

32.71
Minutes

Chester County, PA

29.88
Minutes

↓ 8.65%

% Diff. shows the percentage increase or decrease as compared to the original geography.

Sources: US Census 2012-2016 ACS

Workers living in London Britain Township generally travel more time to work compared to workers in Chester County overall.

Percent of Income Spent on Transportation - Median Income Families

London Britain Township County Subdivision, Chester County, PA

25.32%

Chester County, PA

22.62%

↓ 11.97%

Percent of Income Spent on Transportation - Low Income Individuals

London Britain Township County Subdivision, Chester County, PA

70.81%

Chester County, PA

60.93%

↓ 13.85%

% Diff. shows the percentage increase or decrease as compared to the original geography.

Sources: US HUD & DOT, LAI; US HUD and DOT

Residents of London Britain Township generally spend a higher percentage of their income on transportation compared to Chester County residents overall.

Commute Patterns for Southern Chester County/Northern New Castle County Region

Select Census Tracts encompassing the following areas:

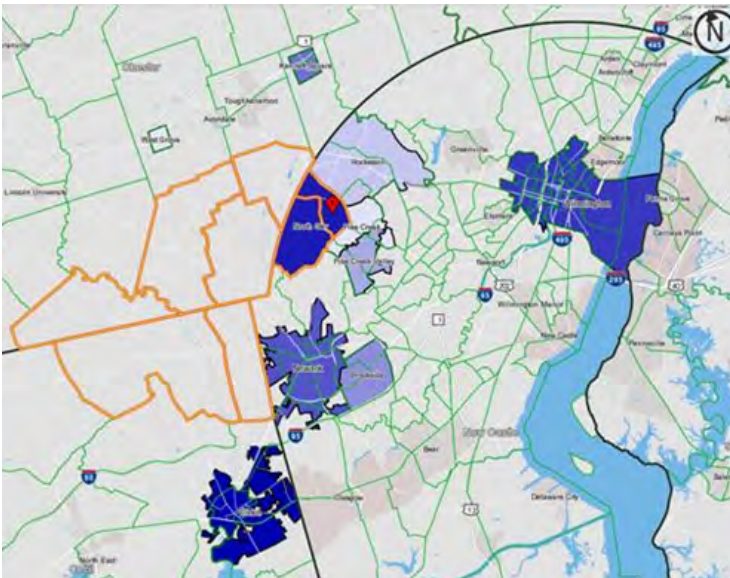
- London Britain Township
- Franklin Township
- Elk Township
- Southern Half of New Garden Township
- North Star, DE
- Fair Hill, MD
- Elk Mills, MD

Inflow/Outflow of Jobs:



Only approximately 500 people both live and work in the Southern Chester County / Northern New Castle County Region.

Where do residents go to work?



The predominate commute pattern is outside of the township and outside of the region to employment centers south and east, including Elkton, MD, Wilmington, DE, and Newark, DE.

Jobs Counts by Places (Cities, CDPs, etc.) Where Workers Live - Primary Jobs 2015		
	Count	Share
<u>All Places (Cities, CDPs, etc.)</u>	2,841	100.0%
<u>Elkton town, MD</u>	85	3.0%
<u>North Star CDP, DE</u>	84	3.0%
<u>Wilmington city, DE</u>	81	2.9%
<u>Newark city, DE</u>	76	2.7%
<u>Kennett Square borough, PA</u>	54	1.9%
<u>Brookside CDP, DE</u>	51	1.8%
<u>Pike Creek Valley CDP, DE</u>	45	1.6%
<u>Hockessin CDP, DE</u>	36	1.3%
<u>Pike Creek CDP, DE</u>	32	1.1%
<u>West Grove borough, PA</u>	32	1.1%
<u>All Other Locations</u>	2,265	79.7%

Recent Regional Transportation Related Plan Highlights

There have been several regional transportation plans that impact London Britain Township. Listed below are key transportation related recommendations from these relevant plans.

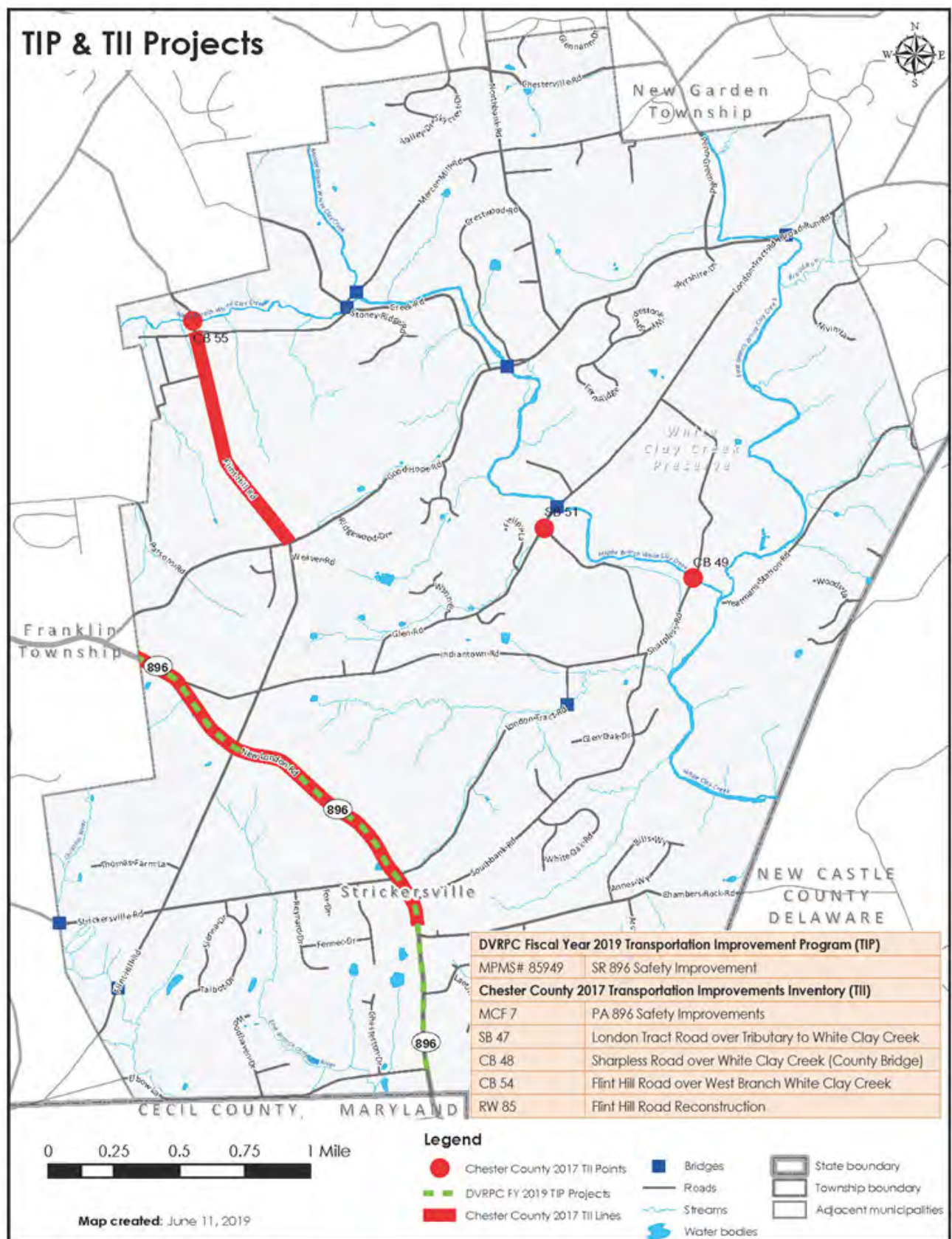
- 1. Landscapes3, Chester County’s Comprehensive Plan (CCPC, 2018)
 - a. Goal: Advance efficient, reliable, and innovative transportation, utility, and communications infrastructure systems that responsibly serve thriving and growing communities.
 - b. Objectives
 - i. Meet travel needs and reduce congestion
 - ii. Provide for the integrated development of transit-related, autonomous vehicle, automated traffic management
 - iii. Provide universally accessible sidewalks, trails, and public transit connections
 - iv. Safe, efficient, and competitive transport
- 2. Transportation Priority Projects in Chester County (CCPC, 2017)
 - a. Identifies PA 896 Corridor Safety Improvements as major corridor improvement project and also includes repairs/replacement for one state owned bridge and two county owned bridges. It also lists Flint Hill Road reconstruction, which has been addressed through drainage improvements.
- 3. Road Safety Audit | PA 896 - Chester County (DVRPC, 2007)
 - a. Documented safety issues and recommended strategies to improve overall safety on State Route 896 in London Britain Township, Franklin Township, and New London Township.

Transportation Improvement Projects: Design/Construction Underway

There is one active transportation improvement project planned in London Britain Township on the Delaware Valley Regional Planning Commission (DVRPC) FY2019 Transportation Improvement Program (TIP). The project will implement improvements identified in the PA 896 Road Safety Audit. The project scope includes shoulder widening, appropriate signage, and improvements at key intersection. Within London Britain Township, the project includes adding a left turn lane for southbound PA 896 at Chambers Rock Road. Funds will be drawn down from a Highway Safety Improvement Program (HSIP) line item as needed.

DVRPC FY2019 Transportation Improvement Program (TIP): Projects in London Britain Township

TIP Project ID	Project: <i>Description</i>
MPMS 85949	Intersection/Interchange Improvements on PA 896



Key Transportation Needs: Comprehensive Plan Update Considerations

Based on input from the Community Visioning Session, the community survey, and input from the Comprehensive Plan Task Force, the following transportation issues were identified as priorities:

Key Topics	Key Issues
Maintain Roadways and Bridges	Maintenance of existing roads is a key issue, particularly given the extensive roadway network owned by the Township and the limited financial and staff resources of the rural municipality. Residents did express support for additional funding for maintenance of Township roads. Stakeholders identified maintaining and resurfacing existing roadways as a top priority for the Township in terms of transportation.
Intersection Improvements	<p>Safety and operational issues were identified at several intersections. Priority intersections in need of improvements include:</p> <ul style="list-style-type: none"> • State Route 896 and Strickersville Road: While this intersection was identified as the top priority, improvements to this intersection are challenging given the close proximity of existing homes and historic nature of the area. • Good Hope Road and Flint Hill Road (prior to installation of all way stop in Fall 2018) • State Route 896 and Chambers Rock Road • State Route 896 and Southbank Road <p>Concerns were expressed implementation of traffic signals or roundabouts as intersection improvement designs given the rural character of the community and potential capital and maintenance costs.</p>
Traffic Calming	Speeding and cut-through traffic are key issues, particularly on the following roadways: Good Hope/Broad Run Road, Chambers Rock Road, Flint Hill Road, Strickersville Road, London Tract/Glen Road. Evaluation and implementation of any traffic calming measures should consider the rural character of the community and account for winter maintenance operations. Additionally, traffic calming measures should be implemented in concert with both education and enforcement.
Walking and Biking	The rural character of the roadways provides no dedicated space for walking or biking. Priority locations to implement bicycle and pedestrian improvements include Good Hope Road with a connection to the Good Hope Trailhead and proposed trail crossings of PA 896. Concerns were expressed with providing wider shoulders and encouraging additional speeding and cut-through traffic.

Trail Crossings of State Route 896

PA 896 is a state owned roadway with one travel lane in each direction and relatively narrow shoulders. Regionally, it connects Newark, Delaware and Lancaster, Pennsylvania and carries an average of 7500 vehicles per day. PA 896 has a posted speed limit of 45 mph. London Britain Township has discussed three potential locations for a pedestrian crossing of State Route 896. The design of trail crossings should focus on safety measures to account for the traffic volumes, travel speeds, and topography along State Route 896.

- **Trail Crossing at Flint Hill Road:** The proposed northern trail crossing is located at the all-way stop intersection of State Route 896 and Flint Hill Road. Design features for the trail crossing could include a high visibility marked crosswalks at the intersection, as well as signage for the trail crossing.
- **Trail Crossing mid-block between Flint Hill Road and Strickersville Road/London Tract Road:** The proposed trail crossing for the Township's Greenway is located between the intersections of Flint Hill Road and Strickersville Road. The specific location for the trail crossing should be selected based on maximizing sight distance. Providing adequate sight distance may require clearing vegetation or regrading along the roadside, which should be considered when acquiring easements for the trail.

In accordance with PennDOT Traffic Engineering Manual (Publication 46), the posted speed limit on PA 896 will need to be lowered to 35 mph in order to provide a mid-block crossing. In order to lower the speed limit and provide a safe crossing, traffic calming measures may be appropriate. Potential traffic calming measures include a gateway median and/or a pedestrian refuge island. Other potential design treatments for the trail crossing include a high visibility marked crosswalk, advance signage, and a user-activated flashing warning device (either side-mounted or overhead).

- **Trail Crossing at Elbow Lane:** The proposed southern trail crossing is located at the T-intersection of State Route 896 and Elbow Lane. This crossing may require similar treatments to the mid-block crossing mentioned above. In particular, providing adequate sight distance may require clearing vegetation or regrading along PA 896. The design features for the trail crossing could include a high visibility marked crosswalk, advance signage, traffic calming measures, and a user-activated flashing warning device.



Existing conditions along State Route 896.



Example of a high visibility marked crosswalk.



Example of an overhead flashing warning device for a mid-block trail crossing.

APPENDIX I

RECREATION AND TRAILS INVENTORY

2015 Inventory of Community Parks and Recreation Facilities

Nichol Park

Nichol Park is comprised of 18.6 acres along State Route 896. Park features include an asphalt walking/running trail, a stone dust jogging trail, a 60-foot baseline ball field, a multi-purpose soccer/football field, a playground built by volunteers, and a pavilion.

The Township also owns two parcels adjacent to the currently developed park, one is 14.53 acres and the other is 2.42 acres. The Township plans to improve the currently developed park parcel by adding an improved parking lot. Future work will focus on a Master Plan for Phase II development of the park.

Mason Dixon Greenway South

The Mason Dixon Greenway South is the Township's second park, comprising 23 acres along Flint Hill Road. The park includes a gravel parking area, a hard surface trail, and a natural surface trail. The park is the first phase of an envisioned Mason Dixon Greenway South, which will total three miles and connect to the White Clay Creek Preserve in the Township.

2018 Inventory of Community and Neighboring Trails

The following inventory is based on GIS data, previous London Britain Township plans, review and discussion with the Township and Comprehensive Plan Task Force, and research and review of existing trails and planning efforts in neighboring municipalities related to proposed or conceptual trails and greenways throughout the region. The map that follow this inventory depicts existing trails in London Britain Township and surrounding areas as of 2018. Base data from 2018 was derived from Chester County Geographic Information Services, while aerial data from 2015 was derived from DVRPC.

Summary of Trails in London Britain Township

Existing Trail Network - 15.1 miles

Trails in Nichol Park

- Nichol Park Trail - 1.2 miles

Trails in White Clay Creek Preserve

- Edwin Leid Trail – 2.2 miles
- Boundary Trail - 1.3 miles
- Charles Bailey Trail - 1.9 miles
- Mason Dixon Trail - 3.4 miles

Trails in HOA Open Space, Roadways, Steam Corridors, or on Private Land

- Mason Dixon Greenway South - .8 miles
- Flint Woods Trail - 2.3 miles

Trail Users

- All Trails: Pedestrians/Walking
- Five Trails: Equestrian use permitted
- Three Trails: Bicycle use permitted

Trail Materiality

- Natural Surface Trails - 9
- Hardscaped Trails: 3
- Gravel or Mulch Trails: 1

Summary of Trails and Trail Planning Efforts in Neighboring Municipalities

Mason Dixon Trail

- Multi-state trail route
- 193 miles in length
- Includes in-road and off-road segments
- Trail goes through London Britain Township, via the White Clay Creek Preserve

East Coast Greenway

- Multi-state trail route
- 3,000 miles in length
- Includes in-road and off-road segments
- Route through Newark is closest portion of trail to London Britain Township

White Clay Creek State Park

- Local existing trail network within White Clay Creek State Park, in Delaware
- 37 miles of trail on 3,600 acres of open space
- Includes trails for hiking, biking, and horseback riding
- Existing trail connections between White Clay Creek State Park and London Britain Township include: the Mason-Dixon Trail, Tri-State Marker Trail, Nature Preserve Trail, Charles Bailey Trail, and the Twin Valley Trail.
- Connections to Middle Run Valley Natural Area via the Tri-Valley Entire Trail and an Unnamed Connector between the Bryan's Field Trail and the Lenape Trail.
- Connections to Newark via the Mason-Dixon Trail.

Fair Hill NRMA

- Local existing trail network within Fair Hill NRMA, in Maryland
- 75 miles of trail on 5,656 acres of open space
- Includes trails for hiking, biking, and horseback riding

White Clay Creek Trail Loop

- Vision for connecting local municipalities into White Clay Creek Preserve
- 17 miles in length, when completed
- Proposed to run along the Wild & Scenic White Clay Creek, both the east and west branches
- Loop system would connect: New Garden Township, London Britain Township, Franklin Township, and London Grove Township

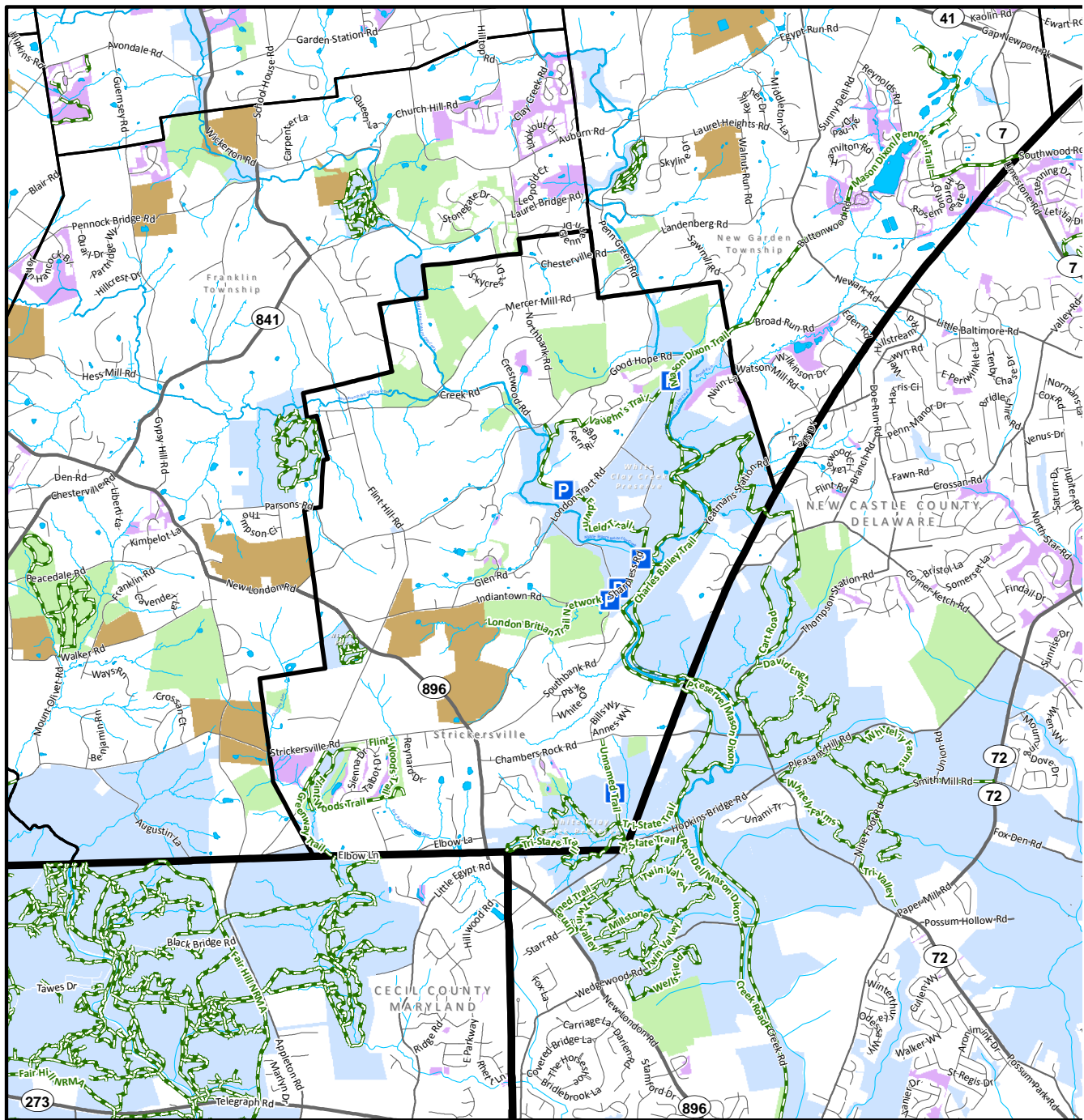
New Garden Greenways and Trails

- Local proposed trail network within New Garden Township
- Potential connection points (identified in Comprehensive Plan) with London Britain Township include:
 - Landenberg to WCC Preserve
 - Broad Run Greenway
 - Mason Dixon Trail
- On Road Bike Routes
 - Watson Mill Road
 - Laurel Heights Road

Franklin Township Greenways and Trails

- Local proposed trail network within Franklin Township
- Potential connection points (identified in Comprehensive Plan) with London Britain Township include:
 - W & S Designated Corridor (WCC Trail Loop)
 - Crossan Park
 - Strickersville Road
 - Fair Hill and MD/PA Border

Action items related to trails can be found in Chapter 4 Natural Resources and Recreation of the Comprehensive Plan document.



Regional Trails

0 0.25 0.5 0.75 1 1.25 1.5 Mile

Data Source: Base data from Chester County Geographic Information Services, 2018.
Aerial data from DVRPC, 2015. Trails from Chester County and Delaware Greenways, 2018.

Disclaimer: This map is for illustrative purposes only and does not constitute a valid survey.

Map created: November 27, 2018

Last revised: June 11, 2018

Legend

- | | |
|-------------------------|--|
| Preserve parking | Protected Lands |
| Existing trails | Eased lands |
| State boundary | County agricultural easements |
| Township boundary | Public lands (federal, state, county, municipal) |
| Adjacent municipalities | Other protected lands |
| Water bodies | |
| Streams | |

Page left intentionally blank.

APPENDIX J

OPEN SPACE

Open Space Inventory

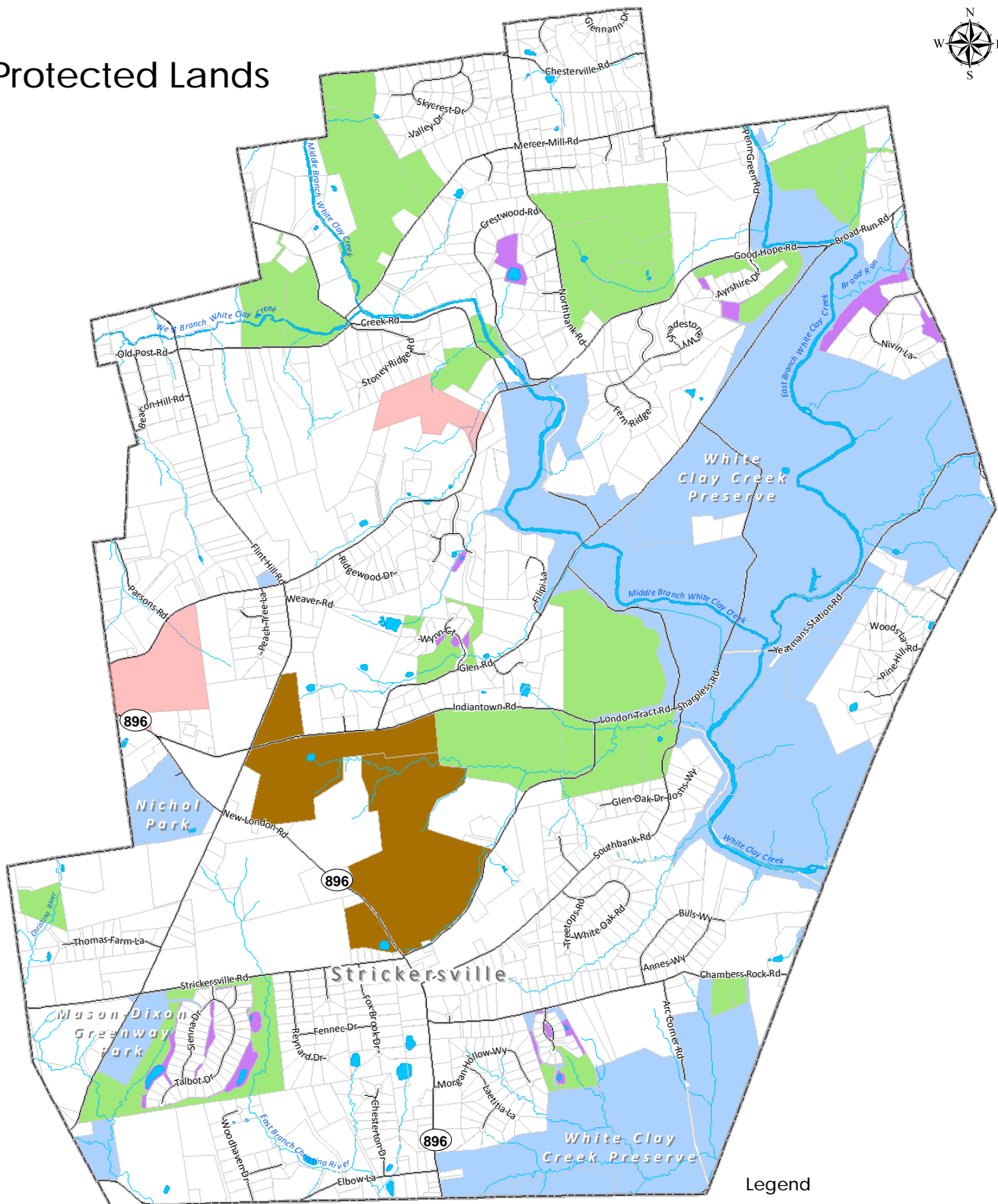
The map that follows this appendix depict existing and pending open space in London Britain Township as of 2018 using tax parcels as the unit of measurement. Base data from 2018 was derived from Chester County Geographic Information Services, while aerial data from 2015 was derived from DVRPC. Open space was defined as land owned by a Homeowners Associations, land within White Clay Creek State Preserve, land owned by London Britain Township, including parkland, land owned or eased by the Township's Land Trust, and other land eased by others, including agriculturally eased lands, lands with conservation easements, and lands with easements pending.

The last inventory of London Britain Township's open space occurred in 2008, as a component of the previous comprehensive plan. Between 2008 and 2018, protected open space increased by 7%, from 1,893 acres to 2,337 acres, for a total of 37% of the Township. Should the two parcels with pending easements become protected, that total would increase to 2,425 acres of protected open space, of 39% of the Township. Differences in 2008 and 2018 mapping technology cause slight variations to the acreage calculations.

Table J-1, London Britain Township Open Space Protection.

Open Space ProtectionType	2008 Acres	2018 Acres
HOA Open Space	56	48
White Clay Creek State Preserve	1,343	1,339
Township Owned		
Park	33	33
Open Space	40	62
Township Land Trust		
Owned Lands	57	104
Eased Lands	22	51
Other Easements		
Agricultural Land Easements	228	224
Other Land Trust/Conservation Easements	114	476
Pending Easements	N/A	86
Total Protected Open Space	1,893	2,337
	30%	37%
Total Protected Open Space (Existing and Pending)	1,893	2,423
	30%	39%

Protected Lands



0 0.25 0.5 0.75 1 Mile

Map created: April 4, 2019
Last revised: June 11, 2019

Legend

- Land trust fee-owned or eased lands
- County agricultural easements
- Public lands (federal, state, county, municipal)
- Other protected lands
- Lands pending protection

Page left intentionally blank.

APPENDIXK

COMMUNITY FACILITIES AND SERVICES

Introduction

London Britain Township's low density, rural setting affords its residents many lifestyle and quality of life benefits, perhaps most notably, access to open space and trails. Due to the associated fiscal limitations of a rural residential real estate tax base, regional and non-Township sources provide some community facilities and services, while the Township manages others. The Township is involved but has limited control over services such as police, ambulance services, fire protection, and emergency planning. The Township has more control over other community facilities and services such as stormwater management, solid waste and recycling, public works, and Township-owned roads. As these services are important to the health, safety, and welfare of London Britain Township residents, it is important to examine the current level of service provided and complete an analysis to ensure that service is maintained or improved (if necessary) over the twenty-year scope of this plan.

Municipal Functions and Staff

London Britain Township owns two adjacent parcels along Good Hope Road. A one-acre parcel contains an office building, a road maintenance/storage garage, a storage barn/salt shed, and a former schoolhouse which is now used as a meeting space. The Township owns an adjacent 1.2-acre parcel which is wooded and currently undeveloped. Sufficient building space exists and houses the needs of the local government and ample meeting room.

Township personnel includes a part-time Township Secretary, a part-time Township Treasurer and Project Manager, a roadmaster, a road/park crew, and an Emergency Management Coordinator. The Township Secretary completes many administrative functions including Open Records Officer, Website Director, On-lot Septic Program Manager, and Parks Events Manager. An elected tax collector is also a part of the Township administration.

Other Township representatives include a Southeastern Chester County Refuse Authority (SECCRA) representative, an Avon Grove Library Board representative, a Recycling Coordinator, and a Landscape Consultant. The Township had a newsletter editor who recently retired from the role in 2018. The Township Secretary is now producing the Township Newsletter on behalf of the Board of Supervisors.

Existing staff and third-party support by the Township attorney, Township engineer, Township building inspector, land planners, auditor, and water resource engineer appear adequate for the foreseeable future.

Public Works/Roads Department

The public works department is responsible for maintaining 39.35 miles of Township roads, including upkeep and snow/ice removal. PennDOT maintains the 2.61 miles of State Route 896 in the Township. The Township roads crew completes roadside mowing, paints lines, places and maintains road signs, and maintains the Township park. The public works department utilizes the road maintenance storage/garage as well as the storage barn/salt shed for its activities. 42 percent of respondents to the 2018 Community Planning Survey supported spending additional funds on the maintenance of Township roads. A portion of the write-in comments for this community survey also focused on road maintenance, snow removal, and overall safety of Township and state roadways.

Police

The Pennsylvania State Police based at the Avondale Barracks in London Grove Township provide police protection for London Britain. Relevant comments in the 2018 Community Planning Survey were highly concerned with the availability and speed of service for emergency services to the Township given the difficulty of consistent cell phone service and the rural nature of the community. As of 2018, a state trooper from the Avondale Barracks is stationed at all times in the Franklin and London Britain Townships patrol zone in order to improve response times.

Formed in 2016, the Southern Chester County Regional Police Force is the joint regional police force of New Garden Township and West Grove Borough. London Britain Township originally explored joining the joint police department but decided ultimately to continue relying on state police coverage.

Fire Protection and Ambulance Service

The Township contracts with West Grove Fire Company and Avondale Fire Company for both EMS and fire service. West Grove Fire Company services 70% of the Township and built a new station (Station 32) adjacent to Nichol Park that provides both fire protection and emergency service in 2012. West Grove Fire Company has between 30 and 40 active volunteer members running more than 550 fire and rescue calls and more than 2,200 ambulance calls annually throughout its service area. Avondale Fire Company services the remaining 30% of the Township and utilizes volunteers for its fire and rescue services while the Avondale Fire Company EMS Division utilizes a combination of paid and volunteer personnel.

Southern Chester County Emergency Medical Services provides advanced life support/paramedic services for more serious medical and trauma emergencies. Southern Chester County Emergency Medical Services' response goal is to be on the scene of an emergency anywhere in its service area within ten minutes. The Township gives an annual contribution to all of its fire and emergency response providers.

Public Sewage Treatment and Disposal

Nearly all residents and property owners rely on on-lot sewage systems for their wastewater treatment. London Britain Township owns a community on-lot disposal system (COLDS) which serves the Shoppes of London Britain, and a wastewater treatment plant which serves 16 residential properties in the Windsor Court subdivision. There are no public sewer facilities or service areas within the Township.

It is the intention of the Board of Supervisors to promote on-lot sewage disposal for all new development as long as it is practical to do so. At the time of this writing, the Board was reviewing a final draft Act 537 Sewage Facilities Plan for adoption.

Water Supply

All developed properties within the Township draw their water supply from private wells. The Shoppes at London Britain share a single well between the commercial uses. Because all properties within the Township rely on well water, the health and protection of both surface and groundwater supplies is of utmost importance.

Stormwater Management

The Township adopted a Stormwater Management Ordinance in 2013 that is consistent with Chester County's Act 167 Plan. The goal of the ordinance is to protect public health, safety and general welfare, property and water quality by implementing drainage and stormwater management practices, criteria, and provisions for land development, construction and Earth Disturbance Activities, to achieve the following throughout the Municipality:

- Reduce the frequency and magnitude of flooding and stormwater impacts affecting people, property, infrastructure and public services.
- Sustain or improve the natural hydrologic characteristics and water quality of groundwater and surface waters.
- Protect natural resources, including riparian and aquatic living resources and habitats.
- Maintain the natural hydrologic regime of Land Development Sites and their receiving watersheds.
- Minimize land disturbance and protect and incorporate natural hydrologic features, drainage patterns, infiltration, and flow conditions within land development Site designs.
- Reduce and minimize the volume of stormwater generated and manage and release stormwater as close to the source of runoff as possible.
- Provide infiltration and maintain natural groundwater recharge to protect groundwater supplies and stream baseflows, prevent degradation of surface water and groundwater quality, and to otherwise protect water resources.
- Reduce stormwater pollutant loads to protect and improve the chemical, physical, and biological quality of ground and surface waters.
- Reduce scour, erosion and sedimentation of stream channels.
- Reduce flooding impacts and preserve and restore the natural flood-carrying capacity of streams and their floodplains.
- Protect adjacent and downgradient lands from adverse impacts of direct stormwater discharges.
- Minimize Impervious Surfaces and connected Impervious Surfaces to promote infiltration and reduce the volume and impacts of stormwater runoff.
- Provide proper long-term operation and maintenance of all permanent stormwater management facilities, BMPs and Conveyances that are implemented within the Municipality.
- Reduce the impacts of runoff from existing developed land undergoing Redevelopment while encouraging New Development and Redevelopment in urban areas and areas designated for growth.
- Implement an illicit discharge detection and elimination program that addresses non-stormwater discharges.
- Provide performance standards and design criteria based on watershed-based stormwater management planning.
- Provide standards to meet certain NPDES stormwater permit requirements.
- Meet legal water quality requirements under State law, including regulations at 25 PA Code Chapter 93, to protect, maintain, reclaim and restore the existing and designated uses of the Waters of the Commonwealth.
- Implement the requirements of Total Maximum Daily Load (TMDLs) where applicable to waters within or impacted by the Municipality.
- Provide review procedures and performance standards for stormwater planning and management.
- See also Chapter 3 Natural and Recreational Resources and Appendix E for additional data and background material regarding impaired streams and TMDLs.

Solid Waste and Recycling

London Britain Township is a member of the Southeastern Chester County Refuse Authority (SECCRA), along with 24 other boroughs and townships in southern Chester County. SECCRA provides solid waste disposal to its 25-member municipalities, including the Township. Township residents can either haul their waste to the SECCRA landfill located in London Grove Township, or contract individually with a private hauler for curbside pick-up.

Some residents also choose to contract with their waste hauler for curbside recycling. Residents can also choose to utilize the joint Franklin Township and London Britain Township recycling center, located at the Franklin Township building and open 24 hours a day.

Avon Grove School District

The Township is part of the Avon Grove School District which includes Franklin, New London, Penn and London Grove Townships, and West Grove and Avondale Boroughs. The Avon Grove School District is a K-12 public school system that serves approximately 5,100 students in four schools (an elementary school, an intermediate school, a middle school, and a high school.) There are a number of private schools and one public charter school within the school district.

The school district recently completed a study of its facilities, pursuant to its strategic plan. The various community stakeholders involved recommended that the district build a new middle school and campus for grades six through eight on the previously purchased Sunnyside Road site, renovate the current middle school and high school buildings to form a redesigned high school campus, and reconfigure the grades at other schools so Avon Grove Intermediate School (AGIS) serves grades two through five and Penn London Elementary (PLE) serves kindergarten and first grade. The proposed redesign of the district's facilities allows the district to eliminate all portable classrooms and better accommodate the school-age population, but it comes with a \$126 million price tag.

Enrollment in Avon Grove School District has remained fairly steady over the last five-year period (2013-2018). A 2017 Enrollment Projection Study prepared on behalf of the School District projects an increase of approximately 11 percent or 556 students over the next five years.

Library Facilities

London Britain Township does not have its own library and supports the Avon Grove Library. Avon Grove Library is the closest library for many Township residents. A Township representative sits on the Avon Grove Library Board and the Township makes an annual contribution to the library. Some Township residents choose to utilize neighboring states' libraries. A non-resident of the State of Delaware may obtain a New Castle County Library card for a fee of \$40 per year. A non-resident of Cecil County, Maryland may obtain a Cecil County Public Library card for a fee of \$35 per year.