

HIGHLAND TOWNSHIP
COMPREHENSIVE PLAN
UPDATE 2022

APPENDICES

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APPENDIX A

Assessment of Community Demographics

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Highland Township Assessment of Community Demographics

Research and analysis conducted by the Brandywine Conservancy
May 2020

Introduction

In 2000, Highland Township underwent a comprehensive plan update process, which included an assessment of community demographics. The following report seeks to compare Highland Township as it is today to how it was in 2000.

To that end, this report compares available demographics from the years 2000, 2010, and 2018. Data from 2000 and 2010 is from the United State Decennial Census, a direct survey of the U.S. population conducted by the US Census Bureau. Data presented from 2018 is from the American Community Survey (ACS), an estimate that is compiled by the US Census Bureau at more frequent intervals. While the ACS is generally a reliable source of data, due to the small population size of Highland Township, it should be noted that the Township may be experiencing different rates of change than the 2018 estimates suggest. In 2020 the US Census Bureau began the process of collecting data for the next Decennial Census. In evaluating release dates for previous ACS data and Census data, it is likely that the release of the 2020 Decennial Census data will occur in 2022.

Highland Township is a rural, agrarian community, located in the western region of Chester County. Although the 2001 Township Comprehensive Plan forecasted a continued decrease in resident population based on trends at that time, the Township has actually experienced a limited increase in number of residents starting with the 2000 Decennial Census. Limiting this increase from something greater may be attributed to the Township's efforts after adopting the 2001 Comprehensive Plan to update its zoning regulations to promote open space and agriculture, and discourage suburban residential and other development. Since 2000, Highland Township has also seen an increase in total protected land of 17.4%, reflecting the community's goals to protect open space and

Explaining the increase in Township population over the past 20 years is difficult without further research. No significant residential development occurred in the Township, so this increase is likely attributed in part to new rural residential housing. While the Township population increased by 147 people between 2000 and 2010 (actual census) and added another 60 people by 2020 (estimate), only 30 housing units were added by 2010, and only an additional 6 were estimated by 2018. Vacant dwellings could also have been occupied by new residents, and overall younger and larger families, or families housing elderly parents could have increased. There also appears to be a greater influx of Plain Sect within the Township over the past two decades. Plain Sect and their extended families are typically larger in size than English families.

The following section of this report graphically portrays a variety of demographic trends for Highland Township, including comparisons with other municipalities of the Octorara Area School District, and with Chester County as a whole. Reviewers need to keep in mind that graphic portrayals beyond 2010 are based on the ACS estimated data, or Delaware Valley Regional Planning Commission (DVRPC) projections, and not the result of actual census.

At the end of the following section, a written summary of the data presented in the graphic charts, graphs, and tables is provided. Following that is a list of sources used to prepare this study.

Highland Township Data Analysis, Trends, & Forecasts



Overview



Population: 1,332



Area: 17.2 square miles

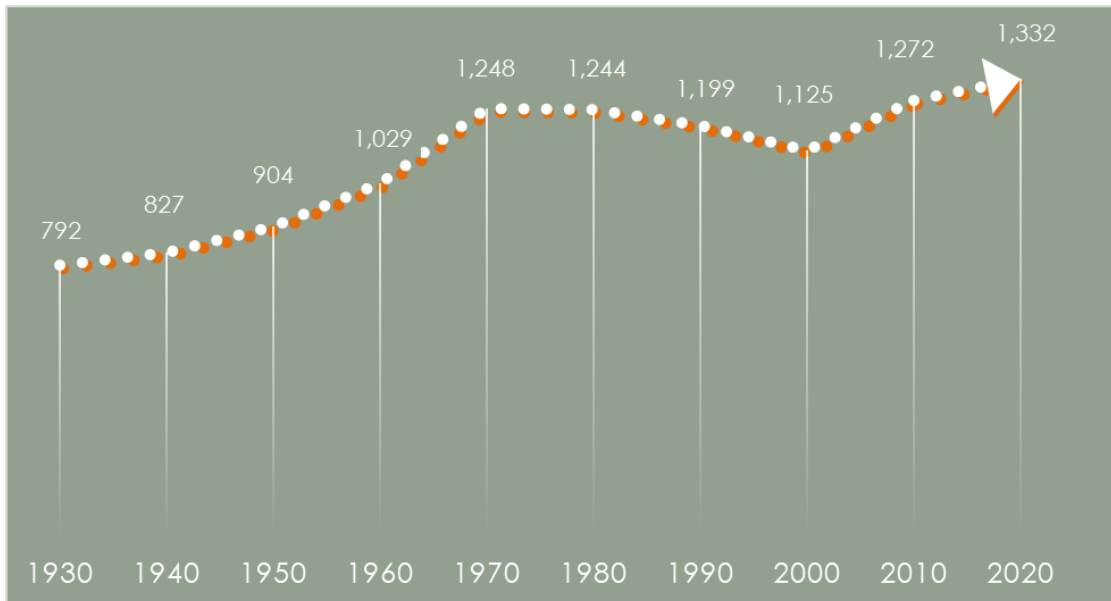


Households: 470



Median Household Income: \$73,088

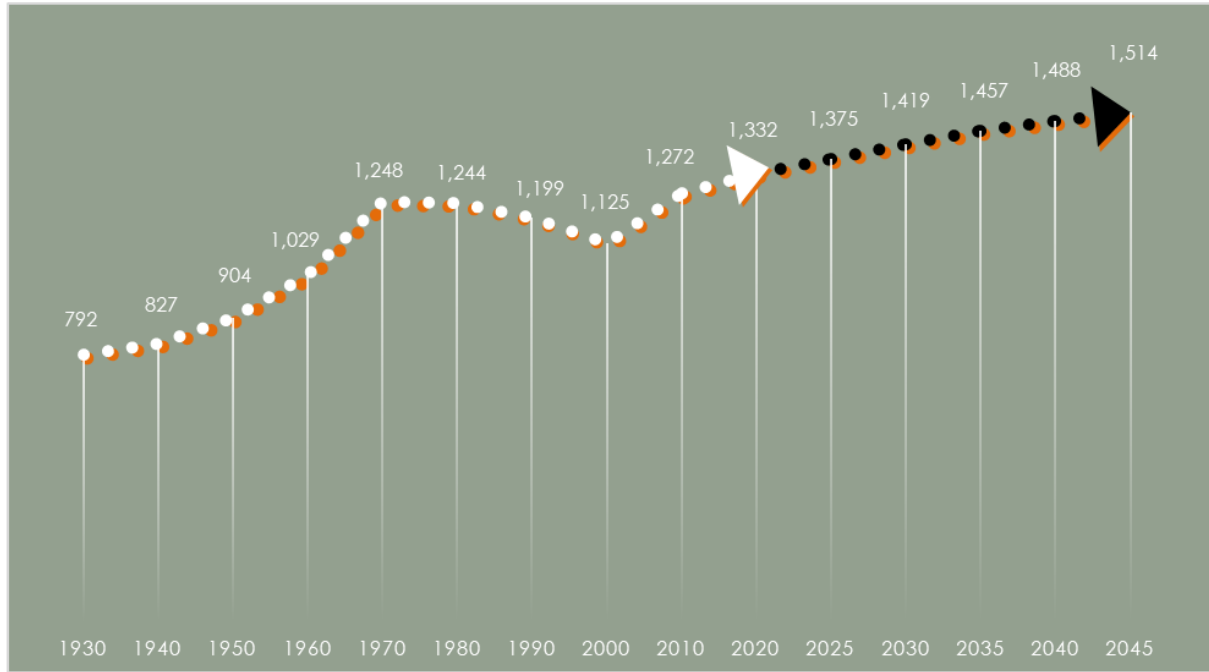
Historic Population Trends, 1930 to 2020





Population

Projections, 2020 to 2045



Delaware Valley Regional Planning Commission (DVRPC) population projections estimate Highland Township may reach a population of 1,514 residents by 2045. DVRPC projects there to be 1,332 residents in the community in 2020. This limited increase in population, 182 persons over a 25-year time period, may be attributed to the rural nature of the Township, the amount of conserved land, and the Township's earlier efforts to protect the agrarian character of the community through zoning amendments. Estimates suggest that the rate of population change will continue to slow over time, from 3.2 % between 2020 and 2025 to 1.7% between 2040 and 2045.

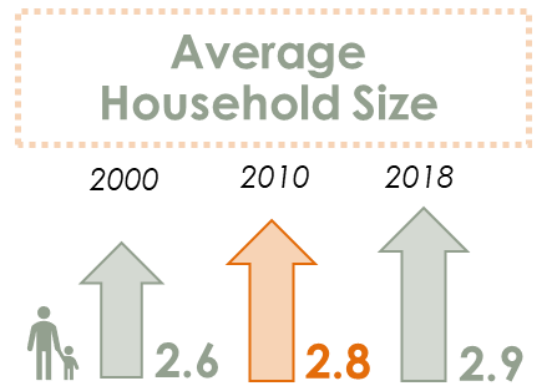
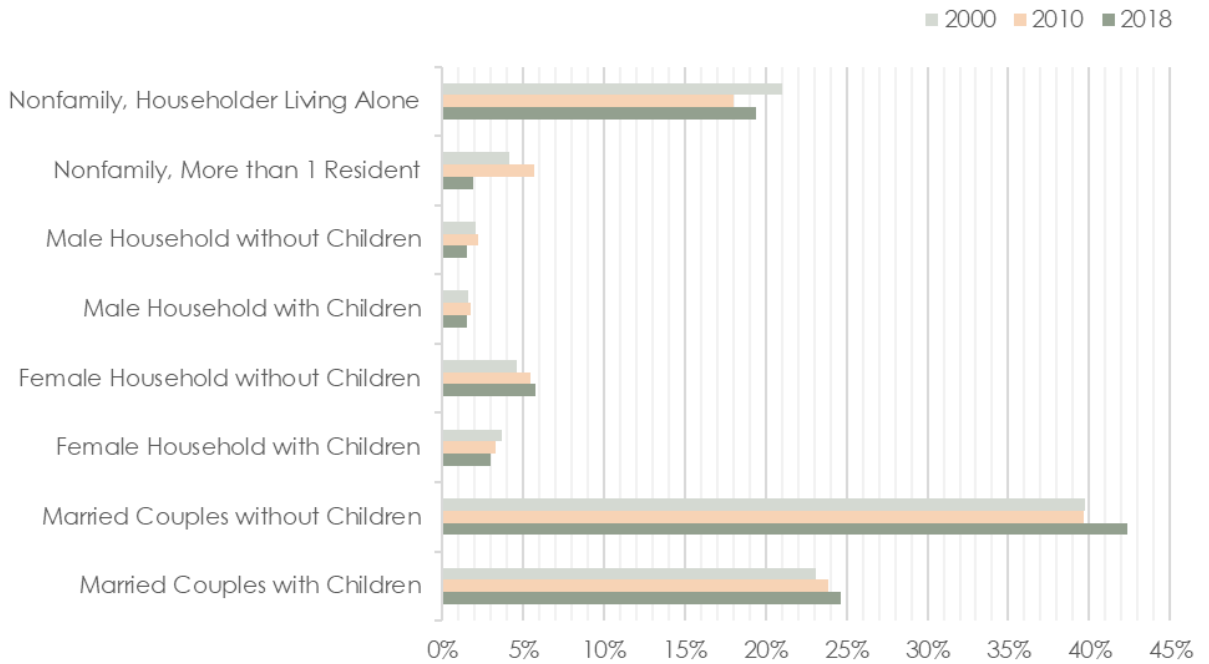
Population Change, 2000 to 2020

	2000 Total	2010 Total	2020 Total	2000 - 2010		2000 - 2020	
				# Change	% Change	# Change	% Change
Highland Township	1,125	1,272	1,332	147	13	207	18
Atglen	1,217	1,406	1,532	189	16	315	26
Londonderry Twp	1,632	2,149	2,553	517	32	921	56
Parkesburg	3,373	3,593	3,974	220	7	601	18
West Fallowfield Twp	2,485	2,566	2,625	81	3	140	6
West Sadsbury Twp	2,444	2,444	2,661	-	0	217	9
Chester County	433,501	498,886	543,702	65,385	15	110,201	25



Population & Households

Population per Household, 2000, 2010, 2018

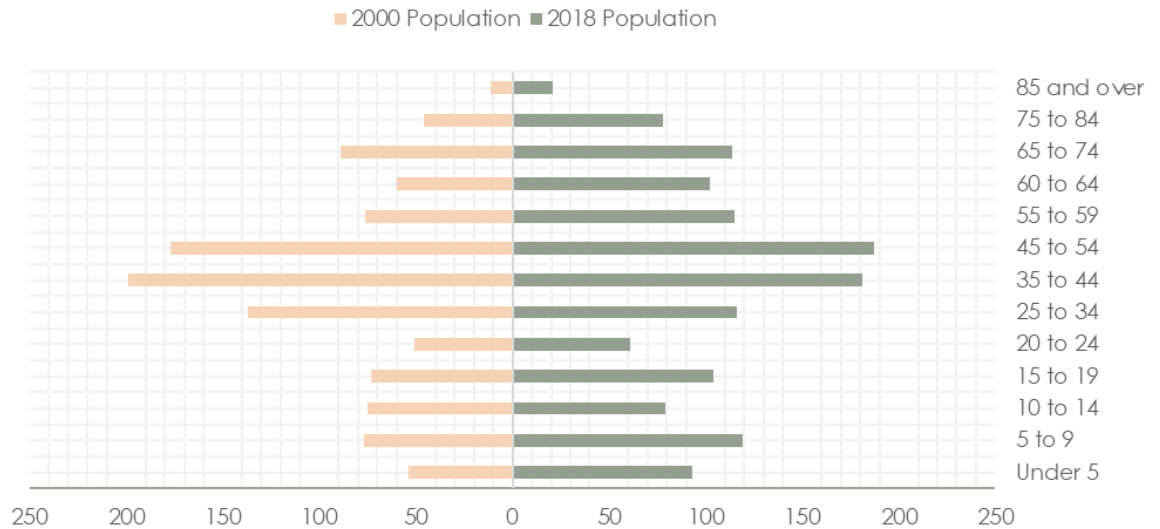


The average household size in Highland Township increased from 2.6 persons per household in 2000, to 2.8 persons in 2010 to 2.9 persons in 2018.



Age

Population by Age Group, 2000 & 2018



Highland Township's median age has remained relatively constant, *increasing between 2000 and 2010 from 40.1 to 41.1* and *decreasing from 2010 to 2018 to 40.7*. Over this 18-year period, children and young adults ages 19 and under typically increased in relation to the overall population. An overall decline occurred in residents ages 25 to 44, and an increase occurred in residents 55 and over.

Median Age & Age Groups

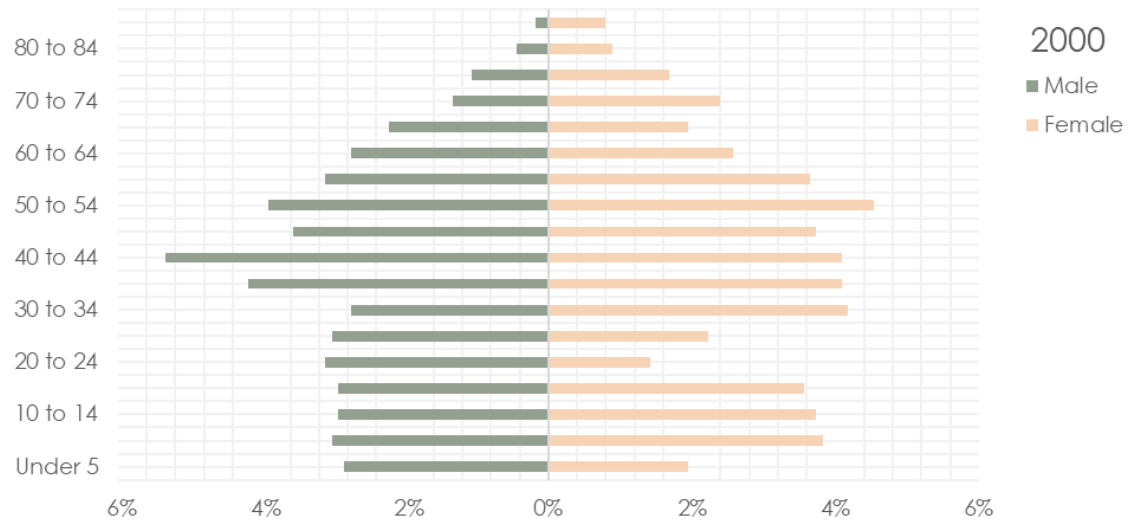
Median Age, 2000 to 2018

	2000 Median Age	2010 Median Age	2018 Median Age	Change 2000-2010	Change 2000-2018
Highland Township	40.1	41.1	40.7	1.0	0.6
Atglen	29.9	32.4	31.2	2.5	1.3
Londonderry Township	37.0	40.1	43.7	3.1	6.7
Parkeburg	34.6	36.1	37.7	1.5	3.1
West Fallowfield Township	35.4	38.8	38.3	3.4	2.9
West Sadsbury Township	35.9	36.8	41.9	0.9	6.0
Chester County	36.9	39.3	40.4	2.4	3.5

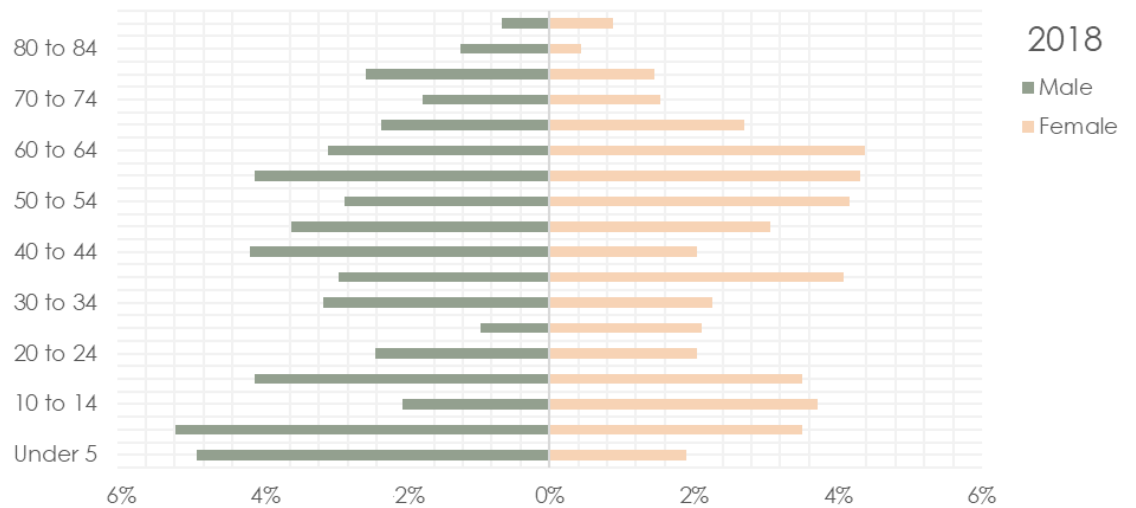


Age

Population by Age & Sex, 2000 & 2018



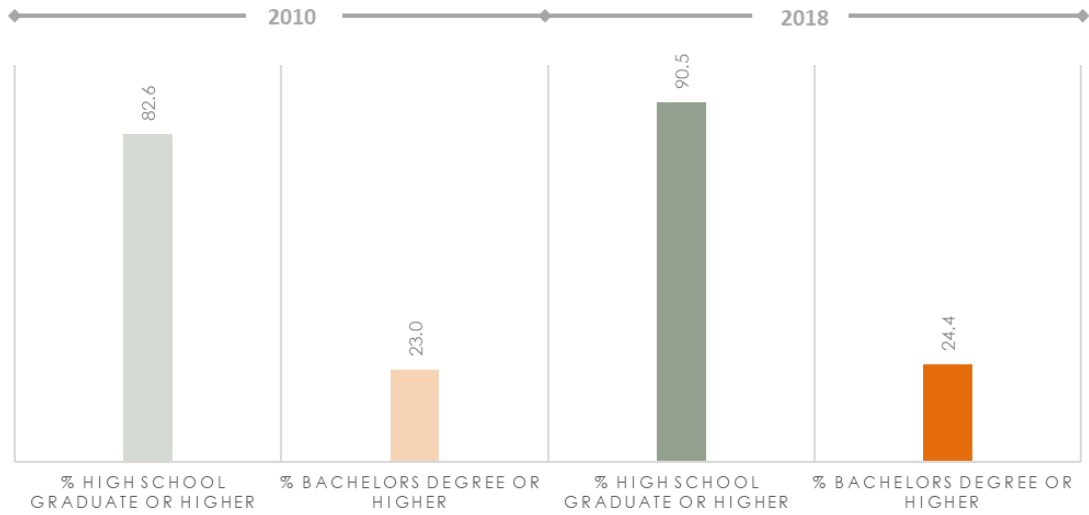
From 2000 to 2018, Highland Township saw a decrease in the percentage of males ages 25 to 29, from 3% to 0.9%. This coincided with increases in males under age 9, and from 15 to 19. Females in the same age categories saw less change, with percentages remaining relatively constant. Males ages 35 to 39 declined by over 1% and residents from 40 to 44 decreased for both sexes. The share of women 40 to 44 decreased by over 2%. All age groups over 60 saw increases in the male percentage of the population, with females decreasing in some categories and increasing in others.





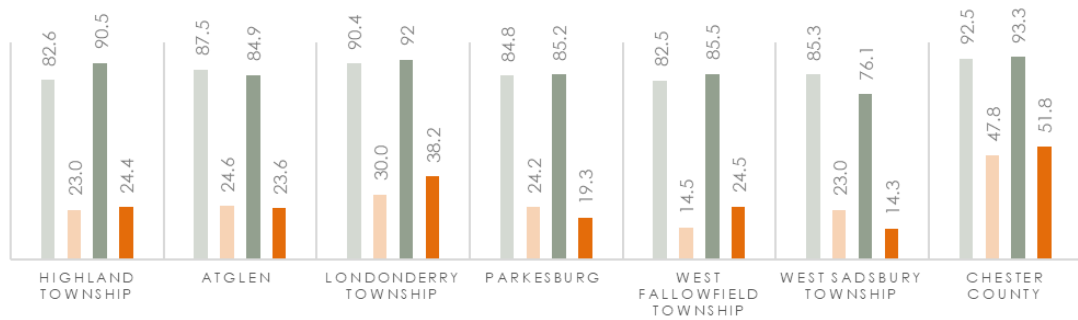
Education

Educational Attainment, Highland Township, 2010 & 2018



Educational Attainment, Municipalities and County Comparison, 2010 to 2018

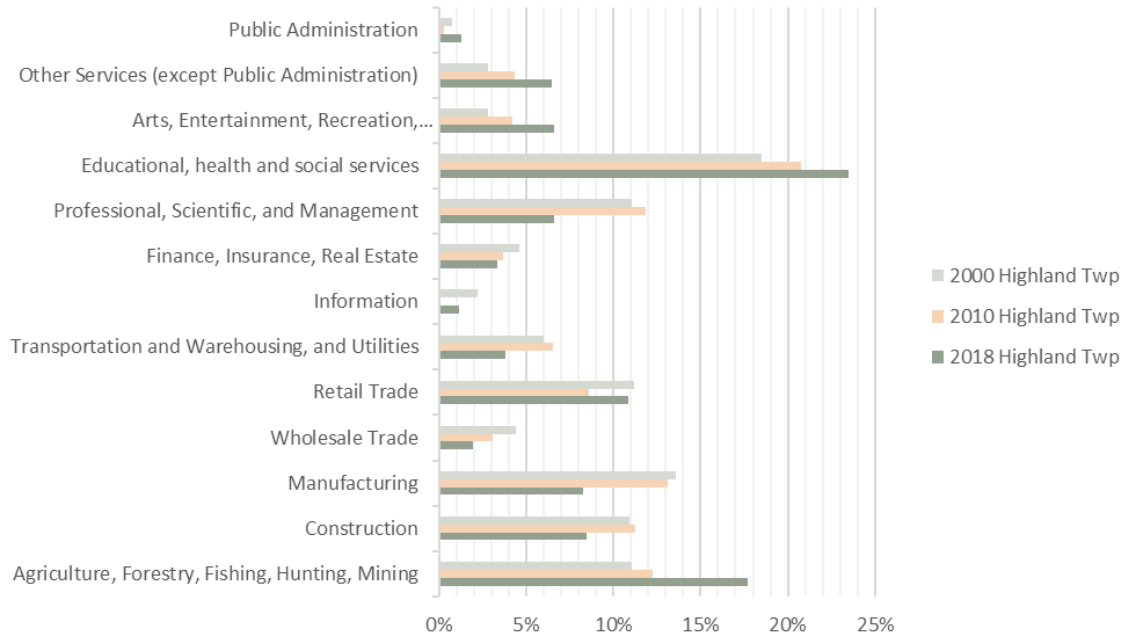
- 2010 High School Graduate or Higher
- 2018 High School Graduate or Higher
- 2010 Bachelors Degree or Higher
- 2018 Bachelors Degree or Higher



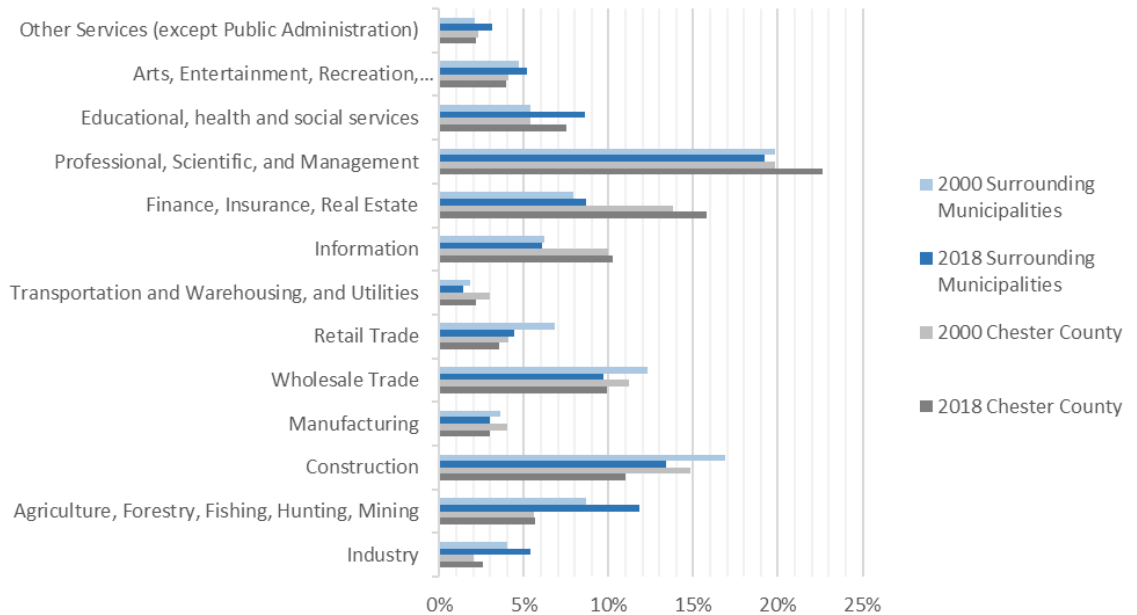


Workforce

Employment by Industry, Highland Township, 2000 to 2018



Employment by Industry, Municipalities and County Comparison, 2000 to 2018



Note: "Surrounding municipalities" includes Atglen, Londonderry Township, Parkesburg, West Fallowfield Township, and West Sadsbury Township.



Workforce

Mean Travel Time to Work

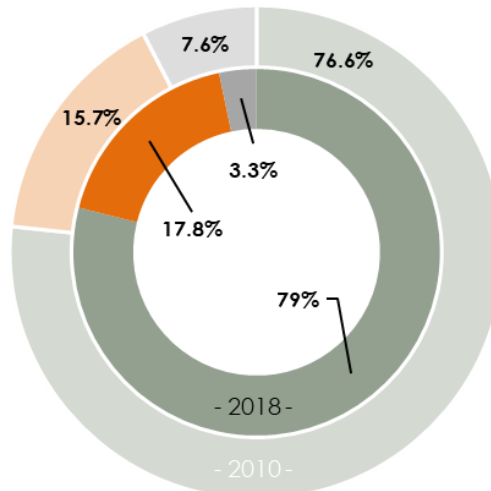
The mean travel time for **Highland Township** residents to work is lower than Chester County as a whole. In **2018**, the mean travel time for Highland Township residents was **24.9 minutes**, quite similar to **25 minutes in 2010**. In comparison, **Chester County** as a whole had a mean travel time of **28.7 minutes** in 2018, an increase from **2010's 27.9 minutes**.

2018 Travel Times

19.7%	<10 min
7.3%	10 - 14 min
11.7%	15 - 19 min
14.5%	20 - 24 min
4.2%	25 - 29 min
17.1%	30 - 34 min
7.8%	35 - 44 min
10.3%	45 - 59 min
7.5%	1 hour+

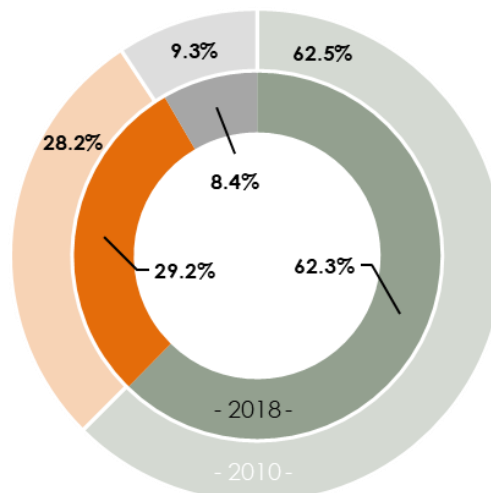
Workplace Location

Highland Township 2010 v 2018



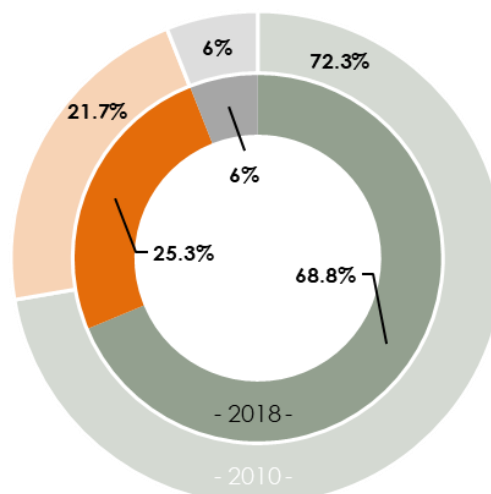
- Inside Co. of Residence
- Outside Co. of Residence
- Outside Pennsylvania

Chester County 2010 v 2018



- Inside Co. of Residence
- Outside Co. of Residence
- Outside Pennsylvania

Surrounding Communities 2010 v 2018



- Inside Co. of Residence
- Outside Co. of Residence
- Outside Pennsylvania

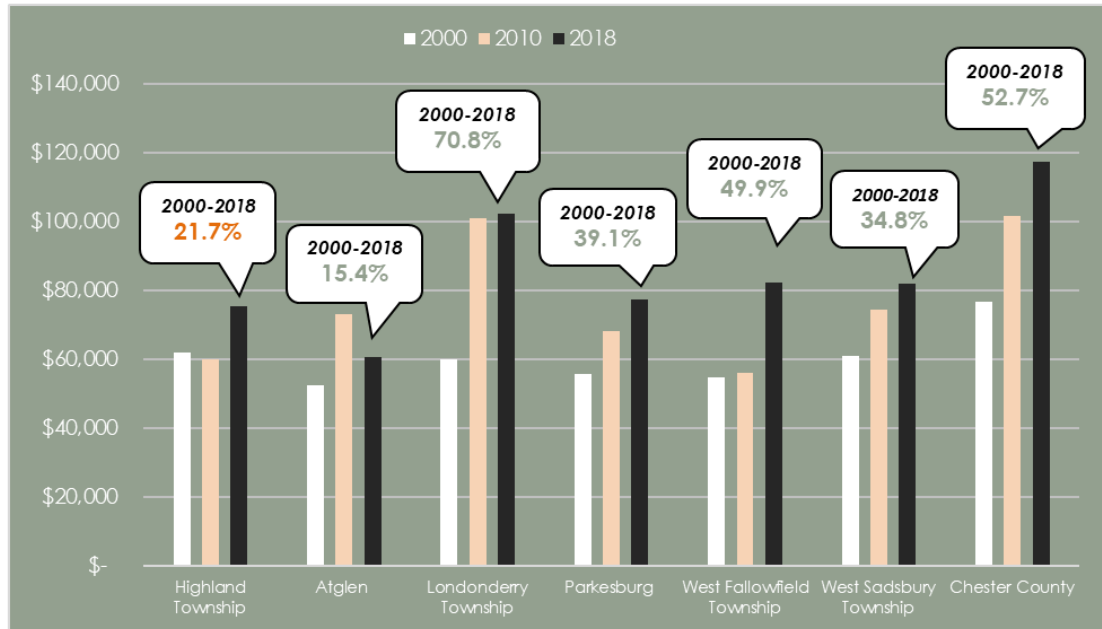
Note: "Surrounding municipalities" includes the values of Atglen, Londonderry Township, Parkesburg, West Fallowfield Township, and West Sadsbury Township averaged.



Income

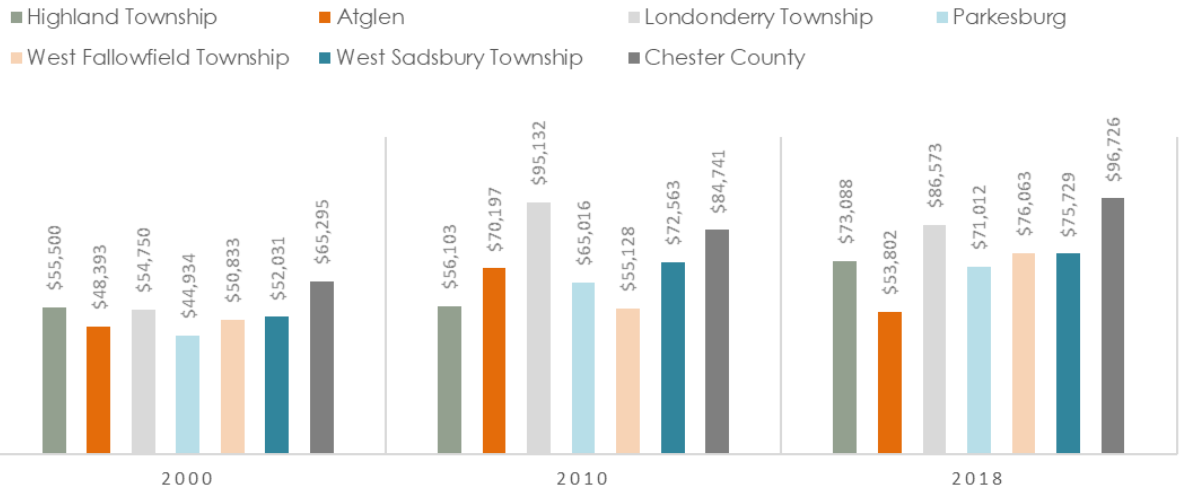
Median Family Income, 2000 to 2018

Highland Township's 2018 median family income increased **21.7%** from 2000 to 2018, to \$75,313.



Median Household Income, 2000 to 2018

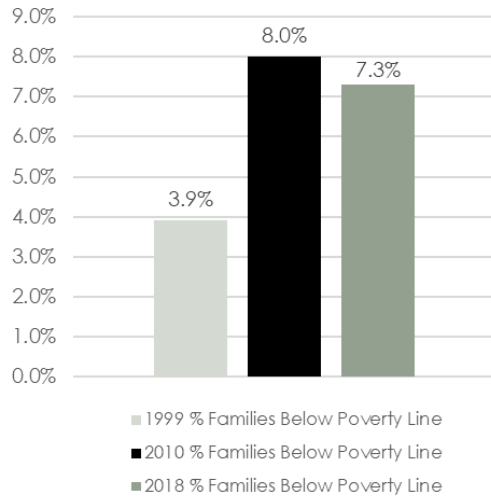
Highland Township's 2018 median household income is \$73,088, a 30% increase from 2000.



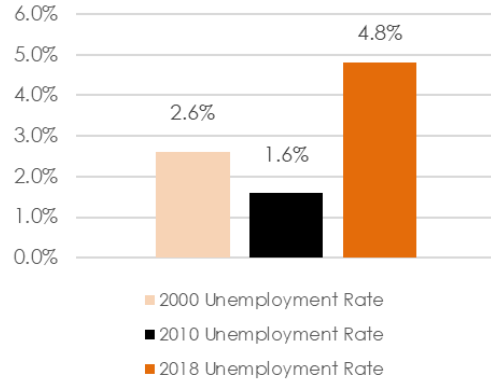


Income

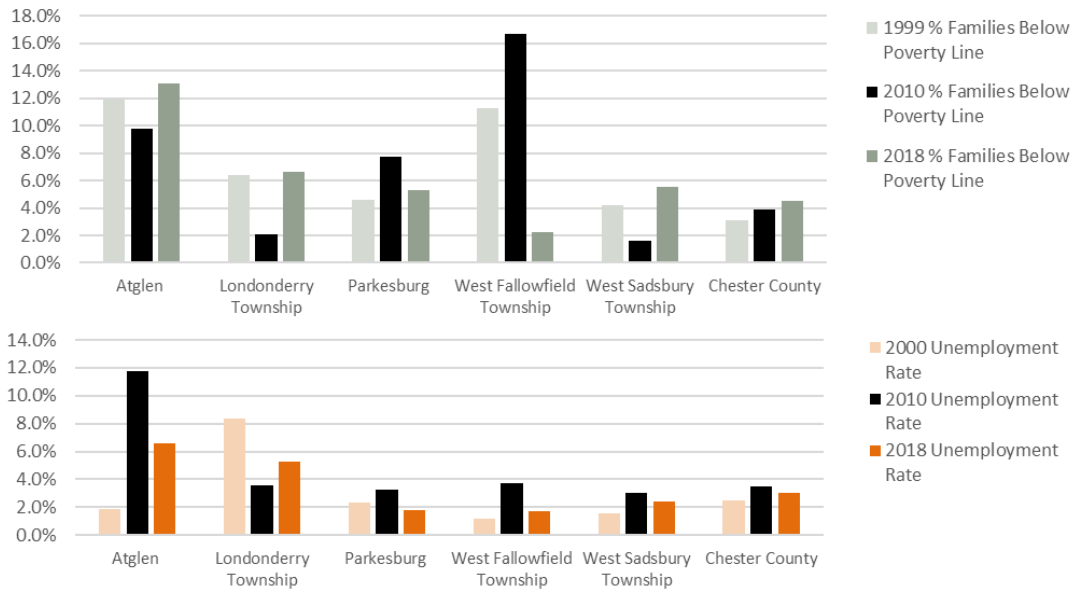
Poverty, Highland 2000 - 2018



Unemployment, Highland 2000 - 2018



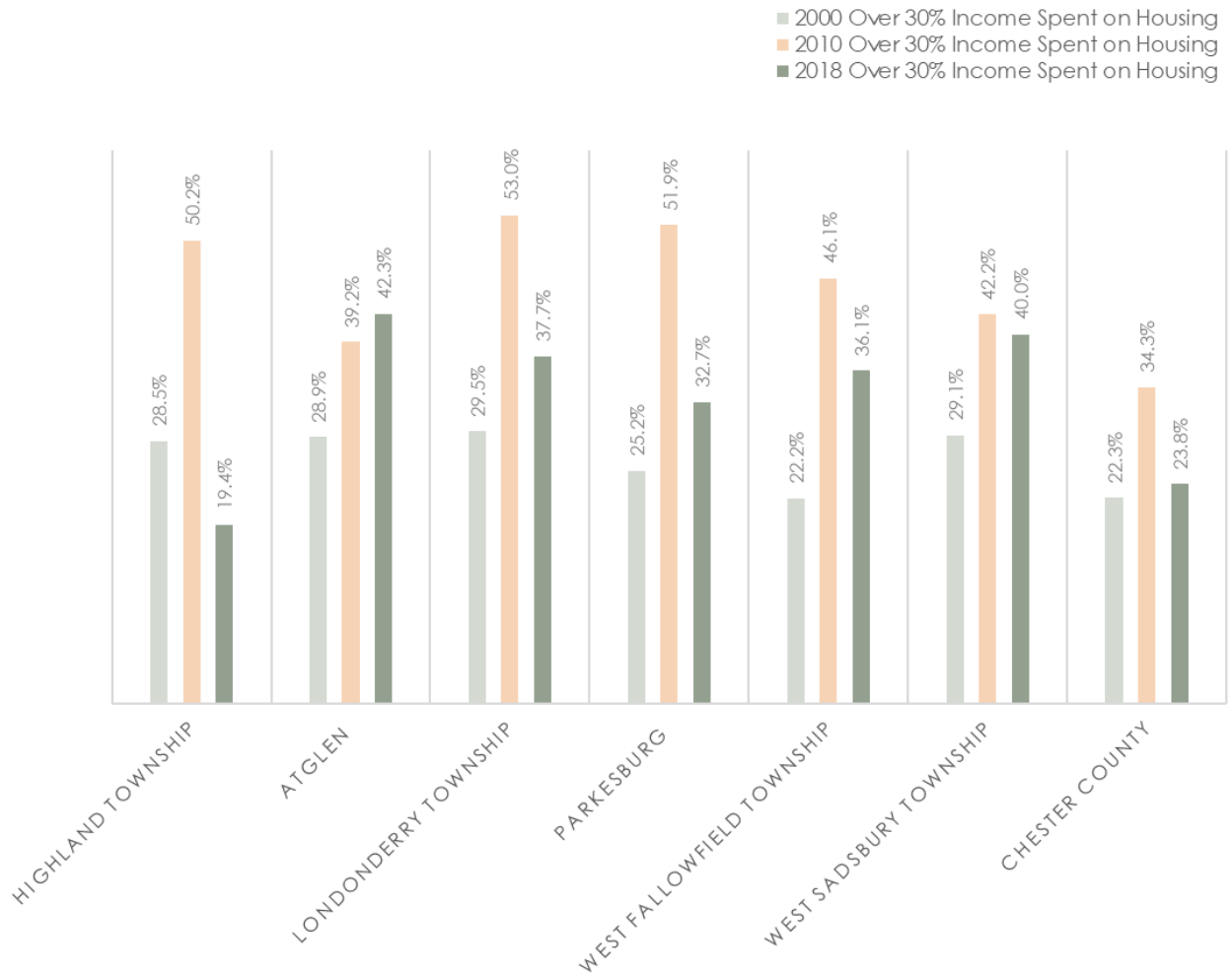
Poverty & Unemployment, Municipalities and County Comparison, 2000 to 2018





Housing Affordability

Homeowner Housing Affordability, Highland Township, 2000 to 2018

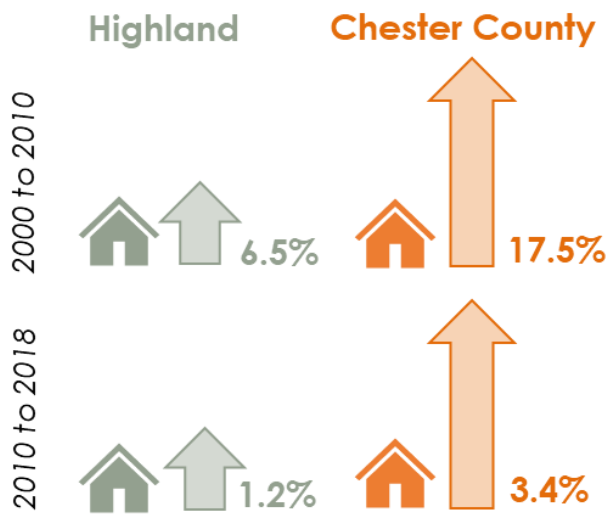




Housing

Highland Township saw an increase of **30 total housing units** between **2000 and 2010** and an increase of **6 total housing units** between **2010 and 2018**. In 2000, there were 459 housing units in the Township. In 2010, there were 489 housing units, and in 2018, there were 495 housing units in the Township.

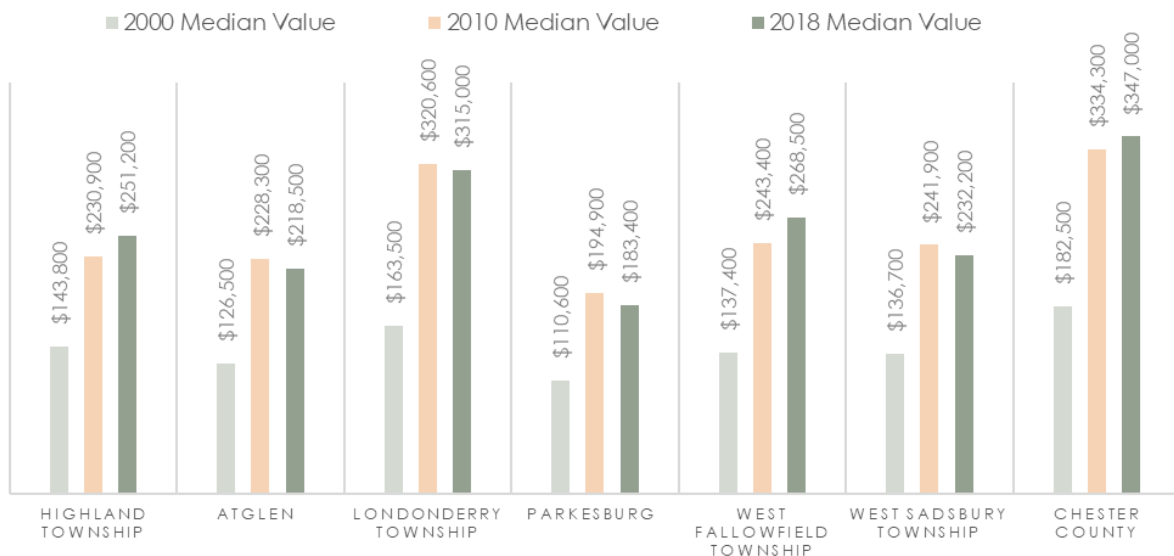
Rate of Change of Housing Units Median Value of Housing Units



Year	Median Value
2000	\$143,800
2010	\$230,900
2018	\$251,200

The median value of owner-occupied housing units increased by 60.6% from 2000 to 2010 and increased by 74.7% from 2000 to 2018.

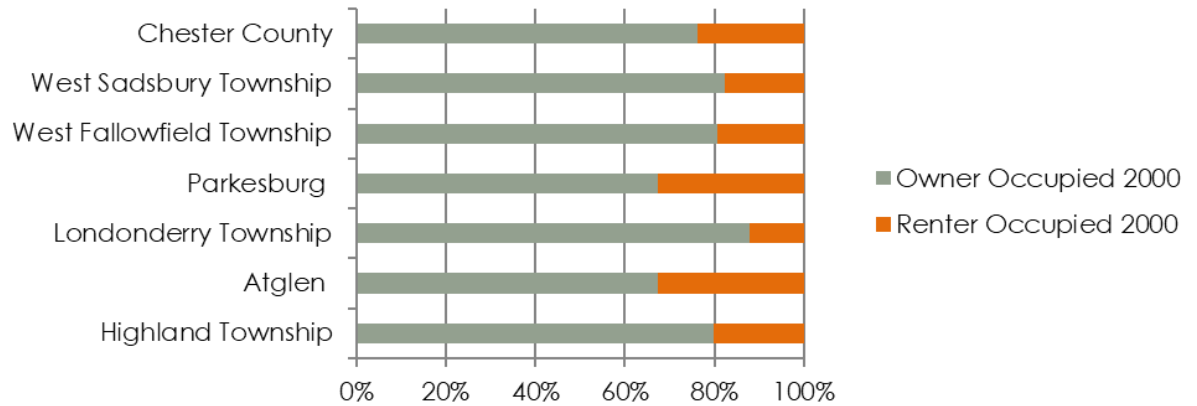
Median Value of Owner-Occupied Housing, 2000 to 2018



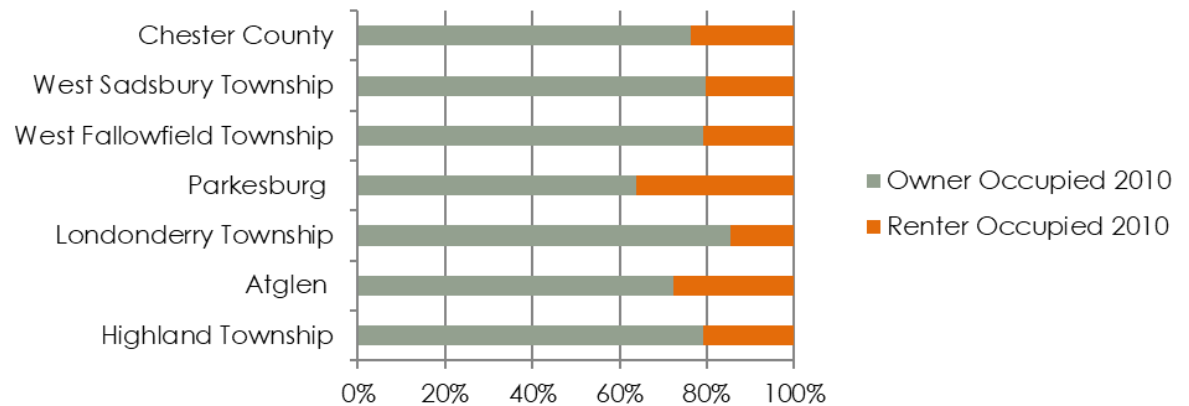


Housing

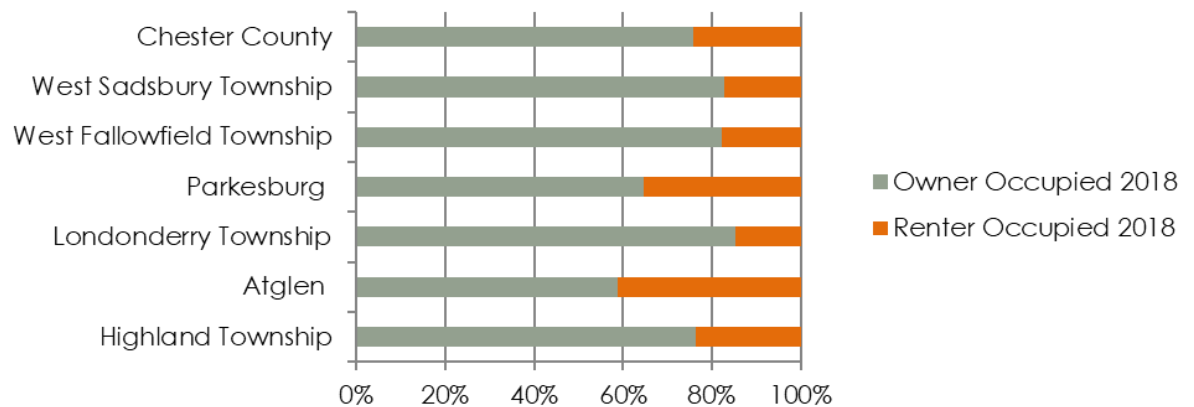
Occupancy, Owner v Renter, 2000



Occupancy, Owner v Renter, 2010



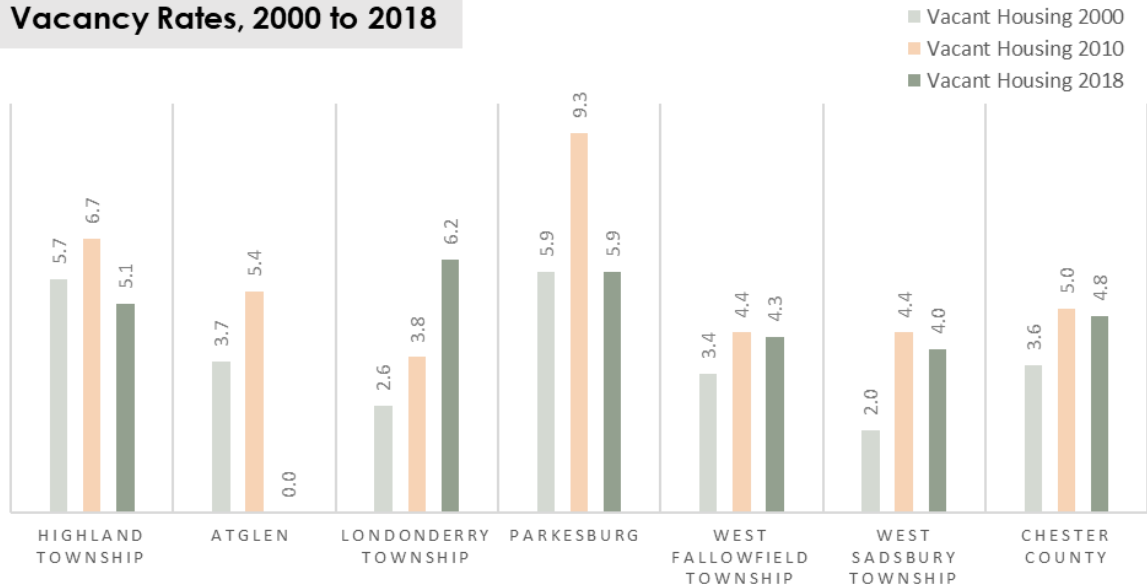
Occupancy, Owner v Renter, 2018



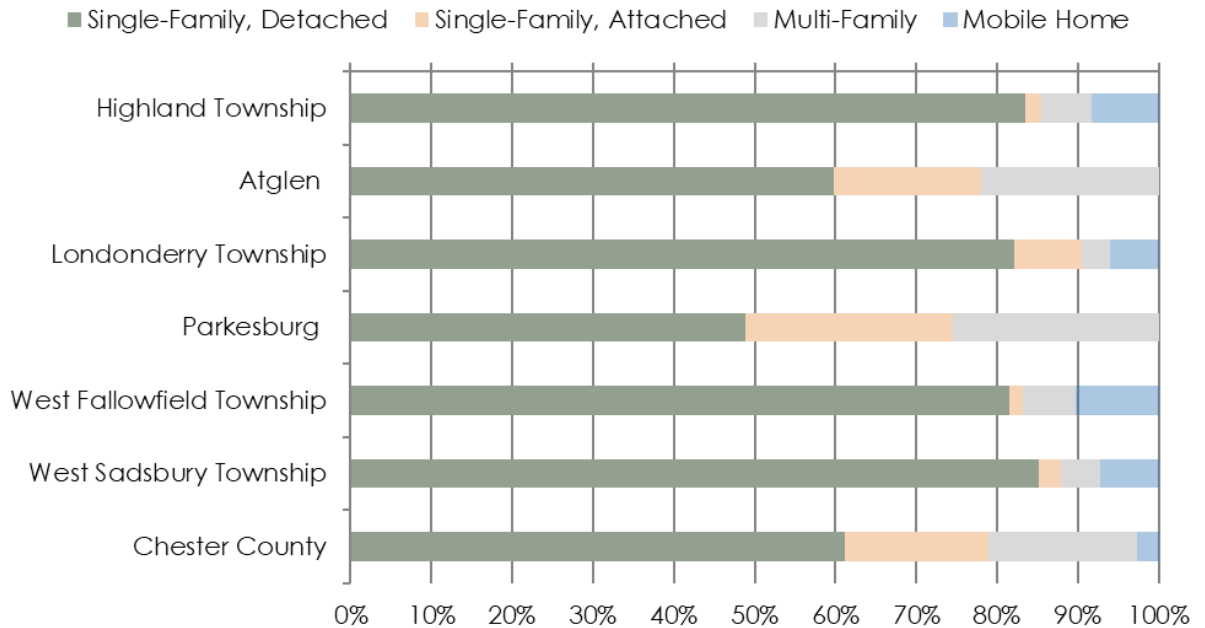


Housing

Vacancy Rates, 2000 to 2018



Housing Stock Diversity, 2018



Single-family detached dwelling units are the most prevalent housing type in Highland Township, comprising 83.4% of the housing stock. This high percentage exceeds the average for Chester County, at 61.1% and is comparable with Londonderry, West Fallowfield, and West Sadsbury Townships.

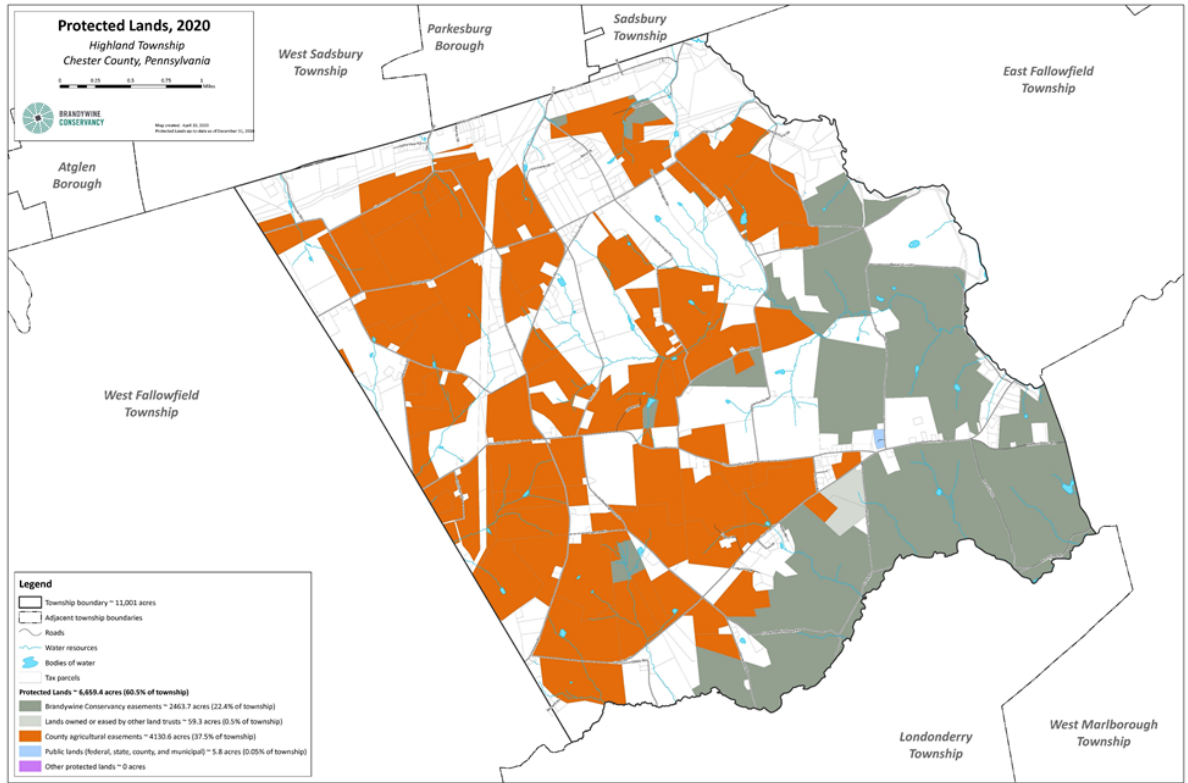


Protected Lands

Protected Open Space, 2000 to 2020

	Acres in 2000	% in 2000	Acres in 2020	% in 2020	% Change
Public Lands	2.97	0.03%	5.8	0.05%	0.02%
Total Conservation Easements	1,854.0	17.3%	2,523.0	22.9%	5.6%
Total Agricultural Easements	2,763.0	25.8%	4,130.6	37.5%	11.7%
Total Protected Lands	4,620.0	43.2%	6,659.4	60.5%	17.4%

Protected Lands Map



Written Summary of Graphic Data

Highland Township's population increased by 147 people from 2000 to 2010 and is estimated by DVRPC to have increased by another 60 people by 2020.

The Township's population also had a higher percentage of males than females as of 2018, and an overall increase in children and members of the Baby Boomer generation - adults over the age of 54. In comparison, there have been decreases in Millennials (22 to 37 years in age), and Generation X (38 to 53 years in age) members. Decreases in such residents most notably occurred in between the ages of 25 and 44. Despite these decreases, the median age of Highland Township in 2018 was relatively young at 40.7.

Household sizes as of 2018 had increased from 2.6 to 2.9 persons per household. The composition of households found in Highland Township has seen increases in female households with children, and married couples with or without children.

Educational attainment rates in Highland Township are estimated to be comparable with many neighboring municipalities. Over time, from 2010 to 2018, there has been an increase by 8% in residents obtaining high school degrees or higher, reflecting a population that is investing more time and financial resources into higher education.

As of 2018, almost 80% of employed residents were estimated to work in Chester County, with the remainder working in other Pennsylvania counties, followed by a small fraction that worked outside of the Commonwealth. Residents in the workforce were typically spending 25 minutes commuting, in order to reach places of employment. Employment in the agriculture/fishing/hunting/industry/mining industry and the educational/health/social services industry saw the greatest increases since 2000.

Both the median household income and median family income has increased since 2000, at lower rates in comparison to neighboring municipalities and the county as a whole. New housing units in Highland Township have occurred less frequently than the county as a whole, with the median value of housing in the community estimated to gain by over \$100,000 since 2000. Housing occupancy rates trend toward home ownership, with the community experiencing a small increase in rentals since 2000.

Data Sources

Data sources used in this report include the following:

1. *U.S. Census Bureau; 2000 Census of Population and Housing; Summary File 1A*
2. *U.S. Census Bureau; 2010 Census of Population and Housing; Summary File 1A*
3. *U.S. Census Bureau; 2006-2010 American Community Survey 5-Year Estimates*
4. *U.S. Census Bureau; 2014-2018 American Community Survey 5-Year Estimates*
5. *Delaware Valley Regional Planning Commission (DVRPC), 2016 Population Projections*
6. *Highland Township Comprehensive Plan, 2001*
7. *Chester County Planning Commission, Jake Michael, AICP, Senior Demographer*
8. *Brandywine Conservancy GIS, 2020*

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APPENDIX B

2021 Community Visioning Session

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Highland Township Public Open House and Vision Session

June 28, 2021

RESULTS

Overview:

On June 28, 2021, Highland Township held an Open House and Visioning Session on the lawn of the township building. In addition to task force members and consultants, approximately 20 members of the public attended. The public provided feedback through a variety of activities on planning issues influencing the future of the township including transportation, open space, planning priorities, future vision, and spending priorities. When reviewed as a whole, the information strongly reinforces several themes from the vision of the previous comprehensive plan:

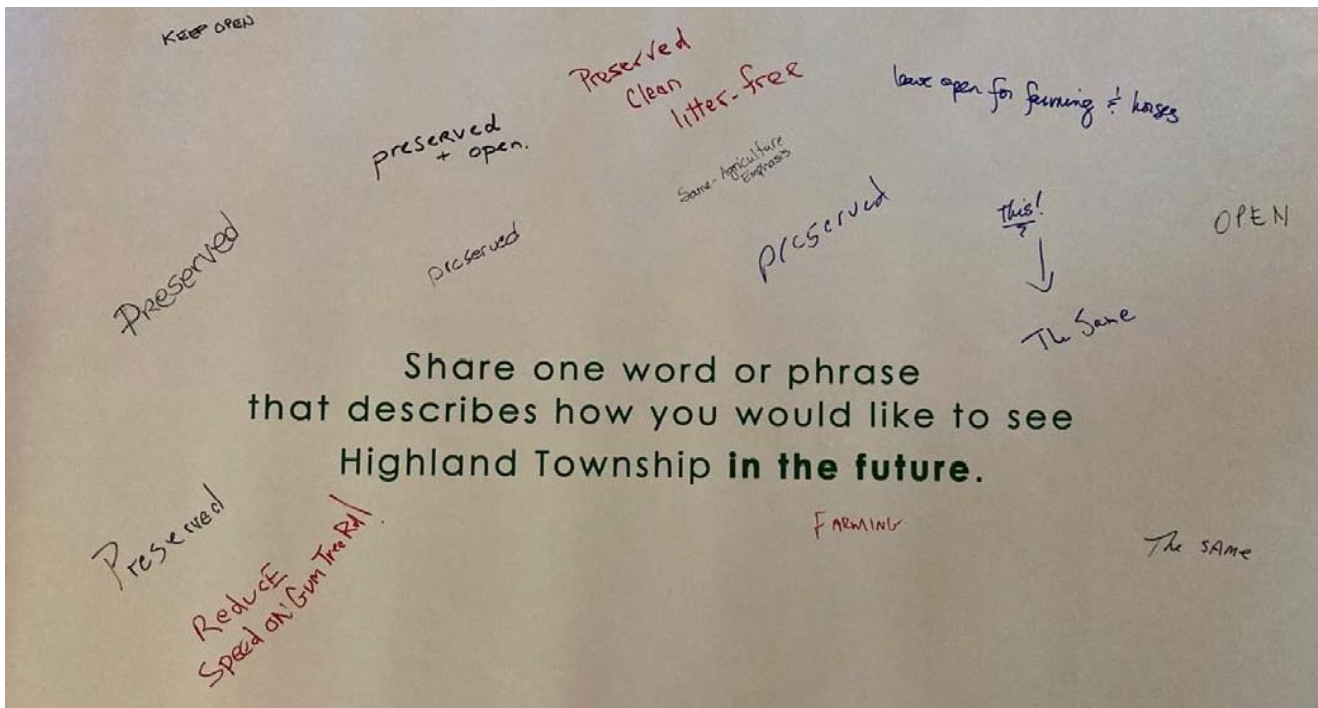
- Residents believe that maintaining the quiet, rural character and lifestyle is the most important value for the future. The residents love the scenic, natural and open qualities of the entire township and wish that it remain the same in the future.
- In order to achieve this, participants strongly demonstrated that protecting the remaining open space would be their highest spending priority. (See page 4)
- In terms of areas of improvement, the road network was stated as the prime area needing attention in the township, particularly Route 10/Limestone Road and Gum Tree Road, both state owned roads. (page 3) Participants supported this by making transportation improvements their second highest “spending priority” in the final exercise.
- These overall results are largely supported and reinforced by the results of the more detailed community values survey, which was taken by an additional 73 residents of the township, or nearly 6% of the township’s population.

The following pages provide a summary of the input received at the Open House.

1. Residents were asked to share one word or phrase describing the Township. The following word cloud represents the answers:



- Residents were then asked to share one word or phrase describing their vision for the Township in the future.



- A series of boards provided the opportunity to rank visioning concepts, planning issues, and transportation related issues, with opportunity for comment. The results are found below:

RESULTS: Non-transportation Planning Issues

Please rank your top 3 priorities by writing "1", "2", or "3" below

	1	2	3	total	Comments
Maintain and enhance the rural character	7	5	2	14	
Preserve historic sites and buildings	0	0	0	0	
Create more recreational opportunities for walking and biking	0	0	4	4	
Enhance/expand township park and recreation facilities	1	0	0	1	
Protect remaining open space and natural resources	5	8	0	13	
Protect scenic roads and viewsheds	0	0	5	5	
Promote environmental sustainability and green building practices	2	0	3	5	
Encourage housing options and services for the aging population	0	0	0	0	
Other	Write-in: Reduce school tax				

RESULTS: Visioning Components

Please rank your top 3 priorities by writing "1", "2", or "3" below

	1	2	3	total	Comments
Quiet, rural lifestyle	11	2	0	13	
Forever farmed	2	3	1	6	
Historic village and homesteads	0	1	1	2	
Viable local agricultural	2	0	1	3	
Clean water	2	3	2	7	
Scenic roads and viewsheds	1	1	4	6	
Cooperation of neighbors	0	1	1	2	
Environmental sustainability	2	2	2	6	
Other	More regular information from the Township/better communication with township				

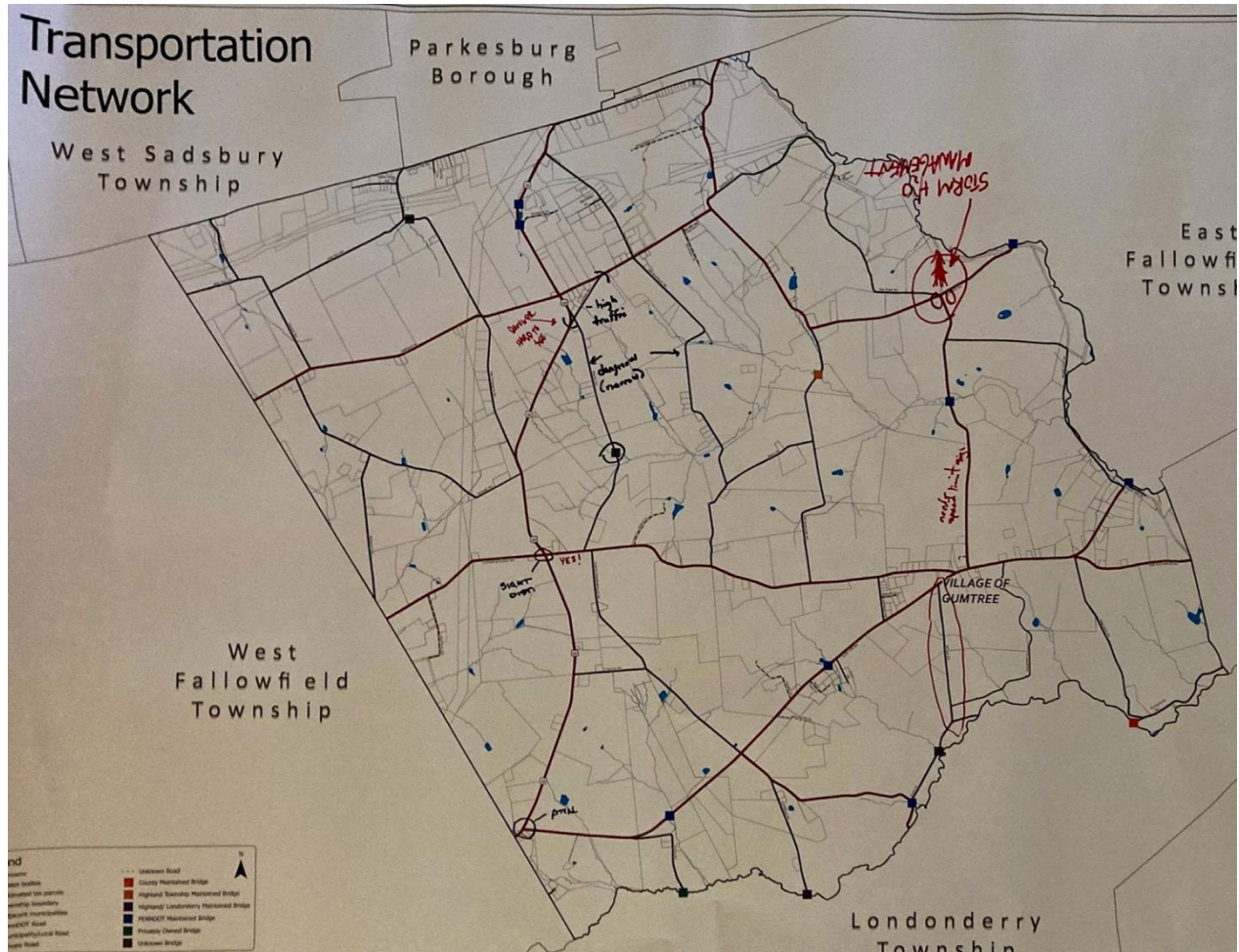
Transportation:

Participants were asked to rank top transportation planning issues as well as mark up a map with comments on the transportation system in the township. These 2 exercises reinforced similar roads and intersections as being in need of safety improvements. In addition, the results of the “Places in need of Improvement” exercise, an exercise open to any topic needing attention in the township, were also primarily focused on the road network.

RESULTS: Transportation Planning Issues

Please rank your top 3 priorities by writing “1”, “2”, or “3” below

	1	2	3	total	Comments
Improving the safety of sharing roads and shoulders with the Amish community	0	0	2	6	All roads (2)
Traffic calming to reduce vehicle speeds	8	6	1	15	Rt 10 (2); Gum Tree Rd (3); E Highland Rd; Old Racetrack; Five Points Road
Reduce cut through traffic	4	4	1	9	Five Points Rd; Gum Tree Rd, Station Rd; Fernwood Rd; Wilson Rd
Better manage truck traffic	1	2	7	10	Gum Tree Rd (2); All Township roads
Maintain and improve road conditions	4	2	0	6	All State roads; Doe Run Station past Rosenvick; All roads (potholes & surface condition); Gum Tree- down hill past Gible.
Improve traffic flow and safety	0	3	4	7	Route 10 (2); many roads are too narrow and difficult to pass by side
Other (Please list)	<ul style="list-style-type: none"> - Manage trees/visibility down Gum Tree past Gible (blind corner & people try to pass ahead of pavement markings); - Work with PennDOT to make Gum Tree a Township road (3) - Improved parking at Parkesburg - Work with PennDOT to reduce speeds on Gum Tree Road 				



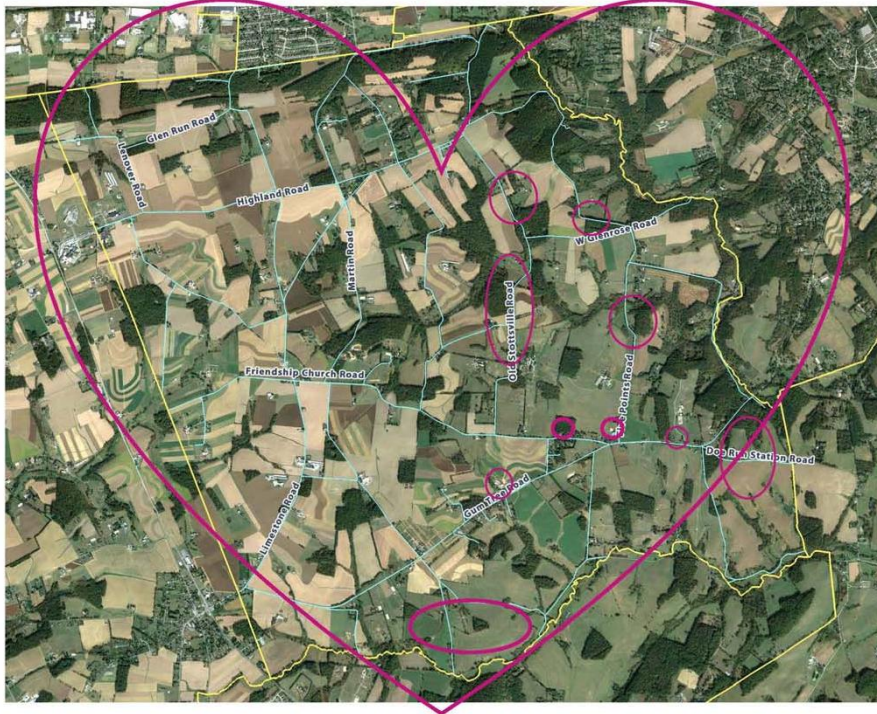
1. **Spending Priorities:** At the Spending Priorities activity station, participants were given five \$20 “Highland bucks” and asked how they would spend it if they were in charge of the township. The following six categories were provided as potential areas of spending, with an “Other” category.

Spending Category	Total	Comments & specific mentions (with amount included in total)
Open space preservation	\$540	
Road Improvements	\$500	\$20 reduced speed limit on Five Points Road
Stormwater Management/Climate Resiliency	\$420	
Agricultural Support	\$280	
Parks & Rec improvement	\$100	\$20- passive/trails
Other	0	
Total	\$1,840	

2. Finally, participants were given a map and asked to delineate their “most loved” places in the township and the places that needed improvement. The maps on the following 2

pages show these results.

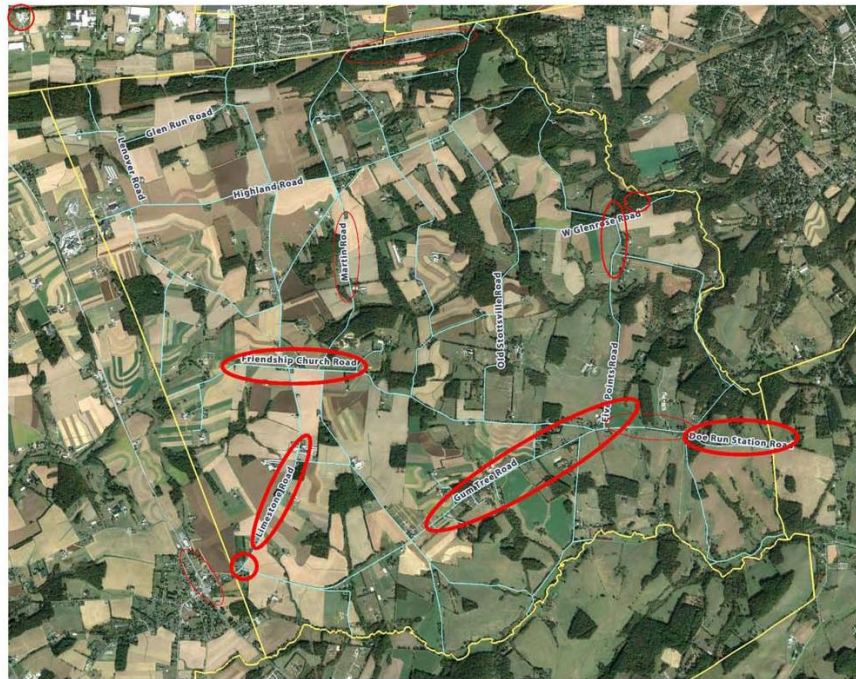
What are the Places You Love in Highland Township? RESULTS- June 28, 2021



What are the places you LOVE in Highland Township? Circle on the map and list a maximum of 3 places here.

- Whole township (3)
- Gum Tree village and road (3)
- Township Building (4)
- Friendship Church (4)
- Home 93)
- Family farm (1)
- Windle Farm
- Chestnut Grove Schoolhouse
- Open space and natural beauty (3)
- Anywhere along Doe and Buck Run Roads
- Racetrack
- Land Trust lands/Runnymede (3)
- Old Strottsville Road (2)

What are the Places that Need Improvement in Highland Township?



What are the places you think NEED IMPROVEMENT in Highland Township? Circle on the map and list a maximum of 3 places here.

- Transportation related:**
- Limestone Road (8 total)
 - By North Star Orchards
 - Intersection with Gum Tree Road (3)
 - Intersection with Friendship Church Road (4)
 - Gum Tree Road (8 total)
 - (trim trees back along shoulder) (1)
 - Intersection with 10 (3)
 - Intersection w/Five Points Rd (4)
 - Doe Run Station Road (4)
 - All State Roads (3)
 - Less potholes
 - Improve surfaces
 - Wider for safer passing
 - Bank along 524
 - Borough Line Road – road improvements
 - 41 to 10- needs a turn signal (outside of township)
 - All through traffic
 - Martin Road
- Non-transportation related:**
- Blighted house on W Glenrose Road (2)
 - Stormwater management on W Glenrose Road (2)
 - Communication with Township (website)
 - Address CAFO issues

APPENDIX C

2021 Community Values Survey & Results

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Highland Township
Community Values Survey

Comprehensive Plan Update 2021-2022

Welcome!

Help guide Highland Township’s future. Please participate in this survey! Highland Township is updating its 2001 Comprehensive Plan, a municipal document that serves as our community’s vision of its future. The plan provides guidance for coordinating decisions on the environment, roads, local regulations, and other municipal activities over the next 10 years. Your involvement is essential.

This survey helps determine residents’ concerns and community priorities about planning issues within Highland Township. Highland Township’s Comprehensive Plan Task Force, with technical assistance from Brandywine Conservancy, is guiding this planning effort, and will use your feedback from this survey to develop Highland Township’s Comprehensive Plan Update.

If you have any questions about this survey or the Comprehensive Plan Update, please contact Kathleen McCaig at the Brandywine Conservancy at kmccaig@brandywine.org. You are encouraged to complete this survey by June 18th. Thank you for your participation!

When you have completed the survey, please place it in an envelope and return it to: Attn:

Kathleen McCaig

Brandywine Conservancy PO

Box 141

Chadds Ford, PA 19317

1. Do you live in Highland Township, either on property you own or rent?

	Yes, own and a resident
	Yes, own land in Highland Township but do not live in Highland Township
	Yes, rent
	No

2. Why did you choose to live in Highland Township?

Please select your top three reasons, ranking them as 1, 2, or 3.

	Close to work
	Family and friends nearby
	Housing costs
	Lifetime resident
	Quality of schools
	Safe/security/low crime rate
	Scenic beauty
	Rural, quiet lifestyle
	Other (please describe below)

3. What would cause you to leave Highland Township, other than a change in place of employment?

Please select your top three reasons, ranking them as 1, 2, or 3.

	Commuting distance or time to work
	Cost or lack of variety in housing
	Crime rate increase
	Inadequate retirement setting/not suitable to age in place
	Limited shopping or entertainment opportunities
	Not enough community services
	Not enough parks or recreation
	Not enough trails
	Odor or noise from adjacent farm
	Quality of public schools
	Taxes too high
	Too many regulations
	Too much traffic
	No intention of leaving
	Other (please describe below)

4. Which of the following issues do you believe are the most important in planning for the future of Highland Township?

Please select your top three reasons, ranking them as 1, 2, or 3.

	Access to regional trails
	Addressing climate change (i.e., planning for extreme weather events, invasive species, etc.)
	Adequacy of community facilities and services (i.e. emergency response, code enforcement, flooding and stormwater management)
	Adequacy of Township park
	Affordable housing or greater choice in housing
	Conserving open space
	Management of development and growth
	Preserving farms and farmland
	Preserving historic buildings
	Promoting energy efficiency, composting, and use of renewable energysystems
	Protecting streams, wetlands, and woodlands
	Traffic management and roadway improvements
	Retaining rural character
	Other (please describe below)

5. Complete the following statement about what kind of community you hope the Township will be in the future:

“In the future, Highland Township should seek to:

”

6. Do you believe Highland Township is a good place for each of the following age groups to live?

Mark each as yes, no, or not sure.

Yes	No	Not Sure	Category
			0 – 11 years
			12-18 years
			19-45 years
			46-65 years
			Over 65 years
For any “no” responses, please describe why below:			

7. What priority transportation needs should be addressed in Highland Township?

Please select up to three of the following options.

See map of transportation network on following page as reference.

	Addressing increasing thru-traffic on Route 10, Gum Tree Road, other
	Maintenance of state-owned roads
	Maintenance of township owned roads
	None needed
	Park and ride lot for commuters
	Snow and ice removal
	Shoulder widening to improve safety for buggies, scooters, biking, or walking on roadways
	Trails - bicycling
	Trails - walking
	Other (please describe below)

8. Are there any roadway locations or intersections in Highland Township that you believe to be dangerous or need to be better maintained? If so, please state where below.

Base Map

West Sadsbury Township

Parkesburg Borough

Sadsbury Township

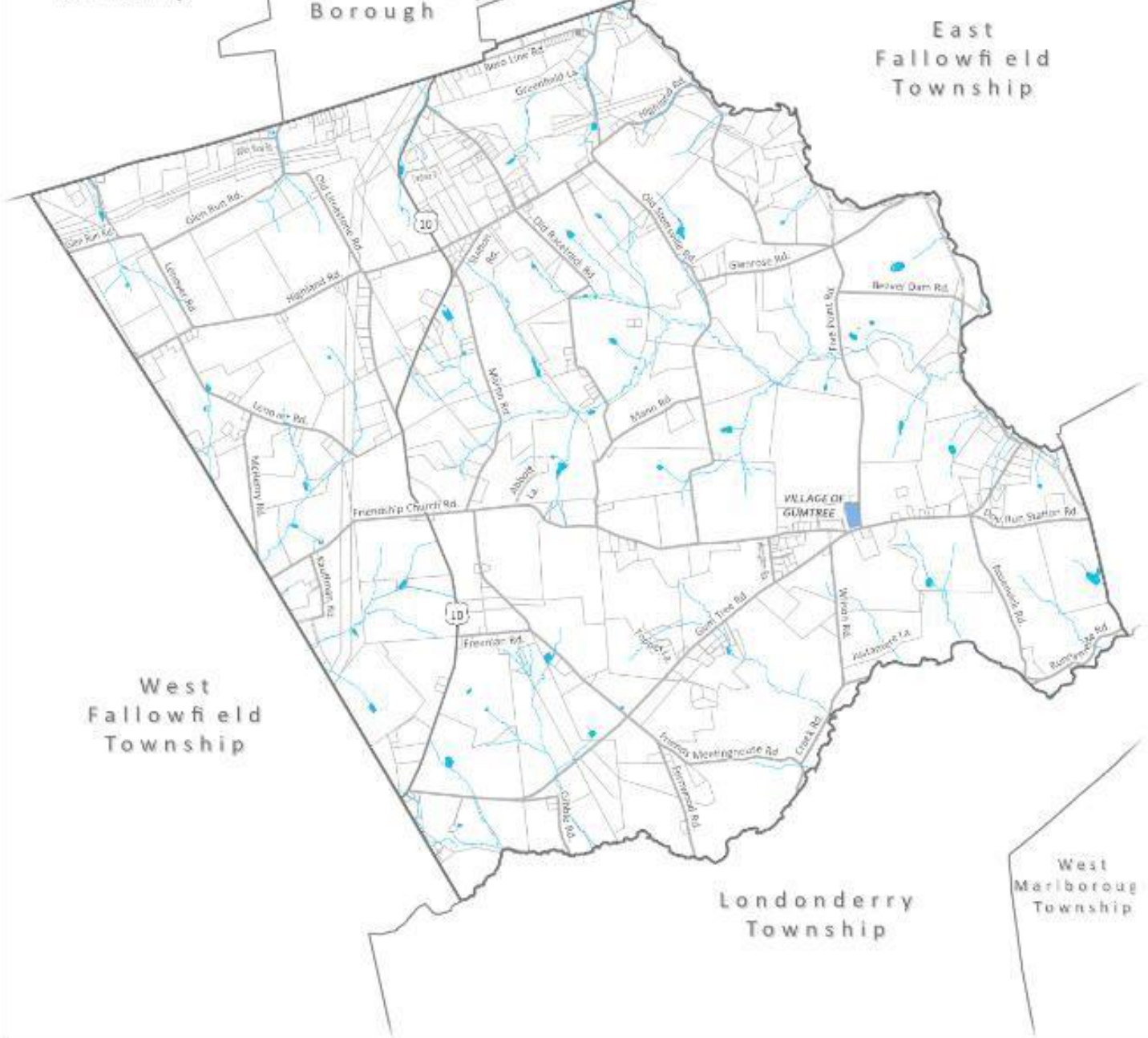
Valley Township

East Fallowfield Township

West Fallowfield Township

Londonderry Township

West Mariborough Township



Highland Township Comprehensive Plan Update 2022



Data Source: Base data from Chester County Geographic Information Services, 2021.

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

Map created: March 24, 2021
Last revised:



Legend

- Water bodies
- Streams
- State routes
- Roads
- Estimated tax parcels
- Township boundary
- Adjacent municipalities
- Municipal Campus

9. Rate the following services or facilities in meeting the needs of Township residents.

Please check either adequate, inadequate, or no opinion for each category.

Adequate	Inadequate	No opinion	Category
			Cable or broadband services
			Code enforcement
			Communications (website, newsletter, etc.)
			Fire/medical/emergency services
			Maintenance of State roads
			Maintenance of Township roads
			Overall effectiveness of Township government
			Parks and recreation (facilities, programming)
			Snow removal
			Trash and recycling removal in the Township
			Township buildings and offices
			Other (please describe below)

10. If Highland Township’s real estate tax monies were clearly marked for the following purposes, which of those do you support for use of collected taxes?

Please mark yes or no for each category.

Yes	No	Category
		24 hr. snow removal coverage
		Direct support for recreational programming
		Expanded ambulance service
		Expanded fire protection
		Expanded police protection
		Flood and stormwater improvements
		Improved Township road maintenance
		More parks and recreation area/facilities
		Municipal recycling program
		Preserving farms and farmland
		Other (please describe below)

11. For the past two decades, the Township Board of Supervisors have maintained strong planning policies and zoning that favor continued agricultural land uses for much of Highland and discourage suburban development.

Do you support this Board practice continuing for another 10+ years?

	Yes
	No
	No opinion

12. Do you have any concerns with more intense forms of agriculture, such as commercial feedlot operations, mushroom composting, intensive equestrian use, etc., that the Township should address?

Examples:

Commercial Feedlot Operations - Uses such as CAFOs or concentrated animal feeding operations

Intensive Equestrian Use - Uses such as boarding facilities, equestrian rehabilitation facilities, or sites that host horse shows

	Yes
	No
If yes, please describe those concerns:	

13. As family members age, the need occasionally arises for a second dwelling, or apartment, to be added to a single lot in order to allow multi-generational families or for the elderly to age in place.

Would you support changing the Township regulations to allow for this need?

	Yes
	No
	No opinion

14. Please use the space below to share other comments on issues that you believe should be addressed in the Township now or in the future.

15. How long have you lived in Highland Township?

	Less than 1 year
	1 - 5 years
	6 - 10 years
	11- 25 years
	More than 25 years
	I do not live in Highland Township

16. What is the approximate size of your property?

	1 to 2 acres
	More than 2 acres to 10 acres
	More than 10 acres to 50 acres
	More than 50 acres

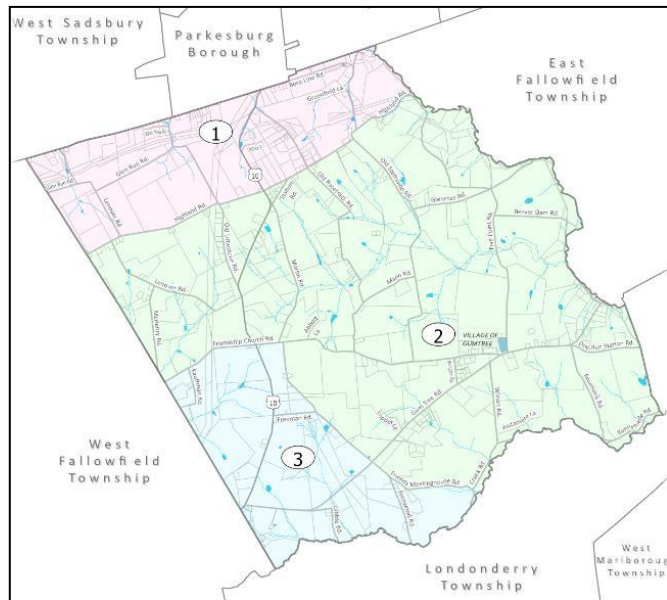
17. How many people of each age group live in your household?

Fill in all that apply.

	0 – 11 years
	12-18 years
	19-45 years
	46-65 years
	Over 65 years

18. In which general area of Highland Township do you live?

	Area 1
	Area 2
	Area 3
	I do not live in Highland Township



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

	Work at home/farm
	In Highland Township (not at home/farm)
	Other area in Chester County
	Berks County
	Delaware County
	Lancaster County
	Philadelphia
	Delaware (state)
	Maryland
	New Jersey
	Other (please specify)

20. How would you prefer to be made aware of Township information, issues, meetings, or updates?

Check all that apply.

	Newsletter
	Newspaper
	Social Media
	Township Website
	Other (please specify)

Thank you for sharing your input! If you would like to be contacted about future opportunities to provide input, please provide your email address:

Name: _____

Email:

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Highland Township Community Values Survey

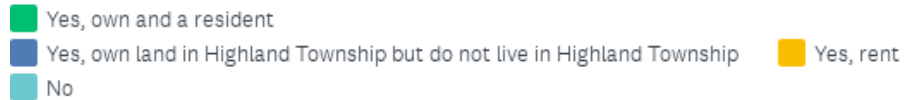
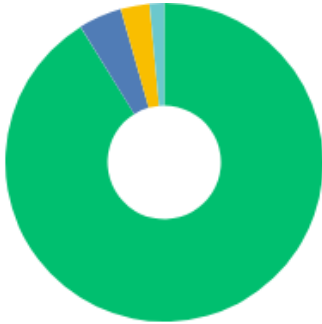
73

Total Responses

Date Created: Wednesday, May 05, 2021

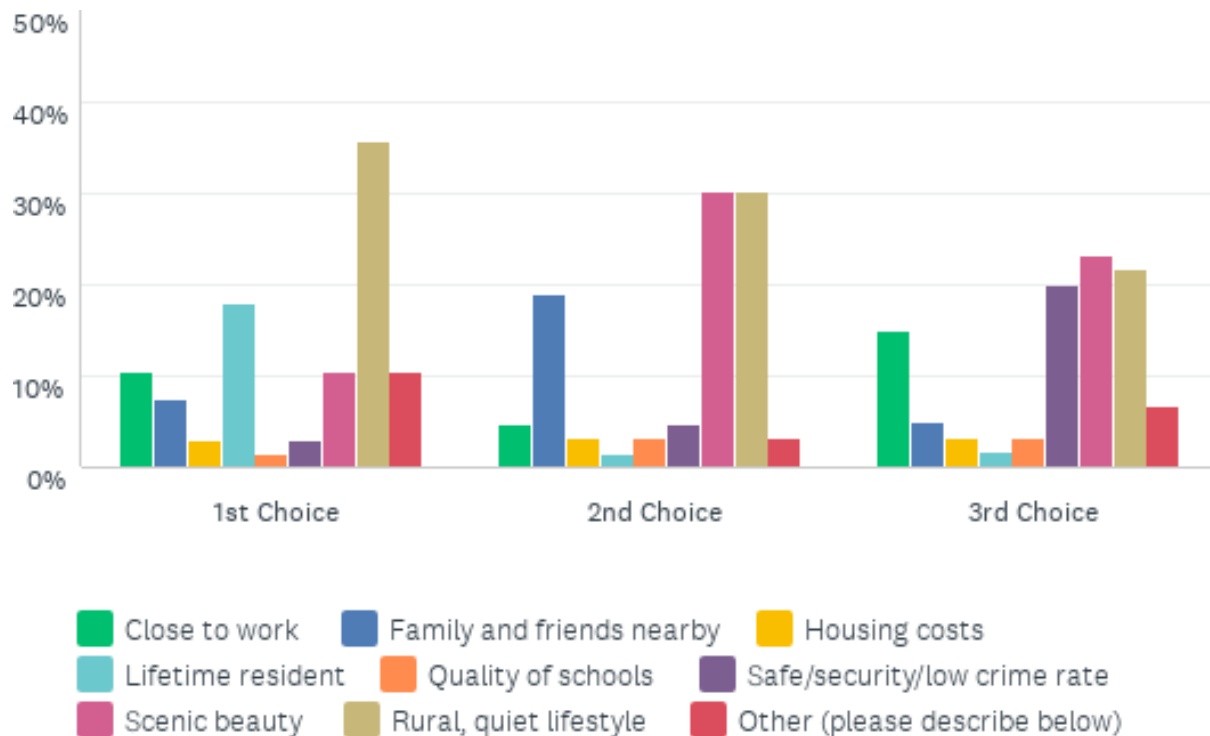
Date Ended: Friday, July 2, 2021

Q1: Do you live in Highland Township, either on property you own or rent?



ANSWER CHOICES	RESPONSES	
Yes, own and a resident	91.2%	62
Yes, own land in Highland Township but do not live in Highland Township	4.4%	3
Yes, rent	2.9%	2
No	1.5%	1
TOTAL		68

Q2: Why did you choose to live in Highland Township? Please select your top three reasons, ranking them as 1st, 2nd, or 3rd.



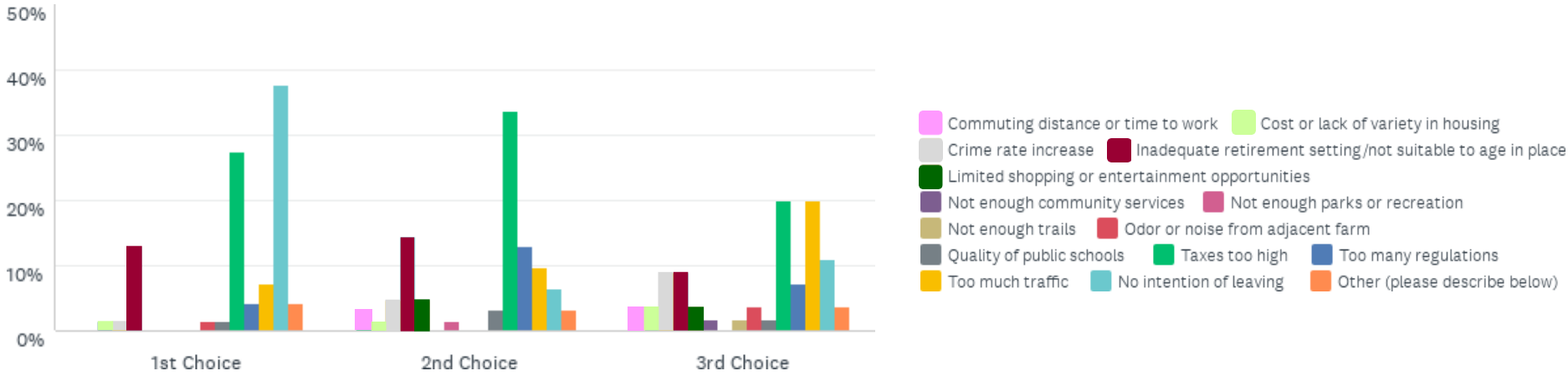
Answered: 67 Skipped: 6

Q2: Why did you choose to live in Highland Township? Please select your top three reasons, ranking them as 1st, 2nd, or 3rd.

	CLOSE TO WORK	FAMILY AND FRIENDS NEARBY	HOUSING COSTS	LIFETIME RESIDENT	QUALITY OF SCHOOLS	SAFE/SECURITY/LOW CRIME RATE	SCENIC BEAUTY	RURAL, QUIET LIFESTYLE	OTHER (PLEASE DESCRIBE BELOW)	TOTAL
1st Choice	10.45% 7	7.46% 5	2.99% 2	17.91% 12	1.49% 1	2.99% 2	10.45% 7	35.82% 24	10.45% 7	67
2nd Choice	4.76% 3	19.05% 12	3.17% 2	1.59% 1	3.17% 2	4.76% 3	30.16% 19	30.16% 19	3.17% 2	63
3rd Choice	15.00% 9	5.00% 3	3.33% 2	1.67% 1	3.33% 2	20.00% 12	23.33% 14	21.67% 13	6.67% 4	60

- equestrian
- family and friends nearby (note - marked but not ranked)
- Family and friends nearby; scenic beauty; rural, quiet lifestyle (note - marked on survey, but not ranked)
- Equestrian operations
- Protected lands, limited expansion
- 3 rd generation family farm
- Purchased my fathers farm in Highland twp
- Family farm
- Horse Country
- Open space
- Business
- Quality of farm land.
- The township is aligned with Horse Farm operations, which we considered in buying a farm here
- Family property that I own and manage remotely - I live in MN.
- Low cost land in desirable site.
- Bought a farm
- Part of equestrian community

Q3: What would cause you to leave Highland Township, other than a change in place of employment? Please select your top three reasons, ranking them as 1st, 2nd, or 3rd.

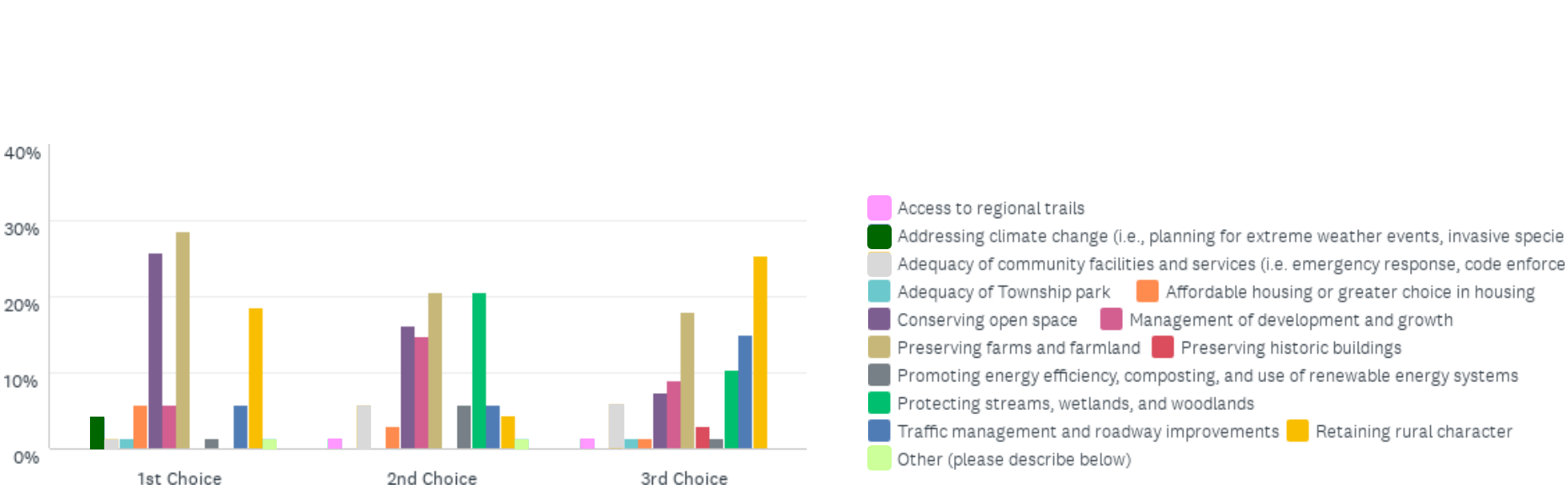


Q3: What would cause you to leave Highland Township, other than a change in place of employment? Please select your top three reasons, ranking them as 1st, 2nd, or 3rd.

	COMMUTING DISTANCE OR TIME TO WORK	COST OR LACK OF VARIETY IN HOUSING	CRIME RATE INCREASE	INADEQUATE RETIREMENT SETTING/NOT SUITABLE TO AGE IN PLACE	LIMITED SHOPPING OR ENTERTAINMENT OPPORTUNITIES	NOT ENOUGH COMMUNITY SERVICES	NOT ENOUGH PARKS OR RECREATION	NOT ENOUGH TRAILS	ODOR OR NOISE FROM ADJACENT FARM	QUALITY OF PUBLIC SCHOOLS	TAXES TOO HIGH	TOO MANY REGULATIONS	TOO MUCH TRAFFIC	NO INTENTION OF LEAVING	OTHER (PLEASE DESCRIBE BELOW)	TOTAL
1st Choice	0.00% 0	1.45% 1	1.45% 1	13.04% 9	0.00% 0	0.00% 0	0.00% 0	0.00% 0	1.45% 1	1.45% 1	27.54% 19	4.35% 3	7.25% 5	37.68% 26	4.35% 3	69
2nd Choice	3.23% 2	1.61% 1	4.84% 3	14.52% 9	4.84% 3	0.00% 0	1.61% 1	0.00% 0	0.00% 0	3.23% 2	33.87% 21	12.90% 8	9.68% 6	6.45% 4	3.23% 2	62
3rd Choice	3.64% 2	3.64% 2	9.09% 5	9.09% 5	3.64% 2	1.82% 1	0.00% 0	1.82% 1	3.64% 2	1.82% 1	20.00% 11	7.27% 4	20.00% 11	10.91% 6	3.64% 2	55

- when time to downsize
- taxes too high, no intention of leaving (note - marked but not ranked)
- Taxes too high - school, not Township
- Change in minimum parcel size/increased density housing
- Laws that would compromise my farming activities
- I'll leave at my death
- Overdevelopment
- I'm referring to school taxes being too high. As retired seniors, Octorara school taxes are much too high. Friends and family are shocked at the amount we pay.
- Octorara School Taxes too high
- N/A

Q4: Which of the following issues do you believe are the most important in planning for the future of Highland Township? Please select your top three reasons, ranking them as 1st, 2nd, or 3rd.



Q4: Which of the following issues do you believe are the most important in planning for the future of Highland Township? Please select your top three reasons, ranking them as 1st, 2nd, or 3rd.

	ACCESS TO REGIONAL TRAILS	ADDRESSING CLIMATE CHANGE (I.E., PLANNING FOR EXTREME WEATHER EVENTS, INVASIVE SPECIES, ETC.)	ADEQUACY OF COMMUNITY FACILITIES AND SERVICES (I.E. EMERGENCY RESPONSE, CODE ENFORCEMENT, FLOODING AND STORMWATER MANAGEMENT)	ADEQUACY OF TOWNSHIP PARK	AFFORDABLE HOUSING OR GREATER CHOICE IN HOUSING	CONSERVING OPEN SPACE	MANAGEMENT OF DEVELOPMENT AND GROWTH	PRESERVING FARMS AND FARMLAND	PRESERVING HISTORIC BUILDINGS	PROMOTING ENERGY EFFICIENCY, COMPOSTING, AND USE OF RENEWABLE ENERGY SYSTEMS	PROTECTING STREAMS, WETLANDS, AND WOODLANDS	TRAFFIC MANAGEMENT AND ROADWAY IMPROVEMENTS	RETAINING RURAL CHARACTER	OTHER (PLEASE DESCRIBE BELOW)	TOTAL
1st Choice	0.0% 0	4.3% 3	1.4% 1	1.4% 1	5.7% 4	25.7% 18	5.7% 4	28.6% 20	0.0% 0	1.4% 1	0.0% 0	5.7% 4	18.6% 13	1.4% 1	70
2nd Choice	1.5% 1	0.0% 0	5.9% 4	0.0% 0	2.9% 2	16.2% 11	14.7% 10	20.6% 14	0.0% 0	5.9% 4	20.6% 14	5.9% 4	4.4% 3	1.5% 1	68
3rd Choice	1.5% 1	0.0% 0	6.0% 4	1.5% 1	1.5% 1	7.5% 5	9.0% 6	17.9% 12	3.0% 2	1.5% 1	10.4% 7	14.9% 10	25.4% 17	0.0% 0	67

- preserving farms and farmland; retaining rural character (note - marked but not ranked)
- The 25 acre minimum has been a stumbling block in some cases with the strong demand and interest in vegetable farming it is now very possible to make a good living on 10 acres. But to have to buy 25 acres it's not possible for some people with the price of land. Could it possibly be reduced to a 10 acre minimum. Chester Co. Open Space Preservation has already taken that step. They now allow a 10 acre subdivision.
- The 25 acre zoning has devalued our farm making it difficult to be able to sell the property to have a retirement plan
- A landscaping improvement at the intersection of Route 10 and Station Road. The triangle should have some sort of flower garden. Something scenic.
- Finding ways to fund maintenance of township roads, facilities, historic entities etc other than property owners tax dollars ex: grants, funding from gambling or medical marijuana

Q5: Complete the following statement about what kind of community you hope the Township will be in the future:

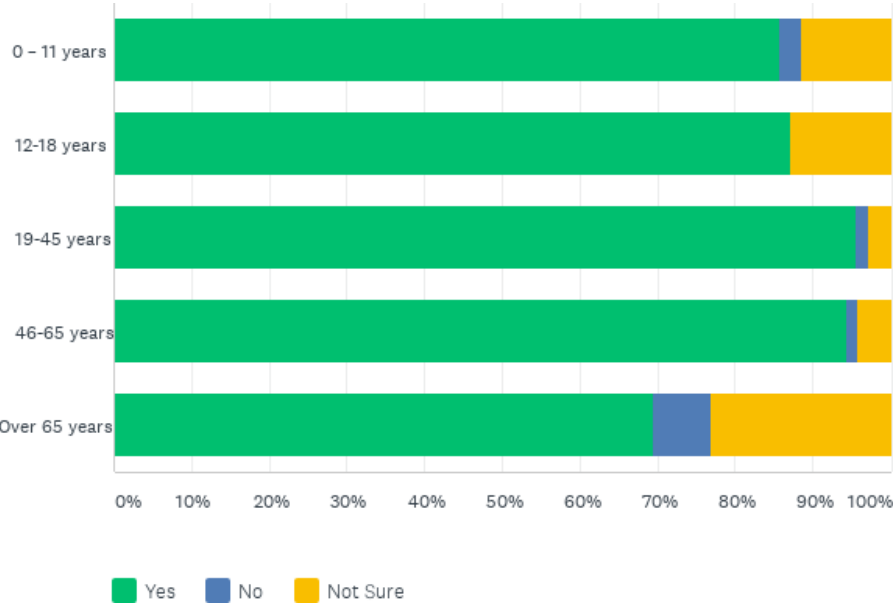
“In the future, Highland Township should seek to:

maintain balance farms Continue township rural housing
residential development Preserve open space land
community Allow keep Remain area setting taxes open
Remain rural

- balance it's rural way of life with environmental health
 - maintain quality of life as is.
 - remain rural
- keep taxes lower
- harmonize agricultural operations with open space and residential interests.
 - not change much
 - support businesses that encourage small family farms.
 - lower property taxes and fix roads
 - Continue to expand ag parcels and easements
 - be a more affordable place to live. A place where taxes are manageable and basic necessities can be bought
 - Maintain its rural feeling, but also have more reasonable zoning for development, such as 5 acre per house, not 25 acres!
 - Allow farm businesses to expand so they can continue to preserve the balance of open space that we have. Our taxes are high and we to generate money to survive and keep our farms
 - Maintain rural character
 - Maintain rural feel and open spaces but allow for some residential and commercial development.
 - Remain as close to how we are now!
 - remain unchanged
 - remain the same - emphasis on agriculture and rural community life
 - Remain a rural area
 - not become a congested, overdeveloped township.
 - maintain rural lifestyle
 - Continue to maintain the quiet and peaceful atmosphere while promoting community among the residents
 - retain its peaceful character.
 - Stay as is
 - Preserve rural area and keep traffic at a minimum.
 - the kind of community it has always been
 - be inclusive and safe.
 - Maintain open space, preserve farmland, limit commercial and large residential complexes
 - Remain the same. It is rural and quiet.
 - Remain Open country
 - prevent residential growth.
 - welcome people of all types.
 - be a quiet semirural community that provides necessary services for it residents

- preserve rural setting, farmland, open space and limit tax increases. Do not create a city-like setting. We moved from an area that was once beautiful open spaces and the township bought up open land and built mega city-like condos. It became crowded with traffic jams. If we wanted a city we would have bought a home in the city.
- Stay the rial community we are now
- Remain as a country setting comprised of farms and open space.
- Retain the beautiful and rural nature of our township by diligently working to keep our water, land and air pure and accessible to all residents including our wildlife.
- Have minimal development
- Remain a rural agricultural setting.
- manage well but not over regulate.
- Provide a natural and beautiful area that is managed responsibly for future generations and for the environment.
- Restrict housing developments from taking over open spaces. However, it would be nice to have AFFORDABLE housing for seniors; not houses that cost \$300,000+ as in neighboring areas.
- Find good leadership.. with a mixture of folks from different backgrounds that are citizens of the Twp.
- Preserve farmland and rural status and perhaps use township land for walking/bike trail so locals have a safe place to do these activities.
- be a rural haven.
- Keep all things in balance. Not too much development in housing. Not too much increase in horse events Etc etc.
- Hold a community day one day a year as a seasonal event to allow us all to get to know one another and connect.
- build a community that will continue to embrace the rural lifestyle while allowing for technology improvements in the form on digital communication
- Preserve open space and farmland.
- Residential farming
- Expand diversity in housing and land use and management. Protect the air and water quality while encouraging sustainable development. Allow the township to grow to the benefit of all.
- Preserve open land and try to keep housing developments and major industry out so that the openness, beauty, and scenic beauty of the township is maintained.
- NO more commercial construction!
- maintain its semi-rural character.
- improve road maintenance
- increase it's office hours.
- Keep the open space and rural beauty of the area.
- Remain rural and farm and horse country. Strive to lower school taxes for retirees.
- Provide somehow some more means to connect/meet/do things with neighbors (as many are at a distance and it is hard to just drive down the driveway to introduce oneself out of the blue)

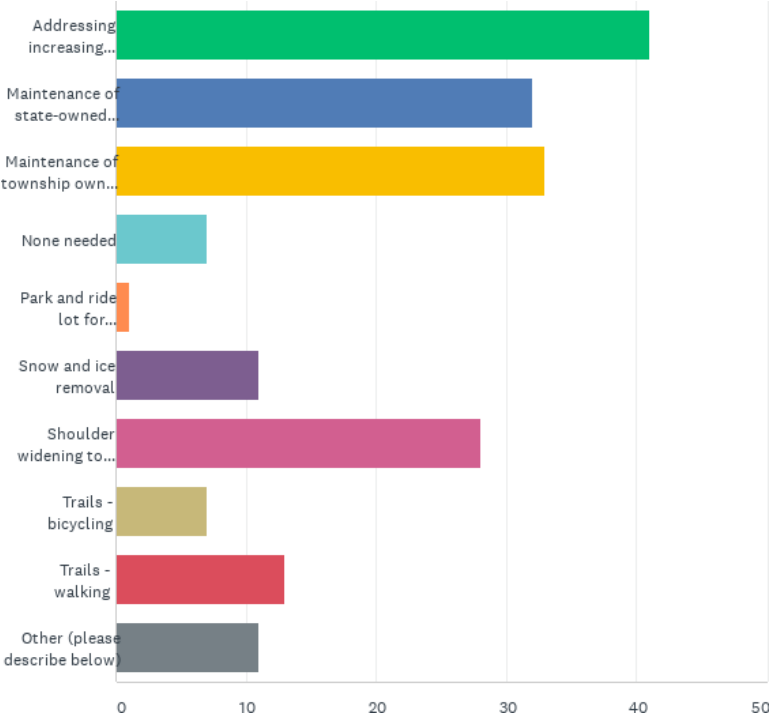
Q6: Do you believe Highland Township is a good place for each of the following age groups to live? Mark each as yes, no, or not sure.



	YES	NO	NOT SURE	TOTAL
0 – 11 years	85.71% 60	2.86% 2	11.43% 8	70
12-18 years	87.14% 61	0.00% 0	12.86% 9	70
19-45 years	95.65% 66	1.45% 1	2.90% 2	69
46-65 years	94.29% 66	1.43% 1	4.29% 3	70
Over 65 years	69.57% 48	7.25% 5	23.19% 16	69

- Lack of public support (transportation, social interaction, etc.)
- Unable to buy any kind of affordable housing
- (School) Taxes too high.
- Octorara School taxes are way too high.
- Not great area for access to services for seniors
- For over 65, there can be some hardships related to school tax, cost of trash pick up, and road conditions in bad weather. It would be nice to have a senior group that meets in the Township building for morning coffee several days a week and to offer skills to younger people in the township, like gardening and sewing or, since we have many professions, basic budgeting or writing a simple will or other topics of general interest.
- Dumb question.
- Taxes are too high! People on fixed incomes cannot afford to live here.
- Transportation, connections with others, ease of getting to services and shops

Q7: What priority transportation needs should be addressed in Highland Township? Please select up to three of the following options.



ANSWER CHOICES	RESPONSES	
Addressing increasing thru-traffic on Route 10, Gum Tree Road, other	56.94%	41
Maintenance of state-owned roads	44.44%	32
Maintenance of township owned roads	45.83%	33
None needed	9.72%	7
Park and ride lot for commuters	1.39%	1
Snow and ice removal	15.28%	11
Shoulder widening to improve safety for buggies, scooters, biking, or walking on roadways	38.89%	28
Trails - bicycling	9.72%	7
Trails - walking	18.06%	13
Other (please describe below)	15.28%	11
Total Respondents: 72		

- thru-traffic - Gum Tree Road
- Thru-traffic - Station Road
- Roads and services are great!
- Possibly some tree trimming in hard to see intersections
- Trim trees on state roads
- We need some type of public transportation
- Improve quality of snow removal on twp. roads
- Please keep trees and bushes trimmed back.
- Enforcement of speed limits.
- Stop special road conditions like speed bumps for roads through high-dollar neighborhoods.
- Friendship church Road/Rte. 10 intersection danger - provide flashing lights or rumble strips for notice?

Also, Gum Tree Rd. where it comes out onto Rte. 10. Speeds are too high on Rte 10 and drivers coming out from Gum Tree misjudge. Many accidents!! Plus, sometimes people just drive straight through Rte 10 from Gum Tree and hit the wall there. So again, like Friendship Church Rd... flashers or rumble strips as warning??

Q8: Are there any roadway locations or intersections in Highland Township that you believe to be dangerous or need to be better maintained? If so, please state where below.

state directions Highland Rd see Friendship Church year Rd traffic
intersection dangerous Rt Stottsville Road light
Gum Tree needs Route Highland Old Racetrack maintained
Friendship Church Road Station Road

- Gum tree and friends meeting

- No

- Gum Tree & RT 10

Friendship Church & RT 10

- None

- Station Road, Martian Road, Old Racetrack Road:

V. narrow, to small for 2 directions (as it is currently)

- 10 & 41

Many road surfaces

- Friendship Church Road is not well maintained. Friendship Church Road and Route 10 intersection is not safe for horse + buggy. The road bank should be cut back on south-west corner!

- Passing zones and pavement quality on Gum Tree Road

- intersection of Gum Tree and Rt 10

- Gumtree rd and friendship church. On the nursery side. Cannot see to pull out onto gumtree rd

- Friendship Church & Rt. 10 and Gum Tree & Rt. 10

- 10 and friendship church

- Gum Tree Road and Five Points Road

- Old racetrack and highland rd intersection often has overgrown weeds

- Deep gully/erosion problem along Old Racetrack Road between Highland Road and Route 10.

- none

- Potholes ignored for YEARS on Friendship Church Rd between Humpton and Old Racetrack (in front of Bo Alexander's property).

- Intersection of Route 10 and Station road. Needs some landscaping in the triangle.

- A Roundabout would help traffic flow at Rt 10 & Gum Tree Rd

- No

- At the intersection of Route 10 and 41 there needs to be turn left green arrows which might help with accidents that occur. Turning left from 41 to 10 in either direction offers no ability to do that on a green light. One needs to wait for a yellow or red light. This is extremely dangerous.

- Gum tree and Friends Meetinghouse Rd

- Rt 41 and Rt 10 all directions should have a left turning lane signal.

- Rt 10 and Old Racetrack Rd

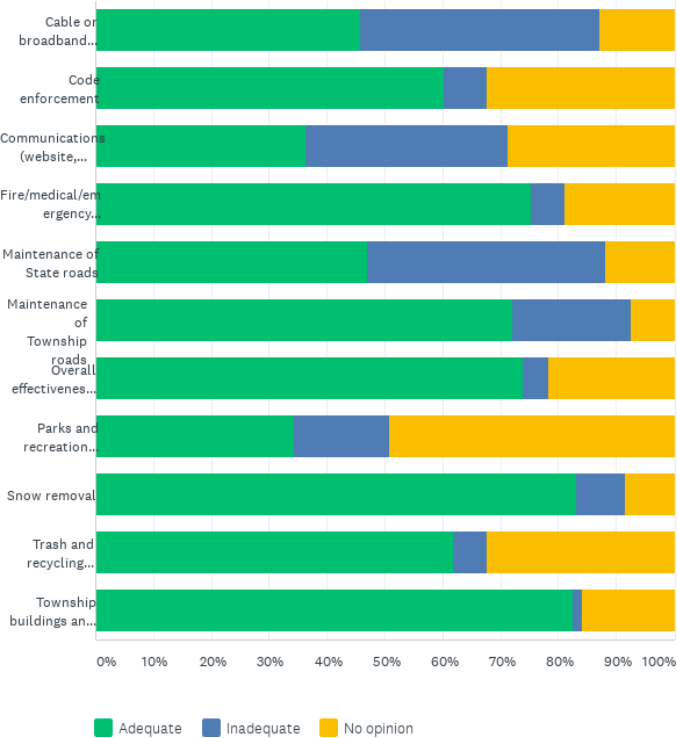
- Curve on Stottsville and Glenrose. Trash dumping and road washout
- Chapel Road- State road heavily traveled and unsafe at any speed
- I feel that the speed limit of 55 is too high for Gum Tree Rd.
- Rt 41
- Friendship Church Rd. which is maintained by the state I believe has horrible cracking year after year
- The state needs to remove tree limbs along several areas of Rt 10 in the area of Old Racetrack Rd. Some trees need to be removed.
- Rt 10 and Highland Rd, the new light is great but it is hard to see if traffic is still coming
- Old Racetrack and Stottsville - better sight lines and reduced speed; more frequent mowing of weeds at all intersections for sight lines
- Route 10 and Friendship Church Road intersection
- Gum tree rd and friends meeting
- Route 10, Station Road, and Martin Road
- intersection of Route 10 and Highland Road
- Intersection of Rt 10 & Highland Rd
Intersection of Old Racetrack Rd & Highland.
Speed limit enforced.
- No
- ?
- Route 10 and Gum Tree

Route 10 and Friendship Church

Route 10 and Highland Rd
- anywhere on gum tree road/buck run road. dangerously fast truck and car traffic.
- West Glenrose Road
- Not sure who owns it but Friendship Church Road and route 41 is awful. It's too narrow and is dangerous when trying to get off of route 41 onto Friendship Church Road.
- Old Stottsville Rd maintenance holes.

Gum Tree Rd and Rt 10 intersection and also Friendship Church and Rt 10 intersection
- All of the township roads are poorly maintained. I believe Route 10 and Friendship Rd. Is the most dangerous intersection.
- Yes - see above

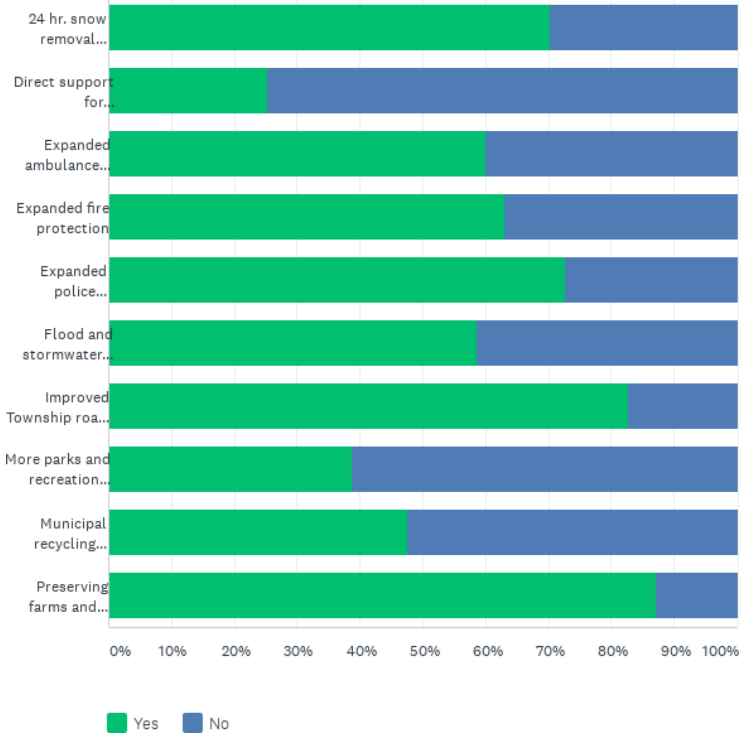
Q9: Rate the following services or facilities in meeting the needs of Township residents. Please select either adequate, inadequate, or no opinion for each category.



	ADEQUATE	INADEQUATE	NO OPINION	TOTAL
Cable or broadband services	45.71% 32	41.43% 29	12.86% 9	70
Code enforcement	60.29% 41	7.35% 5	32.35% 22	68
Communications (website, newsletter, etc.)	36.36% 24	34.85% 23	28.79% 19	66
Fire/medical/emergency services	75.36% 52	5.80% 4	18.84% 13	69
Maintenance of State roads	47.06% 32	41.18% 28	11.76% 8	68
Maintenance of Township roads	72.06% 49	20.59% 14	7.35% 5	68
Overall effectiveness of Township government	73.91% 51	4.35% 3	21.74% 15	69
Parks and recreation (facilities, programming)	34.33% 23	16.42% 11	49.25% 33	67
Snow removal	83.10% 59	8.45% 6	8.45% 6	71
Trash and recycling removal in the Township	61.76% 42	5.88% 4	32.35% 22	68
Township buildings and offices	82.61% 57	1.45% 1	15.94% 11	69

- Could we somehow make it more possible to build, without all the impossible red tape? I support common sense, but could we please keep it there.
- The township has been run and bullied by its solicitor for decades
- Have not lived here long enough to assess Township government, Fire/medicall/emergency services. The roads seem to be cared for adequately but not sure which are state and which are township roads.
- I wish the township office was open more than a few hours on Wednesdays.

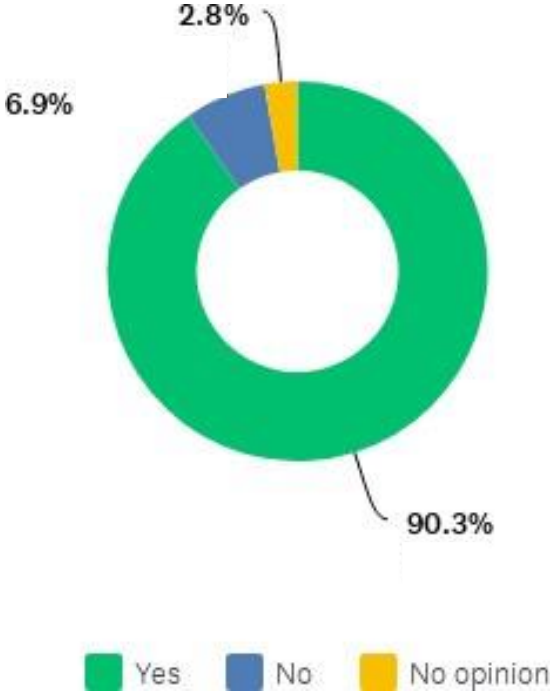
Q10: If Highland Township’s real estate tax monies were clearly marked for the following purposes, which of those do you support for use of collected taxes? Please mark yes or no for each category.



	YES	NO	TOTAL
24 hr. snow removal coverage	70.3% 45	29.7% 19	64
Direct support for recreational programming	25.4% 16	74.6% 47	63
Expanded ambulance service	60.0% 39	40.0% 26	65
Expanded fire protection	63.1% 41	36.9% 24	65
Expanded police protection	72.7% 48	27.3% 18	66
Flood and stormwater improvements	58.7% 37	41.3% 26	63
Improved Township road maintenance	82.8% 53	17.2% 11	64
More parks and recreation area/facilities	38.7% 24	61.3% 38	62
Municipal recycling program	47.5% 29	52.5% 32	61
Preserving farms and farmland	87.1% 61	12.9% 9	70

- No tax increases.

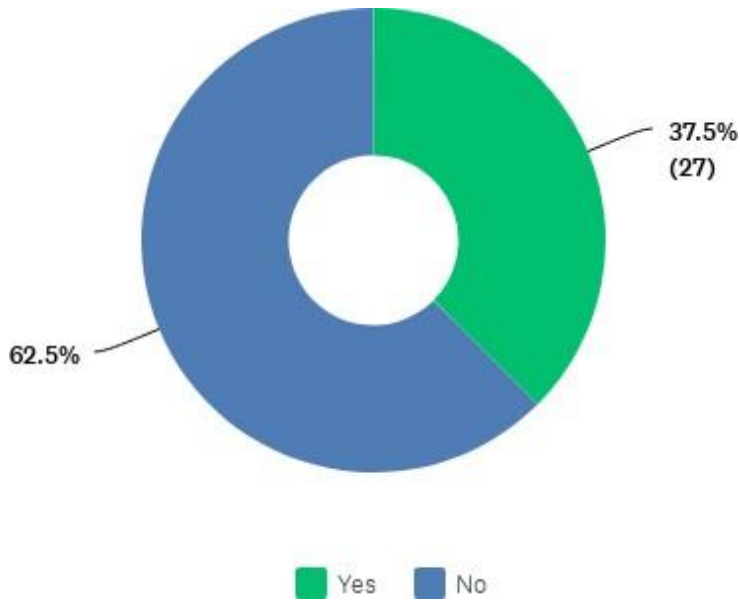
Q11: For the past two decades, the Township Board of Supervisors have maintained strong planning policies and zoning that favor continued agricultural land uses for much of Highland and discourage suburban development. Do you support this Board practice continuing for another 10+ years?



ANSWER CHOICES	RESPONSES	
Yes	90.3%	65
No	6.9%	5
No opinion	2.8%	2
TOTAL		72

Q12: Do you have any concerns with more intense forms of agriculture, such as commercial feedlot operations, mushroom composting, intensive equestrian use, etc., that the Township should address?

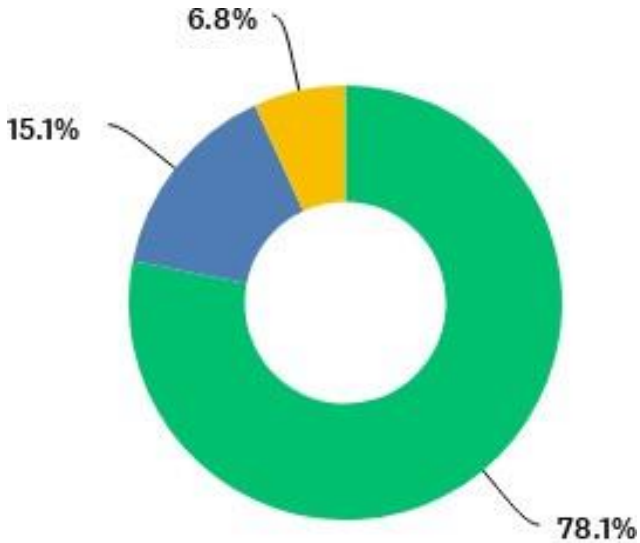
*Examples: Commercial Feedlot Operations - Uses such as CAFOs or concentrated animal feeding operations
Intensive Equestrian Use - Uses such as boarding facilities, equestrian rehabilitation facilities, or sites that host horse shows*



ANSWER CHOICES	RESPONSES	
Yes	37.5%	27
No	62.5%	45
TOTAL		72

- CAFOs - concentrated turkey/chicken farms, concentrated agricultural operations
- Odor and pollution
- We do not support big CAFOs but rather small family farms.
- Quantity and proximity of factory farming. Use of aquifer water by same...
- A Cafo farm is a well managed farm ! They have to adhere to state and federal guidelines that are very strict more strict than local guidelines and policies. The ACRE law in Pa does not allow a twp to enforce tougher laws than the state allows.
- Smells, traffic
- I would not be in favor of CAFOs in the Township.
- I would not appreciate smelly mushrooms in my area as it already smells of turkeys. Equestrian use or commercial farming is okay, as long as the population remains minimal.
- Concerns about chemicals used in farming operations.
- No mushrooms. It smells in Southern Chester County.
- CAFO's produce huge amounts of waste and are an unnatural way to raise livestock.
- I really don't understand this question so I am unable to offer an adequate opinion, however, I support agriculture in all forms in Highland township.
- The amount of liquid manure that is sprayed yearly on the farm fields is off the charts. This practice is supposed to be tilled into the soil and not left to run off in the always soon coming rain event that seems to be the practice that they are always doing. Hurry up and empty the storage tank before it rains or we won't be able to get into the field seems to be the mindset.
- We need to continue to protect the land and water.
- I think we need to work with our farmers especially the Amish to work to control emissions.
- CAFO No
Equine needs definition of what is too large, including viewsheds
- Pollution
- Commercial feedlot and intensive milk production run off and poor animal health
- Keep the noise and smells to a minimum. It's fine now.
- Do we need to be concerned with fertilizer etc contaminating drinking water (wells)
- CAFO's need to be properly managed and monitored. Mushroom composting brings issues with the odors and mist generated.
- Commercial Feed Lots add additional truck traffic that will have a negative on the road system. Commercial Feed Lots have also increase pollution due to animal waste runoff
- I prefer continuing the use of township land to support these endeavors!
- I have a huge issue with CAFO's. They are environmentally unsound, not to mention the immoral perspective of not allowing adequate movement of animals to help solicit true health and wellness of the animal therefore a better consumable product. I do not have a problem with "intensive equestrian use" facilities.
- Pollution and smell. plus quality of animal living conditions

Q13: As family members age, the need occasionally arises for a second dwelling, or apartment, to be added to a single lot in order to allow multi-generational families or for the elderly to age in place. Would you support changing the Township regulations to allow for this need?



Yes No No opinion

ANSWER CHOICES	RESPONSES	
Yes	78.1%	57
No	15.1%	11
No opinion	6.8%	5
TOTAL		73

Q14: Please use the space below to share other comments on issues that you believe should be addressed in the Township now or in the future.

township Farm building acre lot residents twp changing living
properties

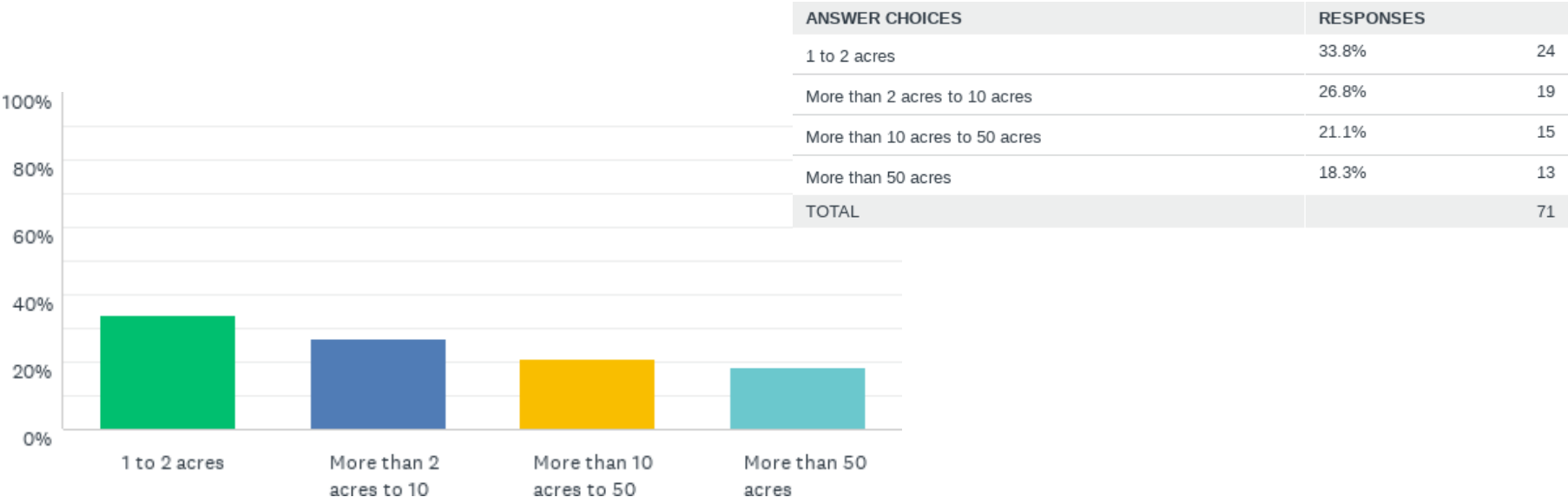
- Expand web site
- Stormwater run-off from CAFO operations. No new CAFOs (enclosed condensed buildings).
- Please have more simple building regulations that fit in with our laid back way of life. And not compare us with big commercial building's like, storm-water green-house structures, small living quarters, which is very hard on our small Family Farm (do it yourself projects)
- Please consider changing the stringent 25 acre zoning for a buildable lot, to a 5 acre buildable lot. This zoning was put through despite a petition that a lot of long term residents signed against that change.
- Our twp is one of the most beautiful twp around. Is it possible to transfer some of the development rights to a twp close by that could use some business to help its tax base. Also could be along a well traveled road or intersection ??We own two 100 plus acre farms in the twp. We live in West Fallowfield twp
- I have lived in highland township my whole life and continue to do so for the benefits of a quiet and peaceful place to reside. I enjoy the farm and woods atmosphere.
- No tax hikes.
- None
- I like living here and I am not looking to see a lot of changes but I realize there are not as many services for elderly who are ill and very young children as in other locations.
- Regarding additional housing on a single lot: I support additions to existing houses but not adding second dwellings.
- None
- Spotted Lantern Fly control
- Abandoned properties and dumping on our near those properties.
- I thought we already had the allowance to build a second dwelling on a lot - not sure why question 13 is on this.
- I have indicated my thoughts via my response in the survey questions
- Park and baseball field
- Getting residents to clean up there properties, such as old cars, trash, etc.
- ?
- Na
- Need of a better working website. Better communication for residents on the happenings in the township
- I would like to see more community involvement in monthly township meetings. A public announcement to let folks know when the meetings are held, etc.
- I think that's it
- (Note from Q21) I would like to stay in Highland Twp after sale of my house but there are few to no living/housing options for senior citizens.

Q15: How long have you lived in Highland Township?

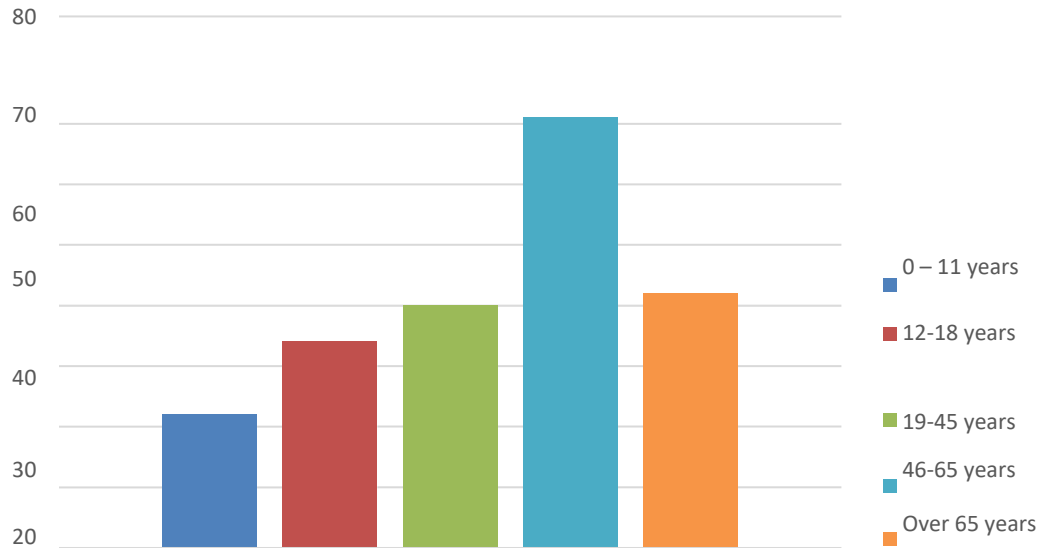


ANSWER CHOICES	PERCENTAGE	RESPONSES
Less than 1 year	1.4%	1
1 to 5 years	9.6%	7
6 to 10 years	1.4%	1
11 to 25 years	30.1%	22
More than 25 years	52.1%	38
I do not live in Highland Township	5.5%	4
TOTAL		73

Q16: What is the approximate size of your property?



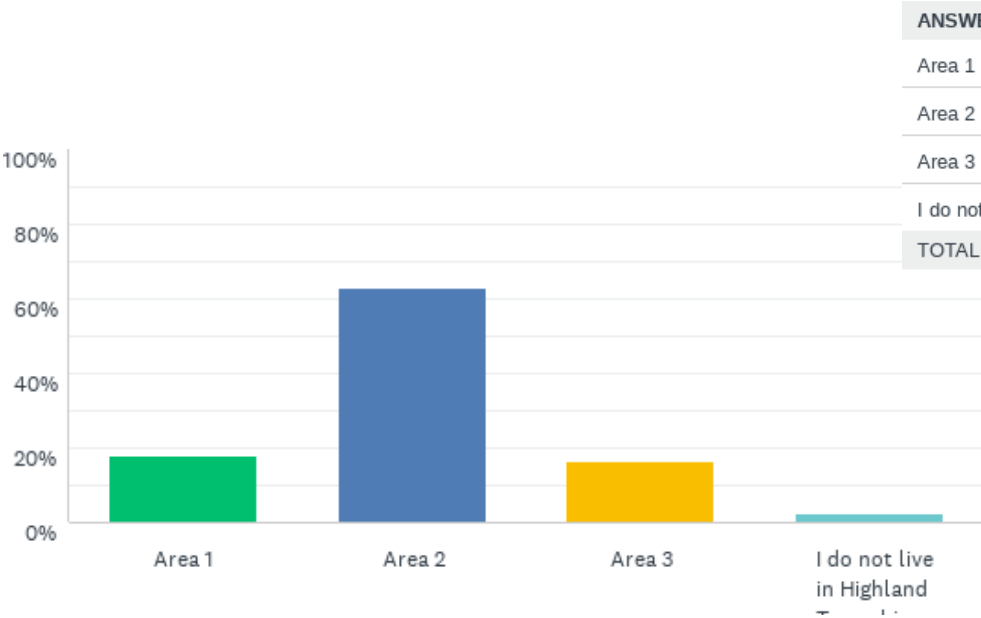
Q17: How many people of each age group live in your household? Fill in all that apply.



ANSWER CHOICES	TOTAL NUMBER
0 – 11 years	22
12-18 years	34
19-45 years	40
46-65 years	71
Over 65 years	42
Total Respondents: 69	

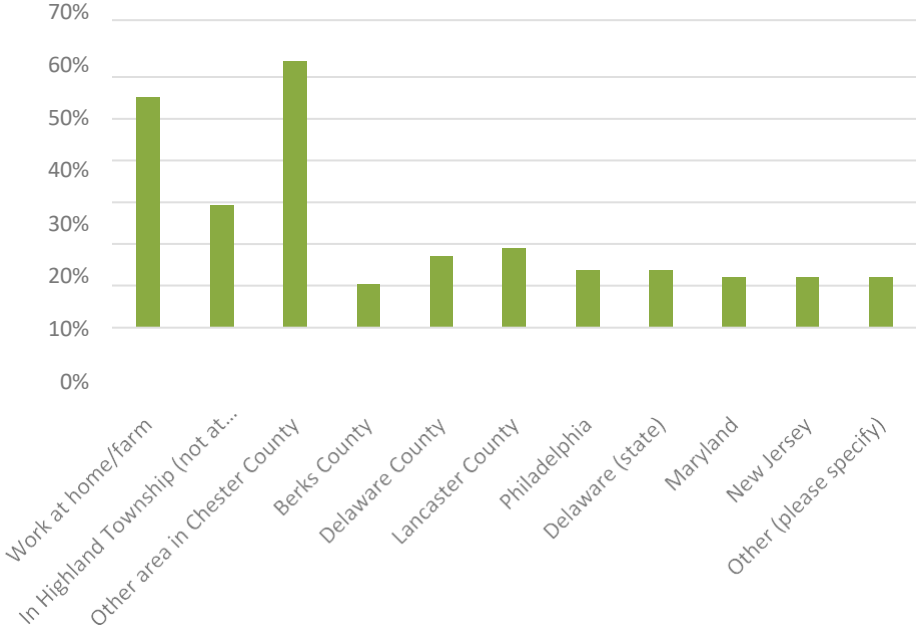
Answered: 69 Skipped: 4

Q18: In which general area of Highland Township do you live?



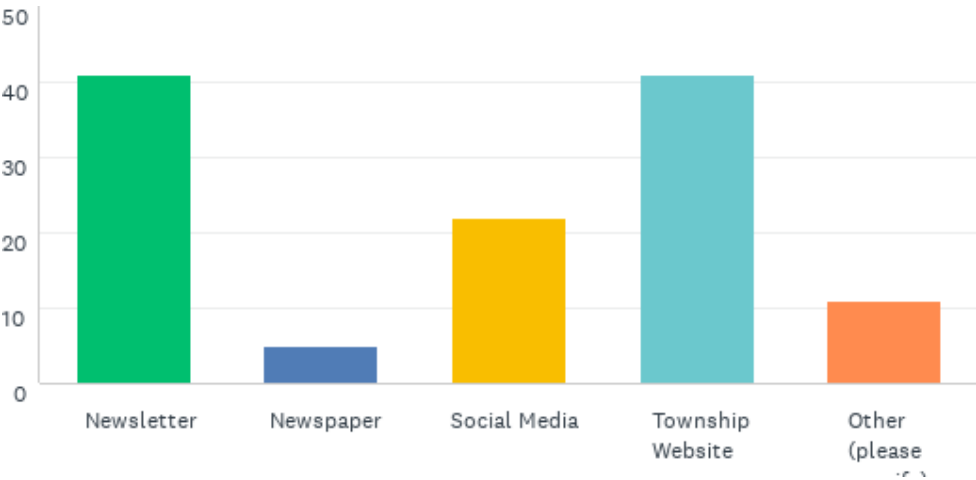
ANSWER CHOICES	RESPONSES
Area 1	17.8% 13
Area 2	63.0% 46
Area 3	16.4% 12
I do not live in Highland Township	2.7% 2
TOTAL	73

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



ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Work at home/farm	2	53	32
In Highland Township (not at home/farm)	1	12	17
Other area in Chester County	1	52	37
Berks County	0	0	6
Delaware County	1	6	10
Lancaster County	1	7	11
Philadelphia	0	2	8
Delaware (state)	0	2	8
Maryland	0	1	7
New Jersey	0	2	7
Other (please specify)	1	7	7
Total Respondents: 58			

Q20: How would you prefer to be made aware of Township information, issues, meetings, or updates? Check all that apply.



ANSWER CHOICES	PERCENTAGE	RESPONSES
Newsletter	58.6%	41
Newspaper	7.1%	5
Social Media	31.4%	22
Township Website	58.6%	41
Other (please specify)	15.7%	11
Total Respondents: 70		

- Email
- Direct email
- email newsletter
- e-Newsletter
- Choose to be alerted by opt-in email.
- Email
- Email or text to twp website
- And also on website
- If urgent issue, e-mail or USPS mail.
- email newsletter
- An announcement board in front of the township building.

Answered: 70 Skipped: 3

APPENDIX D

Natural Resources Inventory

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Highland Township
Natural Resources Inventory

Introduction

This document provides background inventories of Highland Township'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.

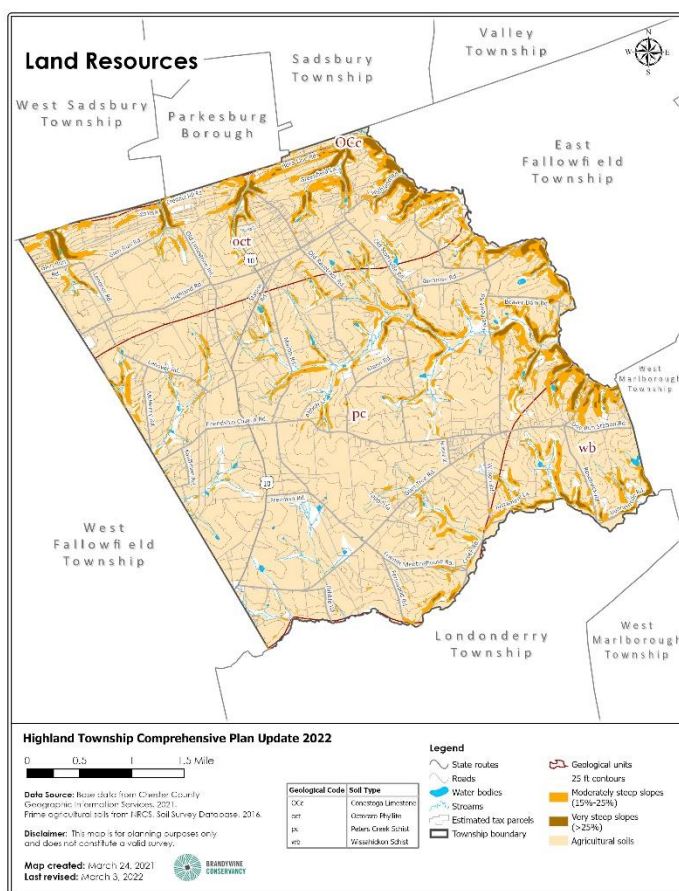
This document presents a variety of maps depicting the various natural resources contained in the Township and offers a descriptive inventory on their location, condition, and importance to the Township. Each natural resource element will be addressed in a separate section of the inventory, even though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

Slopes & Soils

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 Resources Map* shows Highland Township's Moderately Steep (15-25 percent) and Very Steep (25+ percent) slopes. These steeper slopes in Highland Township are mainly located to the east, along Buck Run; to the north, along Little Buck Run and its tributaries, Valley Creek, and Glen Run. Further steep slopes are found along portion of Doe Run and its tributaries and Birch Run. The acreages of Moderately Steep slopes are 1,038.9 acres and Very Steep slopes are 277.5 acres. The total acreage of all steep slopes is 1,316.4 acres, around 12% of the Township total.



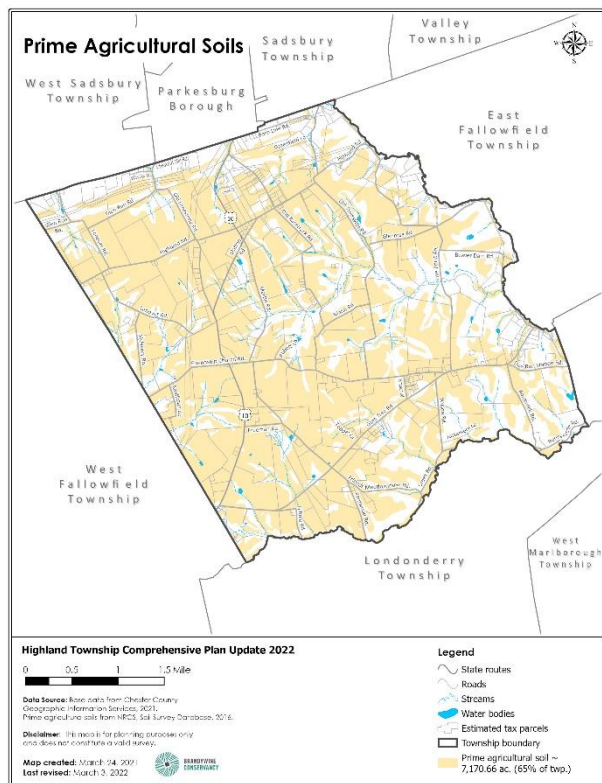
Much of the steep sloped areas are currently in tree cover, which is appropriate for preventing soil erosion. Steeply sloping lands are especially sensitive to ground disturbance and the removal of vegetative cover that could result in problems with stormwater runoff, erosion, and uncontrolled sedimentation. Concentration of runoff from the installation of impervious surfaces on sloped areas can diminish groundwater recharge. The potential for erosion from earthmoving 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 Moderately Steep and Very Steep slopes. Limited vegetative disturbance and grading is permitted on Moderately Steep slopes (no more than 30% disturbance), while disturbance is not permitted on Very Steep slopes, save for utilities or timber harvesting.

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 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.

Highland Township’s soils generally include both highly productive prime agricultural soils and soils that are constrained by specific characteristics. Almost two-thirds (65%) of Highland Township is underlain by prime agricultural soils – 7,170.7 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.

Constrained soils include alluvial soils that are subject to stream flooding and hydric soils, that are either seasonally or permanently wet. Generally located along waterways, hydric 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 Highland Township, there are 398.7 acres of undeveloped hydric soils, which likely serve as important source water areas and provide for the storage and slow release of stormwater to headwater streams.

Soil formation is an ongoing process, a complex interaction among factors such as weather, underlying geology, vegetative cover, and time. In Highland Township, 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

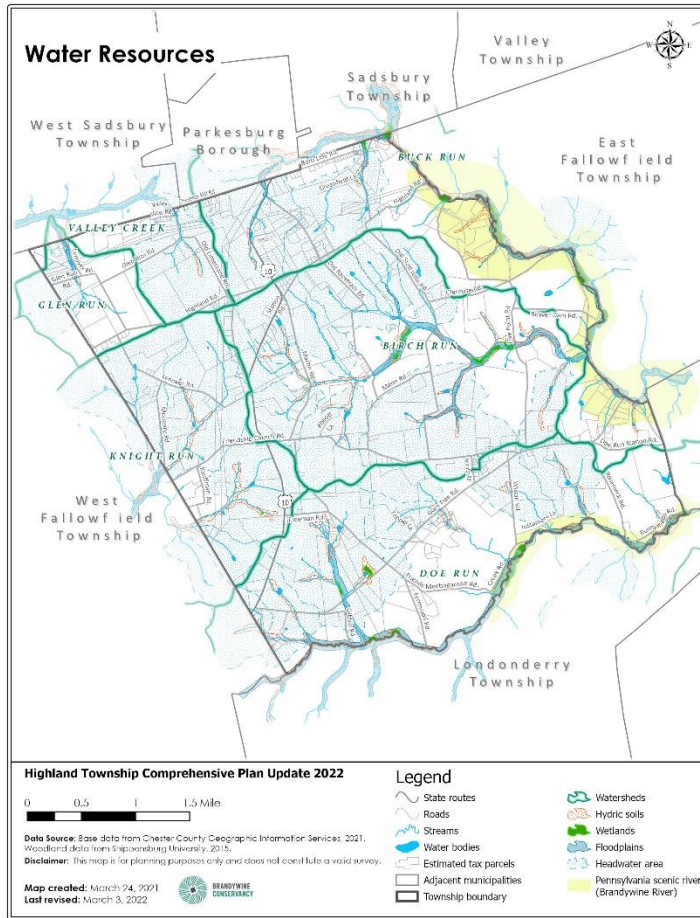
This section describes several important attributes of Highland Township's water resources that can be found on the accompanying *Water Resources Map*. The use of water resources often faces competing interests. Surface water as well as groundwater supplies are used to meet domestic, agricultural, commercial, 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. 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.

Highland Township's stream network is 45.8 miles in size. Many streams and tributaries in Highland Township meet the water quality standards for their designated uses, including Buck Run, much of Doe Run, and Buck Run. Several streams and tributaries within the Township are considered impaired by the Pennsylvania Department of Environmental Protection (DEP), primarily in the northern and western areas of the Township, including Knight Run and its tributaries, Glen Run, Valley Creek, and tributaries of Little Buck Run. Two unnamed tributaries to Doe Run are classified as impaired, in the southern portion of Highland Township. Impairments in the streams and tributaries organic enrichment, habitat modification, and siltation.

First-Order Streams/Headwater Areas

As shown on the *Water Resources Map*, Highland Township contains several first-order streams, including Birch Run, which feed Buck and Doe Runs, both of which are significant tributaries of Brandywine Creek. 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 Highland Township 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 the Township, those areas susceptible to the 100-year flood level are primarily along Birch Run, Buck Run, and Doe Run.

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 Highland Township, these areas are typically found along streams, where they are often narrow and linear in shape. There are currently 79.5 acres of wetlands in Highland Township.

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.

Woodlands, Woodland Interiors, Forested Riparian Buffers, & Wildlife and Rare Species

Woodlands

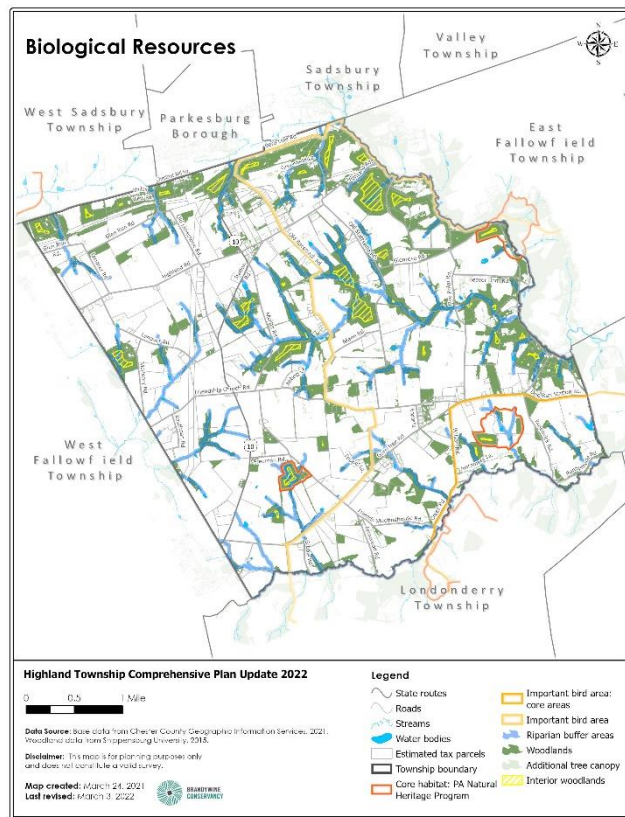
Wooded areas are highly significant for their environmental, social, and economic functions and values. Not only are these lands a vital link in watershed management, but, since most of the northern Piedmont was wooded prior to colonization and settlement, woodlands are the defining characteristic habitat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

Highland Township contains over 2,580.5 acres of woodland. 1,218.6 acres of the Township’s woodlands are located on protected lands. Woodlands also exist on much of Highland Township’s slopes, protecting them from excessive erosion. Trees intercept and slow rainfall from reaching creeks, which can reduce flooding downstream.

While 47.2% of Highland Township’s woodlands are permanently protected, some 1,361.8 acres, or 52.8% of woodlands, remain unprotected and exist on private lands. Programs currently exist that work with private landowners with larger holdings of unprotected woodlands, 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 Highland Township. 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.

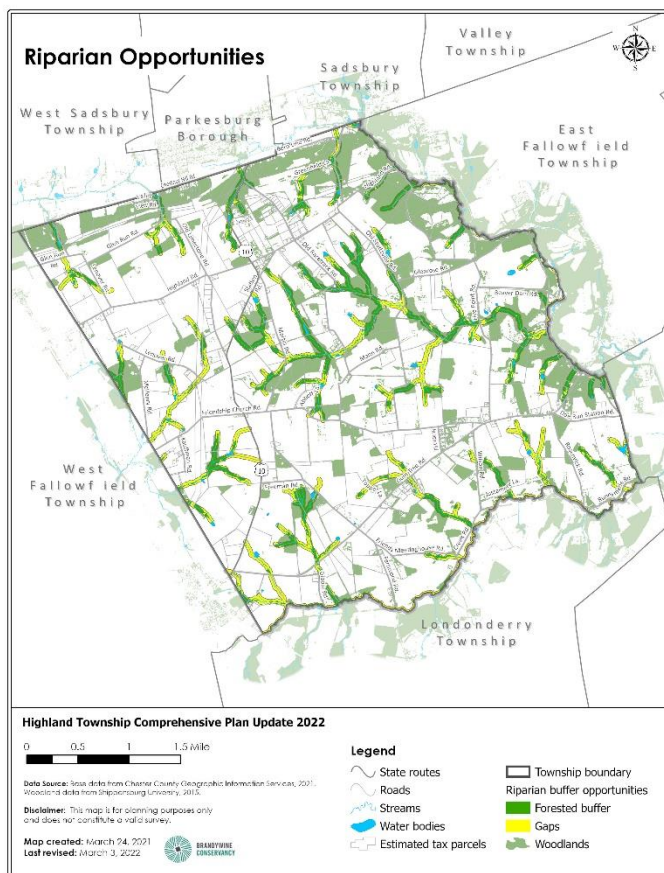


Woodland Interiors

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. 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 153.5 acres of forested interiors in Highland Township, 60.8 acres of which (or 39.6%) 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 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. Riparian forests also make excellent flood control areas, recreational corridors, and are highly scenic.



Of Highland Township’s 1,162.4 acres of land within 100 feet of a stream (100 feet is considered optimal for water quality benefits), approximately half (597.1 acres) are in woodland cover. However, only about 56.4% of these woodlands are currently permanently protected in some way. The *Riparian Opportunities Map* 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 565.3 acres of woodland gaps, 48.5% or 274.3 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

A significant portion of Highland Township is classified as an Important Bird Area. The entire eastern portion of the Township and much of the southern border with Londonderry Township, is designated as an Important Bird Area. Within that larger area, is a smaller portion of the Township, designated as an Important Bird Area: Core Area. Land within the southeastern section of Highland Township, generally bounded by Creek Road, Wilson Road, and Doe Run Station Road, falls within this classification. These areas are identified as essential to sustaining bird populations.

Three areas within Highland Township are designated as Core Habitat areas through the PA Natural Heritage Program. One area is in the western portion of Highland Township, south of Freeman Road. A second area is located on the eastern border of the Township, along Buck Run. A third is in the southeastern portion of the Township, south of Doe Run Station Road.

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APPENDIX E

Open Space Inventory

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Highland Township
Open Space Inventory

Open Space Inventory

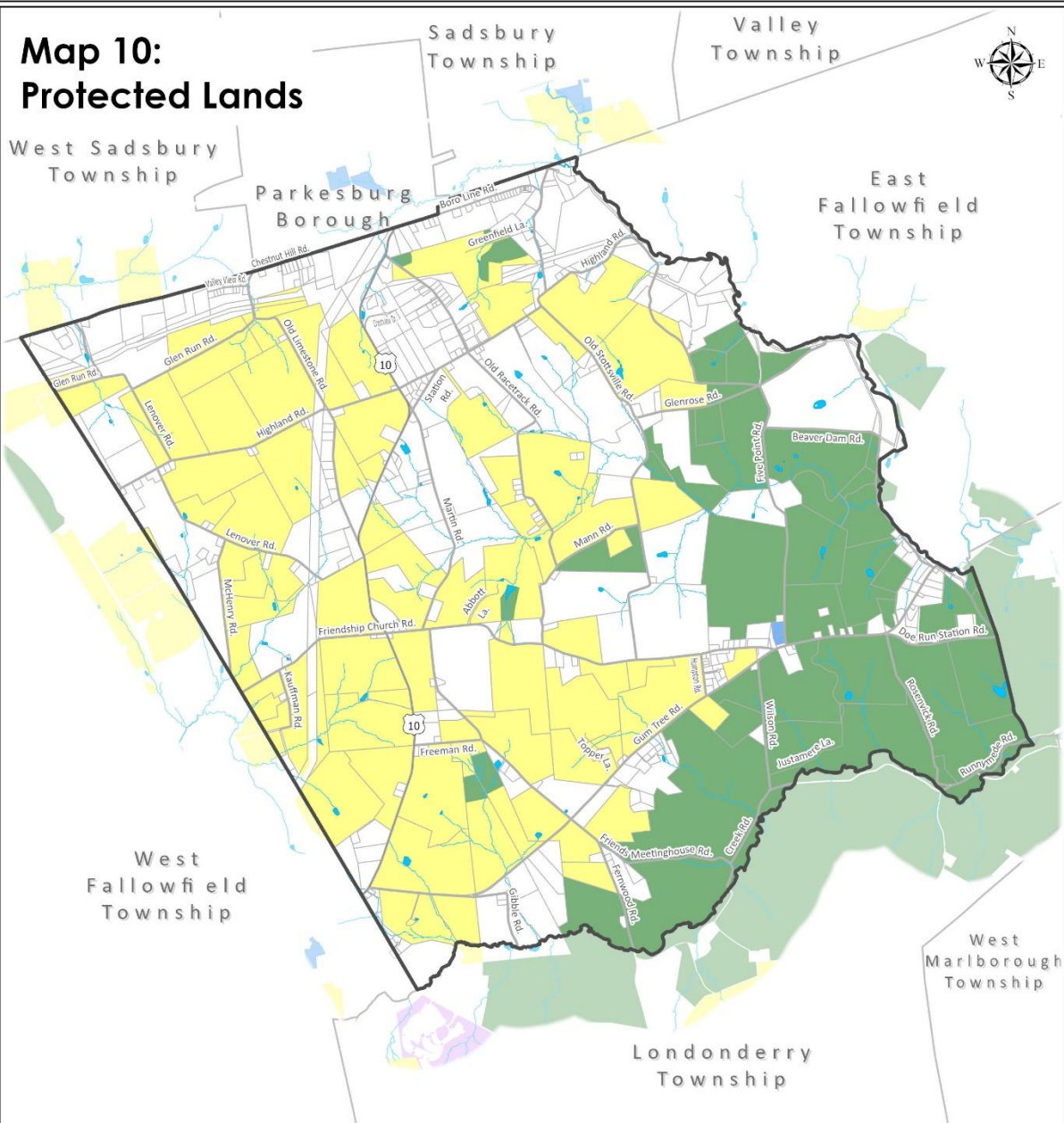
The map on following page illustrates the extensive open space within in Highland Township, as of 2021. Open space was defined as lands protected via agricultural easements, lands protected via conservation easements, land owned by Highland Township or other public entities, and land owned by Homeowners Associations. Tax parcels were the unit of measurement, with base data from 2021 was derived from Chester County Geographic Information Services and land use data from 2015 was derived from DVRPC. The last inventory of Highland Township’s open space occurred in 2001, as a component of the previous comprehensive plan. Between 2001 and 2021, protected open space (existing) increased from 4,310.8 acres to 6,671.4 acres, increasing the amount of protected open space within Highland Township by a total of 2,360.6 acres, or an additional 21.9%.

Comparison: 2001 v. 2021

Open Space Protection Type	2001	
	Acres	Percentage
HOA Open Space	0	0%
Township Owned/Public Land	5.8	0.1%
Agricultural Easements	1,655	15%
ALPP Easements (2000)	796	7.2%
<i>ALPP Easement Applications (2001)</i>	<i>312</i>	<i>2.8%</i>
Conservation Easements	1,854	17%
Total Open Space (existing)	4,310.8	39.2%
Total Open Space (existing + applications)	4,622.8	42%

Open Space Protection Type	2021	
	Acres	Percentage
HOA Open Space	0	0%
Township Owned/Public Land	5.8	0.1%
Agricultural Easements	4,130.4	38%
Conservation Easements	2,535.2	23%
Total Open Space (existing)	6,671.4	61.1%

Map 10: Protected Lands



Highland Township Comprehensive Plan Update 2022



Data Source: Base data from Chester County Geographic Information Services, 2021.

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

Map created: March 24, 2021
Last revised:



Legend

- State routes
- Roads
- Streams
- Water bodies
- Estimated tax parcels
- Township boundary
- Agricultural easements ~ 4,130 ac. (38% of township)
- Conservation easements ~ 2,535 ac. (23% of township)
- Public lands (federal, state, county, and municipal) ~ 5.8 ac. (0.1% of township)
- Other protected land ~ 0 ac.

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APPENDIX F

Transportation Inventory

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Highland Township
Transportation Inventory

Local Transportation Network

Highland Township's transportation system includes:

Roadways (In Highland Township)

Within Highland Township, there is a roadway network totaling 51.9 miles of roads. 21.3 miles are owned by the State and 26.9 miles are owned by the Township. A network of local roads within Highland Township that highlight the community's rural and scenic character. One signalized intersection is located at the junction between Route 10 and East Highland Road.

Roadways (Outside Highland Township)

Residents have access to regional highways located outside the borders of Highland Township, including

- Route 41, at a distance of approximately 0.4 miles
- Route 30, at a distance of approximately 2.6 miles
- Route 1, at a distance of approximately 6.5 miles

Transit – Rail and Bus (In Highland Township)

There is no public transit, neither rail or bus, that provides direct service to Highland Township.

Transit – Rail and Bus (Outside Highland Township)

Residents have access to regional transit systems located outside Highland Township. This includes access to an Amtrak/SEPTA station within Parkesburg Borough to the north of Highland Township.

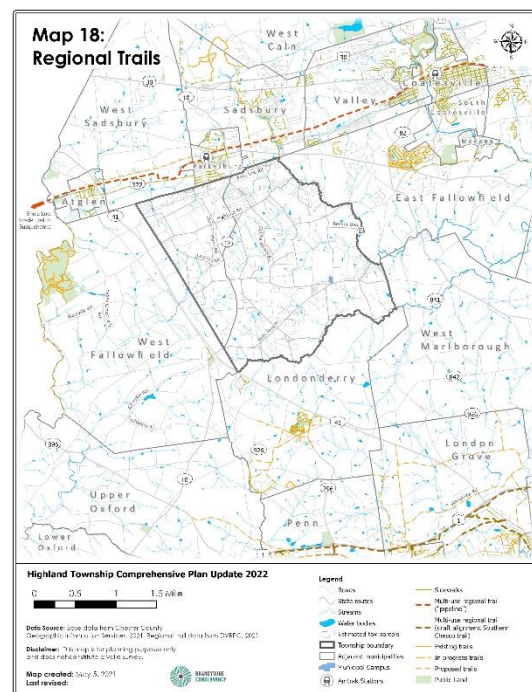
Sidewalks, Trails, and Bikeways

(In Highland Township)

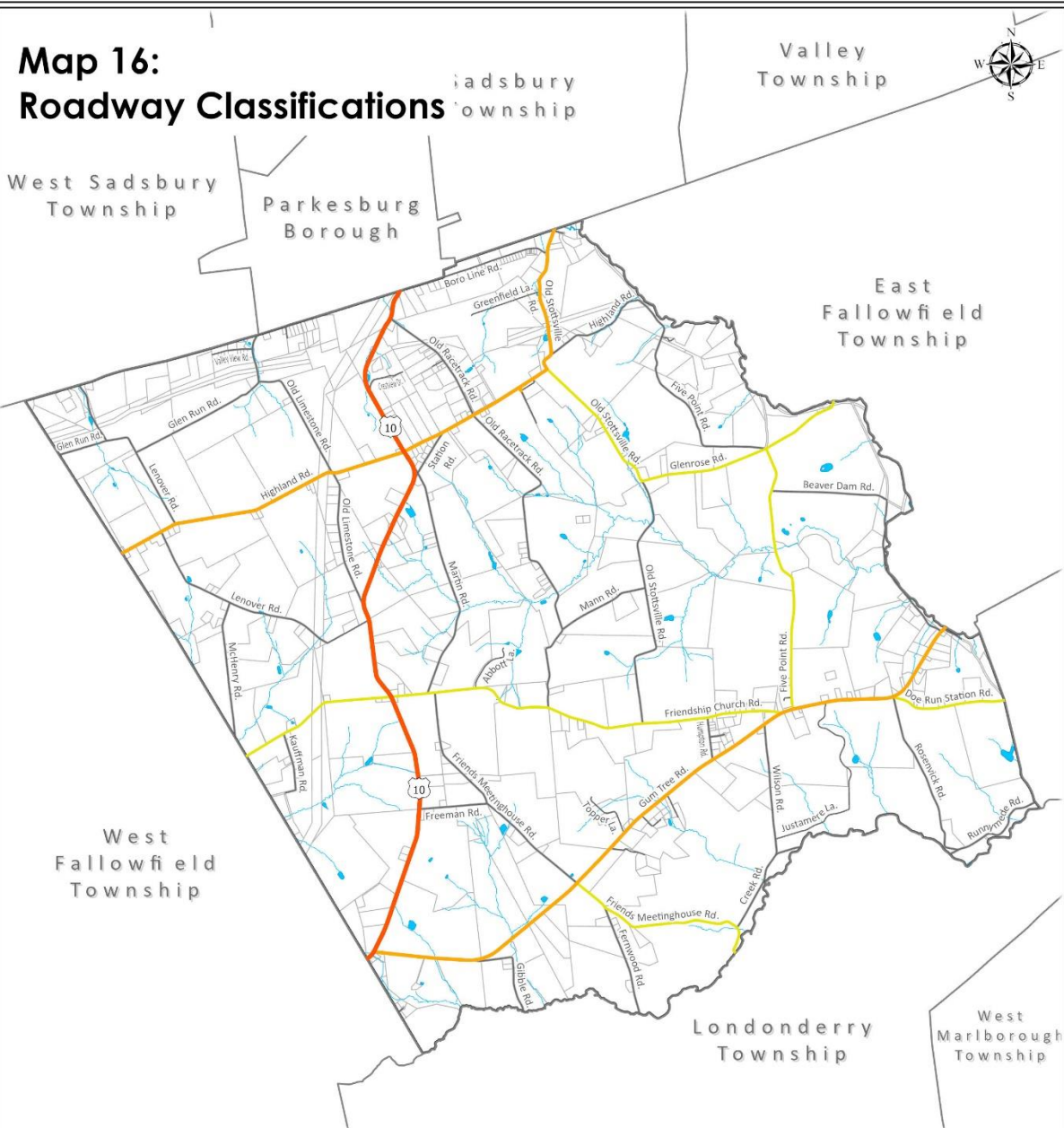
No bikeways (sharrows, bike lanes, protected bikeways, or multi-use trails) exist or are currently planned for within the Township.

Sidewalks within Highland Township are limited to an area north and south of Highland Road, which links the Octorara Elementary School with the Octorara Area School District and Primary Learning Center building.

No trails (pedestrian only or multi-use trails) exist or are currently planned for within the Township.



Map 16: Roadway Classifications



Highland Township Comprehensive Plan Update 2022



Data Source: Base data and roadway data from Chester County Geographic Information Services, 2021.

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

Map created: March 24, 2021
Last revised:



Legend

- Streams
- Water bodies
- Estimated tax parcels
- Township boundary
- Major Arterial
- Minor Collector
- Local

Roadway Functional Classification



Source: Chester County Planning Commission, 2004

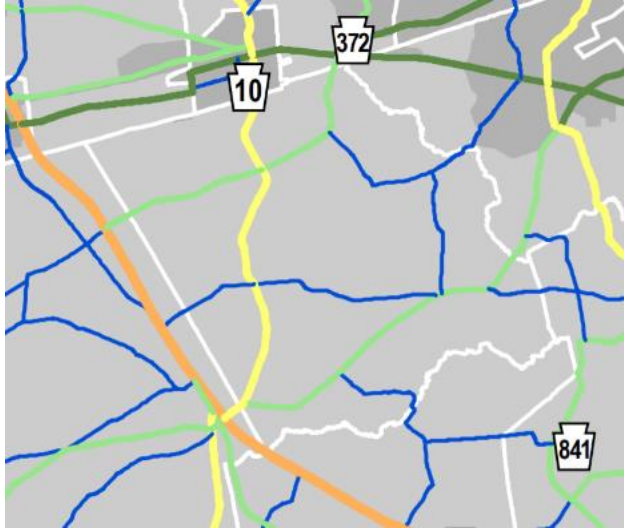
Roadways are classified into one of several categories, based on the function, or character of service, each roadway is designed to provide. This classification system establishes a hierarchy for roadways, factoring in the type of traffic, volume of traffic, and traffic speeds to be accommodated along each corridor. The two basic functions of a roadway are access to property and travel mobility. Access refers to the ease of entering or exiting a roadway

from adjacent properties. Travel mobility refers to the ability of the roadway to move traffic. Generally, the greater degree of mobility a roadway has, the lower its access (i.e. an expressway). The greater the access, the lower its mobility (i.e. a local road).

PennDOT and Chester County Planning Commission each have a roadway functional classification. PennDOT’s classification is useful for identifying federal funding eligibility and the application of roadway design guidelines. Chester County Planning Commission’s (CCPC) classification is intended to create consistency at the local level, among Chester County municipalities. The following table, *Chester County Planning Commission Road Functional Classification: Variables and Criteria*, was developed by CCPC to summarize roadway classifications and to illustrate their differences:

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 inter-municipal 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



Within Highland Township, four roadway functions exist, including major arterials, minor collectors, local distributors, and local roads. In total, according to CCPC there are:

- 0 Expressways (red)
- 0 Principal arterials (orange)
- 2 Major arterials (yellow)
- 0 Minor arterials
- 0 Major collectors (dark green)
- 6 Minor collectors (light green)
- 8 Local distributor (blue)
- 4 Local roads - 44

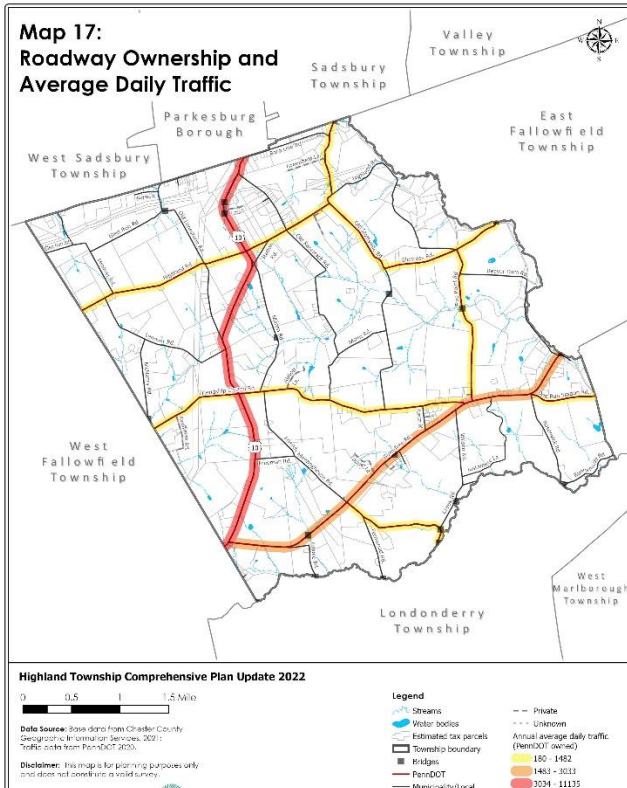
Source: CCPC, Highway Functional Classification Map

Roadway Functional Classification Table

The following table summarizes roadways within Highland Township, based on their functional classification.

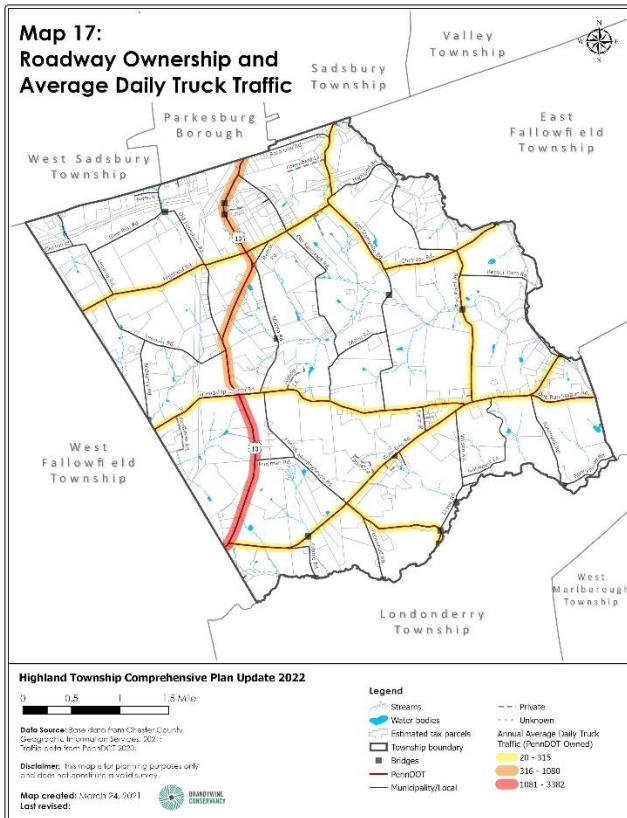
Roadways*	Chester County	2001 Comprehensive Plan
Route 10/ Limestone RD	Major Arterial	Minor Arterial
S Church ST	Major Arterial	Local
Buck Run RD	Minor Collector	Local
E Highland RD	Minor Collector	Local
Gum Tree RD	Minor Collector	Minor Collector
Highland CT	Minor Collector	Local
Highland RD	Minor Collector	Minor Collector
Old Stottsville RD	Minor Collector	Local
Creek RD	Local Distributor	Local
Doe Run Station RD	Local Distributor	Local
E Friendship Church RD	Local Distributor	Minor Collector
Five Point RD	Local Distributor	Local
Friendship Church RD	Local Distributor	Minor Collector
Old Stottsville RD	Local Distributor	Local
S Friends Meetinghouse RD	Local Distributor	Local
W Glenrose RD	Local Distributor	Local

*Roadways listed focus on those classified as major arterials, minor collectors, or local distributors. All other roadways not listed are classified as local roads.



The Roadway Ownership and Average Daily Traffic Map illustrates road ownership, bridge locations, and average annual daily traffic for PennDOT owned roads within Highland Township. The roads with the greatest annual average daily traffic (AADT) include Route 10 and Gum Tree Road. AADT is the average volume of traffic for a one day/24-hour period in a data reporting year.

Roads owned by PennDOT include: Route 10, Highland Road, Old Stottsville Road, Glenrose Road, Friendship Church Road, Gum Tree Road, Doe Run Station Road, and a segment of Friends Meetinghouse Road. Seven bridges are located along state-owned roadways within Highland Township. Five bridges are located along Township owned roadways within Highland Township.



The Roadway Ownership and Average Daily Truck Traffic Map illustrates traffic volumes along state-owned roads attributed to truck traffic.

Route 10 from Friendship Church Road south to the Highland Township border with West Fallowfield experiences the greatest annual average daily truck traffic (AADTT). The segment of Route 10 from Friendship Church Road north to the Highland Township border with Parkesburg Borough experiences the second greatest AADTT. AADTT is the average volume of truck traffic for a one day/24-hour period in a data reporting year.

Transportation Related Demographics Highlights

Demographic data related to transportation, comparing Highland Township with Chester County overall is highlighted in the following graphs and charts.

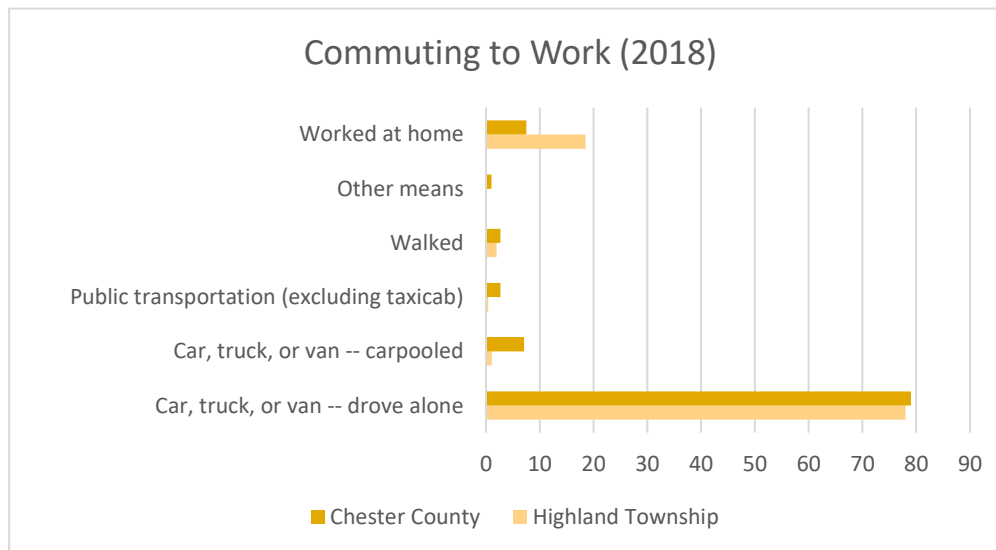
Commute Mean Travel Time (2018)

In comparison to workers in Chester County overall, workers that live in Highland Township generally travel less time to their place of employment:

Highland Township	Chester County
24.9 minutes	28.7 minutes

Source: US Census Bureau

Commute Type (2018)



Source:
US Census Bureau
2018, ACS 5 Year

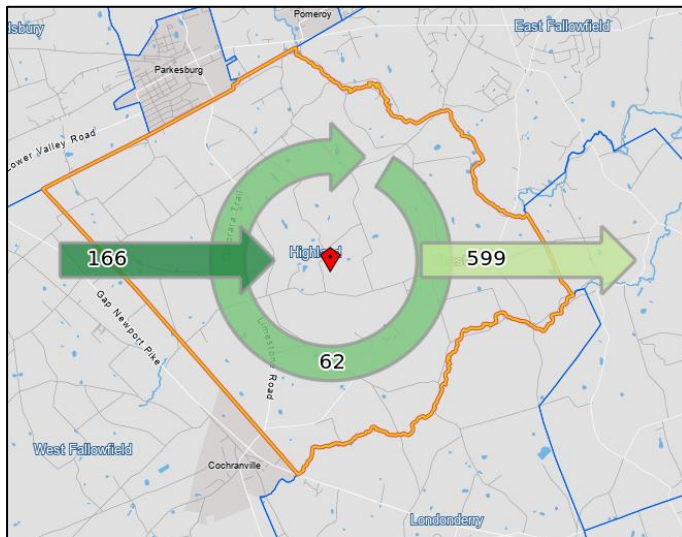
Individuals who live in Highland Township and commute to work primarily use automobiles to reach places of employment and drive alone. 78% of workers 16 years and over drove alone via car, truck, or van, slightly less than workers living in Chester County overall, who commuted alone via car, truck, or van at a rate of 79%.

18.5% of workers in Highland Township worked at home in 2018, more than double the rate for workers living across Chester County overall, which at that time, was 7.5%.

Commuting Patterns

The following information illustrates data regarding commuting patterns for people who live and work in Highland Township, who live in the Township but work elsewhere, and who live elsewhere but work in Highland Township.

Inflow/Outflow of Jobs (2018)



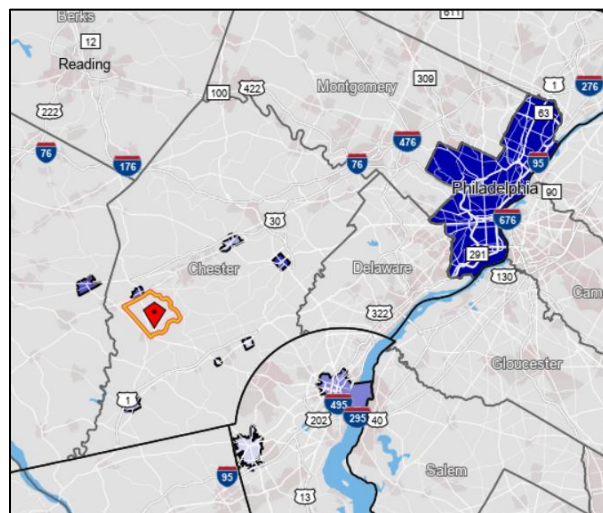
Inflow - 166 people lived outside Highland Township and worked in Highland Township

Interior Flow - 62 people lived and worked in Highland Township

Outflow - 599 people lived in Highland Township and worked outside Highland Township

Source: US Census Bureau

Where do residents go to work? (2018)



Jobs Counts by Places (Cities, CDPs, etc.) Where Workers are Employed - Primary Jobs

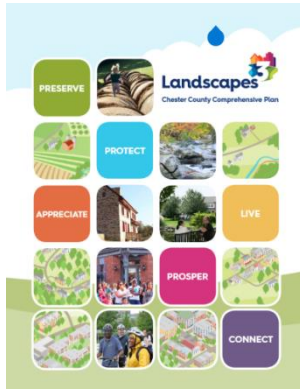
	2018	
	Count	Share
All Places (Cities, CDPs, etc.)	661	100.0%
Philadelphia city, PA	27	4.1%
West Chester borough, PA	10	1.5%
Gap CDP, PA	8	1.2%
Parkesburg borough, PA	8	1.2%
Wilmington city, DE	7	1.1%
Downingtown borough, PA	6	0.9%
Oxford borough, PA	6	0.9%
Newark city, DE	5	0.8%
Avondale borough, PA	5	0.8%
Kennett Square borough, PA	5	0.8%
All Other Locations	574	86.8%

Source: US Census Bureau

The most common commuting pattern for employed residents is outside Highland Township. Workers are traveling to variety of employment centers across the region, including Philadelphia, West Chester, and other locations in Chester, Delaware, Lancaster, Berks, and Montgomery Counties, as well as in Maryland and Delaware.

Plan Highlights Related to Transportation Projects

Several plans within the region highlight information related to transportation that is relevant to Highland Township. Below are key transportation related recommendations gathered from research and a background document review of those plans.



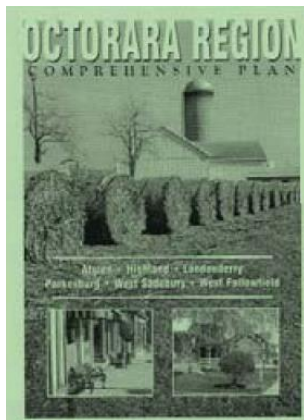
Landscapes 3

Prepared by: Chester County Planning Commission

Date: 2018

Chapter: Connect

Project: Route 10, from the Lancaster County line to south of Route 41 is designated as a focus area for corridor safety improvements.



Octorara Regional Comprehensive Plan

Date: 2004

Area: Highland, Atglen, Parkesburg, West Sadsbury, West Fallowfield, and Londonderry Townships

Chapter: Transportation

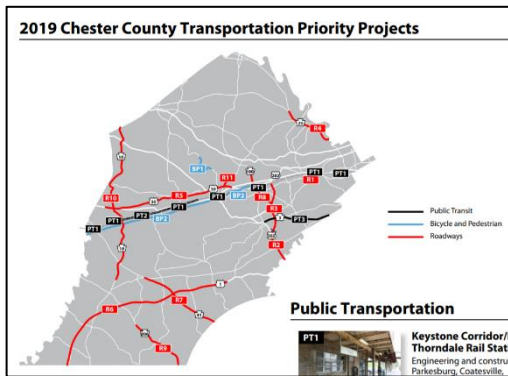
Goal: Plan for a safe, efficient, and diversified system

Objectives: Coordinate safety improvements on roadways of common interest; coordinate regional projects with PennDOT twelve-year program.

Transportation Improvement Projects

The following highlights transportation related projects located within Highland Township, that are listed on regional transportation improvement programs.

Chester County Planning Commission (CCPC)

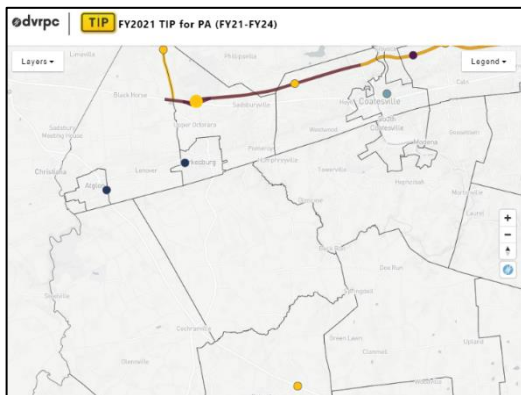


One project is listed in the 2019-2022 Chester County Transportation Improvement Program as a Transportation Priority Project:

“MCN 3 PA 10: Friendship Church RD to PA 896, Safety Improvements”

An update in January of 2021 indicated that the PA 10 Safety Improvements project, with a scope focusing on shoulder widening, is in the preliminary engineering phase, with anticipated construction by the end of 2022.

Delaware Valley Regional Planning Commission (DVRPC)



There are no improvement projects planned in Highland Township on the Delaware Valley Regional Planning Commission (DVRPC) FY2021 Transportation Improvement Program (TIP).

APPENDIX G

Community Climate Profile

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Highland Township Community Climate Profile

Brandywine Conservancy, July 2021

Introduction

According to 2017's Climate Science Special Report, **“sixteen of the warmest years on record for the globe occurred in the last 17 years (1998 was the exception).”** The historic scientific evidence clearly shows a change in climate for the Greater Philadelphia Region with a shift to concentrated extreme heat waves as well as heavy rain and snow events. While many might not consider climate change a “municipal issue,” municipalities bear the burden of needing to manage the impacts of flooding from heavy rainfall, clearing heavy snowfall, and dealing with extreme heat. Broadly, the Greater Philadelphia Region will see an increase in sea level, warmer conditions, more intense precipitation events, and longer periods of drought. It is difficult to respond to these slow, incremental changes in climate, but municipalities that plan considering future climate conditions will be better prepared to safely serve their community.

This report includes a high-level overview of the ways that Highland Township is already experiencing the impacts of climate change but is not a fully exhaustive report. This report intends to inform the Comprehensive Plan Update process by providing data points of historical conditions and modeled future conditions. These climate conditions should be considered for future planning of municipal actions. The Delaware Valley Regional Planning Commission (DVRPC) prepared a guide for municipalities entitled “Municipal Management in a Changing Climate” which advises that to prepare for climate change, municipalities need to adjust in the following ways:

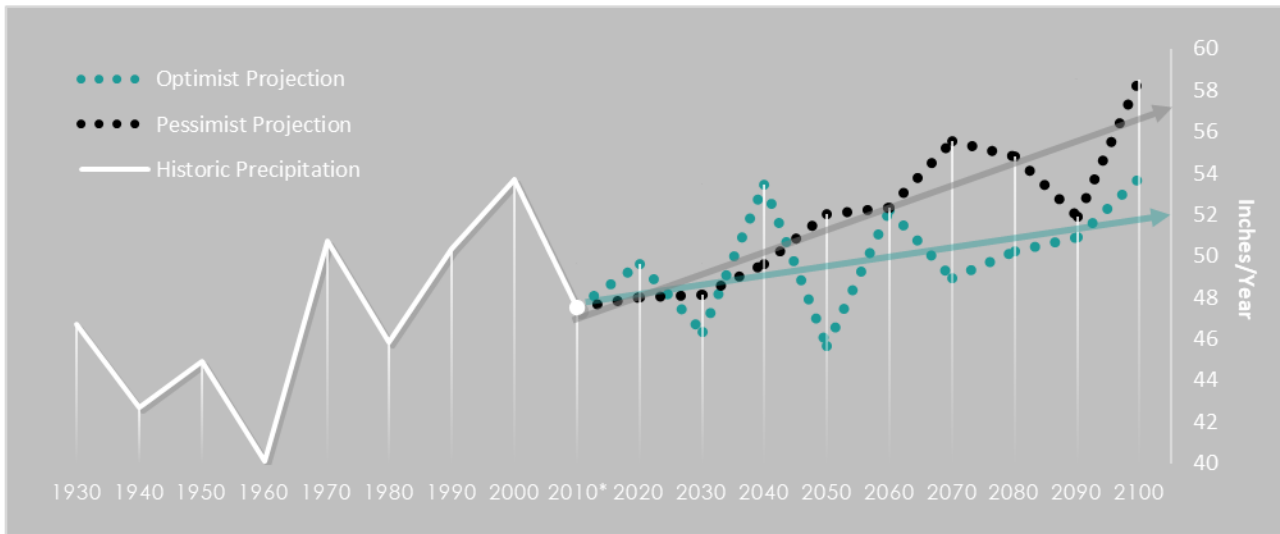
- “Prepare municipal facilities for a changing climate, including both buildings and recreation facilities
- Maintain and upgrade stormwater systems to handle more intense rainfall
- Modify delivery of municipal services (e.g., refuse collection times) appropriately
- Assure employee contracts are suitable for conditions
- Maintain and expand tree cover with species appropriate for a changing climate
- Assure cooling centers are available for residents
- Update regulations to account for climate change”



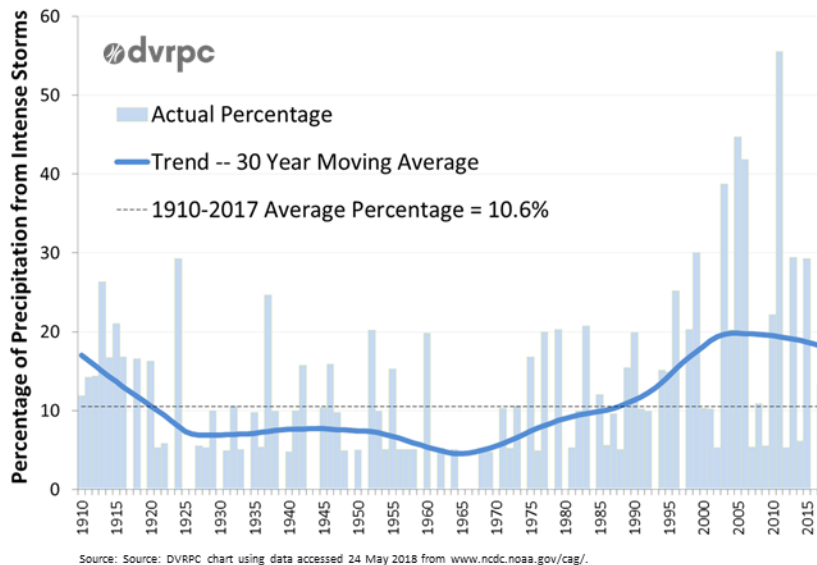
Precipitation

The following illustrates precipitation data, both measured and projected, for Highland Township. From 1970-1980, the Township experienced 51.2 inches per year (in/yr) of precipitation, on average. In an optimist scenario, projections show the Township experiencing 49.6 in/yr, on average, from 2010-2020 and 48 in/yr from 2090-2100. In a pessimist scenario, the Township experiences 53.8 in/yr, on average, from 2010-2020 and 58.5 in/yr from 2090-2100.

Average Precipitation



Intense Storms and Precipitation



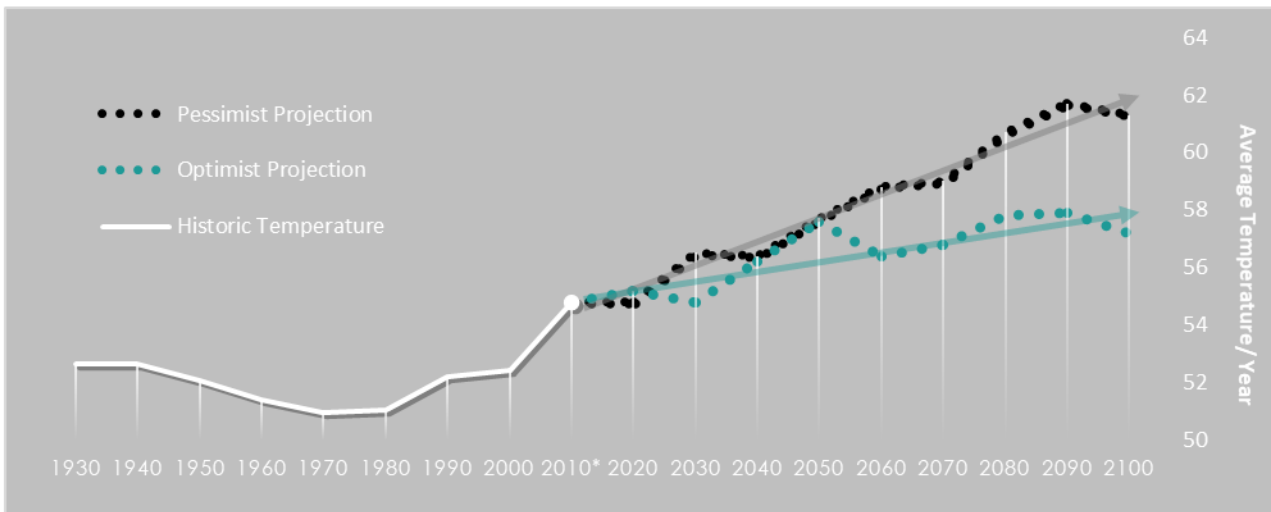
Data Sources: Historic precipitation from NOAA's national climate data center, Coatesville 1 SW & 2 W weather station. Projected precipitation data from National Center for Atmospheric Research (NCAR) Community Climate System Model (CCSM) projections compiled using the iTree tool developed by USDA Forest Service, Davey Tree Expert Co., National Arbor Day Foundation, Society of Municipal Arborists, International Society of Arboriculture and Casey Trees. Intense Storms and Precipitation graph from DVRPC.



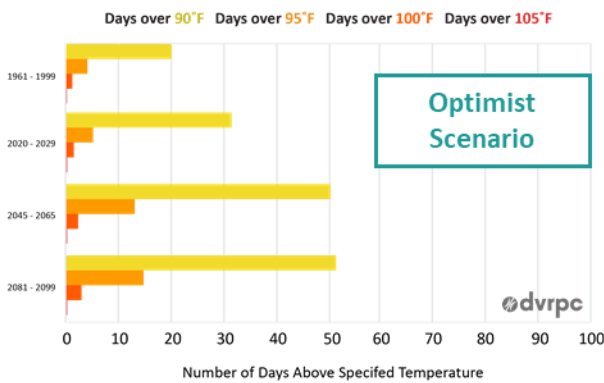
Temperature

The following illustrates temperature data, both measured and projected, for Highland Township. From 1970-1980, the Township experienced a temperature of 50.95°F on average, annually. In an optimist scenario, projections show the Township experiencing temperatures of 55.2°F on average, from 2010-2020 and 57.2°F from 2090-2100. In a pessimist scenario, the Township experiences temperatures of 55.2°F on average, from 2010-2020 and 61.3°F from 2090-2100.

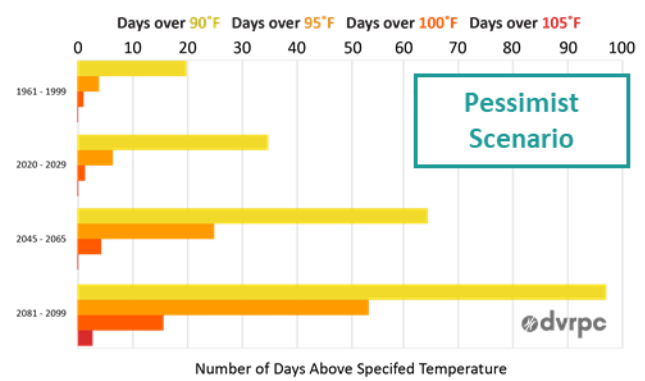
Average Temperature



Days Over Specified Temperatures



Source: DVRPC chart using data provided by ICF.



Source: DVRPC chart using data provided by ICF.

Data Sources: Historic temperature from NOAA's national climate data center, Coatesville 1 SW & 2 W weather station. Projected temperature data from National Center for Atmospheric Research (NCAR) Community Climate System Model (CCSM) projections compiled using the iTree tool developed by USDA Forest Service, Davey Tree Expert Co., National Arbor Day Foundation, Society of Municipal Arborists, International Society of Arboriculture and Casey Trees. Days over specified temperatures graphs from DVRPC.

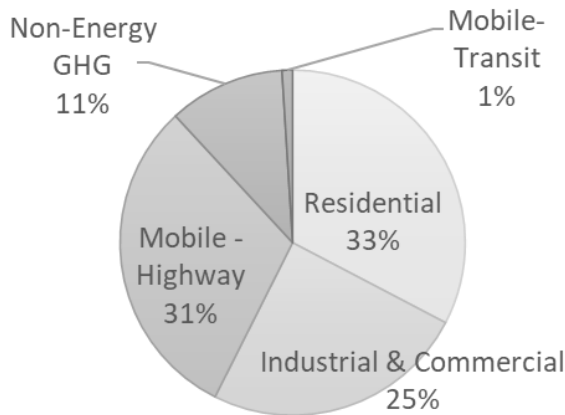


Emissions

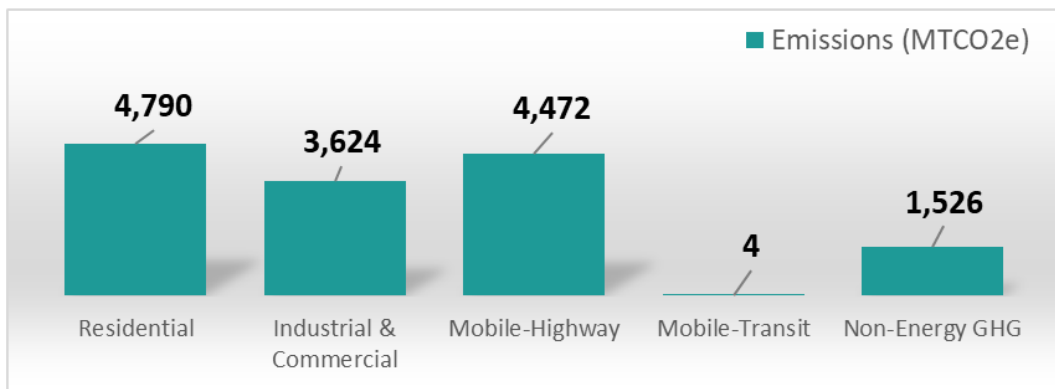
The following information illustrates greenhouse gas emissions (GHG) within Highland Township, according to the 2015 Energy and Emissions Profile for Highland Township, developed by the Delaware Valley Regional Planning Commission (DVRPC). Overall emissions are illustrated as well as emissions within the Township attributed to different sectors.

Township Greenhouse Gas Emissions

Overall



By Sector



Carbon Sequestration



Absorbing and storing atmospheric carbon dioxide is called “carbon sequestration.” According to the University of California, Davis, “Biological carbon sequestration is the storage of carbon dioxide in vegetation such as grasslands or forests, as well as in soils and oceans.”

Data Sources: GHG emission data from Delaware Valley Regional Planning Commission (DVRPC) <https://www.dvrpc.org/webmaps/MunicipalEnergy/mcdDetail.aspx?mcdcode=4202934448>.

Data Sources

Data sources used in this profile include the following:

1. Wuebbles, D.J., et al., 2017: Executive summary. In: Climate Science Special Report: Fourth National Climate Assessment, Volume I (“CSSR”) [Wuebbles, D.J., et al.(eds.)]. U.S. Global Change Research Program, Washington, DC, USA, p. 13, doi:10.7930/J0DJ5CTG.
2. Delaware Valley Regional Planning Commission’s (DVRPC) “Municipal Management in a Changing Climate” Municipal Implementation Tool #31
<https://www.dvrpc.org/Reports/MIT031.pdf>
3. US EPA’s Climate Indicators Page <https://www.epa.gov/climate-indicators/weather-climate>
4. University of California, Davis <https://climatechange.ucdavis.edu/science/carbon-sequestration/biological/>
5. Pennsylvania Climate Impacts Assessment, 2021
<https://www.dep.pa.gov/Citizens/climate/Pages/impacts.aspx>
6. i-Tree Landscape v4.3.1 (n.d.). Retrieved May, 2021
from <https://landscape.itreetools.org/>
7. National Centers for Environmental Information: National Oceanic and Atmospheric Administration retrieved from <https://www.ncdc.noaa.gov/cdo-web/search>
8. DVRPC Energy and Emissions Profile for Highland Township, Chester County, PA
<https://www.dvrpc.org/webmaps/MunicipalEnergy/mcdDetail.aspx?mcdcode=4202934448>
9. Climate Nexus <https://climatenexus.org/climate-change-issues/>
10. Center for Disease Control (CDC) Climate and Health fact sheet:
https://www.cdc.gov/climateandhealth/pubs/AIR-QUALITY-Final_508.pdf
11. US EPA’s Ozone Pollution Page <https://www.epa.gov/ozone-pollution-and-your-patients-health/course-outline-and-key-points-ozone#health%20effects>
12. PA DEP’s Air Quality Partnerships Page
<https://www.ahs.dep.pa.gov/AQPartnersHTML/health.htm>