Lower Frederick 2040

Lower Frederick Township Comprehensive Plan

MONTGOMERY COUNTY PENNSYLVANIA



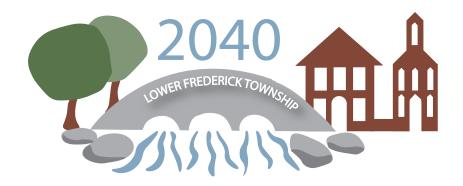
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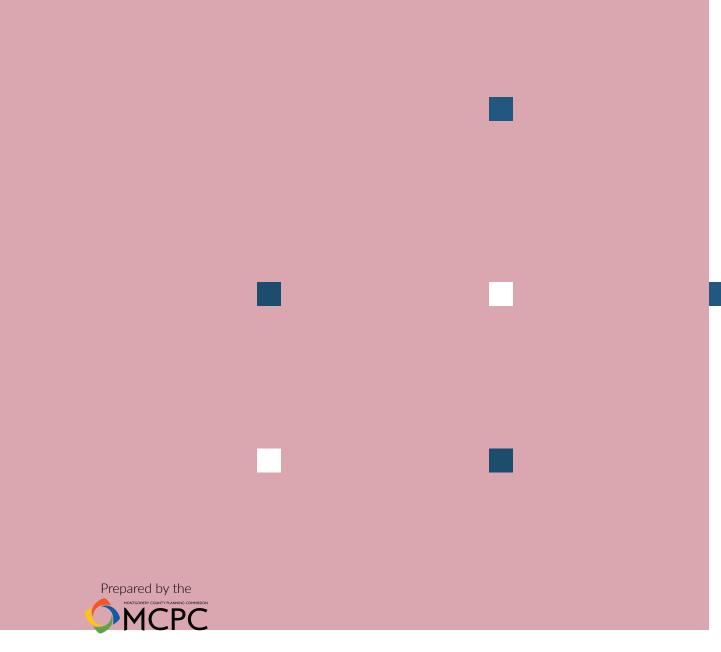
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Lower Frederick 2040

Lower Frederick Township Comprehensive Plan

MONTGOMERY COUNTY PENNSYLVANIA





LOWER FREDERICK TOWNSHIP

COMPREHENSIVE PLAN



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COMPREHENSIVE PLAN

Community Profile

Introduction

ower Frederick 2040 serves as Lower Frederick Township's ■long-range plan and establishes community goals for public facilities, infrastructure, land use, and community development. This plan recommends policies and programs to achieve these goals and realize the township's vision for its future. This plan is a supplement to the Central Perkiomen Valley Regional Comprehensive Plan Update (2014), building on its recommendations and describing strategies for the local application and implementation of these policies within the township.

The four main topic areas of Lower Frederick 2040 are:

- Natural Environment and Open Space
- Transportation
- Infrastructure
- Village Development and Community Character

The chapters covering each topic area list the community goals associated with that topic area and provide background information. For each topic area there is a list of policy recommendations and the community objectives

they support. This chapter summarizes the process by which the plan was written and introduces the township with historic background, and current demographics and land use information. The final chapter addresses the implementation of the plan and presents the full list of recommendations. The implementation chapter identifies potential funding sources and partner organizations that may contribute to the implementation of this comprehensive plan in addition to the government departments and boards of the township that will lead the implementation of each item.

LOWER FREDERICK 2040 PLANNING PROCESS

Lower Frederick Township began the process of creating a comprehensive plan in 2018. The Comprehensive Plan Steering Committee was first convened in December of 2018 to lay out the objectives of the township's comprehensive plan and develop strategies for public outreach and participation. The steering committee consisted of seven residents of the township: Charles Yeiser, Ernie Schmitt, Philip A.

Smith, Pam Reich, Crystal Gilchrist, Tarek Osman, and Amy Sacks.

On June 19, 2019, the township held a public outreach workshop. During this workshop, attendees from the public helped to identify community issues, preferences, and goals. Input from this event was used to develop a vision for the comprehensive plan. The event featured poster stations covering the following topics: village development and community character; transportation and infrastructure; preservation of natural resources and open spaces, and agricultural preservation; and finance and paying for infrastructure.

Over the summer of 2020, the township conducted a public survey in support of the *Lower* Frederick 2040 comprehensive plan. The survey was initiated as public outreach to reengage residents in the comprehensive planning process after in-person meetings were curtailed due to COVID-19 restrictions.

The survey gauged public sentiment regarding land use, housing, historic properties, and commercial development. The survey was prepared on surveymonkey.com for online outreach, with hardcopies available at the municipal building. The survey was published in mid-July and responses were collected through the end of September. In total, the survey collected 193 responses with 188 responses coming from township residents.

A public open house was held on May 6, 2021, using the Zoom virtual meeting service. This event began with the showing of a recorded presentation that gave background on the planning process and the comprehensive plan's goals and recommendations. The video presentation was available for viewing online in the weeks prior to the event, and afterwards. Following the video presentation, meeting attendees were invited to ask questions or give their comments on the plan.

Relationship to Other Plans

MONTCO2040: A SHARED VISION

The Montgomery County comprehensive plan, Montco 2040: A Shared Vision, was adopted in 2015 and provides an overall land use and growth management framework for the county and provides guidance on multimunicipal and regional issues such as trails, flooding, and roadway improvements. Montco 2040 is structured around the implementation of three primary themes: connected communities, sustainable places, and vibrant economies.

The future land use plan that Montco2040 describes for Lower Frederick is consistent with the township's future land use plan, designating the preservation of open spaces, farmland, woodlands, and stream corridors and identifying areas where residential and commercial development would be appropriate.

CENTRAL PERKIOMEN **VALLEY REGIONAL COMPREHENSIVE PLAN**

The comprehensive plan of

the Central Perkiomen Valley Regional Planning Commission (CPVRPC) was updated in 2014. The Central Perkiomen Valley Regional Comprehensive Plan is the comprehensive plan for the member communities of the CPVRPC: boroughs Collegeville, Trappe, and Schwenksville and Perkiomen, Upper Frederick, and Lower Frederick townships. The regional comprehensive plan set goals to ensure management of future development; encourage more livable communities; encourage investment in open space; and promote responsible integration of historical, cultural, and natural amenities with new development.

The township's comprehensive plan supports and complements the recommendations of the regional comprehensive plan and is consistent with the region's future land use plan. The recommendations of Lower Frederick 2040 support the implementation of the regional comprehensive plan's recommendations for open space preservation, recreation, future development, and transportation improvements.

NEIGHBORING PLANS

Upper Frederick Township

– In November 2020, Upper Frederick Township adopted the Upper Frederick Comprehensive Plan Update. Like Lower Frederick 2040, the Upper Frederick comprehensive plan supports the Central Perkiomen Valley Regional Comprehensive Plan and establishes local implementation strategies to address the township's priorities. The Upper Frederick future land use plan supports the

regional comprehensive plan, which designates the majority of the township as Rural Resource Conservation Area and the Future Growth Area along the Big Road Corridor. Where Upper Frederick borders Lower Frederick, land uses are generally consistent with those across the township boundary. The Upper Frederick plan identifies greenway conservation and recreational trail goals in riparian corridors that are shared with Lower Frederick.

Limerick Township – Limerick Township adopted its latest comprehensive plan in 2009. Among its other goals, the township's plan seeks to direct development to growth areas, revitalize and maintain village centers, and preserve resource conservation areas. The growth management recommendations of the Limerick Comprehensive Plan designate all township land abutting Lower Frederick as resource conservation areas. The existing and future land uses along this shared border are fully consistent with those in Lower Frederick. This plan, with Limerick's Greenways and Trails Master Plan, supports the Sunrise Trail, a proposed county trail that would also pass through Lower Frederick.

Upper Salford Township –

Upper Salford, Lower Frederick's neighbor across Perkiomen Creek, is a member of the Indian Valley Regional Planning Commission (IVRPC). Adopted in 2015, the Indian Valley Regional Comprehensive Plan set goals for the region, including: protect historic, cultural, and natural resources; implement effective

growth management techniques; encourage farmland preservation; and direct sewer and water infrastructure improvements to designated growth areas. The regional land use plan identifies most of Upper Salford as Rural Resource Area, though an area partly abutting Lower Frederick is designated as Village Conservation Area. This area includes Salford village and is largely screened from the boundary with Lower Frederick by public open space. The conditions in the Salford village area are similar to those around Spring Mount, where Lower Frederick's village abuts Rural Resource Area in Upper Salford. The future land use plan of the Indian Valley Regional Comprehensive Plan is consistent with existing and planned land uses in Lower Frederick.

LOWER FREDERICK OPEN SPACE PLAN

The open space plan of Lower Fredrick Township was adopted in 2006 and updated in 2015. This document set goals for the township to preserve natural resources and scenic character, maximize active recreation opportunities, facilitate pedestrian and bicycle mobility, preserve agricultural heritage, and accommodate efficient growth. The open space plan and any subsequent updates to it act as a component of the township's comprehensive plan, developing goals and implementation strategies specific to the natural environment, parks, and open space of Lower Frederick.

Background

LOCATION

Lower Frederick Township occupies 8.2 square miles of rugged land in the Perkiomen Valley in western Montgomery County. The township is located on the west bank of the Perkiomen Creek and borders five other municipalities: Upper Frederick, Limerick, Perkiomen, and Upper Salford townships and Schwenksville borough.

HISTORY

Prior to the founding of Pennsylvania, much of the land of the Delaware watershed was part of Lenapehoking, the home of the Lenape tribe. The Unami, a subgroup of the larger Lenape tribe, lived along the Schuylkill River and its tributaries, including the area of Lower Frederick Township. Many places and geographic features in the region still bear the names given to them by the Lenape.

In the early 18th century, German and English immigrants became the first Europeans to buy land and establish farms in the area that would become Lower Frederick. In 1731, Frederick Township was founded. Throughout the 18th and 19th centuries, farming prevailed in the area while other local industries grew, including mills powered by the township's numerous creeks. The mineral resources of the township supplied quarries, brickworks, potters, and mining throughout the 1800s. In 1919, Frederick Township was



Built on Swamp Creek in 1767, Sunrise Mill is located in a county park that straddles the boundaries between Upper Frederick, Lower Frederick, and Limerick townships. The mill is an excellent example of the region's early agriculture and industry.



Demographics

divided into Upper Frederick and Lower Frederick townships, the last of Montgomery County's municipalities to be incorporated.

Lower Frederick's Delphi and Spring Mount villages developed into a resort area as the Reading Railroad's Perkiomen Branch made them a popular destination for Philadelphians. In the latter half of the 20th century, population growth and suburbanization in the metropolitan region reached Lower Frederick, adding to its population and transforming it into the rural bedroom community it is today.

Since its incorporation in 1919, Lower Frederick has grown from a sparsely-populated farming community to a more residential area with the arrival of suburban development. During the township's fastest period of growth from 1980 to 2000, the population of Lower Frederick doubled. In recent years, the township has generally followed prominent regional and national demographic trends, seeing decreases in average household size and increases in the median age, educational attainment, and income level.

YEAR	POPULATION	CHANGE	AVERAGE ANNUAL GROWTH RATE
2018	4,881	80	0.2%
2010	4,801	6	0.0%
2000	4,795	1,399	4.1%
1990	3,396	1,017	4.3%
1980	2,379	-136	-0.5%
1970	2,515	407	1.9%
1960	2,108	488	3.0%
1950	1,620	521	4.7%
1940	1,099	201	2.2%
1930	898		

Figure 1.1 Lower Frederick Population Change (Decennial Census and ACS 5-Year Estimates)

POPULATION

In 2018, Lower Frederick had a population of 4,881 people. Over the past 50 years, Lower Frederick's population has nearly doubled, with most of that growth occurring during the 1980s and 1990s (Fig. 1.1). Population growth in the township has otherwise occurred at a much slower pace. Population forecasts prepared in 2015 by the Delaware Valley Regional Planning Commission project that growth will continue at an average rate of 0.4% per year. This projection estimates that Lower Frederick will have a population of 5,355 people in the year 2040 (Fig. 1.2).

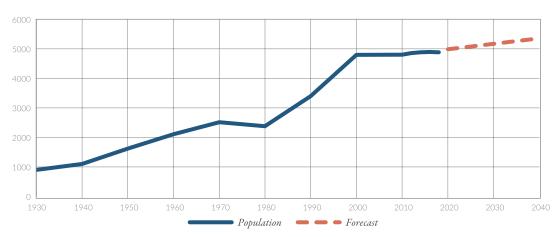


Figure 1.2 Lower Frederick Population Growth and Forecast (Decennial Census, ACS 5-Year Estimates, DVRPC Population Forecast)

AGE AND SEX

An age pyramid divides a population by sex and age, to show its composition. The age pyramid of the township and the county (Fig. 1.3) shows that each have a similar distribution of ages across their populations. Each have distinct age ranges that are proportionally larger within the population. These larger age groups appear in the ranges of 5 to 14 years, and 40 to 54 years.

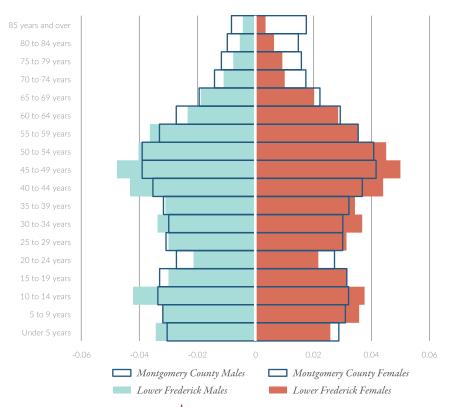


Figure 1.3 | Age Pyramid (2010 Decennial Census)

In 1990, the median age of Lower Frederick's population was 32.5, while Montgomery County had a median age of 35.8 years. Since then, the median age of both the township and county have risen. The median age of Lower Frederick residents in 2018 was 39.6 years, while the county overall had a slightly older median age, 41.3 years. Lower

Frederick's younger population, relative to the county, is reflected in the township's proportionally larger share of residents under 18 years of age and proportionally smaller share of residents 60 years or over. Neighboring townships, Limerick, Perkiomen, Upper Frederick, and Upper Salford share this characteristic to a lesser or greater degree.

AGE GROUP	MONTGOMERY COUNTY	LOWER FREDERICK	LIMERICK	PERKIOMEN	SCHWENKSVILLE	UPPER FREDERICK	UPPER SALFORD
Population	823,823	4,881	18,990	9,163	1,422	3,608	3,353
Percent under 18 years	21.7%	23.9%	24.8%	27.6%	22.7%	23.6%	30.7%
Percent 60 years or over	24.2%	18.7%	18.3%	14.3%	26.1%	22.7%	24.3%

Figure 1.4 | Age Groups Comparison (2019 ACS 5-Year Estimates)

Household sizes in Lower Frederick have been decreasing in recent decades. The average household in the township is now 2.65 people, down from 2.77 in the 2000 census. While this shrinking of the township's average household size may represent an ongoing trend, average household sizes in Montgomery County and nationwide have stabilized between 2.5 and 2.6 in recent years after declining for decades. If Lower Frederick undergoes the same transition from declining average household size to longterm stability in that measure, it will allow for greater certainty when making population and housing projections.

In 2018, the share of households with one or more person under 18 years in Lower Frederick was 7 percentage points larger than the share of households that had one or more person 60 years or over. This situation was reversed at the county level, where the share of households with one or more person 60 years or over was 8.9 percentage points larger than the share of households with children. One-person households are significantly more common countywide than they are in Lower Frederick. The share of one-person households in Montgomery County is 9.5 percentage points higher than in Lower Frederick.

HOUSEHOLD COMPOSITION	MONTGOMERY COUNTY	LOWER FREDERICK
Households with one or more people under 18 years	32.1%	36.4%
Households with one or more people 60 years and over	41.0%	29.4%
Householder living alone	25.8%	16.3%

Figure 1.5 Household Composition Comparison (2018 ACS 5-Year Estimates)

	MONTGOMERY COUNTY		LOWER FREDERICK	
RACE AND ETHNICITY	2010	2018	2010	2018
White alone	81.1%	79.4%	94.3%	93.1%
Black or African American alone	8.7%	9.1%	2.0%	1.8%
American Indian and Alaska Native alone	0.1%	0.1%	0.3%	0.2%
Asian alone	6.4%	7.5%	1.4%	2.5%
Native Hawaiian and Other Pacific Islander alone	0.0%	0.0%	0.0%	0.0%
Some Other Race alone	1.6%	1.3%	1.0%	1.4%
Two or More Races	1.9%	2.5%	1.0%	1.0%
Hispanic or Latino of any race	4.3%	5.0%	3.0%	6.9%

Figure 1.6 Racial and Ethnic Composition (2010 Decennial Census, 2018 ACS 5-Year Estimates)

DIVERSITY

Like many rural communities, the population of Lower Frederick has less racial diversity than the county as a whole. In 2018, minority groups made up 20.6% of Montgomery County's population, but accounted for just 6.9% of the township's population. Across the county, racial and ethnic diversity has increased in recent years. The upward trend in diversity is seen in Lower Frederick, too, though generally at a slower rate than at the county level.

EDUCATION

A community's educational attainment level can indicate the community's overall income potential and economic status. Levels of educational attainment in Lower Frederick are comparable to those countywide, with 95.9% of Lower Frederick adults aged 25 years or older having graduated high school or earned a GED to the county's 94.2%. Among higher levels of education, however, Lower Frederick has a smaller share than at the county level. In 2018, 34.4% of Lower Frederick adults aged 25 years or older held a Bachelor's degree or higher, whereas this figure for Montgomery County reached 48.8%.

INCOME

In Lower Frederick, the median household income in 2018 was \$85,994, approximately 2.5% lower than that of Montgomery County. In that same year, the per capita income of Lower Frederick was \$37,238. This amount is nearly 20% lower than the county's per capita income.

INCOME MEASURES	MONTGOMERY COUNTY	LOWER FREDERICK
Per capita income	\$46,199	\$37,238
Median household income	\$88,166	\$85,994
Mean household income	\$120,859	\$98,675

Figure 1.8 | Income Comparison (2018 ACS 5-Year Estimates)

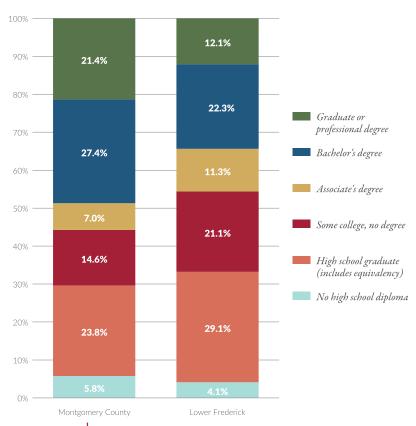


Figure 1.7 Educational Attainment of People 25 Years or Older (2018 ACS 5-Year Estimates)

The disparity between the township and county's per capita income is partly due to Lower Frederick's larger median household size, but a larger share of this disparity is attributable to the county's larger mean household income. Lower Frederick Township has relatively fewer households than the county that earn \$150,000 or more. A greater share of households in Lower Frederick have earnings in middle income levels.



Figure 1.9 | Household Income Comparison (2018 ACS 5-Year Estimates)

Despite having comparable shares of households at lower income levels, estimated poverty rates in Lower Frederick were higher than those across Montgomery County. The share of families with income below poverty level was higher in Lower Frederick than in Montgomery County in 2018.

POVERTY RATES	MONTGOMERY COUNTY	LOWER FREDERICK
Percent of residents below poverty level	5.9% - 6.5%	5.1% - 12.9%
Percent of families below poverty level	3.8% - 4.4%	4.0% - 12.2%

Figure 1.10 | Poverty Rate Comparison (2018 ACS 5-Year Estimates)

EMPLOYMENT

In recent years, the unemployment rate in Montgomery County has generally trended downward from its peak in 2010, reaching 4.6% in 2018. In 2018, the unemployment rate reported in Lower Frederick was higher, at 6.8%. In 2018, the labor force participation of residents 16 years and over was 71.9% in Lower Frederick-higher than either Montgomery County or Pennsylvania.

The list of employment sectors represented among Lower Frederick residents is broadly similar to the county level. At the township and county level, management, business, science, and arts sector occupations account for the largest share of jobs held by residents, followed by jobs categorized under natural resources, construction, and maintenance. Though they are not the largest employment sectors in the township or county, production, transportation, and material moving occupations and sales and office occupations are where the greatest differences between the township and county labor forces can be found. In 2018, the share of Montgomery County workers in production, transportation, and material moving occupations was 61% larger than that sector's representation in the labor force of the township. The share of the Lower Frederick labor force in sales and office occupations was 48% larger than that sector's representation at the county level.



EMPLOYMENT MEASURES	PENNSYLVANIA	MONTGOMERY COUNTY	LOWER FREDERICK
Employment rate	94.2%	95.4%	93.2%
Unemployment rate	5.8%	4.6%	6.8%
Population 16 years and over in labor force	62.7%	68.3%	71.9%

Figure 1.11 | Employment Rate Comparison (2018 ACS 5-Year Estimates)

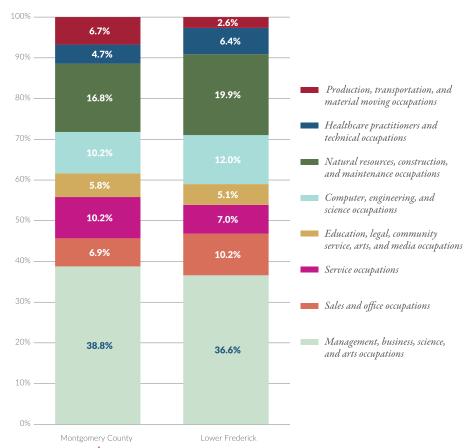


Figure 1.12 Residents' Employment Sector (2018 ACS 5-Year Estimates)

Overall, Lower Frederick is a net exporter of jobs, meaning that a larger number of workers live in the township and commute to a job outside of it than live outside of the township and commute to a job in the township. In 2018,

609 people worked in Lower Frederick but lived elsewhere; 71 people both resided and worked in the township, and 2,587 residents of the township were employed outside of the township. This imbalance between

commutes into and out of the township, along with the ratio of jobs and population characterizes Lower Frederick as a bedroom community. In 2018, there were approximately 7.2 residents for every job located in Lower Frederick, giving the community a jobs to population ratio of 0.14. Small, neighboring communities Upper Frederick, Upper Salford, and Schwenksville have similarly low ratios, whereas Limerick Township's ratio of 0.64 identifies it as a larger employment center than Lower Frederick.

JOBS & POPULATION	LOWER FREDERICK	LIMERICK	PERKIOMEN	SCHWENKSVILLE	UPPER FREDERICK	UPPER SALFORD
Population	4,881	18,874	9,186	1,483	3,584	3,366
Jobs	680	12,011	2,998	356	470	621
Jobs/Population Ratio	0.14	0.64	0.33	0.24	0.13	0.18

Figure 1.13 Jobs and Populations Comparison (2018 ACS 5-Year Estimates)

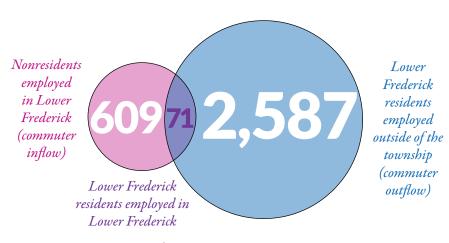


Figure 1.14 Worker Inflow-Outflow Diagram (2018 ACS 5-Year Estimates)

In Lower Frederick, the largest employment sector is Educational Services, accounting for over a quarter of all jobs in the township. Retail Trade is the second-largest share of jobs located in the township, and is a prominent employment sector throughout Montgomery County.

JOBS BY EMPLOYMENT SECTOR	PERCENTAGE
Educational Services	26.0%
Retail Trade	22.5%
Construction	14.1%
Other Services (excluding Public Administration)	12.5%
Transportation and Warehousing	5.9%
Other (less than 5%)	19.0%

Figure 1.15 | Largest Employment Sectors (2018 ACS 5-Year Estimates)

Existing Land Use

Currently, the main land use in Lower Frederick is residential properties, accounting for nearly half of the township's area. The second largest category of land use, which groups agriculture and undeveloped land, makes up another third of the township's area. Open space, a category that includes both public and privatelyowned land that is permanently preserved from development, covers 10% of the township. Together, these three categories cover 91% of the township and define the appearance and identity of Lower Frederick as a primarily rural residential community. All other land, including commercial, institutional, and utility uses add to less than 10% of the township.

LAND USE CATEGORIES (2021)	ACRES	PERCENTAGE
Residential	2,398.4	48.0%
Commercial and Industrial	122.5	2.5%
Open Space	512.4	10.2%
Agriculture and Undeveloped	1,663.8	33.3%
Institutional and Utility	303.1	6.1%
Township Total	5,000.2	100.0%

Figure 1.16 | Land Use Category Table

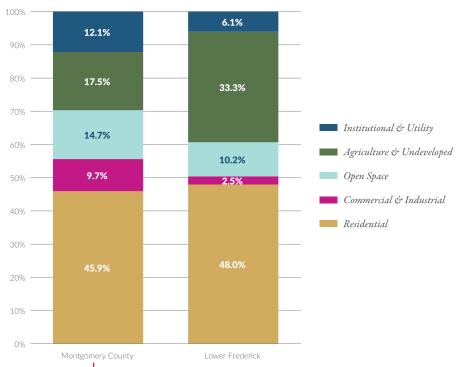
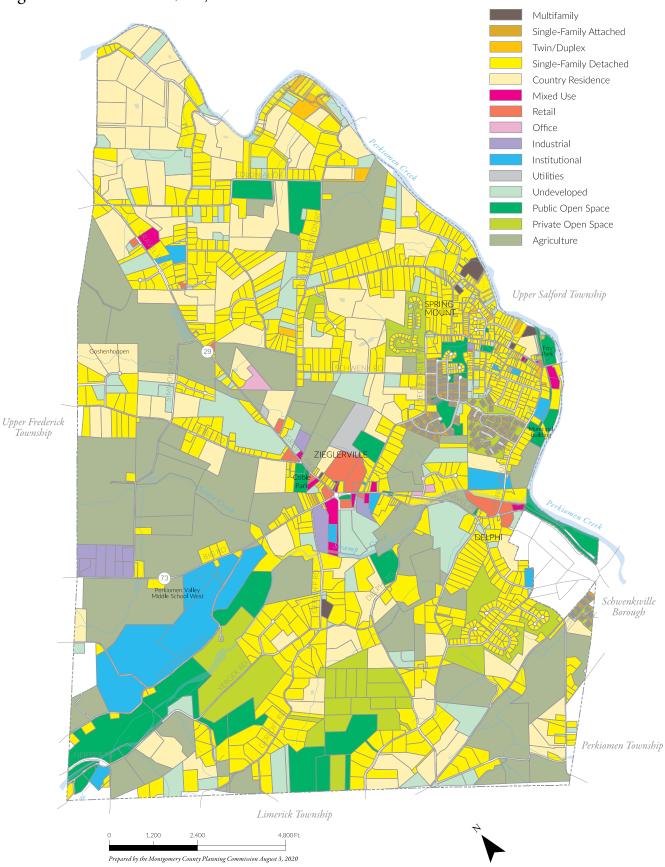


Figure 1.17 | Land Use Categories Area Comparison

Figure 1.18 | Land Uses, July 2020



RESIDENTIAL

Residential land makes up 48% of the township's area. Every type of residential land use can be found in Lower Frederick with the sole exception of mobile home parks. The largest fraction of the township's residential land is composed of single-family detached lots under 5 acres in size. Together, these properties account for 28.3% of the township. Another 17.7% of the township is classified as "country residence", single-family detached homes on lots five acres in size or larger.

The remaining residential land use types, single-family attached, twin or duplex, and multifamily account for less than two percent of the township's area, covering a combined 94.9 acres.

Industrial uses in Lower Frederick are concentrated in the township's LI Limited Industrial zoning district, located on the western edge of the township, in an area bounded by Big Road, Simmons Road, Goshenhoppen Creek, and the border with

LAND USE TYPE	ACRES	PERCENT OF TOWNSHIP
Industrial	49.4	1.0%
Retail	42.2	0.8%
Mixed Use	22.8	0.5%
Office	8.2	0.2%

Figure 1.20 | Commercial and Industrial Land Uses

LAND USE TYPE	ACRES	PERCENT OF TOWNSHIP
Single-Family Detached	1417.1	28.3%
Country Residence	886.4	17.7%
Single-Family Attached	56.1	1.1%
Twin/Duplex	25.7	0.5%
Multifamily	13.1	0.3%
Mobile Home Park	0.0	0.0%

Figure 1.19 | Residential Land Uses

COMMERCIAL AND INDUSTRIAL

All commercial and industrial land uses in Lower Frederick, combined, make up only 2.5% of Lower Frederick's area. These land use types are commonly places of employment. Industrial land uses cover 49.4 acres and represents the largest land use type in this category. Retail accounts

Upper Frederick Township. The other commercial types are more widespread in the township, but there are significant clusters in Zieglerville and Delphi.

OPEN SPACE

The open space category includes two land use types, representing the ownership of the open space. In Lower Frederick

Township, public and private open space is present in nearly even amounts and each account for roughly five percent of the township. Public open space, including township-, county-, and state-owned parks and open spaces, is the larger of the two open space types. Private open spaces, mainly consisting of open spaces reserved in residential developments, account for the

NT OF SHIP	township's remaining open spaces. Whether private or public,
%	open space hosts a
%	large portion of the
	community's natural a

ural areas and, as permanentlyprotected properties, will preserve them for years to come.

Public and private open spaces alike are widely dispersed across the township. Although some private open spaces and public parks can be found in more developed areas, these land uses are mainly found in wooded, upland areas of Lower Frederick. Examples of this land use category are described in greater detail in the Natural Environment and Open Space chapter of this plan.

AGRICULTURAL AND UNDEVELOPED

Agriculture and undeveloped properties are grouped here because these two land use types are uniquely sensitive to development pressure. Typically large properties with comparatively low land prices make them appealing sites for land development. Over the past fifty years, these land uses have shrunk from 80% of the township in 1970, to 33% in 2020.

After single-family detached housing, agriculture makes up the second-largest land use in Lower Frederick. These properties cover more than a quarter of the township and many of them continue the township's centuries-old tradition of farming. Farmland preservation can help to alleviate development pressure and maintain this culturally and historically significant land use. Many properties in the township are a part of the Act 319 Clean & Green preferential tax assessment program. Properties enrolled in this program may be in active use as a farmland or acting as an agricultural or forest reserve. All properties enrolled in the Clean & Green program are identified as agriculture land use.

Despite the township's long history of settlement and recent population growth, nearly 400 acres of the township is currently undeveloped. This land use category identifies land that has no homes, businesses, or other identified uses. The majority of Lower Frederick's undeveloped land is located in stream valleys and other areas with rugged terrain that makes development challenging. Undeveloped land covers nearly 8% of the township and contains much of Lower Frederick's most sensitive natural areas.

LAND USE TYPE	ACRES	PERCENT OF TOWNSHIP
Agriculture	1268.4	25.4%
Undeveloped	395.4	7.9%

Figure 1.22 | Agriculture and Undeveloped Land Uses

LAND USE TYPE	ACRES	PERCENT OF TOWNSHIP
Public Open Space	260.2	5.2%
Private Open Space	252.3	5.0%

Figure 1.21 Open Space Land Uses

INSTITUTIONAL AND UTILITY

Public buildings, churches, and cemeteries are common examples of institutional land uses found in Lower Frederick. This land use totals 5.7% of the township's area and occurs most commonly as isolated properties that are not located near other institutional uses. Prominent examples of this land use type include Saint Mary Catholic Church, Lower Frederick Fire Company, and Perkiomen Valley Middle School West, which has a 160-acre campus.

Saint Mary Catholic Church, on Spring Mount Road, is a prominent example of an institutional land use in the township.



In Lower Frederick, utility facilities make up one of the township's smallest land uses. These properties host infrastructure that supply the area with drinking water and treat the community's wastewater.

LAND USE TYPE	ACRES	PERCENT
Institutional	283.2	5.7%
Utility	19.9	0.4%

Figure 1.23 Institutional and Utility Land Uses

LAND USE TRENDS

In recent decades, the most prominent trend in Lower Frederick's land use has been the gradual transformation of agricultural and undeveloped land to open space and residential properties. This ongoing process is also seen in neighboring townships and throughout the region. This has accompanied the growth of suburban job centers and road development that has made these employment areas more accessible to rural communities. In the township, this development trend has slowed since 2000. Recently proposed residential developments in the Zieglerville area represent a continuation of the trend and would convert undeveloped properties into residential land and open space.



Natural Environment & Open Space

Natural Features

ower Frederick's terrain and natural resources have guided its history and development and continue to shape its future development and community character. The soils and unique geology of Lower Frederick have dictated the location and extent of development, cultivating its rural character. Other natural features such as streams, riparian corridors, tree canopy cover, and wetlands help to define Lower Frederick's unique aesthetic and are important for the ecosystem services they provide to the community. This chapter reviews the natural features of Lower Frederick, the roles they have played in its past, and the impact they might have on the future of the township.

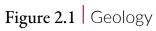
Geology

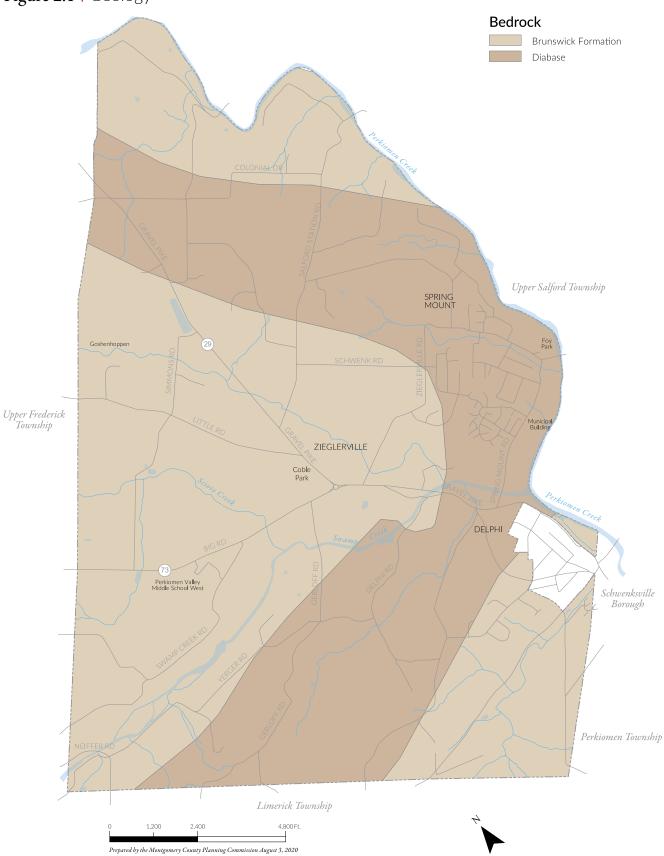
The unique geology of Lower Frederick is evidenced by exposed rock formations that can be found throughout the township. Bedrock geology is typically unseen; however, it is the foundation of an area and is responsible, along with the hydrologic cycle, for the changes in elevation, steep slopes, location of watercourses, and

orientation of the landscape. This, in turn, influences the vegetative communities, soils, and canopy cover. Montgomery County is located in the Triassic Lowland and Piedmont Upland sections of the Piedmont Physiographic Province. The Triassic Lowlands are primarily red shales and sandstones, with intrusions of diabase. The formations underlying Lower Frederick include The Brunswick Shale, Diabase, and Lockatong Argillite/Shale.

BRUNSWICK FORMATION

The Brunswick Shale formation underlies most of Lower Frederick in addition to much of the northwestern half of the county. Brunswick Shale is characterized by reddish-brown shale, mudstone, and siltstone. Argillite is a harder form of shale that lies in strata that curve around the Swamp, Scioto, and Goshenhoppen Creek watersheds. This contributes to the rolling topography of the southern part of the Township. Groundwater yields vary within the Brunswick Formation. Joints and fractures can allow for adequate water flow, despite the fine-grained rock's low porosity.







Erosion resistance makes outcroppings and boulders a common sight in areas with diabase bedrock



DIABASE

Diabase is formed from molten rock that intruded into large cracks in the Brunswick formation and solidified. The resulting diabase sills and dikes are generally several feet to less than half a mile wide. There is a ring of diabase intrusions around East Greenville, Pennsburg, and Red Hill that extends as a crescent-shaped arm through Lower Frederick. Diabase is extremely resistant to erosion or weathering, and consequently comprises much of the highland areas in the township. Diabase impedes water infiltration and groundwater movement. The higher mineral content of diabase leads to unique plants and habitat.

Although some fractures near the surface absorb small amounts of water, they result in notoriously low well yields. Diabase makes it difficult to excavate and results in areas that are steeply sloped and wooded with numerous surface rocks and boulders. Due to the many challenges that diabase poses to development, the presence of diabase bedrock is included as an environmental adjustment factor in the township's zoning ordinance.

Topography and Steep Slopes

Slope is an important environmental condition and is defined as the amount of change in vertical elevation over a specified horizontal distance. These changes in elevation throughout a community contribute greatly to its appearance and natural diversity. Steep slopes often have a combination of vegetation, climate, soil, and underlying geology that differs from the surrounding area and can be susceptible to erosion, especially if vegetation is removed. The instability and sensitivity of steep slope areas can limit development. The preservation of existing vegetation on steep slopes should be a priority for the township in order to preserve habitats and reduce the amount of erosion and

sediment entering the waterways.

Very little of the steep slope land in the township has been developed, for several reasons: road access to these areas is poor; the areas are part of the township's lowest-density zoning district (the R-1 Rural Density Residential District); public sewer and water facilities do not extend to the areas; on-site water and sewage systems are difficult due to the diabase formations and poor soils; and a significant amount of the land is owned by Montgomery County and conservation organizations. The township has a steep slope ordinance, adopted in 1981, which regulates the uses and development of land with slopes exceeding 15 percent. This ordinance restricts building and development on steeply-sloped

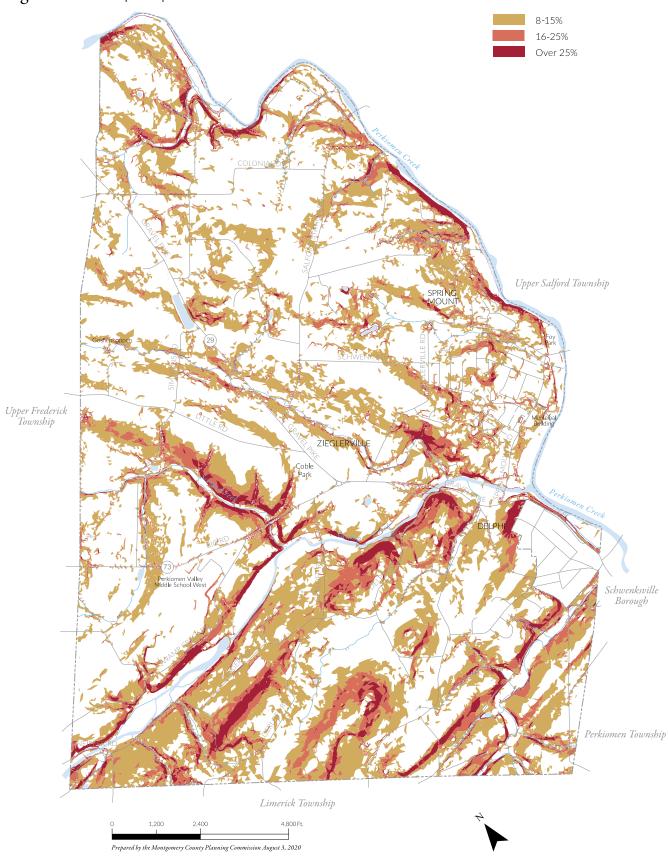
> areas in order to protect those areas and reduce erosion and sedimentation. Due to the unique topography and geology of Lower Frederick Township, care should be taken to preserve steeplysloped areas and the ecosystems they support.

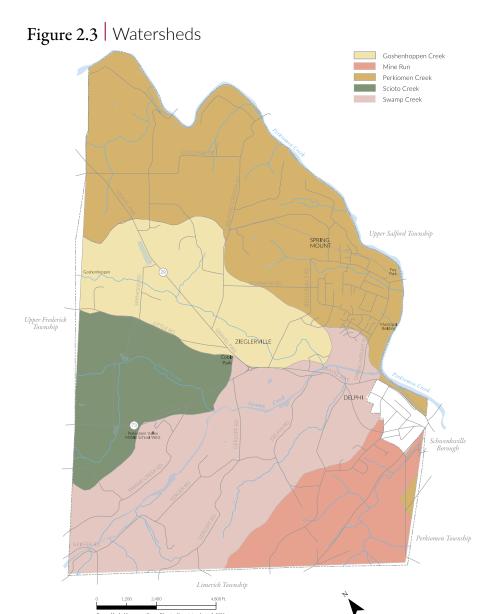
Interactions between streams and varying geology create many of the township's steep slopes.











Surface Waters and Groundwater

Water is integral to the landscape, shaping its contours, providing opportunities for recreation, and supporting life and industry. The average annual rainfall in the county varies from 43 inches near City Avenue to 47 inches near the Green Lane Reservoir. Annual precipitation can vary from the average by as much as ten inches. In general, 25 percent of precipitation becomes direct runoff, 50 percent evaporates or is transpired by plants, and 25 percent replenishes groundwater. The surface water that falls on or travels through Lower Frederick Township affects the topography, soils, and vegetation of the area. Effluent from sewage treatment plants can contribute to stream flow raising water temperatures and adding substances not removed in the treatment process such as salts and pharmaceuticals.

Groundwater drawn by public and private wells supply 100 percent of the water sourced within Lower Frederick. Groundwater replenishment occurs slowly, and is largely dependent on open, undisturbed land. This recharge is aided by vegetation, which serves to retain precipitation where it falls and allows it to seep into the soil rather than run off the surface.

WATERSHEDS

Five major streams drain Lower Frederick Township. Perkiomen Creek flows along the township's eastern border with Upper Salford and all other streams in the



township are its tributaries. After Perkiomen Creek, Swamp Creek is the largest watercourse in the township. Swamp Creek flows between Yerger and Swamp Creek Roads before joining Perkiomen Creek at Delphi. Goshenhoppen Creek, which flows east of Zieglerville, drains the center part of the township. Scioto Creek drains the area between Little Road and Route 73. Mine Run drains the southern corner of the township, near State Game Farm Road, and flows north into Schwenksville before it enters Perkiomen Creek.

FLOODPLAINS

Floodplains are areas of lowlying land lining rivers and streams. Floodplains are important natural features and prone to flooding. They are poor locations for land development. Each of the five major streams in Lower Frederick has an associated floodplain area. Several unnamed tributaries of the Perkiomen Creek also have floodplains. Most of the floodplain area in the township is undisturbed as a result of the undeveloped nature of most of Lower Frederick. The geology of the region causes many streams to have steep, rocky banks that reduce the width of floodplains and their ability to accommodate and slow floodwaters. The foliage and soils of floodplains and surrounding riparian corridors are crucial to the township's natural habitats and play a role in reducing flood risks locally and downstream. Lower Frederick Township has a floodplain conservation ordinance that was adopted in 1977 and further amended in 1984, 2000, and 2016.

WETLANDS

Wetlands provide many ecosystem services and are worthy of protection due to a number of unique services they provide. Wetlands serve as habitats for birds, amphibians, and fish which, in turn, support other wildlife. Wetlands mitigate flooding

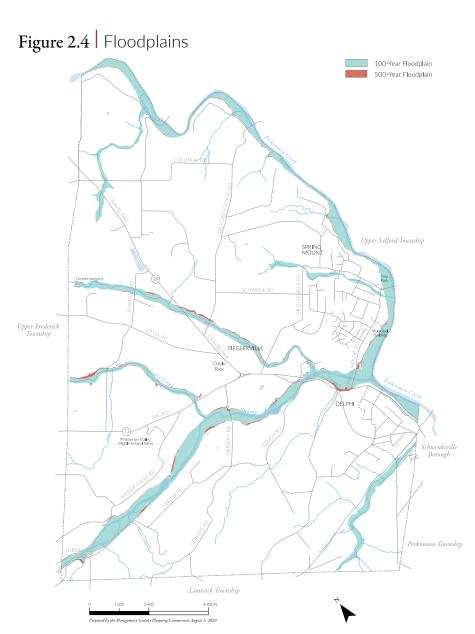
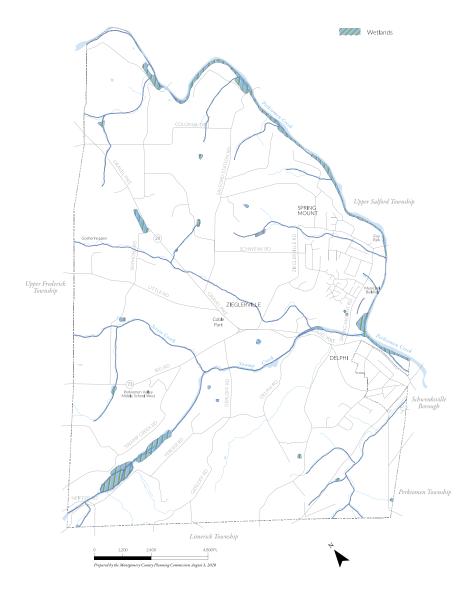


Figure 2.5 | Streams, Water Bodies, and Wetlands



by absorbing floodwater and reducing stream velocity. As water flows through a wetland, it slows and drops much of its sediment and other excess nutrients. This process filters runoff before it enters streams and waterways, which reduces water contamination and improves the health of streams both locally and further downstream. Wetlands also encourage infiltration of stormwater, which contributes to groundwater recharge.

RIPARIAN BUFFERS

A riparian buffer is a vegetated area, typically featuring trees, that follows the course of a stream, growing on its banks and adjacent land. Riparian buffers provide many benefits, locally and regionally, to the community and environment. These benefits generally increase as the width and ecological health of the buffer increases, though steep streambanks can hinder a riparian buffer's performance. Improved water quality, reduced erosion, decreased frequency and severity of floods, increased biodiversity, and cooler local temperatures are some of the benefits of riparian buffers.

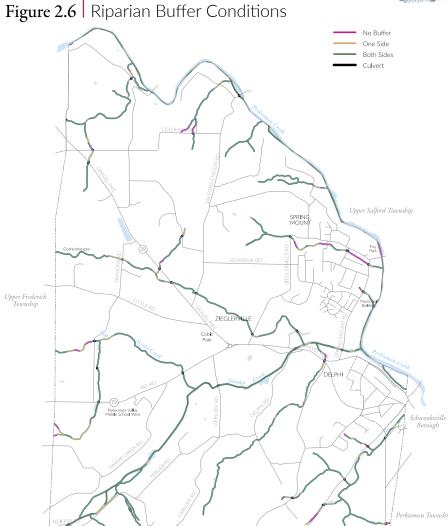
Like wetlands, riparian buffers improve water quality by filtering pollutants from runoff before it enters the stream. This can assist with the removal of pesticides, excess sediment, nutrients and pathogens. Riparian buffers allow sediment and any attached phosphorus to settle out and infiltrate the ground before it enters the stream. The phosphorus and other excess nutrients can then be taken up by the buffer's vegetation.



The root systems of trees and other plants help to convey water into the ground, stabilize stream banks, and protect them from erosion. This is of particular importance during precipitation events. The vegetative ground cover in riparian buffers prevents runoff flows from gaining the speed needed to erode and transport sediments into streams. Erosion increases the sedimentation of a stream and thus flooding risk, since the size and carrying capacity of a stream are reduced through this process.

Riparian buffers help to lower the concentration and velocity of runoff and thus the height and velocity of floodwaters downstream. Buffers often contain wetlands and riparian ecosystems that can serve as a natural reservoir to store runoff and slow its release into the stream over time. During flood events, the presence of dense vegetation growth along the streambanks helps to slow the flow of the stream, preventing flash flooding and lowering levels of flooding downstream. Sedimentation can also decrease the amount of sunlight reaching aquatic plants and organisms and clog fishes' gills. The stream bottom is where most of the biological activity takes place and therefore a stream's health is greatly improved by this stabilization.

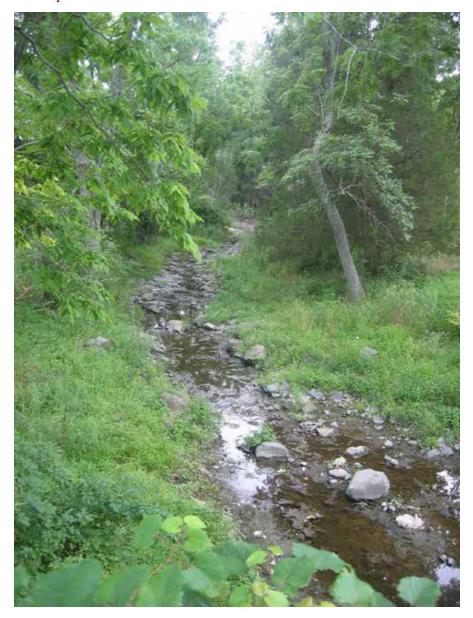
Riparian buffers host diverse communities of wildlife and plant species. Preserving riparian woodland buffers provides natural corridors for various species' habitats and movement. Riparian corridors can act as bridges connecting larger open spaces such as parks and woodlands. Buffers also provide a specific



and critical ecosystem needed by certain plants and animals that live and breed along streams. The trees also provide leaf litter which serves an important purpose for stream health by feeding macroinvertebrates who are then consumed by other stream inhabitants.

Trees within forested riparian buffers can significantly reduce local air temperature by adding moisture to the air and shading the

Riparian buffers help to maintain water quality in streams throughout the township.



land. The shade that trees provide can also help to reduce the water temperature of the stream. Many aquatic species, like trout, thrive in cooler waters that riparian buffers help to protect.Trees provide remarkable benefits to local ecosystems and communities by helping to purify air, filter pollutants, absorbing carbon dioxide, and releasing oxygen.

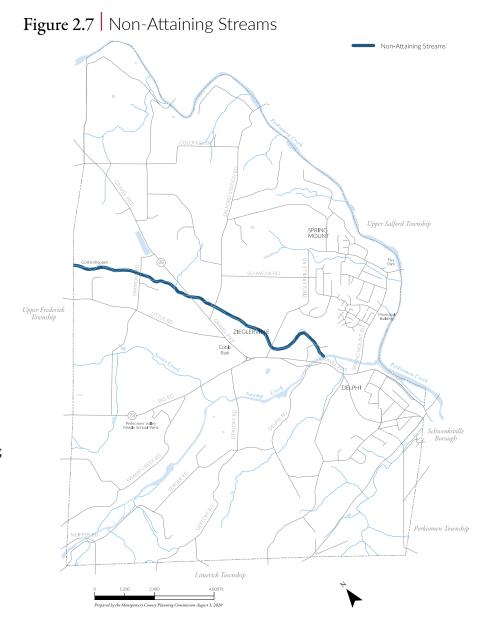
All of the above benefits lead to a healthier stream system, and further benefits the community and environment. Although many of the streams in Lower Frederick are surrounded by ample vegetation and tree cover, opportunities still exist for buffer restoration in certain areas of the township. In 2012, The Heritage Conservancy with Montgomery County Planning Commission conducted a survey of riparian buffer conditions (see fig. 2.6). Streams were classified as having no buffer, buffer on one side, buffer on both sides, or as culverts—not having any opportunity for a buffer. Instances of missing stream buffers in the township typically correspond with agricultural land use and areas of denser development.



WATER QUALITY

Under the Clean Water Act of 1972, The EPA establishes standards for levels of pollutants in surface waters. Waters that are too polluted or otherwise degraded to meet established water quality standards are deemed "non-attaining". Section 303(d) of the Clean Water Act requires states to submit lists of impaired waters to the agency. It is then required that a TMDL (total maximum daily load) is established for nonattaining streams. A TMDL is the total maximum amount of a pollutant that can be present in a water body. These quantities are determined by the EPA and it establishes the threshold of reduction in each pollutant needed for that stream to meet water quality standards.

Within the township, Goshenhoppen Creek is the only waterway formerly identified as a non-attaining stream. Excessive nutrient levels in the creek were the cause of this impairment, and have been attributed to municipal point source pollution. Identifying and mitigating such discharges is crucial to preserving the water quality of local waterways. Other efforts, such as the restoration and management of riparian buffers along stream corridors, can help to reduce nutrients from other sources and contribute to the overall health of the township's waterways.



Soils

Soils are a natural assortment of organic materials and mineral fragments that cover the earth and support life. The weathering of rock and the activity of soil organisms causes the composition of soils to change slowly over time. Soils can vary with respect to depth to bedrock, depth to groundwater, color, texture, fertility, mineral characteristics, and erodibility.

The agricultural capability of soil is measured based on fertility, depth to bedrock and groundwater, texture, erodibility and slope. Soils are classified as prime farmland, farmland of statewide importance, and other farmland. Lower Frederick Township has three areas of prime farmland or farmland of statewide importance. Prime farmland includes deep, welldrained, and moderately-sloped soils that can support high yields of crops with little management. Farmland of statewide importance includes soils that support cultivation but require careful crop management. Areas of prime farmland are increasingly less common as areas are developed. Preserving these prime agricultural soils would help maintain the rural character of the area and preserve historic farms.

Hydric soils are periodically wet soils in an undrained condition that often support the growth of wetland vegetation. Soils with major hydric components can be an indicator of wetlands. Hydric soils exist along all of the creeks in Lower Frederick Township,

with a large area existing in the southern part of the township between Swamp and Mill creeks. The presence of hydric soils can indicate that the area is a wetland. Wetlands provide many ecosystem services, including water infiltration and water treatment, which should be considered when development is proposed on or near hydric soils.



Figure 2.8 | Soil Types

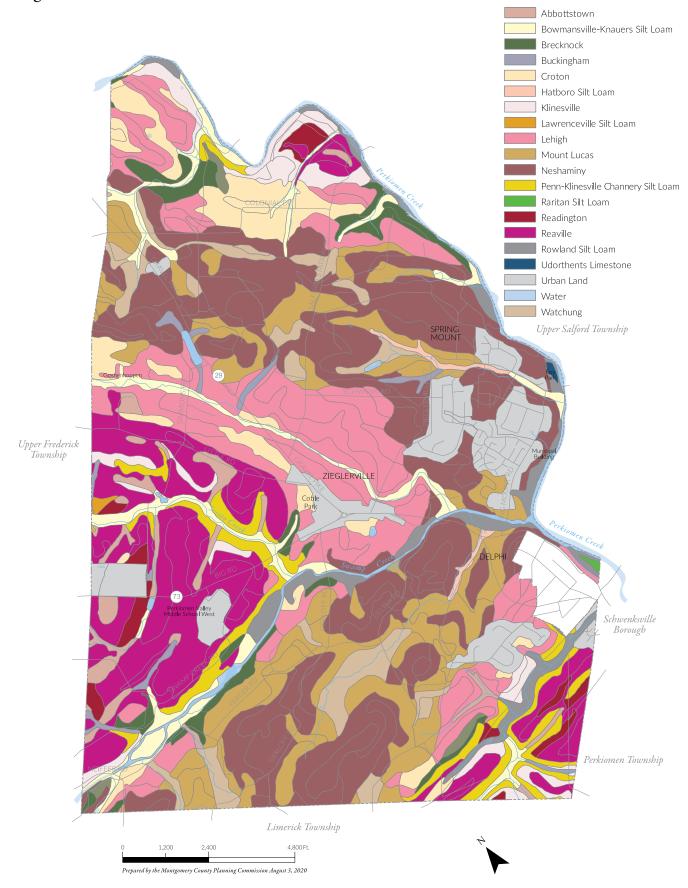


Figure 2.9 Tree Canopy



Vegetation and Wildlife

Montgomery County was formerly a dense forest of hardwoods which covered over 99 percent of the county, with oaks being the dominant species. Chestnut, tulip poplar, hickory, ash, red maple, and dogwoods were also present. Development and several hundred years of clearing and cultivation have reduced

the woodlands to a fraction of their former extent. Large stands of forested areas are found in the western part of the county. Woodlands surround Green Lane Reservoir and run from Upper Pottsgrove to Lower Frederick. Second-growth woodlands are becoming more prevalent as farmland reverts back to woodland through the process of succession.

Lower Frederick Township is part of a nationally-significant forested landscape known as the Highlands, which extend across the Mid-Atlantic region from Maryland to Connecticut. Nearly all land south of Swamp Creek in Lower Frederick is covered by dense woods. This is a result of the topography of the area and the relative absence of farming. Most of the wooded areas in Lower Frederick are located in areas underlain by diabase bedrock.

Woodlands provide several important ecosystem services, including stormwater infiltration, carbon sequestration, and improved air quality. Tree canopy cover also reduces the temperature of the areas it shades, mitigating the urban heat island effect in places like shopping centers and main streets. Trees provide habitat for insects and animals. The presence of a variety of vegetation and landscapes can lead to greater species diversity and a wider range of flora and fauna in the area.

In the abundance of life that Lower Frederick's woodlands support, some species cause issues for the larger ecosystem. Invasive insect species like the emerald ash borer and the spotted lanternfly have introduced new dangers to trees. Emerald ash borer beetles are present throughout the state and have killed or damaged many



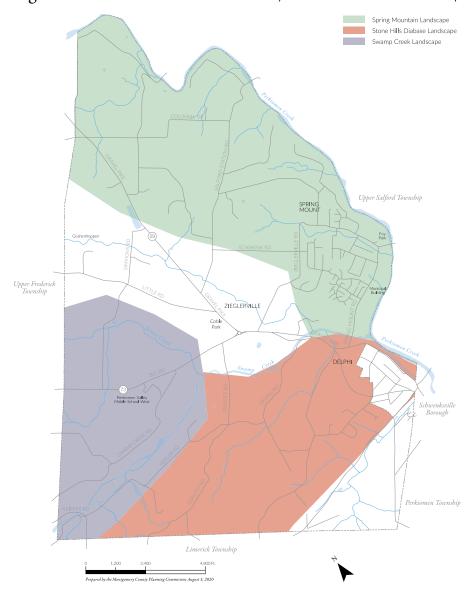
of the native ash trees. Afflicted trees can harbor other pests and pose risks of falling, potentially causing injury or property damage. The spotted lanternfly is a more recent arrival and currently limited to southeastern Pennsylvania. This flying insect damages the plants that it feeds on and threatens agricultural and hardwood industries in the state. Another major issue affecting a large portion of Pennsylvania is the overpopulation of whitetailed deer. The lack of natural predators in recent years has led to a population boom of deer in the area, which can lead to the destruction of the understory layer of forests and encourage the growth of invasive species. Deer are also a part of the Lyme disease life cycle, which can lead to an increase in cases of Lyme's disease. The deer help transport ticks that carry the disease, and those ticks may eventually bite a human, causing illness. Deer are also a major cause of motor vehicle accidents in the state of Pennsylvania. Lower Frederick Township should create a plan for future deer management in order to preserve habitats and improve the overall safety of the township.

Conservation Landscapes

The Natural Areas Inventory Update, undertaken by the Nature Conservancy and Montgomery County Planning Commission, describes conservation landscapes associated with previouslyidentified regions of Montgomery County that have exceptional natural value. These landscapes

contain areas of high priority for conservation and protection, to maintain their biological diversity and the integrity of their natural communities. Threats from land development, uncontrolled deer populations, and invasive species are common across the county's conservation landscapes and require observation and management. Lower Frederick Township contains portions of three conservation landscapes.

Figure 2.10 | Natural Areas Inventory Conservation Landscapes



SPRING MOUNTAIN CONSERVATION **LANDSCAPE**

The Spring Mountain Conservation Landscape stretches across the township's eastern edge, paralleling Perkiomen Creek. Although this conservation landscape lies primarily within Lower Frederick, the area takes its name from Spring Mountain Woods, the core area of the landscape, located in Upper Salford Township. The landscape is defined by wooded diabase hills and has 51% tree coverage. Despite hosting the majority of the Spring Mountain Conservation Landscape, very little of the area within the township has permanent protection. Critical features within the Spring Mountain Conservation Landscape include Pennsylvania

Natural Heritage Program-listed plants like ginseng, nodding trillium, and Wister's Coralroot. The core area of this landscape features exceptional plant diversity, vulnerable plant communities, PNHP-listed animal species, and rare insects.

SWAMP CREEK CONSERVATION LANDSCAPE

This conservation landscape encloses low-lying areas in the western corner of the township. The central feature of this area, Swamp Creek, occupies a broad and relatively flat valley and flows eastward into Lower Frederick before joining Perkiomen Creek. This conservation landscape is less heavily-wooded than the surrounding ridges, having a tree cover of only 27%, but features

The terrain and vegetation of the Swamp Creek Conservation landscape contrast with the neighboring Stone Hill Conservation Landscape.





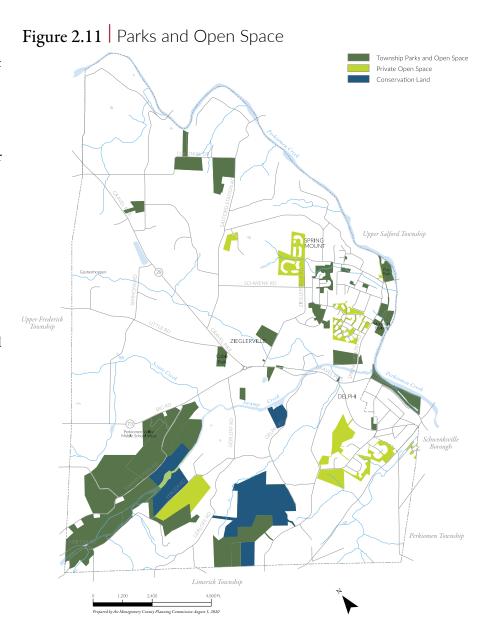
many sensitive riparian, wetland, and forest habitats. The county's Sunrise Mill property helps to preserve these habitats in the township and constitutes the core area of the Swamp Creek Conservation Landscape. The blue herons that nest in this landscape are PNHP listed, as are river otters, which have been reported in the area.

STONE HILL CONSERVATION LANDSCAPE

Like the Spring Mountain Conservation Landscape, Stone Hill corresponds with a prominent diabase ridge. This ridge occupies much of the township's southern portion, beginning at Delphi and extending westward to the border of Berks County. Woodlands cover 56% of this area and define the landscape's character. The Stone Hill Conservation Landscape is not associated with any sites identified in the original Natural Areas Inventory. Lower Frederick is host to a portion of a core area comprising the Meng Preserve and Stone Hill Greenway. Natural Lands' sanctuary and publicly-held Stone Hill Greenway preserve considerable land within Lower Frederick's portion of the Stone Hill Conservation Landscape.

Parks and **Open Space**

Permanently protected lands, whether publicly or privately owned, preserve the beauty and environmental value of the landscape and create opportunities for recreation in natural settings. Lower Frederick is home to a number of township and county parks in addition to privatelyowned open spaces.



COUNTY PARKS

Sunrise Mill

Sunrise Mill is a 164-acre historic site that overlaps Upper Frederick, Lower Frederick, and Limerick Townships. More than 60 acres of the site are in Lower Frederick Township.

Memorial Park

Memorial Park is an island in the Perkiomen Creek, accessible from Park Avenue via Schwenksville Borough or Perkiomen Township only. The park includes a ball field.

Perkiomen Trail

The Perkiomen Trail is a 22.5mile trail along the Perkiomen Creek, using the right-of-way of the former Perkiomen Branch of the Reading Railroad, from Lower Providence Township to the Green Lane Reservoir. Montgomery County owns part of the trail in fee simple and the remainder by quit claim, which is a series of easements, leases, and other ownership interests taken

Coble Park's walking loop encloses the park's other recreation facilities and connects to the parking area along Gravel Pike.



over from the railroad. A small portion of the trail is in Lower Frederick Township.

TOWNSHIP PARKS AND OPEN SPACE

Coble Park

Coble Park is located in Zieglerville, adjacent to the township's public works facilities with frontage on Little Road and Gravel Pike. The 4.5-acre park is close to the township's center. This park includes a ball field, basketball court, playground area, picnic pavilion, paved walking loop, and parking area.

Foy Park

Foy Park is located adjacent to Spring Mount, between the Perkiomen Trail and Perkiomen Creek. This 5.4-acre neighborhood park includes a basketball court, playground, picnic areas, paved walking loop, and passive open space amenities along the Perkiomen Creek.

Second Street Park

Second Street Park is located adjacent to the ambulance building on 2nd Avenue, just off Main Street in Spring Mount. A tributary to the Perkiomen Creek runs through the 1.3-acre park.

Township Complex

The Township Complex consists of 4.8 acres behind the Lower Frederick Township Building. These lands are designated as passive spaces along the Perkiomen Creek.

Veterans Memorial

Veterans Memorial is a township-owned memorial to Lower Frederick residents who died in battle. The 0.3-acre parcel is located at the corner of Old Gravel Pike and Gravel Pike and



contains the veterans monument and a flagpole.

Cedar Hill Open Space

Cedar Hill Open Space was dedicated to Lower Frederick as part of the Cedar Hill townhouse development in Spring Mount. It is adjacent to the Cedar Hill II cluster development and includes more than 16 acres of preserved natural land.

Cuddy Park

Cuddy Park was preserved as a result of the County Open Space program in the 1990s. Lower Frederick received funds to preserve the 12.4-acre area in the north of the township, on Colonial Drive. This park features a demonstration rain garden, native plants meadow, a picnic paviliion, dog park, gravel walking loop, and parking area. The park is named in honor of Lorraine Cuddy, who served as Township Manager for 30 years.

Colonial Park

Colonial Park is a 22-acre natural park located at the corner of Colonial Drive and Salford Station Road. This park was preserved through the County Open Space program and includes a mowed walking loop and parking area.

Stone Hill Greenway

Stone Hill Greenway is jointly owned by the Township, Natural Lands (formerly Natural Lands Trust), Limerick Township, and Montgomery County. Lower Frederick township owns 52 acres, designated as public open space. 105.7 acres of Stone Hill Greenway are owned by Natural Lands, a nonprofit lands trust which also maintains the Meng Preserve. The greenway features rustic trails and limited parking.

Colonial Park's sloping terrain and open fields offer an expansive view across the Perkiomen Valley.



Cuddy Park is home to the township's dog park.



Natural Environment Goals

Support and advance the goals of the Lower Frederick Township Open Space Plan, particularly:

- Preserve Natural Resources and Scenic Character
- Preserve Agricultural Heritage

Protect the quality and supply of water resources within the waterways, wetlands, and aquifers of the township.

Preserve areas of high community, environmental, and aesthetic value.

Manage future growth to preserve natural and cultural assets of the community.

Maintain and enhance tree cover in the township.

Provide a variety of recreation opportunities to serve the diverse needs of township residents.

Natural Environment Recommendations

1. STEWARDSHIP GUIDE

Initiate a landowner outreach and education program to promote land stewardship practices among the residents, business owners, property managers, and other community members of the township.



- 1a. Provide guidance describing tree and lawncare best practices.
- 1b. Encourage planting and maintenance of riparian and wetland buffers.
- 1c. Enable and encourage native meadow plantings and other lawn alternatives.
- 1d. Distribute information about invasive and pest species.

2. OPEN SPACE PLAN

Review and update the Lower Frederick Open Space Plan to support township parks, open space, conservation, and land use goals.

- 2a. Evaluate the goals and recommendations of the current Open Space Plan.
- 2b. Update Open Space Plan to support township planning and conservation goals.

3. GREENWAY PLANNING

Evaluate land management opportunities identified in the Multi-Region Greenway Study.

- 3a. Establish a vision for a connected system of open space and natural lands.
- 3b. Adopt land use controls that contribute to a network of preserved land.
- Consider acquisition of open space or conservation easements.

4. OPEN SPACE PRESERVATION

Identify and prioritize local open space and agriculture preservation opportunities that host concentrations of sensitive natural resources, vulnerable plant and animal populations.

- 4a. Employ NAI study methods when assessing potential land preservation sites.
- 4b. Maximize the community and environmental value of preserved land.

5. PARKS AND OPEN SPACE PLANNING

Create plans for township parks and open spaces that preserve riparian areas and mitigate stormwater runoff and flooding hazards.

- 5a. Identify watercourses and riparian areas in township parks and open spaces.
- 5b. Within township parks and open spaces, implement measures to mitigate stormwater runoff, erosion, and other flood hazards.
- Within township parks and open spaces, ensure recreational amenities are located to minimize risk of damage by flooding and other natural hazards.
- 5d. Identify recreational activities and amenities that are appropriate

for riparian areas and ensure that such facilities are designed to mitigate the risk of damage by stormwater runoff or floods.

6. CONSERVATION ZONING

Adopt Riparian Corridor & Wetland Conservation Zoning to define and delineate buffer areas to be protected adjacent to streams, wetlands, and water bodies.

- 6a. Identify important habitats and scenic landscapes needing protection in township codes.
- 6b. Adopt wellhead protections and conservation of headwaters areas to protect the quality and supply of water resources.
- 6c. Identify ways township assets can mitigate flooding risks in the township and in areas downstream.

7. DARK SKIES CONSERVATION

Adopt an Outdoor Lighting Ordinance to establish regulations for the use and installation of outdoor lighting.

- 7a. Establish reasonable uses of outdoor lighting for the health, safety, and welfare of the public
- 7b. Set minimum standards to protect neighbors and natural habitats from nuisance glare from artificial light sources
- 7c. Promote energy-efficient lighting design and operation

Transportation

Introduction

OVERVIEW

he Pennsylvania Municipalities Planning Code requires comprehensive plans to contain "a plan for movement of people and goods, which may include expressways, highways, local street systems, parking facilities, pedestrian and bikeway systems, public transit routes, terminals, airfields, port facilities, railroad facilities, and other similar facilities or uses." Due to the township's small size and rural setting far from navigable waterways, transportation in Lower Frederick primarily consists of motorized road traffic, but walking and biking are important options for local travel and recreation.

HISTORIC DEVELOPMENT

Since its earliest history, Lower Frederick's converging valleys have offered easy routes through steep terrain, making it an important local crossroads. The Lenape created networks of trails through the region, including major trade routes like the Perkiomen-Lehigh Path. Many of these trails remained in use after the arrival of Europeans and became the region's first roads.

Among Lower Frederick's oldest roads are its main thoroughfares, Gravel Pike and Big Road. Gravel Pike, designated Pennsylvania Route 29 was completed in 1847 as the Perkiomen and Sumneytown Turnpike. Big Road previously bore the name "the Great Road," but was originally built as Skippack Road. Big Road now carries Pennsylvania Route 73.

After decades of previous, unsuccessful attempts to extend a railway up the Perkiomen Valley, the Reading Railroad's Perkiomen Line was constructed along the course of Perkiomen Creek following the Civil War. The rail line carried freight and passengers and was in active use from 1868 to 1978. Two train stations, Zieglersville (the former name of the village and post office) and Spring Mount, were located in Lower Frederick Township and another three, Salford, Hendricks, and Kratz, were located across the creek in Upper Salford Township. After the closure of the Perkiomen Branch, Montgomery County acquired most of the disused right-of-way.

The 20th century trends of suburbanization and the rising popularity of the automobile, tied the former rural resort

community to the broader metropolitan region. The increasingly widespread growth raised concerns for the township's future. "The Lower Frederick section of [Route 29] is the most rural section the highway but here again... we see evidence of commercial development which should be controlled now, while the highway still retains its scenic and recreational potential, before unregulated development destroys the potential and turns the road into a shabby traffic artery and a blight upon the communities it traverses." ("Volume 4: The Perkiomen Creek and Proposed

Scenic Highway." Comprehensive Plan: Lower Perkiomen Valley Area. 1969.). The worries that Lower Frederick would experience overdevelopment, expressed in the 1969 plan and the township's 1971 comprehensive plan, were not realized in the half century since the adoption of those plans, but the township continues to face development pressures. Proactive planning for a transportation system that corresponds with Lower Frederick's land use vision can help to ensure that the township's historic character endures.

Narrow, winding roads are common in the wooded hills of Lower Frederick.



Roads and Bridges

PRESENT CONDITIONS

Nearly 47 miles of roadways are located in Lower Frederick. Traffic congestion is relatively low and motor vehicles are the most common mode of transportation. The 2017 American Community Survey estimates that approximately 87% of Lower Frederick workers commute by car, truck, or van. Bicycling and walking are popular activities where they are provided for, but constitute a small share of Lower Frederick residents' commutes.

The village areas in Spring Mount, Zieglerville, and adjacent to Schwenksville have smaller lot sizes and a mix of residential and commercial uses that contribute to walkability. Despite these favorable conditions, walking infrastructure is limited mostly to more recent developments and is absent from the older central village areas. Trails in parks and along greenways provide a venue for recreational walking and biking, but remain largely disconnected from other trails and residential areas.

Lower Frederick does not have any aviation or port facilities, but its proximity to Philadelphia, Limerick, and Pottstown airports allows for access to commercial air travel and other global transportation networks. The township is not currently served by public transit, though the Northwestern Montgomery County Strategic Transit Plan (2010) and other studies have previously explored its potential in the township and wider region.

ROADS AND BRIDGE OWNERSHIP

The ownership of roads in Lower Frederick is divided between multiple public and private entities. The ownership of a road determines what entity bears responsibility for maintaining the road and for making improvements. Most of the roads in the township are publicly-owned by either the state or municipal government, but some remain in private ownership.

OWNERSHIP	TOTAL MILES IN TOWNSHIP
Municipal	26.0
State	13.6
Private	2.8

OWNERSHIP	IN TOWNSHIP
Municipal	19
State	13
County	3

Figure 3.1 Road Mileage by Ownership

Figure 3.2 Bridge Ownership

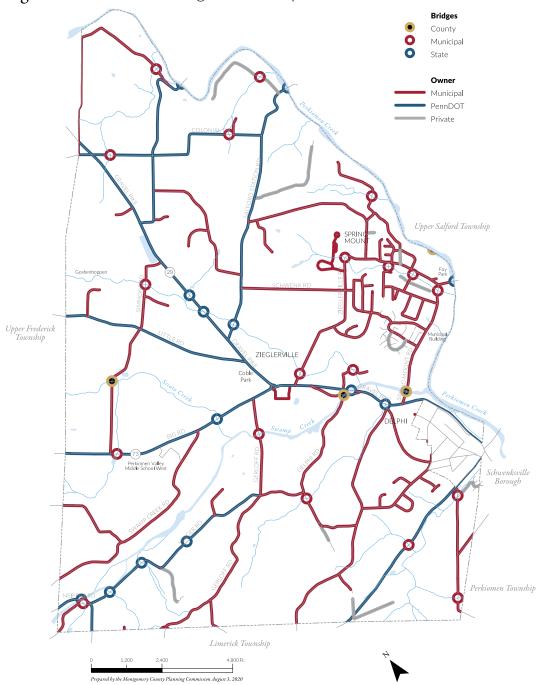
Gerloff Road Bridge is an example of a historic township-owned bridge.



Bridges often belong to the same owner as the roads they carry, but some exceptions exist within Lower Frederick. Montgomery County owns three bridges (though one is currently out of service) in the township, despite owning no roads here.

Municipally-owned roads account for most of the road mileage in Lower Frederick, but tend to be smaller or shorter than the state routes, covering much of the township and providing access to local residences and businesses. The roads owned by PennDOT create a network that is oriented to provide connectivity at a larger, more regional scale that prioritizes through-traffic.

Figure 3.3 | Road and Bridge Ownership



Together, this network of public roads provides circulation within Lower Frederick and connections to other communities. Coordination between municipal and state government helps to develop complementary transportation investments and resolve local issues.

FUNCTIONAL CLASSIFICATION

Functional classification describes a hierarchy of road types according to the character of service and function they provide. The system is based on standards established by the American Association of State Highway and Transportation Officials (AASHTO), and is used by the Pennsylvania Department of Transportation (PennDOT). It provides design guidelines appropriate for each road classification, as well as a way to coordinate road functions and improvements among neighboring communities, throughout the region, and across the state. This system permits a logical and efficient road network consisting of expressways, arterials, collectors, and local roads. These classifications have been further subdivided into major and minor characteristics, and identify a variety of local road types.

Whether a road functions more to provide access to property or travel mobility is a big determinant of that road's classification. Access refers to the level of control over vehicles entering or exiting a roadway to or from adjacent properties. Mobility refers to the ability of a road to move traffic between more distant destinations.

Arterials, like Gravel Pike or Big Road, primarily serve the function of mobility, moving larger numbers of vehicles for longer distances, at higher speeds. Local roads, like Zieglerville or Simmons Road, mainly serve the function of access, moving fewer vehicles over shorter distances while providing opportunities to enter or exit the roadway from adjacent properties. Collectors, like Spring Mount or Salford Station Road, compromise between the priorities of regional mobility and local access and connect the local and arterial networks.

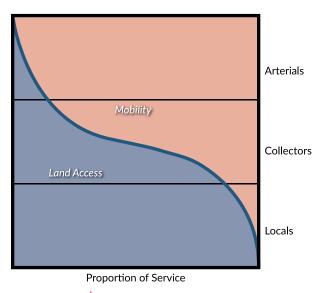
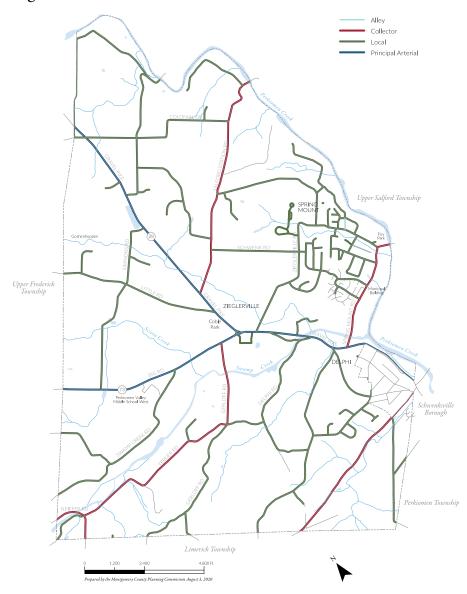


Figure 3.4 The Access-Mobility Spectrum

Figure 3.5 Functional Classification



TRAFFIC VOLUME AND CAPACITY

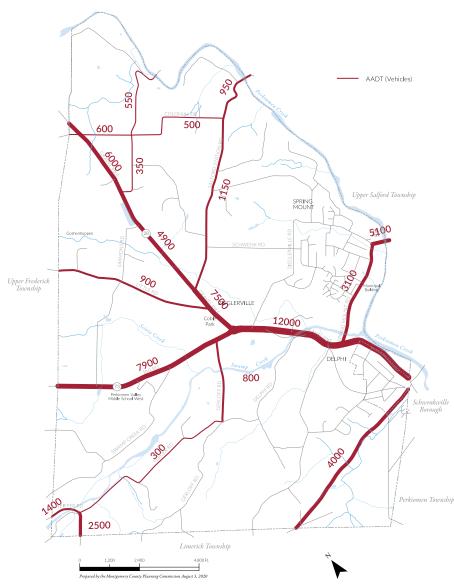
Traffic volume measures of the number of vehicle trips that occur on a road during a given time period, and is generally given as the annual average daily traffic (AADT) or as a count of morning and evening peakhour traffic. In contrast, capacity measures the maximum number of vehicles a road or intersection can accommodate during a given time period, and is expressed as a number of vehicles per hour. Congestion results when traffic volumes approach or exceed the capacity of a roadway or intersection. Gravel Pike, south of Zieglerville, carries both state routes 29 and 73, accommodating Lower Frederick's highest average traffic volume. This segment carries an average of 12,000 cars per day. These principal arterials are wider and straighter than most roads in Lower Frederick and easily accommodate usual traffic volumes. Though Lower Frederick may experience congestion during peak hours, these issues are fairly localized, mainly affecting the intersections where collectors and smaller roads connect to the principal arterials.

ROAD SAFETY

Road design and travel speeds are major factors in the safety of roads. Speed limits in Lower Frederick range from a low of 25 miles per hour on local roads, to a high of 50 miles per hour on stretches of some arterials. Higher speeds correspond with increased risk to all road users, whether they are in vehicles, walking or

biking. Protecting vulnerable road users from fast-moving traffic, by providing separated infrastructure like a parallel trail, side path, or a widened shoulder can greatly increase the safety and comfort of people while walking and biking. Improved shoulders have benefits for driver safety and can accompany drainage and maintenance projects. However, overly wide roads can induce higher travel speeds.

Figure 3.6 | Average Daily Traffic Volumes



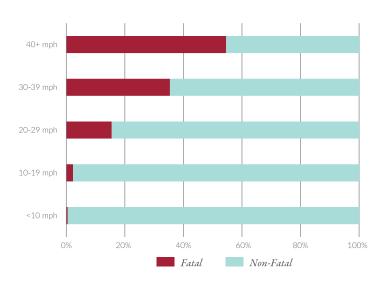
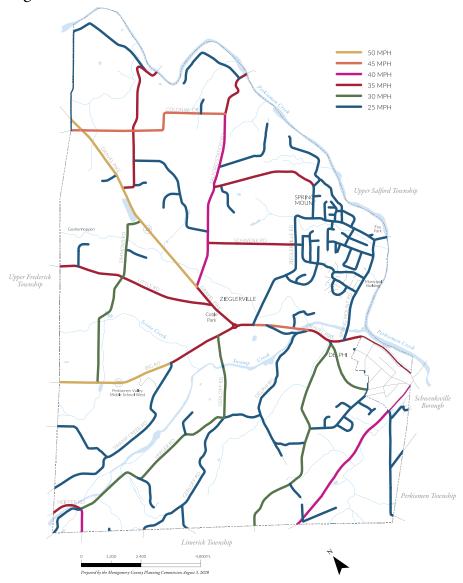


Figure 3.7 | Pedestrian Impact Risks by Vehicle Speed (Impact Speed and a Pedestrian's Risk of Severe Injury or Death. AAA Foundation for Traffic Safety.)

Figure 3.8 Speed Limits



While crosswalks at the Zieglerville roundabout are not controlled by signals, crossing distances are short and offer the protection of pedestrian islands.



Sidewalks and Trails

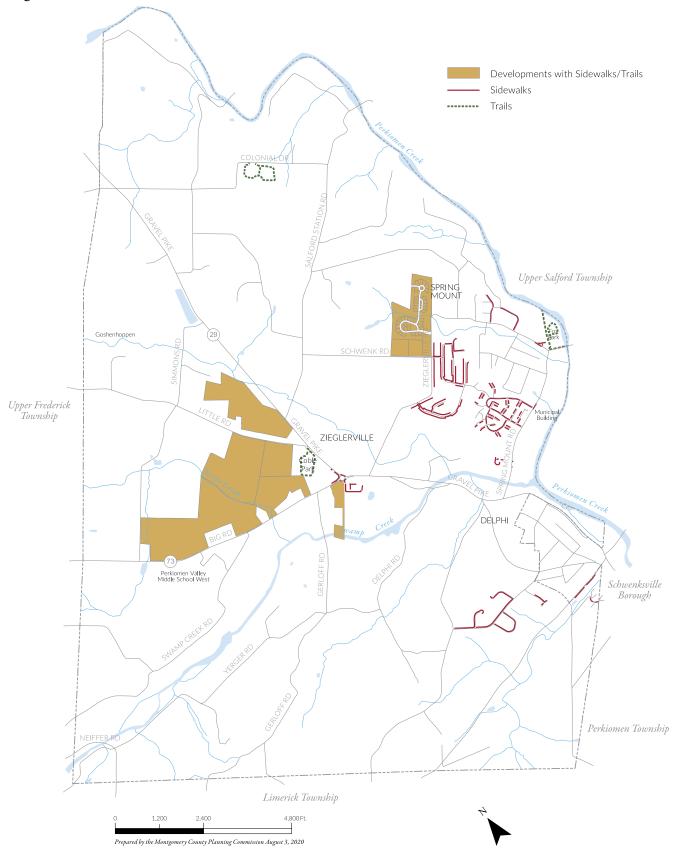
SIDEWALKS AND **CROSSWALKS**

Lower Frederick's existing system of sidewalks is concentrated in the village areas adjacent to Spring Mount and Schwenksville in the east and south of the township. This walking infrastructure serves denser development, but remains disconnected from many community facilities and other walking destinations within the township. Gaps in the sidewalk network and road that lack walking infrastructure discourage walking or lead people to walk near traffic or on informal paths. The lack of safe sidewalks or paths limits the mobility options available to township residents and increases individuals' reliance on private motor vehicles.

Lower Frederick's land development standards ensure that new residential and commercial developments include sidewalks or walking paths. In this way, the land development process can expand Lower Frederick's walking network and help to provide access to residents and businesses. Currently pending and approved land developments that include sidewalks indicate that walking access in Lower Frederick will continue to improve and expand, but this expansion will occur mostly on the fringes of the historic village centers. The older village areas often lack sidewalks or even the improved shoulders that allow pedestrians some separation from vehicle traffic.







Building Resilience: Active Transportation

Walking, jogging, bicycling, and other forms of active transportation have many benefits to individual and community wellbeing. Moderate daily aerobic activity, like 30 minutes of walking, supports many body systems and can improve personal quality of life. Active transportation provides an accessible mobility option to people who do not drive. By reducing a community's need for health services and motor vehicles. active transportation effectively increases the capacity of those networks.

TRAILS

In Lower Frederick, both county and local trails provide for the recreational needs of residents. Montgomery County's Perkiomen Trail was completed in 2003 and is the biggest trail in the area near Lower Frederick. The 20-mile trail follows the course of Perkiomen Creek and connects Green Lane Park to the Schuylkill River Trail. The trail accommodates walking, biking, and equestrian users and is a popular facility for recreation and travel. Although much of the route was constructed on the former right-of-way of the Reading Railroad's Perkiomen Branch, Lower Frederick only contains a short portion of the trail, near Spring Mount. At Foy Park the Perkiomen Trail departs from the former rail alignment and crosses Perkiomen Creek alongside Spring Mountain Road. The trail continues downstream in Upper Salford, closely paralleling the creek and the boundary of Lower Frederick.

The township's trails and paths are currently limited to individual walking path loops located in Foy, Cuddy, and Coble Parks. The 2015 update of the Lower Frederick Open Space Plan outlined an extensive network of proposed or potential trails and paths to complement the township's growing sidewalk network and offer new passive recreation opportunities. The township does hold trail easements located along Swamp Creek and Perkiomen Creek, however, no trails have been constructed on these easements.

Montgomery County has also given attention to the potential for a trail in the Swamp Creek valley. A proposed trail identified in the county comprehensive plan would follow the watercourse, connecting the Perkiomen Trail to Sunrise Mill and New Hanover Township. The Sunrise Trail & Swamp Creek Greenway Feasibility Study, completed by the county in 2019, aimed to determine the feasibility and recommended alignment of the proposed Sunrise Trail, and identify recreational access opportunities along Swamp Creek.

Bicycling

The Perkiomen Trail is Lower Frederick's main facility for bicycling and one of the rare places where people can bike that is apart from motor vehicles. Despite the general absence of separated cycling paths in Lower Frederick, the scenic countryside, low traffic volumes, and varied terrain make the township an attractive destination for road cycling. Experienced riders, who are confident enough to bicycle in mixed traffic, are a common sight on many of Lower Frederick's rural local roads. For newer or less confident riders, the prospect of sharing the township's narrow and winding roads with vehicles may be daunting or discouraging. While separated side paths or bike lanes may not be feasible for most cases, other measures may help to make Lower Frederick's roads safer and more inviting for riders of all levels.

In 2018, Montgomery County adopted Bike Montco, a bicycle plan to supplement the county's 2015 comprehensive plan. The plan

designates a network of priority bicycle routes and recommends facility types to accommodate bicycling on a variety of roadways. Although none of the plan's priority bicycle routes pass through Lower Frederick, its recommendation matrix offers a framework which the township can apply when planning bicycle facilities on its roadways. The facility types featured in the plan's guidelines use markings, distance, and physical barriers to separate bicyclists from vehicular traffic. Where speeds and traffic volumes are low, little to no separation is needed. With increasing speeds and traffic volumes, more separation and protective measures are needed to ensure the safety.

Throughout the township, pavement markings or paved shoulders would be suitable facilities on most roads, though greater levels of separation and protection afford more safety and comfort to riders.

SPEED LIMIT Average Daily Roadway Type 25 MPH 35 MPH 40-55 MPH Trips (ADT) Least Local Rural/Scenic Local Urban Marked shared lane Most Principal Arterial

An excerpt from Bike Montco: Recommended bicycle facility types

Figure 3.10 | Bike Montco Recommended Facility Types

NOTE: This table lists the suggested bicycle facilities in order of most protection to least protection. Whenever possible, the facility that provides the most protection should be utilized.

*Paved shoulders on arterial roads should be at least 6 feet wide.

The Perkiomen Trail is one of the region's premiere pieces of walking and bicycling infrastructure.



Transportation Goals

Support community character and future land use goals.

Encourage connected growth that enhances residents' transportation options.

Expand pedestrian and bicycle access throughout the township.

Improve the safety and resilience of transportation infrastructure.

Transportation Recommendations

8. ROAD IMPROVEMENTS PLAN

Identify and prioritize local transportation improvement projects.

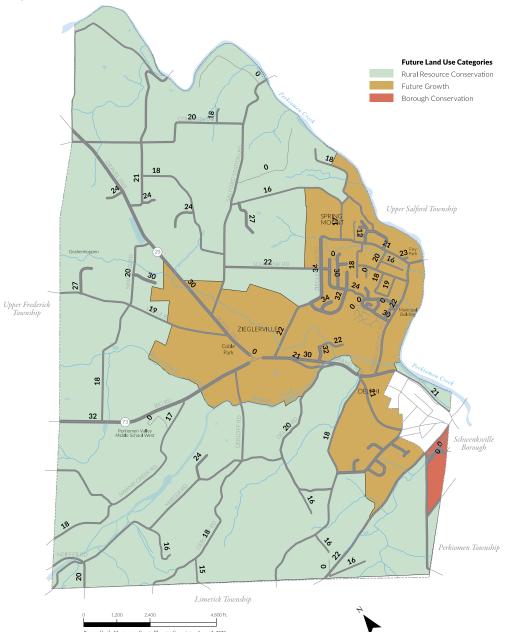
- 8a. Identify and prioritize transportation projects requiring the involvement of external partners or funding sources.
- 8b. Consider projects for inclusion on regional Transportation Improvement Plan (TIP)
- 8c. Evaluate local roadways and identify sites where poor drainage, visibility, or other safety concerns are present.
- 8d. Implement revolving 5-year plan to periodically review road safety, drainage, and visibility issues.

9. CONTEXT-SENSITIVE DESIGN

Develop a roadway plan that identifies appropriate designs that support local land uses and community character areas described in the SALDO and zoning ordinances.

- 9a. Select walking and bicycling infrastructure that is suitable for the speed and volume of traffic.
- 9b. Develop standards for pavement markings and the widths of lanes and roadways in rural and village areas.
- 9c. Provide streetscape design guidance for land developments in rural and village areas.

Figure 3.11 Road Width

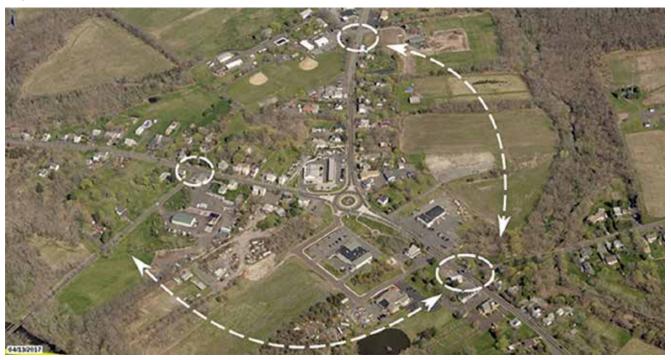


10. INTERCONNECTED STREETS AND SIDEWALKS

Use SALDO, zoning, or Official Map to plan connected infrastructure for all modes of transportation.

- 10a. Delineate future pedestrian and street connections for developing
- 10b. Evaluate proposals and connector concepts from past plans (1971, 2015 Connections update of Open Space Plan).
- 10c. Construct trails to connect residential areas, public open spaces, and commercial centers.
- 10d. Work with property owners and other partners to improve pedestrian safety and accessibility in historic developed areas.

Figure 3.12 | Zieglerville Street Connectivity Concepts



11. ACCESS MANAGEMENT

Adopt access management standards to maintain road capacity and enhance safety on the township's arterials and collector roads in village areas.

- 11a. Encourage or incentivize property owners to consolidate driveways and share driveways on major roadways of the township.
- 11b. Revise SALDO and zoning to require access management on arterial roads and support its use in other congestion-prone areas.

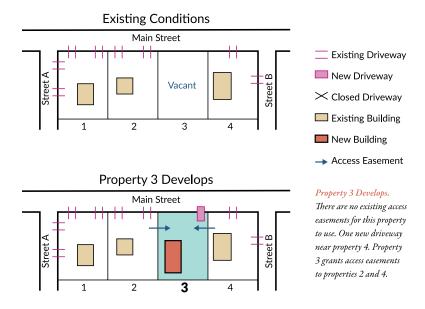


Figure 3.13 | Access Management Implementation



12. TRAFFIC CALMING

Deploy traffic calming techniques on township roads to reduce speeding and vehicle-pedestrian conflicts.

- 12a. Identify and prioritize areas where vehicle speeds are a concern.
- 12b. Determine which traffic calming options are appropriate in rural and village context areas
- 12c. Assess traffic calming options for their compatibility with the performance requirements of emergency responders and public works.



Figure 3.14 Traffic Calming Techniques

(Clockwise from top left: bump out, rain garden curb extension, raised crosswalk, roundabout)

13. PARKING

Evaluate and update parking standards to support other transportation and development goals.

- 13a. Evaluate off-street parking requirements and consider allowing more use of shared parking in commercial applications.
- 13b. Consider permitting on-street parking in village areas, if it is compatible with adjacent land uses, road widths, and traffic volumes.
- 13c. Consider allowing new commercial or mixed-use developments to substitute on-street parking for off-street parking on internal streets.

14. COMPLETE STREETS POLICY

Adopt a local complete streets policy to increase safety and accessibility for all road users.

- 14a. Evaluate the Complete Streets Policy of Montgomery County as a guiding document for township policy.
- 14b. Incorporate complete streets principles in the maintenance and construction of township roads and bridges to safely accommodate all road users.

15. TRAIL PLANNING

Provide township residents with access to the natural and scenic resources of Lower Frederick.

- 15a. Evaluate proposals and trail concepts from past studies and Open Space Plans.
- 15b. Identify opportunities to construct trails on township-owned land, easements, and rights-of-way.
- 15c. Prioritize trail connection goals and preferred alignments to guide trail construction during the land development process.
- 15d. Consider opportunities to acquire land, easements, and rights-ofway that support trail connection goals.

Infrastructure

Introduction

he public and private systems that move materials, energy, and information throughout the township make up the infrastructure of Lower Frederick. These networks support the township and connect it to neighboring municipalities and the wider world. These systems must be maintained, to counteract normal deterioration and to keep pace with changing technologies and community needs. While the township has a great deal of control over the infrastructure that it owns, like public sewers and stormwater systems, other infrastructure is largely or entirely beyond local control. Nevertheless, the township can assess its needs and goals for infrastructure, and work with its various partners to meet these objectives.

Public Sewer Systems

The wastewater treatment needs of Lower Frederick are served by a mix of public and private systems of varying sizes. Two public sewer systems operate in the village areas on the east side of the township. These two systems serve a slight majority of the township's residents, while the remainder of the township relies on private or on-lot systems. Under Act 537, the Pennsylvania Sewage Facilities Act of 1966, all municipalities must maintain an official plan encompassing all of the community's sewage disposal needs. These plans cover public and private sewer systems, including individual on-lot systems. Lower Frederick's first Act 537 Plan coincided with the construction of the wastewater treatment plant in Spring Mount in 1977. Subsequent expansions of the public system, private systems, and land developments have caused the Act 537 Plan to receive periodic updates.

PUBLIC WASTEWATER SYSTEMS	TO SPRING MOUNT WWTP	TO SCHWENKSVILLE WWTP
Gravity Lines	9.0 miles	2.0 miles
Forced Mains	0.8 miles	0.3 miles
Pumping Stations	3	3

Figure 4.1 Public Sewer Systems and Waste Water Treatment Plants (WWTP) Serving Lower Frederick

LOWER FREDERICK SEWER SYSTEM

Lower Frederick provides public sewer service to nearly half of the households in the township, and currently reports 922 total connections. The service area of the system consists primarily of two gravity-powered collection areas. A larger area, north of Goshenhoppen Creek, flows directly to the township's wastewater treatment plant (WWTP). The smaller collection area follows Gravel Pike from Zieglerville to the Delphi Pump Station, which then uses a force main to connect to the wastewater treatment plant. The Perkiomen Valley Middle School receives its sewer service via a smalldiameter force main connecting to Zieglerville along Big Road. In total, Lower Frederick's sewer system consists of nearly nine miles of gravity lines leading to Spring Mount Wastewater Treatment Plant.

In 2018, the Spring Mount Wastewater Treatment Plant was reconstructed and updated. After decades of population growth, the old wastewater treatment plant was operating very close to its rated capacity, and regularly exceeded it during rainstorms. The reconstruction of the wastewater treatment plant increased its rated capacity by 150%, allowing it to handle peak flows. Recent efforts to exclude inflow and infiltration of groundwater and stormwater into the sanitary sewer system have succeeded in lowering the frequency and intensity of wastewater treatment plant's peak flows. The combined efforts of renovating the wastewater treatment plant and reducing

inflow and infiltration have given the township a significant surplus of wastewater treatment capacity.

SCHWENKSVILLE SEWER SYSTEM

Schwenksville Borough Water and Sewer Authority (SBA) provides sewer service to an area of Lower Frederick that is adjacent to the borough. The borough's sewer system serves less than 10% of Lower Frederick's residents. Wastewater in this system flows to the Schwenksville Wastewater Treatment Plant located alongside Perkiomen Creek, 1.5 miles downstream from Spring Mount.

Private Sewer Systems

Private, on-lot systems serve over 700 properties throughout the township. Most of these systems consist of conventional in-ground septic systems or sand mounds. Despite this, much of the soils in Lower Frederick are characterized as having low suitability for these types of systems. Unfavorable soil conditions can reduce the effectiveness of on-lot systems, increase operating costs, and limit their useful lifespan. The Act 537 Plan must account for failing on-lot systems and analyze potential service extensions to provide them with public sewer service. On-lot systems require larger lot sizes to accommodate the system's footprint and to provide options for alternate locations, making them more compatible with Rural Resource Conservation Areas. Alternate systems, like spray

Infrastructure

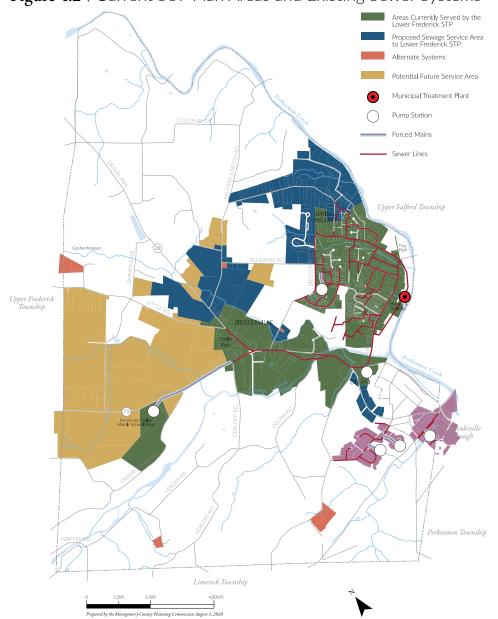


Figure 4.2 | Current 537 Plan Areas and Existing Sewer Systems

irrigation or package plants, have previously been considered for use on properties in the township.

Water

PUBLIC WATER SERVICE

The Schwenksville Borough Water and Sewer Authority (SBA) provides public water service

within Lower Frederick and serves approximately 70% of the township's population. The SBA has over 12 miles of water lines in Lower Frederick, connecting its five wells and two storage sites to customers in Lower Frederick and the rest of the service area. The daily water usage reported by SBA remains fairly constant throughout the year, generally staying between 300,000 and 350,000 gallons per

day. The SBA draws approximately two-thirds of its supply from wells located in Lower Frederick Township, with the remainder coming from interconnections with Aqua PA and the North Penn Water Authority.

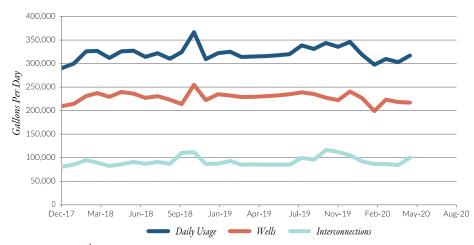
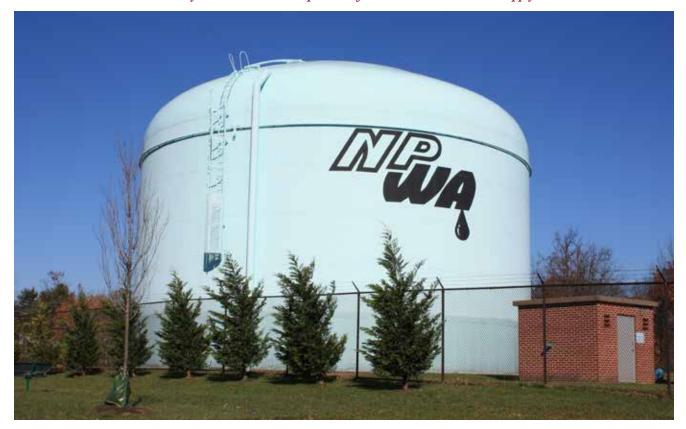


Figure 4.3 | Schwenksville Borough Authority Water Supply

ON-LOT WATER SUPPLY

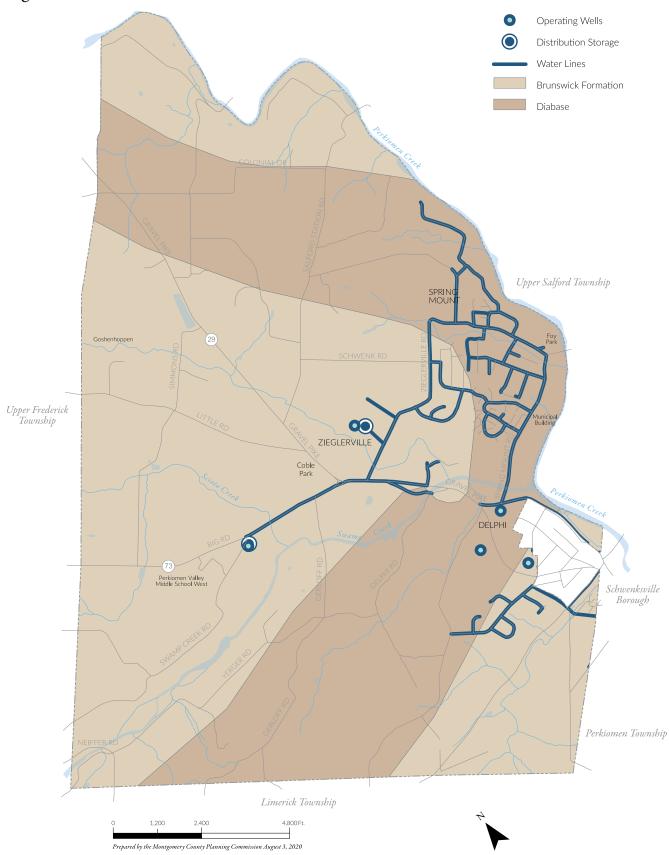
Private wells provide drinking water for properties across the Rural Resource Conservation Area of Lower Frederick. The performance of these wells is highly dependent on the local bedrock and its groundwater yield. Most of the township is underlain by porous rock formations with moderate groundwater yields. In the east and south of the township, groundwater is limited by the presence of diabase rock. Some wells sunk in this area can access water that flows through fractures and joints, but the rock's non-porous composition greatly restricts groundwater supplies.

The North Penn Water Authority contributes a small portion of Lower Frederick's water supply.



In frastructure

Figure 4.4 | Water Supply Lines and Bedrock Geology



Stormwater

Proper stormwater management protects both the natural and built environment. Flows of runoff can carry pollutants to streams, cause damaging erosion, and exacerbate floods. Best management practices reduce these risks. Under the Clean Water Act, Pennsylvania administers the Municipal Separate Storm Sewer System (MS4) program to manage the quality and quantity of stormwater runoff. Municipalities are required to implement six minimum control measures to fulfill their MS4 permit. Locally, the Montgomery County Conservation District administers one of these, Construction Site Stormwater Runoff and Control, and is currently expanding its capacity to include assistance with another. Post-Construction Stormwater Runoff for New Development. Lower Frederick is responsible for the other four minimum control measures, though partnership opportunities exist in the region. The Perkiomen Watershed Conservancy offers Public Education and Outreach programs and Public Involvement and Participation services.

Energy

The electrical power and fuels that energize modern life are supplied by critical infrastructure systems. Some communities are directly involved in these energy infrastructure systems through their ownership and operation of municipal or cooperative utility companies. Most communities, however, have little influence in the planning of their energy infrastructure systems. While the placement and operation of pipelines and electrical systems is publicly 1: Public Education and Outreach

4: Construction Site Stormwater Runoff and Control

2: Public Involvement and Participation

5: Post-Construction **Stormwater Runoff for New Development**

3: Ilicit Discharge Detection and Elimination

6: Pollution Prevention and Good Housekeeping

Minimum Control Measures of the MS4 Program

Building Resilience: Stormwater Management

Annual rainfall totals are increasing across the northeastern United States and Lower Frederick is no exception to this trend. The frequency and intensity of major rainfall events are predicted to rise, and with them, the need for effective stormwater management. Property owners can help to protect their community and downstream neighbors by reducing the stormwater runoff.



regulated through the Pennsylvania Utilities Commission, the township has a limited role in planning these infrastructure systems. Lower Frederick is served by the Philadelphia Electric Company (PECO), which supplies electrical power and natural gas to much of the county.

ALTERNATIVE ENERGY

Renewable energy sources, like wind and solar, are growing and expanding their share of electrical generating capacity, both locally and nationally. Where local conditions are favorable, alternative energy technologies can make electrical generation feasible even at the scale of individual properties. This allows for dispersed installations of solar panels or wind turbines on homes and businesses. Lower Frederick regulates the size and placement of such systems in the zoning ordinance. These restrictions help to ensure the safety of alternative energy systems. Throughout southeastern Pennsylvania,

The simplicity and flexibility of vertical axis wind turbines make them wellsuited to small-scale systems.



including Lower Frederick, the potential for commercial-scale wind power is rather low. Locally, photovoltaic solar power is the most common alternative energy system, though small wind power still has some applications.

Building Resilience: Alternative Energy

Alternative energy systems provide clean, renewable local sources for electrical power. Property owners can install alternative energy systems to supplement or replace their electric supply, providing a measure of independence and an alternative to a generator. Renewable power can help communities to lessen their reliance on distant power suppliers and connections to the regional grid.

Solar panels on the roof of the Lower Frederick Fire Company generate electrical power.



Infrastructure Goals

Protect the quality and supply of water resources within the township.

Provide sewer service to support the land use goals and protect public health and natural resources of the township.

Manage stormwater to reduce risks to natural and community assets.

Encourage the use of renewable energy sources where it is compatible with the community's natural features and community character.

Ensure communication infrastructure supports township goals for community character and economic development.

Infrastructure Recommendations

16. SEWER SERVICE PLANNING

Update the 537 Plan to reflect expanded sewer capacity, new development, and local land use goals.

- 16a. Conduct a study to determine the feasibility of sharing wastewater treatment service with Schwenksville.
- 16b. Recommend future land use map revisions to Central Perkiomen Regional Comprehensive Plan and evaluate revisions to townshhip Act 537 plan.
- 16c. Continue outreach to property owners with on-lot systems and promote regular maintenance.

17. STORMWATER MANAGEMENT

Collaborate with local organizations to provide outreach and education promoting stormwater management practices among the residents,



business owners, property managers, and other community members of the township.

- 17a. Encourage planting and maintenance of riparian and wetland buffers.
- 17b. Promote the use of rain barrels, rain gardens, and pervious materials in appropriate locations.
- 17c. Enable and encourage the planting of natural ground cover to increase rainfall infiltration and decrease runoff and erosion.
- 17d. Coordinate with local organizations to conduct stormwater mitigation projects in support of MS4 requirements.

18. ALTERNATIVE ENERGY SYSTEMS

Consider provisions to encourage the installation of alternative energy and geothermal systems.

- 18a. Evaluate zoning ordinance for applicability to contemporary alternative energy and geothermal systems.
- 18b. Ensure property owners developers have options to safely install alternative energy systems and car charging stations.

19. WATER PROTECTION GUIDE

Provide property owners with a resource guide to maintain the safety of private wells and on-lot systems.

- 19a. Promote the use of sanitary well caps to limit water contamination risks and require their use on new wells.
- 19b. Inform property owners about natural hazards like flooding, freezing weather, and power outages and how to prepare for them.

As rainfall increases throughout the region, water supplies face greater risk of contamination.



Natural plantings can reduce runoff from yards and fields and help stormwater infrastructure disappear into its surroundings.



Installing charging stations helps to attract the patronage of electric car drivers and ease the transition away from fossil fuels.



LOWER FREDERICK TOWNSHIP

COMPREHENSIVE PLAN



Village Development & Community Character

Housing and **Development**

ower Frederick's development over the past three centuries has given the township a rich and varied collection of residential and commercial buildings. This architectural heritage records the history of the township, from its earliest days as a farming

community and stagecoach stop, through the growth of Spring Mount as a resort town, and the eventual transition into a rural bedroom community. This chapter addresses the present conditions and potential future of development in Lower Frederick.

Farms line many of Lower Frederick's rural roads and host some of the township's earliest homes.



EXISTING HOUSING SUPPLY

Lower Frederick's long and varied history is reflected in the composition of its housing stock. Many prominent examples of old houses and farmsteads line major roadways of the township, contributing to the historic character of Lower Frederick's rural and village areas. In 2018, the Census Bureau reported Lower Frederick's total housing supply as 1,930 dwelling units. The majority of these (55.9%) consist of single-

> family detached homes. This housing type is the most common in Montgomery County and the United States, as a whole. The singlefamily detached type is a constant through the community's history and is represented by many of the township's oldest and newest homes. The next-greatest share of Lower Frederick's housing stock is made up of single-family attached

units, such as townhomes or twin houses. This type represents over

a third of the township's homes. Multifamily housing is relatively rare in the township, with only small buildings having four or fewer units present.

Although the township boasts many homes dating back to the 18th and 19th centuries, only 20% of the township's current housing stock was built prior to 1950. Over 50% of the township's existing homes were constructed between 1980 and 1999 (Fig. 5.2). The reason for the apparent discrepancy between the community's conspicuous historic character and the relatively recent construction of most of its housing stock becomes clear when looking at the locations of housing from different eras.

Many of the oldest examples of housing in Lower Frederick are found on large lots along major roadways. These tracts (Fig. 5.3) occupy many highly visible locations, whereas recently-built homes tend to use a more compact development style, with numerous small lots found on tracts in less conspicuous sites in the township.

UNIT TYPE	LOWER FREDERICK					
Single-Family Detached	1,079	55.9%				
Single-Family Attached	707	36.6%				
Multifamily (total)	144	7.5%				
2 Units	111	5.8%				
3-4 Units	33	1.7%				
Total	1,930					

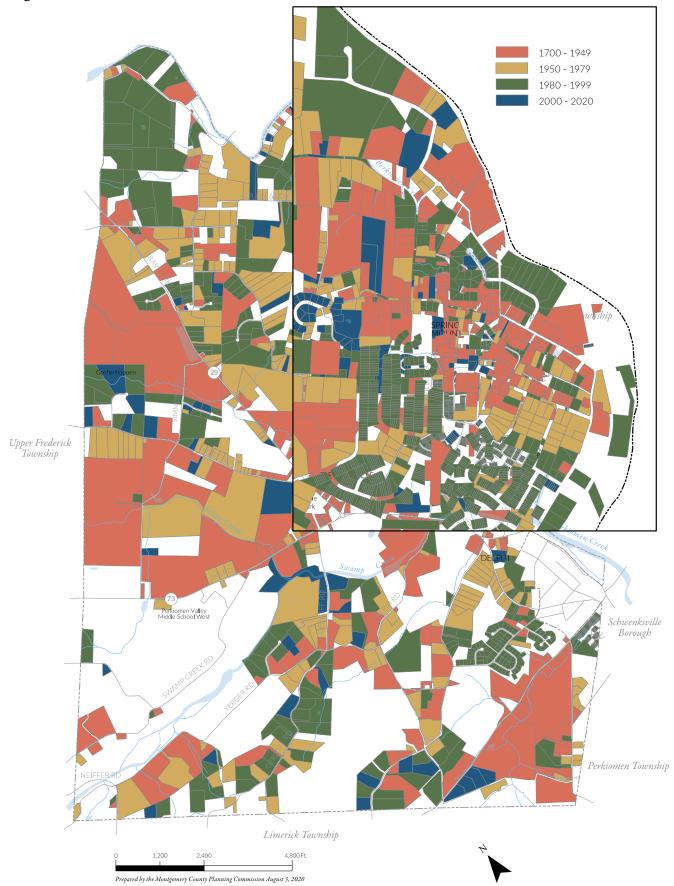
Figure 5.1 Housing Units by Type (source: US Census Bureau ACS 5-Year Estimates 2018)



Figure 5.2 | Housing Stock Construction by Decade (source: US Census Bureau ACS 5-Year Estimates 2018)







Townhouses comprise over a third of Lower Frederick's housing supply. Most are found in a small area west of Spring Mount village.



Homes in Lower Frederick are generally less expensive than in the county, overall. The median home value reported for Lower Frederick in 2018 was \$223,400, while the

Lower Frederick Montgomery County 100 200 300 400 Thousands **2**010 **2**018 **2000**

Figure 5.4 | Median Home Value (2020 dollars source: US Census Bureau Decennial Census, 2000, 2010 ACS 5-Year Estimate 2018)

reported value for the county overall was 37% greater. These amounts represent an increase from the inflation-adjusted median home values reported for each area in 2000 (Fig. 5.4).

This upward trend in home values is noteworthy for Lower Frederick township, where 85.7% of households are owneroccupied. Over this same period, the median monthly rent also increased in Lower Frederick Township (Fig. 5.5), climbing by 17% from 2000 to 2018. Median monthly rent in Lower Frederick in 2018 was \$1,510-a figure that is significantly higher than the county's median monthly rent of \$1,218 that same year.



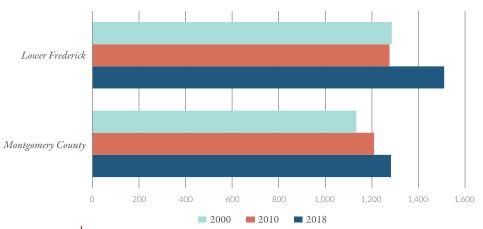


Figure 5.5 | Median Monthly Rent (2020 dollars source: US Census Bureau Decennial Census, 2000, 2010 ACS 5-Year Estimate 2018)

DEVELOPMENT TRENDS

Development is influenced by regional and national economic trends, making it hard to predict when and where it may occur within a municipality. Land use policy can steer development toward favorable sites and influence its design if the community acts early enough. Population forecasts offer one way for a municipality to estimate the

potential demand for new housing.

Lower Frederick's population has continued to grow over the past twenty years, though at a slower rate than in the latter half of the twentieth century. Using population forecasts provided by the Delaware Valley Regional Planning Commission and extrapolating from recent demographic figures (Fig. 5.6) Lower Frederick may

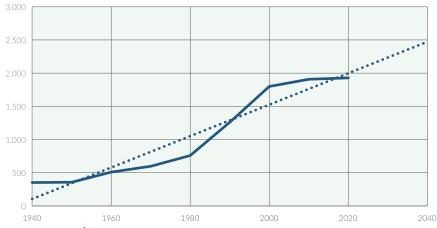
LOWER FREDERICK

2040 Projected Population (DVRPC)	5,355
2040 Projected Average Household Size	2.5 to 2.6
2040 Projected Group Quarters Population (2018 value: 0.20%)	11
2040 Projected Household Population (Projected population minus projected group quarters population)	5,344
2040 Projected Number of Households (Projected household population divided by projected average household size)	2,055 to 2,138
Estimated Total Number of Housing Units Needed by 2040 (Projected number of households plus the number of projected vacant units (2018 value: 4.56%)	2,154 to 2,240
2020 Total Number of Housing Units	1,930
Estimated Number of Housing Units Remaining to be Built by 2040 (Total estimated number of housing units minus housing units built as of 2020)	224 to 310

Figure 5.6 Forecasted Housing Need (sources: 2018 ACS 5-Year Estimates, DVRPC Population Forecasts 2015. See Methodology appendix.)

expect to see the development of up to 310 new homes by 2040. This would yield an average rate of development equaling 16 homes per year, if population growth follows the DVRPC projection and household sizes stay within the projected range.

Another method of predicting future development draws a linear projection from past housing development in the township. This method, seen in figure 5.7, gives an estimate of 2,473 homes in 2040—an increase of 543 homes from the present amount. This method predicts 75% more housing development than what is indicated by population projections. These two projections attempts to offer plausible scenarios for the township to anticipate, but each predict a higher overall rate of development than the township has experienced in recent decades. If residential development in the township continues at the rate seen since 2000, the township's population and housing stock will be smaller in 2040 than these projections indicate.



Housing Development Trend Figure 5.7

ZONING CAPACITY ANALYSIS

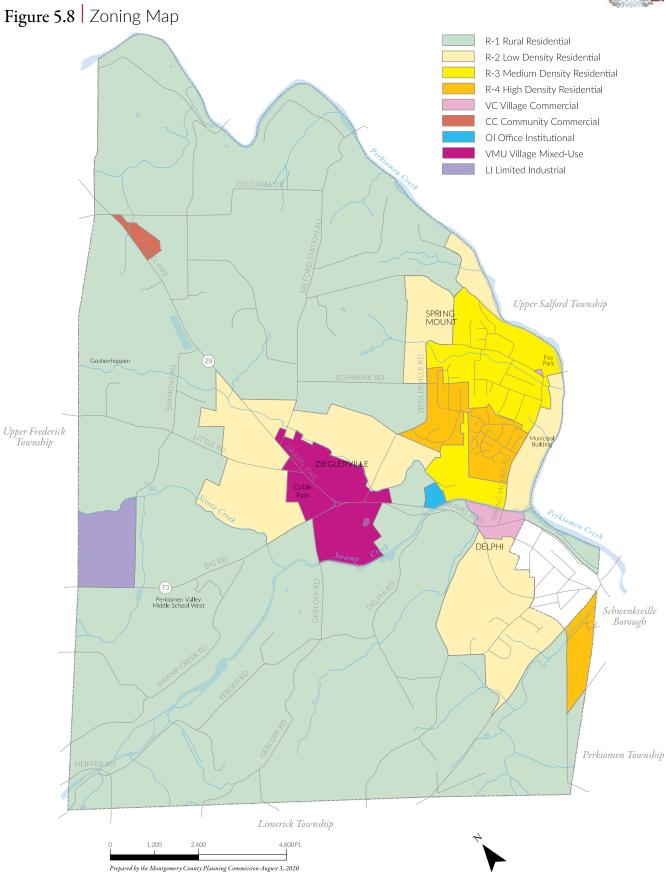
Zoning provides a municipality with considerable power to shape its future. These land use regulations describe the limits of where development can occur, and what forms it may take. Lower Frederick's identity as a residential community is reinforced by its current zoning, in which residential zoning districts cover 95% of the township's area. This residential identity grew out of past development trends and is consistent with the CPVRPC future land use plan.

The latest population forecasts and development projections indicate that any future growth of the township is likely to continue at a slow, steady pace. While Lower Frederick is not expected to experience an increase in its rate of growth, the modest amount of development that is expected could result in very different effects on the township depending on its form and location.

To understand what effects zoning may have on the community's evolution, a build-out analysis or zoning capacity analysis determines the maximum amount of development that is theoretically possible under the current zoning. This analysis looks beyond the amount of growth that is likely to occur in the township.

A build-out analysis was completed as part of the Lower Frederick Open Space Plan in 2005. This analysis method maps land where it is possible for development to occur, inventorying undeveloped





EXISTING UNITS	1930					
POTENTIAL UNITS	1354					
R-1	674	49.8%				
R-2	147	10.9%				
R-3	55	4.1%				
R-4	88	6.5%				
VC	1	0.1%				
VMU	388	28.7%				
ZONING CAPACITY	3,2	284				

Figure 5.9 2020 Zoning Capacity Analysis

land, agricultural land, and residential lots that are large enough to be subdivided. Land areas with environmental constraints are then subtracted, leaving the developable land. This developable land is then assessed for the maximum number of housing units permitted by zoning.

The 2005 build-out analysis reported that Lower Frederick then had 1,824 housing units, and had potential to accommodate an additional 1,005 units, for a total zoning capacity of 2,829 units. Since then, the township has added 106 homes, while the zoning is largely unchanged.

In a new analysis, the current zoning capacity of Lower Frederick was found to be 3,284 units—an increase of 455 units from the 2005 analysis. Much of the differences between the results of these two analyses are attributable to land developments that occurred during the intervening years and a change in methodology to assess the potential for mixed-use development, rather

than single-family detached housing, in the VMU zoning district. The zoning capacities determined by each analysis are greater than the amount of residential development predicted by population forecasts and long-term development trends, suggesting that the township is not likely to be fully built-out within the foreseeable future and current zoning is more than sufficient to accommodate the amount of development that is likely to occur. This surplus zoning capacity suggests that the township has leeway to adjust its zoning in support of open space preservation goals.



Community Character

CHARACTER AREAS

The character of an area describes the unique combination of land uses, development patterns, and architectural styles that prevail in a place. The visual and functional character of an area gradually changes over time, but also provides a record of the community's history in the buildings and features retained from each era. By recognizing and describing an area's character, a community can take steps to preserve and enhance the elements that create its unique identity.

Lower Frederick Township is a community formed from several areas possessing their own distinct identities and varying character. These differences in appearance and development largely correspond with the future land use designations from the Central Perkiomen Valley Regional Comprehensive Plan and can be categorized as having either Rural Residential or Village Center character. Each area contains roughly half of the township's population, but at very different population and development densities.

Lower Frederick's village areas form the nucleus of the township. The historic villages of Spring Mount, Zieglerville, and Delphi are primarily designated as Future Growth Area, with a small portion of Borough Conservation Area, bordering Schwenksville. This area is more densely-developed than the rest of the township. Besides containing roughly half of the township's housing stock, this area is also home to much of Lower Frederick's commercial land uses.

Rural Residential

This area is defined by large expanses of low-density development and a greater prevalence of farms, woodlands, and stream valleys. Areas exemplifying this character cover most of the township and are associated with districts zoned R-1 Rural Residential and R-2 Low-Density Residential, though there are also several small areas where commercial and institutional land uses intermingle with this landscape of wooded hills and rolling fields. The natural features and historic, rural appearance of this area are irreplaceable, and it is a goal of Lower Frederick Township to maintain the character of this area.

Village Centers

The villages of Lower Frederick share many traits with other long-established villages of the region, but still retain distinct identities. In all villages, homes and businesses tend to be built closer to one another, on narrow lots, and nearer to the street. Many years of ongoing development and redevelopment has created a mix of uses and building types in each

of Lower Frederick's villages. The small size of each village and mix of homes and shops help to make them places where walking is a safe and practical alternative.

VILLAGE STREETSCAPES

In rural settings, residents usually find it necessary to drive to get to work or run their daily errands. The distances between homes, workplaces, and other destinations are too long or too hazardous to use another mode of transportation. Within a rural setting, however, a village can create a more compact collection of homes and businesses, where walking is safe, enjoyable, and practical. Though the character of Lower Frederick's village centers

differs from the character of the township's rural residential area, the roads in both areas often lack sidewalks, curbs, and other features that distinguish the streetscapes of villages from those in rural settings.

In the public workshop at the beginning of the comprehensive planning process, and again in the Village Development and Community Character Survey, residents of the township expressed support for improving the walkability of Lower Frederick's villages, with pedestrian connections in the villages and between them. To create a friendlier, more attractive, and more walkable landscape, the VMU district in Zieglerville requires small-scale, attractive

Traditional buildings, narrow lots, and short setbacks define the streetscape in village areas like Zieglerville.





commercial buildings that have doors and windows facing streets and parking areas. In addition, garages and parking areas for all uses must be located to the side and rear of houses and commercial buildings. These regulations ensure that future development will enhance the existing character of the village, however, relying on the development process to create streetscape improvements means that safe and walkable streets in Zieglerville and elsewhere could take years to implement without further action. Streetscape improvements to beautify the roadways of Zieglerville, create sidewalks, and reduce traffic speeds would help to connect residents to local businesses and make the village a more attractive commercial and residential center.

TRADITIONAL NEIGHBORHOOD DEVELOPMENT

Through zoning and development ordinances, the township can help to ensure that future development complements the existing community and supports Lower Frederick's planning goals. Good design matters everywhere, but the same rules may not be appropriate for all parts of a community. Traditional Neighborhood Development (TND) is a type of zoning ordinance that encourages new development to incorporate common traits from historical villages or towns. TND zoning can be tailored to fit a community, and helps to ensure that new development complements the

historic character.

Traditional Neighborhood Development can include residential and commercial buildings of many types and sizes. The photos below show a few examples of common building types in the Traditional Neighborhood Development style.

Traditional Neighborhood Development has several

Traditional Neighborhood Development combines common traits from historical villages and towns with sidewalks or paths to make walkable communities.



Mixed-Use buildings provide a community with new residential and commercial opportunities.



Building Resilience: Economic Development

Economic development is a broad term. encompassing a number of policies a municipality may undertake to attract. retain, and support local businesses or promote the formation of new businesses. Creating a setting where businesses can thrive provides benefits to a community by increasing employment opportunities, expanding access to services, and increasing property values. Traditional Neighborhood Development, like that permitted in Zieglerville's VMU zoning district, accommodates a mix of uses including retail or office with residential uses. Zoning is an important tool for creating an environment where beneficial business development can occur, but additional policies and promotion would complement these efforts and help support the economic development goals of the regional comprehensive plan.

common features that define it. Having a central public space is a key element of the style. The development that surrounds this center includes a mix of commercial, residential, and mixed-use development in lowrise buildings that are located close to the street. Buildings face the street, with entrances at the sidewalk and parking located to the side or rear. Streets form a network to create a number of different possible paths for vehicle circulation, easing congestion. This style also looks to incorporate civic or institutional buildings into developments, giving them a place of prominence and connecting them within a walkable neighborhood. Some aspects of Traditional Neighborhood Development are already present in the township's existing development and supported in its ordinances. The ongoing development Village by the Pond (pictured on page 77) also exemplifies some of the traits of Traditional Neighborhood Development, having sidewalks, a mix of uses, and traditional architecture.

Adopting more of the elements of Traditional Neighborhood Development would help to support community goals of ensuring that development in village areas complements the local character and promoting a mix of housing types. Expanding the range of housing types allowed in village areas and encouraging development to include a mix of housing

types would help to supply of workforce housing, prevent development from consuming rural land, and produce a greater variety of housing to suit residents' diverse needs. Traditional Neighborhood Development supports local economic development, creating new commercial opportunities in appealing, walkable sites. The traditional style of development produces smaller buildings than are typical of conventional development, allowing for easier reuse and allowing a community to be more adaptable to changing times.



Future Land Use

As a member of the Central Perkiomen Valley Regional Planning Commission, Lower Frederick's land use policies are guided by the Future Land Use Plan described in the Central Perkiomen Valley Regional Comprehensive Plan. The existing land use patterns in Lower Frederick and the five other member municipalities inform the future land use plan which helps them coordinate to preserve open space, encourage sustainable development, and maintain the rural character that is so important to residents throughout the region. The Land Use Plan designates appropriate areas for new growth and directs revitalization, new development, and infrastructure improvements into those areas. Outside of the designated growth areas, the primary land use objective is preservation of the rural landscape and its natural and cultural resources, with only lower density development that is sensitive to such resources.

The planning region's Future Land Use designations must be updated periodically to correspond with changing land uses and the local plans in each member community. In Lower Frederick, the current boundaries of the Future Growth Area mostly corresponds with areas where public sewer service is available, however proposed land developments may require revisions to the Future Land Use map. The following are the Future Land Use Areas in Lower Frederick Township.

Figure 5.10 | Current CPVRPC Future Land Use Areas Rural Resource Conservation Future Growth Borough Conservation Municipal Treatment Plant Pump Station Forced Mains Sewer Lines Upper Salford Township Upper Frederick Township ZIEGLERVILLE

BOROUGH CONSERVATION AREA

In the Central Perkiomen Valley, this area is primarily developed and characterized by a mix of land uses, existing public infrastructure, and a variety of housing types at varying densities. The Borough Conservation Area covers only a small portion of Lower Frederick, adjacent to Schwenksville. Future development in the Borough Conservation Area will be in the form of infill development and should be compatible with the character of the area and the heritage of the region. Municipal codes should encourage new development in this area by providing for flexible standards that are supportive of infill development and that provide standards for the preservation of the existing character of the area.

FUTURE GROWTH AREA

The Future Growth Area is located within and surrounding the villages of Zieglerville, Spring Mount, and Delphi in Lower Frederick. This area is characterized by a mix of old and new development occurring on primary road networks. Much of this development is served by public sewer and water. It is anticipated that new development in the Future Growth Area would be of a scale and intensity characteristic of a rural village. In new development, a variety of residential and nonresidential uses will be permitted. New development shall be sensitive to the existing character of the area by adhering to standards that promote pedestrian circulation and access to buildings and community open space.

RURAL RESOURCE CONSERVATION

By directing the majority of new development into the Future Growth Area through the provision of public infrastructure and higher densities, the Rural Resource Areas can preserve Lower Frederick's natural and cultural resources. Preserving the open spaces, farmland, woodlands, and other natural and cultural resources within this rural area is crucial to sustaining the natural environment, agricultural economy, and the quality of life in the township. The Rural Resource Conservation Area includes the majority of Lower Frederick. The Rural Resource Conservation Area includes most of the undeveloped and environmentally sensitive land in the township. To preserve the remaining undisturbed natural features and cultural resources, public infrastructure such as public sewer and water should not be permitted. Future development will be compatible with rural preservation and the predominant land uses will be low-density residential, farmland, preserved woodlands, and reforested areas.



Village Development & **Community Character Goals**

Preserve historic resources, structures, and properties that contribute to the local heritage and character.

Ensure that rural development preserves and protects the natural environment and scenic views.

Ensure that development in village areas complements the historic community character and supports township transportation goals.

Encourage future growth to occur in the village areas and follow local architectural styles and building scale.

Promote the creation of housing in a mix of sizes and types to support the range of household needs within the community.

Village Development & **Community Character** Recommendations

20. VILLAGE STREETSCAPE PLAN

Create a vision for major streets within and surrounding the villages of Zieglerville and Spring Mount.

20a. Create gateways at intersections surrounding the village center to identify and distinguish Zieglerville, provide traffic calming, and

- improve pedestrian crossings.
- 20b. Adopt a pedestrian connections plan for village areas to update the connections plan recommendations of the Open Space Plan, identifying and prioritizing locations for sidewalk or path installation, particularly in village areas.
- 20c. Create lists of street furniture and design elements preferred for streets in residential and business areas.

A gateway at the intersection of Gravel Pike and Zieglerville Road would help to control traffic speeds, create pedestrian connections, reinforce village character, and beautify the entrance to the village of Zieglerville



21. TRADITIONAL NEIGHBORHOOD DEVELOPMENT (TND)

Incorporate elements of Traditional Neighborhood Development into the township's zoning and SALDO.

- 21a. Review SALDO for opportunities to promote TND principles in the building and site design of new development.
- 21b. Assess current zoning for possible addition of a TND development option, or creation of a TND zoning overlay.
- 21c. Provide visual and descriptive examples of desired development types and building design details.

22. DIVERSE HOUSING

Encourage a context-sensitive mix of housing types throughout the township to accommodate a broad range of household needs.

- 22a. Consider zoning revisions to allow development with a mix of housing types in VMU District when not fronting Gravel Pike or Big Road.
- 22b. Assess current Accessory Dwelling Unit (ADU) ordinance for the extent of its applicability. Consider revisions to increase the applicability of the ADU option.



23. FUTURE LAND USE AND ZONING

Update the Future Land Use areas to reflect changing development patterns, township conservation goals, and transportation and infrastructure capacity.

23a. Assess current zoning's support of the township's future land use vision and consider text and map revisions to align with the updated Future Land Use map, revised Act 537 plan, and Open Space Plan.

24. HISTORIC PRESERVATION AND REUSE

Consider measures by which Lower Frederick can promote the preservation of structures that have received historic designation.

- 24a. Maintain a list of buildings or structures with historic or cultural significance.
- 24b. Create a zoning overlay to permit certain uses by special exception when the proposed use preserves a historic or culturally significant structure.
- 24c. Produce a design guide identifying the characteristic features of historic buildings in Lower Frederick, to inform restoration work and traditional-style development.

LOWER FREDERICK TOWNSHIP

COMPREHENSIVE PLAN

Plan Implementation

mplementing the vision described in this plan requires the coordinated efforts of multiple township departments, boards, and committees and the cooperation of external agencies. This chapter organizes the goals and recommendations made throughout the comprehensive plan and identifies potential partners and sources of funding. The partners listed for each implementation item includes both township and external parties that may have a role to play in the completion of each item. Other organizations not listed here may contribute to the realization of these recommendations and the partners listed for each item may change as implementation proceeds. The Lower Frederick Board of Supervisors may convene other boards, as-needed, to implement the recommendations of this plan or Act 537 plan.

Many of these implementation items involve new planning efforts related to the specific projects or ordinances to realize these goals. The multiple items that involve the Zoning or Subdivision and Land Development Ordinances may be implemented together through a comprehensive review and revision of each ordinance. Other items may be implemented through the adoption of an official map or updates to other plans, such

as the township's open space and recreation plan.

The items listed in the implementation tables are assigned a priority relating to their relative immediacy, importance, and effective impact. Implementation items that are expected to have significant effects in the near-term or enable the implementation of other items receive higher priority. Items with smaller impacts or ones that depend on the prior implementation of other items or the development process receive lower priority.

The priority assigned to each implementation item is based upon existing conditions and current forecasts, to address existing and anticipated needs. Priority levels are not permanent and should be reassessed regularly as circumstances change. The boards and committees of the township will review the recommendations and implementation items listed in this chapter on an annual basis, tracking progress towards each goal and adjusting the priority of remaining items.

The completion of implementation items is contingent upon the institutional capacity of the township and partner organizations. The availability of funding is a crucial

factor when determining the feasibility of an implementation item and setting the timing and priority of each. To assist in this, the chapter includes a list of some potential funding sources which may be applicable to implementation items. Like the implementation tables, this list should be reviewed periodically and revised to include new funding sources and delete defunct ones.

Implementation Partners

TOWNSHIP BOARDS AND DEPARTMENTS

BOS Board of Supervisors PC Planning Commission PRB Parks & Recreation Board **EAC Environmental Advisory Council**

Agricultural Security Area Advisory Committee ASA

PWD Public Works Department

POTENTIAL PARTNERS

CTConservancies and Trusts that assist with land

conservation

CPVRPC Central Perkiomen Valley Regional Planning Commission Pennsylvania Department of Community and Economic **DCED**

Pennsylvania Department of Conservation and Natural DCNR

DEP Pennsylvania Department of Environmental Protection Delaware Valley Regional Planning Commission DVRPC Public and Private entities working with historically and HP

culturally significant properties

Montgomery County Planning Commission MCPC Neighboring municipalities, including those not in NM

CPVRPC

Pennsylvania Department of Transportation PennDOT

WW Public and private entities working with waterways and

riparian corridors

Figure 6.1 | Implementation Table

			REGUI	LATORY CO	ONTROL							
CHAPTER	ITEM	RECOMMENDATIONS & STRATEGIES	ZONING ORDINANCE	SALDO	OTHER ORDINANCES	CAPITAL INVESTMENTS	EXTERNAL COORDINATION	DEVELOPMENT PROCESS	OUTREACH	PRIORITY	PRODUCTS	PARTNERS
CHAITER	1	Stewardship Guide - Initiate landowner outreach and education progra									<u> </u>	TARTIVERS
	1a	Provide guidance describing tree and lawncare best practices.	um to promote it	and Stewart	изтър ргассисса ат	ong residents, bush	ness owners, propert	y managers, and our	•	low	e township.	EAC, PC
	1b	Encourage planting and maintenance of riparian and wetland buffers.		•					•	medium	-	ASA, EAC, DCNR, PWC
		Enable and encourage native meadow plantings and other lawn										
	1c	alternatives.	•	•	•				•	medium		ASA, EAC, PRB, DCNR
	1d	Distribute information about invasive and pest species.							•	high	•	ASA, EAC, DCNR
	2	Open Space Plan - Review and update the Lower Frederick Open Space	ce Plan to suppoi	rt township	o parks, open space T	e, conservation, and	d land use goals.	<u> </u>			<u> </u>	
	2a	Evaluate the goals and recommendations of the current Open Space Plan.					•		•	high		BOS, PC, PRB, EAC, MCPC
	2b	Update Open Space Plan to support township planning and conservation goals.					•		•	high	•	BOS, PC, PRB, EAC, MCPC
	3	Greenway Planning - Evaluate land management opportunities identif	ied in the Multi-	Region Gre	enway Study.							
	3a	Establish a vision for a connected system of open space and natural lands.			•				•	medium	•	BOS, EAC, PC, MCPC
	3b	Adopt land use controls that contribute to a network of preserved land.	•	•				•		medium		BOS, PC
	3c	Consider acquisition of open space or conservation easements.				•	•	•	•	high		BOS, PC
	4	Open Space Preservation - Identify and prioritize local open space and	d agriculture pres	servation o	pportunities that h	ost concentrations	of sensitive natural	resources, vulnerable	e plant, and anin	nal population	ıs.	
	4a	Employ NAI study methods when assessing potential land preservation sites.								medium	•	EAC, PC
	4b	Maximize the community and environmental value of preserved land.				•			•	medium		BOS, PRB, PWD
	5	Park and Open Space Planning - Create plans for township parks and	open spaces that	preserve r	iparian areas and r	nitigate stormwate	r runoff and flooding	hazards.				
	5a	Identify watercourses and riparian areas in township parks and open spaces.			•		•			high	•	PRB, EAC
	5b	Within township parks and open spaces, implement measures to mitigate stormwater runoff, erosion, and other flood hazards.				•				medium		PRB, PWD, PWC
	5c	Within township parks and open spaces, ensure recreational amenities are located to minimize risk of damage by flooding and other natural hazards.				•				high	•	PRB, PWD
	5d	Identify recreational activities and amenities that are appropriate for riparian areas and ensure that such facilities are designed to mitigate the risk of damage by stormwater runoff or floods.				•				medium		PRB, PC, EAC, PWC
	6	Conservation Zoning - Adopt a Riparian Corridor & Wetland Conserva	tion Zoning to d	efine and d	lelineate buffer are	as to be protected	adjacent to streams,	wetlands, and water	bodies.			
	6a	Identify important habitats and scenic landscapes needing protection in township codes.	•	•		•	•	•	•	low		BOS, PC, EAC
Natural Environment	6b	Adopt wellhead protections and conservation of headwaters areas to protect the quality and supply of water resources.	•	•		•	•		•	medium		BOS, PC
and Open Space	6c	Identify ways township assets can mitigate flooding risks in the township and in areas downstream.	•	•		•	•			high		BOS, PC



			REGULATORY CONTROL							_		
CHAPTER	ITEM	RECOMMENDATIONS & STRATEGIES	ZONING ORDINANCE	SALDO	OTHER ORDINANCES	CAPITAL INVESTMENTS	EXTERNAL COORDINATION	DEVELOPMENT PROCESS	OUTREACH	PRIORITY	PRODUCTS	PARTNERS
	7	Dark Skies Conservation - Adopt an Outdoor Lighting Ordinance to es	stablish regulatio	ns for the ເ	ıse and installatior	of outdoor lightin	g.					
Natural	7a	Establish reasonable uses of outdoor lighting for the health, safety, and welfare of the public.	•	•						medium		BOS, PC, EAC
Environment and Open	7b	Set minimum standards to protect neighbors and natural habitats from nuisance glare from artificial light sources.	•	•				•		medium		BOS, PC, EAC
Space	7c	Promote energy efficient lighting design and operation.	•	•					•	low		BOS, EAC
	8	Road Improvements Plan - Identify and prioritize local transportation	improvement pro	ojects.								
	8a	Identify and prioritize transportation projects requiring the involvement of external partners and funding sources.				•	•			low		BOS, PC, PWD
	8b	Consider projects for inclusion on the regional Transportation Improvement Plan (TIP).					•			medium		BOS, PC, PWD
	8c	Evaluate local roadways and identify sites where poor drainage, visbility, or other safety concerns are present.			•	•			•	high		PC, PWD
	8d	Implement revolving 5-year plan to periodically review road safety, drainage, and visibility issues.				•			•	high		PC, PWD
	9	Context Sensitive Design - Develop a roadway plan that identifies app	propriate designs	that suppo	ort local land uses a	and community cha	aracter areas describe	ed in the SALDO and	zoning ordinan	ces.		
	9a	Select walking and bicycling infrastructure that is suitable for the speed and volume of traffic.		•			•			medium	•	PC, PWD, MCPC, PennDOT
	9b	Develop standards for pavement markings and the widths of lanes and roadways in rural and village areas.	•	•	•		•			medium	•	BOS, PWD, PennDOT
	9c	Provide streetscape design guidance for land developments in rural and village areas.		•	•		•			low	•	PC, PWD, MCPC, PennDOT
	10	Interconnected Streets and Sidewalks - Use SALDO, zoning, or Officia	l Map to plan co	nnected inf	rastructure for all	modes of transport	tation.					
	10a	Delineate future pedestrian and street connections for developing areas.		•	•					high	•	BOS, PC
	10b	Evaluate proposals and connector concepts from past plans (1971, 2015 Connections update of Open Space Plan).			•					low	•	PC
	10c	Construct trails to connect residential areas, public open spaces, and commercial centers.					•	•		medium		BOS, PWD, DCNR, MCPC
	10d	Work with property owners and other partners to improve pedestrian safety and accessibility in historic developed areas.					•	•	•	medium		BOS, PC, MCPC, DCED, PennDOT
	11	Access Management - Adopt access management standards to mainta	in road capacity	and enhand	ce safety on the to	wnship's arterials,	and collector roads in	village areas.				
	11a	Encourage or incentivize property owners to consolidate driveways and share driveways on major roadways of the township.	•				•	•	•	low		PC
	11b	Revise SALDO and zoning to require access management on arterial roads and support its use in other congestion-prone areas.	•	•	•					high	•	BOS, PC, MCPC
	12	Traffic Calming - Deploy traffic calming techniques on township roads	to reduce speed	ling and vel	nicle-pedestrian co	nflicts.						
	12a	Identify and prioritize areas where vehicle speeds are a concern.							•	high	•	BOS, PC, PWD
	12b	Determine which traffic calming options are appropriate in rural and village context areas.							•	medium	•	BOS, PC, PWD
Transportation	12c	Assess traffic calming options for their compatibility with the performance requirements of emergency responders and public works.					•			medium		BOS, PC, PWD, Emergency Services

			REGULATORY CONTROL		LEMENTATION]			
			ZONING		OTHER	CAPITAL	EXTERNAL	DEVELOPMENT				
CHAPTER	ITEM	RECOMMENDATIONS & STRATEGIES	ORDINANCE		ORDINANCES	INVESTMENTS	COORDINATION	PROCESS	OUTREACH	PRIORITY	PRODUCTS	PARTNERS
	13	Parking - Evaluate and update parking standards to support other tran	sportation and o	developmer 	nt goals. I			I				
	13a	Evaluate off-street parking requirements and consider allowing more use of shared parking in commercial applications.	•	•					•	high		BOS, PC
	13b	Consider permitting on-street parking in village areas, if it is compatible with adjacent land uses, road widths, and traffic volumes.	•	•						low		BOS, PC
	13c	Consider allowing new commercial or mixed-use developments to substitute on-street parking for off-street parking on internal streets.	•	•						low		BOS, PC
	14	Complete Streets Policy - Adopt a local complete streets policy to incr	ease safety and	accessibilit	y for all road users	. .						
	14a	Evaluate the Complete Streets Policy of Montgomery County as a guiding document for township policy.							•	high		BOS, PC
	14b	Incorporate complete streets principles in the maintenance and construction of township roads and bridges to safely accommodate all road users.	•	•	•	•	•		•	medium	•	BOS, PC, PWD, Emergency Services, PennDOT
	15	Trail Planning - Provide township residents with access to the natural	and scenic resou	rces of Lov	ver Frederick.							
	15a	Evaluate proposals and trail concepts from past studies and Open Space Plans.								high		PC, PRB
	15b	Identify opportunities to construct trails on township-owned land, easements, and rights-of-way.				•			•	high		PC, PRB
	15c	Prioritize trail connection goals and preferred alignments to guide trail construction during the land development process.		•			•	•	•	medium		PC, PRB
Transportation	15d	Consider opportunities to acquire land, easements, and rights-ofway that support trail connection goals.				•	•		•	medium		BOS, PC, PRB, EAC
	16	Sewer Service Planning - Update the 537 Plan to reflect expanded sev	wer capacity, nev	w developm	ent, and local land	use goals.						
	16a	Conduct a study to determine the feasibility of sharing wastewater treatment service with Schwenksville.				•	•			medium	•	BOS, DEP, MCPC, Schwenksvillle
	16b	Recommend future land use map revisions to CPVRPC and evaluate revisions to townshhip Act 537 plan.			•		•			high		BOS, PC, MCPC
	16c	Continue outreach to property owners with on-lot systems and promote regular maintenance.							•	low		BOS, PC, EAC, DEP
	17	Stormwater Management - Collaborate with local organizations to prov	/ide outreach and	d education	promoting stormy	vater management	practices among the I	residents, business ov	wners, property	managers, and	other communit	ty members of the township.
	17a	Encourage planting and maintenance of riparian and wetland buffers.					•	•	•	medium		BOS, PC, EAC, PRB
	17b	Promote the use of rain barrels, rain gardens, and pervious materials in appropriate locations.		•			•		•	low		BOS, PC, EAC, PRB, PWC
	17c	Enable and encourage the planting of natural ground cover to increase rainfall infiltration and decrease runoff and erosion.		•	•		•	•	•	medium		BOS, PC, EAC, PRB
	17d	Coordinate with local organizations to conduct stormwater mitigation projects in support of MS4 requirements.				•	•		•	medium		BOS, EAC, DEP, WW
	18	Alternative Energy Systems - Consider provisions to encourage the in	stallation of alter	native ene	rgy and geotherma	l systems.						
Infrastructure	18a	Evaluate zoning ordinance for applicability to contemporary alternative energy and geothermal systems.	•				•			medium		PC, MCPC

	18b	Ensure property owners developers have options to safely install alternative energy systems and car charging stations.	•	•			•	•	medium	BOS, PC, MCPC
	19	Water Protection Guide - Provide property owners with a resource gu	ide to maintain	the safety o	f private wells and	on-lot systems.				
		Promote the use of sanitary well caps to limit water contamination risks and require their use on new wells.			•			•	medium	BOS, PC, EAC, DEP
Infrastructure	19b	Inform property owners about natural hazards like flooding, freezing weather, and power outages and how to prepare for them.						•	low	BOS, Emergency Services

			REGULATORY CONTROL									
CHAPTER	ITEM	RECOMMENDATIONS & STRATEGIES	ZONING ORDINANCE	SALDO	OTHER	CAPITAL	EXTERNAL COORDINATION	DEVELOPMENT PROCESS	OUTREACH	PRIORITY	PRODUCTS	PARTNERS
CHAITER	20	Village Streetscape Plan - Create a vision for major streets within and					COOKDINATION	TROCESS	COTILEACIT	TRIGITITI	TRODUCTS	TAKTIVEKS
	20a	Create gateways at intersections surrounding the village center to identify and distinguish Zieglerville, provide traffic calming, and improve pedestrian crossings.				•	•	•		medium		BOS, PC, MCPC, DCED, PennDOT, DVRPC
	20b	Adopt a pedestrian connections plan for village areas to update the connections plan recommendations of the Open Space Plan, identifying and prioritizing locations for sidewalk or path installation, particularly in village areas.			•				•	high	•	BOS, PC, MCPC
	20c	Create lists of street furniture and design elements preferred for streets in residential and business areas.							•	low	•	PC, MCPC
	21	Traditional Neighborhood Development (TND) - Incorporate elements	of Traditional N	eighborhoo	d Development in	to the township's z	zoning and SALDO.					
	21a	Review SALDO for opportunities to promote TND principles in the building and site design of new development.		•						medium		PC, MCPC
	21b	Assess current zoning for possible addition of a TND development option, or creation of a TND zoning overlay.	•							medium		PC, MCPC
	21c	Provide visual and descriptive examples of desired development types and building design details.						•	•	low	•	PC, MCPC
	22	Diverse Housing - Encourage a context-sensitive mix of housing types	throughout the	township t	o accommodate a	broad range of hou	usehold needs.					
	22a	Consider zoning revisions to allow development with a mix of housing types in VMU District when not fronting Gravel Pike or Big Road.	•							medium		PC, MCPC
	22b	Assess current Accessory Dwelling Unit (ADU) ordinance for the extent of its applicability. Consider revisions to increase the applicability of the ADU option.	•							low		PC, MCPC
	23	Future Land Use and Zoning - Update the Future Land Use areas to reflect changing development patterns, township conservation goals, and transportation and infrastructure capacity.										
Village	23a	Assess current zoning's support of the township's future land use vision and consider text and map revisions to align with the updated Future Land Use map, revised Act 537 plan, and Open Space Plan.	•							high	•	BOS, PC, MCPC
Development	24	Historic Preservation and Reuse - Consider measures by which Lower	Frederick can pr	omote the	preservation of str	uctures that have i	received historic desi	gnation.				
and Community Character	24a	Maintain a list of buildings or structures with historic or cultural significance.			•				•	medium	•	PC, HP

			REGULATORY CONTROL									
CHAPTER	ITEM	RECOMMENDATIONS & STRATEGIES	ZONING ORDINANCE	SALDO	OTHER ORDINANCES	CAPITAL INVESTMENTS	EXTERNAL COORDINATION	DEVELOPMENT PROCESS	OUTREACH	PRIORITY	PRODUCTS	PARTNERS
Village	24b	Create a zoning overlay to permit certain uses by special exception when the proposed use preserves a historic or culturally significant structure.								low		BOS, PC, MCPC
Development and Community Character	24c	Produce a design guide identifying the characteristic features of historic buildings in Lower Frederick, to inform restoration work and traditional-style development.							•	low	•	BOS, PC, HP, MCPC

Potential Funding Sources

C2P2	Community Conservation Partnership Program (DCNR)
CDBG	Community Development Block Grant (MCPC)
000000	a that will be tall to

Central Perkiomen Valley Regional Planning CPVRPC

Commission grants

Green Light Go (PennDOT) GLG

Greenways, Trails, and Recreation Program (DCED) **GTRP** Local Share Account Gaming Funds (DCED) LSA Multi-Modal Transportation Fund (PennDOT and MMTF

DCED)

Montco2040 Montco2040 Implementation Grant Program

(Montgomery County)

PECO Green Region and other grant programs Keystone Historic Preservation Planning Grant PECO PHMC

Program (PHMC)

Safe Routes to School (DVRPC) SRTS

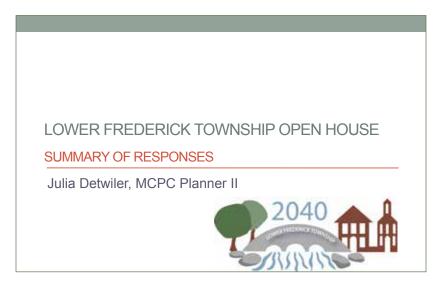
TA Set-Aside Transportation Alternatives Set-Aside Program (DVRPC) Transportation and Community Development Initiative **TCDI**

(DVRPC)



Appendix A

2019 Open House Responses



The Comprehensive Plan Open House was held on June 19 at the Township Building. Nearly 100 people attended and shared their thoughts about the future of Lower Frederick Township.



The dots represent attendees home locations. Most of the township was well-represented by the attendees.

COMPREHENSIVE PLAN

The Open House included a number of stations where attendees could share thoughts about various topics impacting the township and its residents. The traffic station was busy all night with lots of ideas and thoughts provided. Each slide includes a summary of the contributions at each station.

Traffic

- Speeding on Main Street and Game Farm Road
- Regular litter pickup
- Need improved shoulders
- Speeding on Spring Mount Road and Zieglerville Road
- Gerloff should have a sign saying "Local Deliveries"
- Think big! Plan for 2040 traffic, not 2020 traffic
- High Speed bypass to 422 and to 476 in Kulpsville
- Complete road network with no cul-de-sacs



Opinions about parks, trails and open space varied. Most parks and open space areas are highly-valued and wellused by residents.

Parks

- · "If you want to walk or ride your bike, move to the city"
- "Need a safe way to get from townhomes to the Perkiomen Trail"
- "Keep open space open!"
- · "More bike trails"
- "Bike lane on Meng Road"
- "Would like to be able to walk to CVS and Wawa from Spring Mount."
- · Support for the Sunrise Mill Trail
- Most people drive to local parks
- Some people use the trail network to access parks and open space





Visual Preference

- · A majority of people preferred adaptive reuse of historic buildings to the construction of new shopping centers
- Most people preferred open space with passive recreation and trails to active recreation spaces
- Most people want small lots with homes near the villages of Spring Mount and Zieglerville



Two stations asked about attendees' visual preferences for Lower Frederick and how future growth should be planned.

Maintaining our historic look and feel was important. Access to open space for passive recreation was noted as preferred. And residents did not particularly want the standard suburban land development pattern of spreading homes on larger lots across the landscape.

Visual Preference

- Most people want businesses closer to the street with parking in the rear
- · People were divided on preserved forests and streams vs. local farms with fields surrounded by forests
- There was an almost even split on housing style, with half of people preferring townhomes that are close together and walkable, and the other half in favor of traditional larger homes on bigger, more expansive lots



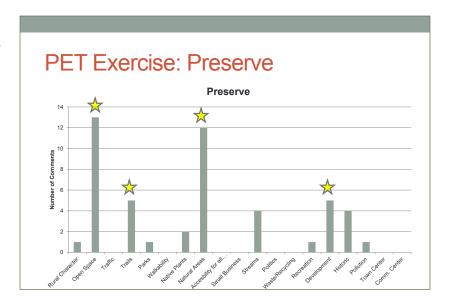
As far as commercial development, residents preferred a pattern more like Skippack with frontages closer to the street with parking in the rear. The preservation of forests as well as farms was strongly supported but there was support for both preserved open space as well as keeping local farms.

The issue of housing types was a bit difficult to address. Neither photo gave a good example of the existing types of housing stock that is currently in Lower Frederick but the split from the Open House supports both houses on smaller lots as well as larger homes on larger lots.

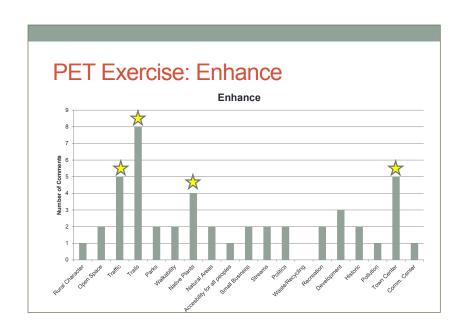
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COMPREHENSIVE PLAN

A "PET" exercise asked attendees what they would like to see Preserved, Enhanced or Transformed within the Township. The preservation of natural areas and open space were noted as most important.



The main issues noted to be enhanced were trails, traffic and a town center.





PET Exercise: Transform Transform

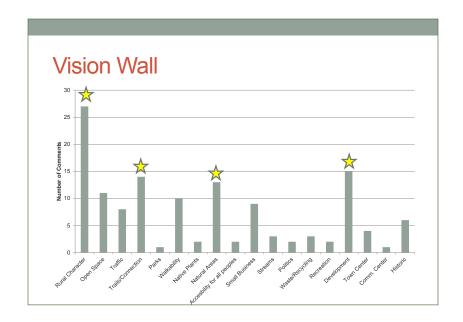
The main issue that attendees would like to see transformed relates to traffic issues around the Township.



Attendees were asked to leave one word that best describes Lower Frederick. A "word cloud" was created based on the number of times a particular word was contributed.

COMPREHENSIVE PLAN

This graph also illustrates the number of times each topic was noted in terms of our vision for the future.







Appendix B

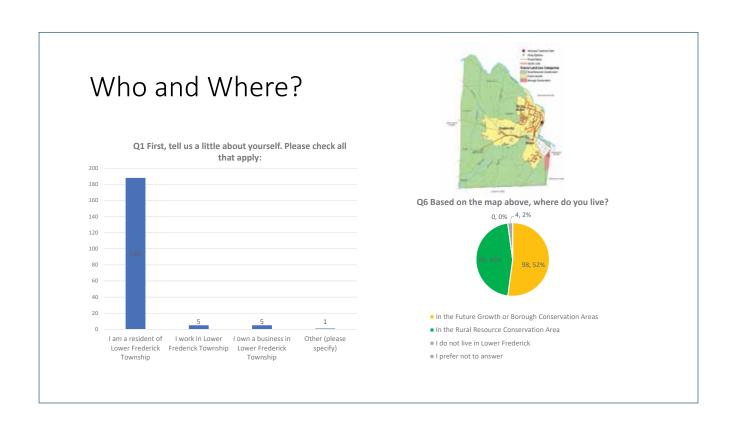
Survey Summary Presentation

Survey Engagement

- The web survey collected 190 responses, 3 more responses were completed on paper copies.
- Nearly all responses (188, in total) came from township residents
- Lower Frederick had 1,842 households in latest Census Bureau estimates
- The following slides report on those responses provided by township residents.

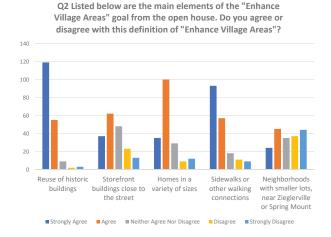
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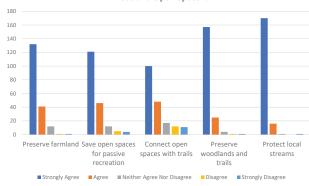
Enhance Village Areas



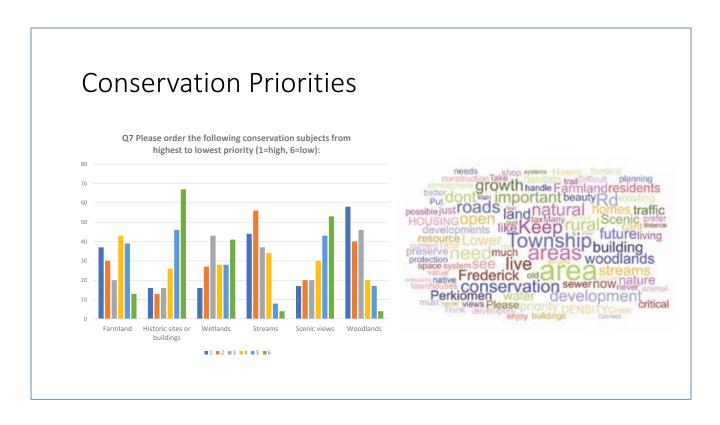


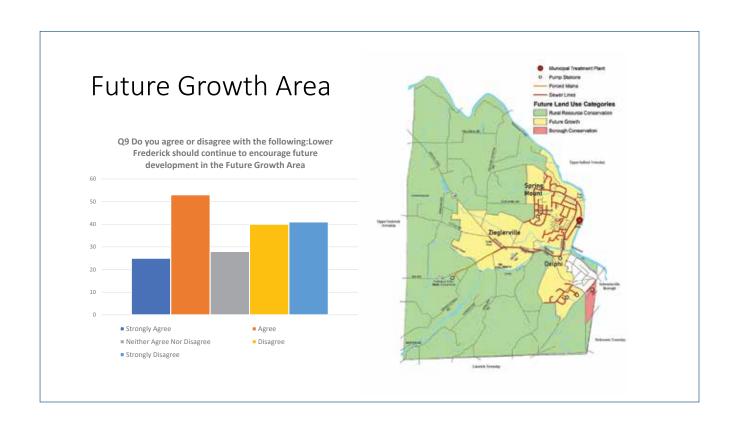
Preserve Natural Areas and Open Space

Q4 Listed below are the main elements of the "Preserve Natural Areas and Open Space" goal from the open house. Do you agree or disagree with this definition of "Preserve Natural Areas and Open Space"?



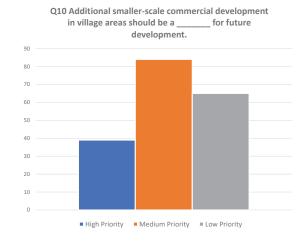


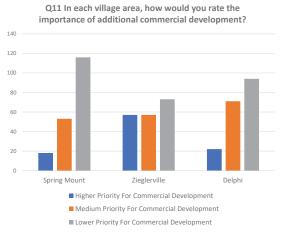






Commercial Development



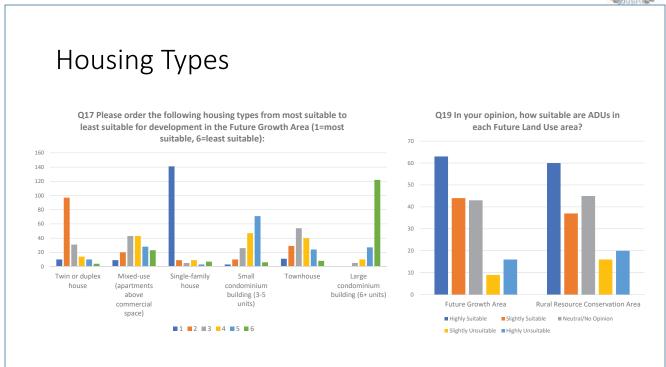


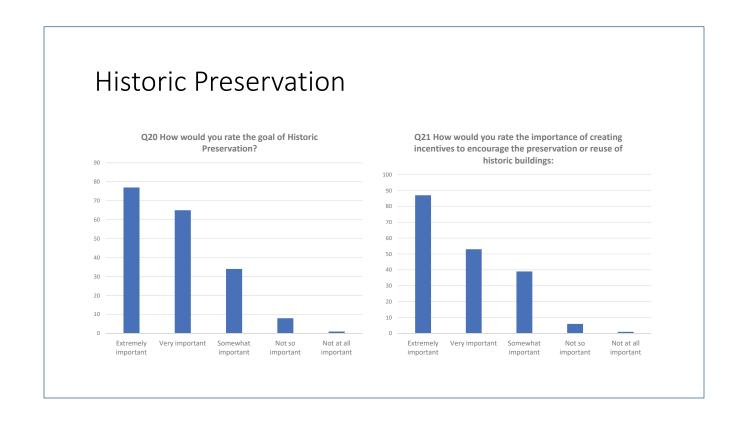
Development Features Q12 Please order the following list of possible features of new development from highest to lowest priority (1=high, 5=low): township Schwenksville 100 main bu commercial traffic business road business Sidewalks or paths Parks or recreation Through-streets for Natural open Pedestrian lighting for connectivity areas access and and safety connectivity ■1 ■2 ■3 ■4 ■5











Survey Takeaways:

- High level of public participation
- Common Concerns: overdevelopment, loss of open space, overly dense development, existing and future traffic congestion, vacant buildings or storefronts, lack of character in contemporary development, pollution (e.g., air, light, noise, water)
- Aspirations: Skippack, Schwenksville, New Hope, A "main street" feel in the village(s), preserve woodlands and streams
- Shared Values: Small shops, stores, and restaurants; walkability; natural features, farmland, having a "self-sufficient" township



Appendix C

VD & CC Survey Report

MONTGOMERY COUNTY BOARD OF COMMISSIONERS

VALERIE A. ARKOOSH, MD, MPH, CHAIR KENNETH E. LAWRENCE, JR., VICE CHAIR JOSEPH C. GALE, COMMISSIONER



MONTGOMERY COUNTY PLANNING COMMISSION

Montgomery County Courthouse • PO Box 311 Norristown, Pa 19404-0311 610-278-3722 FAX: 610-278-3941 • TDD: 610-631-1211 WWW.MONTCOPA.ORG

> SCOTT FRANCE, AICP EXECUTIVE DIRECTOR

September 21, 2021

SUBJECT: Village Development and Community Character Survey Results

TO: Boards and Committees of Lower Frederick Township

FROM: John Miklos, Community Planner

INTRODUCTION

This memo presents the results of the Village Development and Community Character survey, conducted over the summer of 2020 in support of the Lower Frederick 2040 comprehensive plan. After the COVID-19 outbreak interrupted comprehensive plan meetings, this survey was initiated as public outreach to engage residents in the comprehensive planning process and gauge public sentiment regarding land use patterns, residential development types, historic properties, and commercial development.

PROCESS

The survey was drafted by MCPC in collaboration with the township's comprehensive plan steering committee in the spring of 2020. The survey focused on topics to be covered by the Village Development and Community Character chapter of the comprehensive plan, including:

Preservation of natural resources and open space

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COMPREHENSIVE PLAN

- Community character in rural and village settings
- Siting and features of commercial and residential development
- Future Land Use and infrastructure planning
- Traditional Neighborhood Development
- Historic preservation and adaptive reuse

The survey was created on surveymonkey.com for online outreach, with printed copies available at the municipal hall. The survey was published in mid-July and announced to township residents through flyers mailed with public sewer bills, postcards mailed to households without public sewer service, and announcements on the township's website and Facebook page. The survey remained open and collected responses through the end of September.

RESULTS

In total, the survey collected 193 responses during its run from July 11 to September 30. Three of those responses were submitted using the printed version at the township office, with the other 190 responses collected through the web survey. Survey respondents identified themselves as residents of Lower Frederick Township in 188 of the completed surveys, the remainder of respondents either declined to provide that information or answered that they were not township residents. The number of responses from township residents is approximately equal to 10% of households in Lower Frederick (1,870 households in 2019 American Community Survey 5-year estimates).

Question 1: First, tell us a little about yourself. Please check all that apply:

- I am a resident of Lower Frederick Township 188 responses
- I work in Lower Frederick Township 5 responses
- I own a business in Lower Frederick Township 5 responses
- Other (Please specify) 1 response: "I own a business in Skippack Township"

This initial question provided the criteria for filtering responses and confirming respondents' residency in the township. The results given for the remainder of the survey questions are from respondents who reported being Lower Frederick residents.

Question 2: Listed below are the main elements of the "Enhance Village Areas" goal from the open house. Do you agree or disagree with this definition of "Enhance Village Areas"?

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
Reuse of historic buildings	119	55	9	2	3	188

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Storefront buildings close to the street	37	62	48	23	13	183
Homes in a variety of sizes	35	100	29	9	12	185
Sidewalks or other walking connections	93	57	18	11	9	188
Neighborhoods with smaller lots, near Zieglerville or Spring Mount	24	45	35	37	44	185

Using the answers given for question 6, the responses from this question can be grouped together by respondents living in the Future Growth Area (Zieglerville and Spring Mount) and those living elsewhere, in the Rural Resource Conservation Area.

Future Growth Area:

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
Reuse of historic buildings	66	22	8	1	1	98
Storefront buildings close to the street	21	32	26	9	7	95
Homes in a variety of sizes	20	46	20	5	6	97
Sidewalks or other walking connections	56	25	2	8	7	98
Neighborhoods with smaller lots, near Zieglerville or Spring Mount	14	20	23	18	21	96

Rural Resource Conservation Area:

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
Reuse of historic buildings	51	30	1	1	1	84
Storefront buildings close to the street	16	28	22	12	5	83
Homes in a variety of sizes	15	53	9	3	3	83
Sidewalks or other walking connections	36	31	14	2	1	84
Neighborhoods with smaller lots, near Zieglerville or Spring Mount	10	25	10	19	20	84

Question 3: In your own words, what does "Enhance Village Areas" mean to you?

This wordcloud was generated from the responses submitted for this question. The size of each word is proportional to its frequency among these responses:



This question received 150 responses:

?

A mix use area with attention to the historic qualities, walkable, focus on small business, eateries.

A more self efficient town setting.

A village. A walkable area of shops and stores. A grocery store within 15 minutes would be nice.

Add more walkability, business and living areas to the Spring Mount/Zeiglerville areas of the township. Connect the park and green space with sidewalks.

Add small stores or businesses with some smaller houses and some more greenery.

Aesthetically pleasing village with a variety of small businesses and homes.

aesthetics - trees, fascia of buildings, side walks, etc.

All of the above. It would be nice to have enhanced walking paths connecting areas of Lower Frederick to the Perkiomen Valley trail. We live less than a mile from the trail now but we have to drive and park at a trail head due to not having a walkable route. We'd also love to have more local businesses, similar to Skippack Village but smaller in scale, that are walkable as well.

An appropriate balance of light commercial and residential. This could mean multi-story with commercial on the ground floor and residential above. The community would be pedestrian-centered and there would be reasonable parking that both promotes walking and biking and allows for people beyond walking distance to drive to the village and park to enjoy its amenities.



As much undeveloped open space as possible, utilizing existing structures

Attract storefronts and restaurants to the area wile creating a walkable small town feel

Attractive Shopping areas with safety a top priority interspersed with homes ... all with easy access and ample parking.

Beautify existing structures

Beautify the town center: planters, flowers, grass, trees, and paved trails (with trees) for walking or biking to commercial establishments. Homes should not be cookie-cutters.

being able to walk about

Boutique shops, coffee shops, healthy dining options with a town square for special events (arts festivals, holiday celebrations, etc.)

Boutique shops, non chain restaurant(s), charming.

Bring character and charm to the area, renew any areas or buildings that need work. Some on Main Street seemed closed or not used. A community pool would also be great.

Bring more development to the area

build upon what we have

Clean up or reface older buildings to match the year they were built

Cluster of small homes with some stores nearby

Communal space, community garden, green space for bench, picnic area

Community areas easily accessible to all individuals regardless of physical abilities. Retail/eatery's that cater to all income levels and not just the elite

Connected walkable areas with some small businesses and a variety of home types.

Connected, small business shops that are easy to access

Covid has led to many folks taking to the streets to perform their stunts. Kids on hover boards & scooters pulling wagons. They need safe places to play using preserved green space! We are already up each others but at .43 acre.. So buy land and permanently preserve it for future generations.

Create a community feel - i.e. places where people can gather, shop, and eat.

Create a walkable/bikeable community with a mix of commercial and residential development. Wherever possible, zoning should encourage the re-use of existing structures. It would be great if the village environment allowed people to both live and work in the same community.

Cute areas where folks live, no pollution, no clutter

development for tax base

Development, with an eye toward commercial use.

Don't build strip malls. Area in front of old firehouse is nice

Easy accessible shops via various modes of safe transportation including bike and on foot.

emphasize walkable/bikeable living areas with small homes and/or townhomes near shops rather than expansive development with single family homes. Keep parking areas hidden to rear rather than creating the strip mall effect with parking in front.

Enable growth while maintaining quality of life for existing and new residents.

Enhance village areas should be repurposing existing structures, not demolishing green areas or building new shopping centers or stores.

Enhancing village areas means to reduce the drug and crime in our township to make it a safer place to live.

Finding ways to strengthen our economy while preserving the area

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fix up existing areas

Get rid of unsightly buildings that serve little purpose, and smooth the flow of traffic. Facilitate the addition of attractive buildings. Invite small business and restaurants through inviting walkable downtown.

Good public safety facilities centrally located, sidewalks, recreational areas, street lighting

Hopefully spruce up Main St. Schwenksville Upgrade rather than build

I have no idea

I have no idea what that means

I think it's important to support and encourage small businesses to open in existing buildings along our main streets. As with many small towns, too many of these beautiful structures are currently vacant and in need of some rehab. Providing them the means to occupy and fix up these buildings will be key to promoting a thriving Main St.

I understand this to mean that you want to commercialize those areas but keep a small town feeling them.

I would not call the township a village, unless you are referring to individual developments where you know most of your neighbors. A village, is a simpler, quieter place, with plenty of nature, of natural surroundings, forest, streams fields, open to the public. I stress the quiet, as many neighbors to not care, an think they can do what ever they want, like playing loud booming music daily. Law enforcement should have the ability to do something about it. I strongly encourage, consideration of adopting a policy like sower Salford township on noise control. http://salfordtownship.com/ uploads/Ordinance%20177%20 %20Noise.pdf

Improve and restore existing structures, as well as, expand to maintain character of area.

Improve areas to make them more comfortable to look at/be in.

Improve roads, side walks, and landscaping

Improve the appearance of current shops and buildings (create a common style or theme) allowwing for parking and traffic ease and control.

improve the existing village areas by using existing buildings, putting parking out of sight, and having walkable areas so residents and visitors can move on foot from one area to another, thereby reducing traffic.

Improve the quality and/or value of our 2 village areas. It does not necessarily mean to expand these areas, unless done in a quality way, and in a way that increases the value of these 2 village areas.

In my opinion I think area should look more desirable and bring something that would attract people to area to view as a community like a attraction not over crowding of more homes that over crowd area,

Increase number of small businesses that enhance quality of life for residents (restaurants, service oriented businesses).

Keep a small ton feel. Encourage small business. Do NOT encourage new housing with less then 2 acre lots, that are in an area where there is existing water and sewer. Building fo seniors.

Keep and respect the heritage along w/the OPEN space so beloved by the residents of this community!

Keeping neighborhoods SAFE, helping people stay connected in the community, welcoming businesses that are needed for daily life—but not to the point that allows commercial space to overwhelm the small town feel. Traffic should be a major consideration in all planning.

Keeping the atmosphere of the small town feeling without the commercialism of larger towns.

Keeping the circle with the current businesses is ok, but not further development

Limit commercial development in existing commercial areas and preserve other areas as residential only. Keep rural "feel" to commercial establishments and minimize signage, etc.

Main Street Fixed Up

Maintain architecturally interesting buildings and adapt to new uses. Decrease and discourage large corporation franchises such as WaWa and Dunkin donuts and encourage individual entrepreneurship such as Mr Lee's, and B-fit training studio. Improve walking safety for residents of village area.

Maintain common areas on a year around basis.



Maintain the look and feel of the original village with additional services and small scale retail to meet the day to day needs of those who live nearby.

Maintain the small town feel but bring needed commercial resources

Maintaining our neighborhoods through growing area and times

Maintaining the existing open feel of our community by restoring and reusing current buildings, and restriction of congested new developments. Maybe even providing tax exemptions for people to restore their properties. Also, restricting new developments to be built in a manner consistent with the spacing and lot sizes of our community.

make a more functional area/usage of the rural sections of the township

Make our community better, by improving history and nature while stopping large developments

Make stay a small town with some businesses to off-set taxes. More houses, mean more daily traffic and our area can't handle anymore!!!!

Make the village areas more accessible by putting in sidewalk and trails connecting various neighborhoods and key village areas.

Make them attractive and pedestrian-friendly.

making areas visitor friendly

Making things more walkable with sidewalks or trails, bring in small Businesses especially on main st through schwenks-

Means quaint areas that are not over crowded with building. No more than half open space and half building.

Means to revitalize the village areas that we have in place now

Modernize and improve upon while maintaining village status charm

More construction

More of a smalltown community feel w/ parks, farmers markets, coffee shop. NO big chains.

More open space, not development

More shopping

More store offerings

More stores

More unwanted traffic.

Mystical beings in the enchanted village.

N/A

N/a

Neighborhoods with associations (HOA) with much housing in small divided up lots.

No idea, honestly.

no more house development projects

No urban sprawl or mini malls but rather small shops clustered together like the shops in Zieglerville around "Rita's Ice", enhanced with ponds, walkways and preserved open areas.

not building postage stamp homes on open space that should be maintained as open space. Reuse what we have

Our main concern is lot sizes for homes. We do not want this area to be high density housing, but would prefer slightly larger lot sizes and open fields/land. Small local businesses, such as Skippack, would have a nice appeal.

Outgrowth from the existing towns and upkeep/improvements of the existing buildings

Overdevelopment of rural areas.

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people learning to take care of their properties - have ordinances that require that.

Poorly built homes, sold for outrageous prices to people who work in the city

Quaint Cozy Village like Skippack

Quaint, subtle development, but has the potential to draw many crowds, like the New Hope area.

Reasonable use of existing structures to impart character, Desire to experience and adds value to the community in both dollars and quality of life.

Renovate, accent with new construction existing buildings. Look to Skippack for what's working; Schewenksville for what's not. Take advantage of natural resources: in Spring Mount, the trail and Perkiomen Creek and encourage related businesses .. bike and canoe rentals, for instance.

Restaurants and businesses that can be reached safely by walking or biking.

Restore and improve

Retail businesses concentrated in one area with homes on smaller lots around the perimeter.

Revitalize center town areas. Bring in jobs/businesses.

Revitalize Main St and bring more businesses

Revitalize, Restaurants, Boutique Retail

Sense of community

Skippack like

Skippack Village is the best analogy

small town friendly feeling

Small town look and feel

Small Town Main Street

Small village of homes with walking ability to get to amenities

smaller business areas

Smaller mixed residential and commercial communities where amenities are walkable/bike-able for the residents.

something extra

Something like downtown new hope pa

Street lighting and sidewalks needed

strip open land, overcrowd the town with houses and stores.

Taking existing areas and improve on these instead of creating new areas of development and thus using up valuable open space. Being creative with the historic areas so as to preserve them and add new life our area.

That the village be accessible and comfortable for pedestrians and that the shops cater to a friendly atmosphere that encourages socialization. In short, cafes shops that are attractive to pedestrian traffic.

The Main Street of Schwenksville completely lacks character and charm. I think it's "look" is actually an embarrassment. It would be so nice to see it as a quaint, historic, and still progressive town.

The preservation of historical buildings for the benefit of the community.

This term means to me that there is a convenient way of getting around and living in a small community without the over population and problems associated with a city. In other words it is like a pleasant country community.

Thoughtfully integrating local small business

Tight community feeling with small businesses supported by residents and on a walkable main street.

To add to the Village area with new businesses and have the buildings be tastefully built to blend with the existing, also allowing residential apartments over such businesses



To me it means provide attractive reasons for visitors to come to the area. I would see this as having a local coffee house and a community feel, similar to what Pottstown is doing (and ideally like a Skippack feel).

To restore what already exist.

Too flowery to mean much. However, the village I value is diverse, mosaic, and created by the people who live or operate in the community. It is self-reliant. The "village" a developer builds today is sterile, uniform, and trendy. It is self-serving. Zieglerville (Hotel Almedia, Fowler's Flowers, Annie Sez) is crumbling to the new definition with every new commercial building (CVS, Wawa, Dunkin Donuts). There is nothing enhanced about it.

Too many homes

Town Square atmosphere, shops, restaurants, park area, community gatherings

Traffic nightmare. We do not need any more houses or development.

Update buildings, encourage small businesses

upgrade and highlight village areas as a focal point for the people that live in that area.

Upgrading areas that are close to the main hub of town, but not directly in town

vibrant downtown business district, not weedy vacant lots

Village areas planned and developed with a look reflecting a small town rural feel. The villages would include pedestrian connections within and to the rural surrounding landscape, commercial establishments on smaller scale, green-scaping, and the preservation of the historic roots of Lower Frederick Township as much as possible.

Village in the village. Not outside town limits

Walkable

Walkable areas with small business but not impacting the overall rural nature of the township. DO NOT want this to be like Harleysville, no offense to that town.

Walkable shopping

Walkable, pedestrian-friendly environments that retain historic character and deprioritize large private lots.

Walkablity & small businesses near residences. Plenty of green space.

We are in favor of maintaining Lower Frederick Township as a rural township. I do not believe we must stuff every acre of ground with homes. We have many animal habitats surrounding LFT. Maintain a balance of nature and rural. No large developments are needed or necessary.

We need to bring local businesses that are easily accessible.

Ouestion 4: Listed below are the main elements of the "Preserve Natural Areas and Open Space" goal from the open house. Do you agree or disagree with this definition of "Preserve Natural Areas and Open Space"?

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
Preserve farmland	132	41	12	1	1	187
Save open spaces for passive recreation	121	46	12	5	4	188
Connect open spaces with trails	100	48	17	12	11	188
Preserve woodlands and trails	157	25	4	1	1	188
Protect local streams	170	16	1	0	1	188

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Using the answers given for question 6, the responses from this question can be grouped together by respondents living in the Future Growth Area (Zieglerville and Spring Mount) and those living elsewhere, in the Rural Resource Conservation Area.

Future Growth Area:

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
Preserve farmland	66	22	8	1	1	98
Save open spaces for passive recreation	62	22	8	3	3	98
Connect open spaces with trails	52	24	10	8	4	98
Preserve woodlands and trails	81	14	2	0	1	98
Protect local streams	83	13	1	0	1	98

Rural Resource Conservation Area:

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
Preserve farmland	61	18	4	0	0	83
Save open spaces for passive recreation	57	21	4	1	1	84
Connect open spaces with trails	46	22	7	3	6	84
Preserve woodlands and trails	71	10	2	1	0	84
Protect local streams	81	3	0	0	0	84



Question 5: In your own words, what does "Preserve Natural Areas and Open Space" mean to you?

This wordcloud was generated from the responses submitted for this question. The size of each word is proportional to its frequency among these responses:

This question received 151 responses:



"Just leave it alone"! as nature has created it.

A quiet safe rural area to raise a family

A significant and committed effort to identify natural areas and open spaces in Lower Frederick that should be preserved and and a financial strategy to achieve those preservation goals.

Allow a respite from housing and business construction.

areas for outdoor activities, organic farming

avoiding commercialism and maintaining the natural

Clean air.

development to a minimum (parking lots are enough), keep it clean

Do not allow large muti home developments in our community.

Do not build on open areas...leave them natural

Do not build on open space and preserve the beauty of the green surroundings with plants and wildlife.

Do not build on them. Keep them open for activities that do not degrade or alter the land or waterways.

do not develop these areas

Do not sell to developers

Don't allow new housing developments.

Don't build huge developments on open space - use it for trails and other recreational uses for Lower Frederick residents

Exactly as listed - Preserve woodlands, trails, local waterways, and put in trails that connect open space. There should be very few new housing developments, and those that are built should be hidden behind a buffer of trees - old-growth trees, not trees newly planted. Open space should be preserved.

Exactly what it says. Stop building on every open space there is. All the houses going in along Zieglerville Rd when there are so many townhouses here so close together now!

Exactly what it says...and because we can't preserve everything, I think it's important to connect the open spaces with trails so that open spaces feel more contiguous and expansive and so they can be used by the public.

Exactly what was described above.

Guard our wildlife while facilitating interaction through trails, hiking and biking paths, etc.

Healthy Open Spaces

Honoring Nature and allowing people to enjoy it with respect.

I disturbed nature that can be used for recreation and helps with stormwater management and biodiversity.

I love that our area has so many natural space open to the public. I think the most important thing is to keep these spaces clean and accessible so people can continue to enjoy them for years to come.

I think that we can encourage larger lot sizes when having development occur... I do not believe that we should create areas in which we will need more staff to maintain these areas.

It is a strategy that respects nature. It doesn't, however, mean that the public must buy up all the land. If a community has a vision to respect and honor natural areas and open space, its landowners shall take responsibility for their role in its preservation. Planners shall incentivize and attract landowners who do that and detract speculators and others who view land as a retirement strategy through subdivision.

It means just what the above sentences says. Let's leave this area open without cluttering with developments.

It means leave untouched and unsullied. Do not compromise integrity of those spaces with newly built structures that could impact later with run off or erosion

It means maintaining it in a condition in which wildlife and people can coexist and which minimizes the impact of human activity on the environment.

It means that you need to keep the open land open and protect it from being built on. No more developments.

It means to not build too much Or too close new houses or buildings and not ruin forests, trails, fields, rivers or streams etc

It means to protect our open spaces, more access to trails and the creek. I think that a boat launch at FOY park would be amazing.

Just that. By preserving natural areas and open space helps to protect wildlife and pollinators.

just what it says Preserve Natural Areas and Open Space

Keep areas natural and free from development

Keep connections with the natural environment, not built-up/developed places

Keep development to a small envelope so that more open space can be preserved.

Keep from development and protect the natural woods and open fields for the future



Keep it open and available to use or preserved without buildings or homes.

Keep local streams clean and land green.

Keep Lower Frederick as rural as possible.

Keep making these spaces more accessible, and setting guidelines to make sure they remain

Keep natural and open spaces as they currently are.

Keep Schwenksville a small hometown and the beautiful community it is.

Keep the "rural" vibe.

Keep the area environmental friendly. For trail, parks, and farmland.

Keep the beautiful acreage, strongly limit development, use what is already there DO NOT recreate brick, mortar, steel, stone or continue to add excess homes and roads. Fix and or utilize what is available

Keep the land free from development.

Keep them natural but accessible via interconnected trails. Pavement not preferred

Keep things as they are in a state where you actually have something to look at other than housing all over the place and your able to go out and see nature.

Keep what we have. Not buying additional land to help people's property values and views

Keeping our beautiful natural areas as close as they are today, avoiding crowds of people and traffic while enjoying nature and trails.

Keeping the character of our town by avoiding the big strip malls and housing developments.

Keeping the wooded and natural estuaries, fields and farms in tact without large building lots and develop-

Keeping things clean and green

Keeping trails

Land for were animals may roam for food and water without, being forced out to smaller locations, preserving the open fields from construction.

Lean on developers to preserve trees and woodlots; discourage scouring sites to maximize numbers of housing units. What happened at the most recent development on Zieglerville Road is a travesty! Protest working farms from encroaching development and the protest whinings that always come from newbies.

Leave current natural areas and open space alone. No development whatsoever.

Leave it alone!

Leave it be ...keep the open space OPEN!!

Leave natural habitat natural

Leave nature alone, no building

Leave open area, farms alone!

Leave open space alone and undeveloped. The more contiguous undeveloped open space exists, the more the ecosystem flourishes

leave our natural settings as they are unless there is a risk to human or wildlife

Leave our township more of the rural character than be built up with commercial homes and stores

Leave the areas as is.

Leave the natural land in the form it is, the way The Good Lord intended it to be.

Leaving it alone

Leaving our area as is. I don't want developments.

Less population and rural areas

Let God & mother nature do what they do best.

Limit development. Provide current land owners financial benefit to keep their land, rather than sell to developers.

Limiting. Human effect may on the environment and leaving the natural surrounding how they are

Little to no man made items in area

Lower Frederick Township is unique in many ways - geologically, woodlands, streams and vistas. Where practicable, we should encourage concentrated development so that we can maximize the retention of open space. Also, where possible, preservation should permit public access (trails, etc.). The township could benefit from having a riparian buffer ordinance for new development. Recent extreme flooding events highlight the importance of maintaining our riparian corridors.

maintain a rural status, prevent developers from striping the land. Also prevents over crowding the town and increased traffic.

Maintain large undeveloped areas to support wild life and existing old growth woodlands

Maintain our dedicated park and open spaces and connect them with trails where possible.

Maintaining the rural character of our town while also protecting the natural areas, ie streams and woods. This will also help to keep flooding from getting worse.

make sure what we have doesn't get destroyed

Minimize human interruption of natural space and open areas, keeping these intact to ensure plant and animal habitats.

More trails! Was excited when the Swamp Creek trail was proposed a few years ago. Didn't seem to go anywhere. Any town is enhanced by more trails connecting natural environments. The Perkiomen Trail is a treasure! Let's build on it and make our township more walkable. In the age of COVID-19, we need it more than ever!

N/a

Natural areas that residents can enjoy and not destroy.

Natural areas with passive recreation opportunities

Natural spaces, not manufactured

No "cookie cutter" neighborhoods. If any townhouse developments being created, do so with class and polish. Have open spaces and breaks in the rows of houses. Save any large trees and streams.

No building or public access

No building, except for sports rest rooms. Trails and open areas to all to enjoy.

No development -- no infringement. Keep nature as it is as much as possible.

No development of farms

No development or disruption of the woods, fields, waterways etc. While maintaining their availability.

No development. No maintenance. No trails that could attract the masses.



No development...no pavement for paths. Keep things in a natural state that has minimal effect on the ecosystem

No developments or commercial structures

no high density housing areas; vigilance to make sure that flood plains and creeks are not developed or impacted so that there is increased runoff and pollution issues; we need to be VERY mindful of development that increases flooding issues

no large building developements

No more building or adding trails.

No more developments!!! I'd really be sad to see what is happening to Royersford's open land, happen to this area. In my opinion, people move up this way to take advantage of nature. We really don't want to see McMansions or Micro mansions flood this area like it's in Royersford...

No more trails! Keep the current untouched areas untouched!

Not allow actions that will pollute streams, take away habitat of flora and fauna, and maintain wooded areas.

Not cutting down forests to bud another development.

not subject to development. leave it alone.

Open spaces and trails are highly useful for residents from a mental and physical health standpoint. This should always be a consideration.

passive recreation, walking trails

Perkiomenvtrail and main st

Position Lower Frederick to be a county/state/national leader in preserving natural and open areas. Implement a tax for this purpose, more than what is being proposed, to help acquire and maintain these spaces. We are unique and have much to be proud of. Having preserved and open space increases the desirability of properties here, and thus increases the value. It means parks, trails, and other ways that people can experience and appreciate nature, and to leave a legacy for future generations.

Precisely as you have it in the 5 points above with emphasis on passive recreation. Upper Salford Park, for example, has too much active recreation.

Preservation means to take every measure possible to ensure the land has little to no future impact from development. This can take place using a variety of measures and means.

Preservation of farmland pasture, woodlands, wetlands, and streams.

Preserve as much of the current farmlands as possible and open space. Moved here 51 years ago because of the open space and farmland!

Preserve open fields and wooded areas - keep development minimal and consolidated.

Preserve the balance of animal habitats and housing by limiting developments or zoning to 1-2 acre plots (nothing less). There is no reasonable need to put houses so close together. There is no need for quarter or half acre lots or townhouses.

preserve the existing land the way it is now

Preserve, maintain and support a long term commitment for future open space. No selling or otherwise transferring any natural area or open space without very strong public support.

Preserved natural areas means forested areas remain forests but trees cared for...open space planted with wild flowers, some areas mown.

Preserving Natural Areas and Open Spaces means protecting land, trees, plants, animals, insects, etc. that provide sustenance and life to residents of Lower Frederick Township.

Preserving nature at all times while balancing residents' enjoyment of these areas.

Pretty much what it says: Nature. So, woodland and woodland walking trails. Meadows. Wildlife habitat. Farmland is really not NATURE at all but a human imposed mono-culture. Farmland spared from development should be allowed or even encouraged to revert to a natural state providing habitat for native species of flora and fauna.

Prevent development of existing natural and open spaces and increase connectivity for passive recreation

Prevent private buildings, allow use for all to enjoy nature

Protect land from urban sprawl.

protect natural areas from home development and usage for walks, animals etc

Protect our natural environment for generations to enjoy

Protect the natural beauty of our area. Promote the establishment of the Sunrise Trail.

Protecting the environment

Public infringement of private lands.

Responsible preservation and stewardship of our natural areas for the benefit of all of us and our posterity.

restricting development in open space areas. Keep streams and woodlands natural.

Retain natural resources in as pristine state as possible, protect critical habitats, create and maintain migration pathways for wildlife. Provide healthy outdoor activities for citizens.

Retain natural resources in their original form and function to allow taxpayers to enjoy the natural beauty, to provide healthy recreation activities for all forms of healthful recreation from very active to the handicapped.

Return it to its natural state. Consider long term use and have reserve funding to fix problems you will create in future. You allow development and don't fix drainage issues until a problem occurs. PLAN AHEAD! I've been around a long time. Retired from PECO Energy. I've seen what happens at township meetings with developers and contractors versus the good of the neighborhood. That has to stop. Someone has to voice our opinions.

Rural area

Save open land and not build villages

Stop building houses. If taxes are used to purchase, the land should be available to all, not privately owned.

Stop pollution, preserve streams, woods, no trash

The ability to farm your own land to hunt where you need walk and observe nature in wooded areas and not formal trails

The natural areas and open space are among the top three reasons we chose to live in Lower Frederick. This is a top priority for our family.

The same as all the points above.

This is what will separate us from the likes of Lansdale. The residents of LFT choose to live here because we'd prefer to see green. Say no to developers!

This means to truly protect the land by not over developing it, not altering waterways, protecting what God has put here.

To keep and maintain

Undeveloped open space. That is why my family and I live hear, to be in the country, enjoy the open space, care for the environment.



Unlike a city where they add open space to a crowded environment, preserving open space means adding carefully planned small communities and shopping to the already established open spaces.

Usable nature space that is easily accessed as well as open farm land that remains. Nature space is natural and open to all ages

Woodland and open spaces connected by accessible, well-maintained trails.

Question 6: Based on the map above, where do you live?

For this question, respondents were given a map of future land use areas from the Central Perkiomen Valley Regional Comprehensive Plan to reference (right). Each of these areas roughly correspond with the township's two census blocks and have similarly-sized populations, as reported in recent American Community Surveys from the US Census Bureau.

This question offers insight into the geographic distribution of respondents and the survey's coverage of the township's residents. The responses from this question were used for additional filtering for later questions that pertained to planning issues or development strategies that differ in each part of the township.



In the Future Growth or Borough Conservation Areas	In the Rural Resource Conservation Area		I prefer not to answer	Total
98	86	0	4	188

Question 7: Please order the following conservation subjects from highest to lowest priority (1=high, 6=low):

	1	2	3	4	5	6	Total
Farmland	37	30	20	43	39	13	182
Historic sites or buildings	16	13	16	26	46	67	184
Wetlands	16	27	43	28	28	41	183
Streams	44	56	37	34	8	4	183
Scenic views	17	20	20	30	43	53	183
Woodlands	58	40	46	20	17	4	185

Question 8: If you have additional comments regarding conservation, please share them here:

This wordcloud was generated from the responses submitted for this question. The size of each word is proportional to its frequency among these responses:



This question received 90 responses:

ALL of these conservation subjects (other than historical sites/buildings) are critical to a healthy environment. The air we breath, the water we drink. No one line item can take priority over another as they are all intertwined.

All of these really are a priority in my opinion, so #5 and #6 don't mean they're not important to us, it's just we had to pick.

Animal life is amazing in Lower Frederick and can be its own learning center if family homes are on shared land. There is no need to overtake land - away from animal habitats.

Be aware of high water areas/road drainage as flooding seems to be more prevalent.

Been living in our home for a few decades and with the rate of new construction that has been going on. There has been no tax breaks for the residences of the township.

Conservation implies the overt act to conserve....conserve a resource that can't be duplicated.....let us not be guided by creating profits for builders who don't live with us. Thus ban bulldozers...lol..... keep our area green while providing reasin#ble community growth that doesn't over burden the land nor our budgets...... any growth must never raise taxes for our future to landowners. So do it judiciously!

Delighted to see so much of the township classified as Rural Resource Conservation. Troubled the Future Growth Area includes the Goshenhoppen Creek valley off Route 29. Its scenic beauty and steep slopes in some areas, its role in Perkiomen Creek watershed protection cry for this area to be protected. It has come so far from the running open sewer it was when we moved here 43 years ago.

Difficult to pick which ones are at the top vs at the bottom. # 6 does not indicate it's not important

Don't raise taxes



Ecology protection should be the primary driver of this prioritization.

From what I understand, someone has bought Fowler's flower shop and house and is restoring it. Beautiful. vs CVS tearing down a 200 yr old saddle shop in 45 minutes which Dunkin Donuts could have restored and converted into it's business. It would have been a win'win situation. Think outside the box...save old buildings on the outside and convert them into duplexes, twin hses, condos, apts. on the inside. Saves the historic look with increase in tax revenues.

Future growth requires better infrastructure, Roads are already to small and hard to navigate, especially left hand turns causing bottle necks. This needs to be addressed for future growth, the questions posed do not offer support on this issue

Hard to rank without context. Circumstance may alter ranking. All are important.

Highly value the Perkiomen trail system.

I am not familiar with the historic buildings?

I feel like we need sewers since many systems are failing and with new constraints on things with well distances and septic system tests, it is harder to pass inspections.

I hope when planning for area at corner of Zieglerville Rd and Schwenk Rd they will plant native and try to mimic nature by planting native tress and shrubs. So much natural mature wooded area was destroyed to build the homes along Zieglerville Rd. Nature does not live over" there" and we live over "here". We live in nature. I applaud the parks and rec team efforts in this area such as in front of CVS.

I live in a area now where every once in a while I look out my window and I see wild life which is much more attractive than just cars and over populated areas and noisy smelly pump station.

I prefer not to order the importance on the above questions because I feel all these places are important for

I strongly disagree with question 7. Prioritization should not be done by 'type'. Each decision is circumstantial. A decision should be made on a case by case basis, depending on the particular circumstances.

I think maintaining the rural atmosphere of our community is key to it's appeal and charm.

I think we need to be careful about what we expect from individual land owners and developers.

I would like to see our water cleaner...the upstream water.

If we over develop now we can never restore our open areas. Be very careful what is approved.

Instill in residents the value of taking care of their property and conservation will happen

It would be nice to be able to preserve everything, but if one has to prioritize, ensuring clean water is most important to me.

It would be nice to keep the rural resource conservation areas as such.

Keep our township rural and free from more developments. That is the main reason we moved here!

Keep the charm & rural essence of what we currently have.

Keep the township rural as possible, we have enough bumper to bumper traffic now

Let's enhance what we have now prior to expanding the conservation areas. Put in sidewalks and lighting in the townhouses. Connect it to the trail. Enhance parks.

LFT needs to do a better job of enforcing existing zonings and permitting requirements. Lot set-backs and building restrictions are not being honored allowing for higher building density, more runoff and devalues the neighboring properties.

limit new construction, limit number of retail.

Lower Frederick Township should do its utmost to preserve and protect the rural status that it enjoys.

Main Street in Schwenksville is already a challenge. Creating an atmosphere that generates more traffic to our area is a definite concern.

Make every effort to increase the school size on existing school property instead of taking more farmland and open space when the population increases.

More aggressive measures must be taken to include all current residents and their opinions in the building up of our open spaces. Keep ALL current residents apprised BEFORE decisions made.

Most of Lower Frederick belongs to private tax paying citizens and it is therefore up to them what to do with it.

n

N/a

n/a

N/A

N/a

n/a

Na

Never allow any building in wetland areas

NO HIGH DENSITY HOUSING!

No more building or trails

no more developments untill we get better roads to move traffic, and have transportation orther then automible.

No.

None

None

None

None

None

Not sure what the visualizing 115 homes graphic was supposed to serve. An affordable single home on two acres is extremely difficult to find, yet attracts the kind of people who value the character of LFT. Of course, keep the density near the village.

Open space with woodlands and streams creates a healthy atmosphere for humans.

Open undeveloped space conservation should be paramount in all future planning

Our roads can't handle more development. And we can't take back a farm after it's developed.

Our stream corridors and remaining woodlands deserve the highest priority for preservation. These two elements of the natural environment need to be present in ample amounts in order balance the human need to develop and grow.

Please do not put a development on Gerloff Rd; Delphi Rd. Yerger Rd; Highland Rd; Ryanford Rd.; Creekside Way; and nearby surrounding roads. The beauty of this area is priceless. This beauty and solitude should not be taken away.

Please don't make this area a high density, highly populated, noisy area, it would ruin not only the land but also the wonderful peaceful living we have now.



Please don't put a pump station in my development! Cul-de-sac on Berger road!!

Prefer to keep the rural nature of the township. There are many resources close enough (food, gas, healthcare). Many jobs available within a commutable distance (30 min). No need to change the character of our area for these reasons:

Preserve the best, zone the rest

Preserving habitats is important to me

Protecting Streams, Wetlands and Woodlands are equally important.

Save as much as possible.

Scenic views are a matter of opinion.

Scenic views can be subjective. To me, scenic views means woodlands, streams, and farm land.

Sidewalks built for existing housing to connect to the perkiomen trail.

Slower pace, fewer crowds, less crime.

STOP building up Spring Mount!!!!

Storm drains are dumped into existing streams causing increased flooding in areas where flooding was rare.

That was a very difficult list to prioritize.

The health of wetlands, streams, and forests are critical to our health. Farm land is critical to our food sources. Historic and Scenic areas are critical to our sense of place and protection or development of that.

the local roads can not handle the traffic that is currently on the them. no need to create more development.

The Perkiomen Creek is an incredible natural resource for this area and we are so fortunate to live here along it. It should be preserved and maintained as a top priority for the Township.

The townships goal should be preservation of natural areas. We don't want to become a high density housing area like Perkiomen Township.

To support natural areas lacking access to municipal sewer, we need to tighten our regulation of on site sewer systems. Not just construction, but also routine maintenance and upgrades. For those of us who enjoy living in these areas, it's just a cost of living in this location, and we ALL need to confront that cost. If we're going to live here, we have an obligation to conserve the natural area around us. The Township should hold us to that.

We are rapidly destroying our native habitats for animals and plants by allowing developers to destroy natural habitats. Unless we consider this goal during the development process, we will continue to denigrate our natural resources. Both goals are compatible but only if we work as partners with developers, farmers, and residents to educate about options on their land.

We don't have to grow. Let it be. Let nature have it's land and stop developing.

We have a beautiful area. And with the population growth, it takes extra effort and planning to preserve its beauty. Thank you for conducting the survey.

We ranked "Streams" as #1, because we believe that our priority to ourselves and future generations must be fresh, clean water.

Wildlife habitat! The township has allowed the cut down of old growth trees and current animal thruways. Take into account ecological impacts to birds & animals and all wildlife needs consideration. ie: vultures, hawks, owls, bats, rabbits foxes coyotes wolves bear etc.

Woodlands should be preserved before farmland. The impact of removing woodlands for development is larger and harder to recover from than developing farmland.

Would like for the area not to become over built with townhouses. Please include ranch homes too. keep distance between the homes.

Would like to see buildings repurposed for small businesses instead of chains. I do not want to see housing developments or townhouses. Our roads can't handle the traffic as is. Some roads in this area are considered state roads and receive very little attention and care as it is. I'd prefer to see people come to Lower Frederick to shop and enjoy restaurants and enjoy the open spaces, but not live here in crowded developments that are poorly constructed.

You state that over the next 20 years 115 new residences will likely be added in Lower Frederick. My preference is that none will be added so we can retain Lower Frederick as it is. My sense is that most residents will agree with that - as little change as possible and, definitely, no expansion of the public sewer system.

Question 9: Do you agree or disagree with the following: Lower Frederick should continue to encourage future development in the Future Growth Area

Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
25	53	28	40	41	187

All 98 respondents living in the Future Growth Area, and all 84 respondents from the Rural Resource Conservation Area answered this question. Respondents from the Rural Resource Conservation Area expressed stronger agreement with this statement than the more ambivalent response from Future Growth Area respondents:

Future Growth Area:

Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
13	21	16	24	24	98

Rural Resource Conservation Area:

Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Total
12	32	11	15	14	84



Question 10: Additional smaller-scale commercial development in village areas should be a _____ for future development.

High	Medium	Low	Total
Priority	Priority	Priority	
39	84	65	188

Respondents from the Future Growth Area and Rural Resource Conservation Area responded similarly to this question:

Future Growth Area:

High	Medium	Low	Total
Priority	Priority	Priority	
22	42	34	98

Rural Resource Conservation Area:

High	Medium	Low	Total
Priority	Priority	Priority	
17	39	28	84

Question 11: In each village area, how would you rate the importance of additional commercial development?

	Higher Priority For Commercial Development	Medium Priority For Commercial Development	Lower Priority For Commercial Development	Total
Spring Mount	18	53	116	187
Zieglerville	57	57	73	187
Delphi	22	71	94	187

Respondents from the Future Growth Area and Rural Resource Conservation Area responded similarly to this question, favoring Zieglerville for commercial development:

Future Growth Area:

	Higher Priority For Commercial Development	Medium Priority For Commercial Development	Lower Priority For Commercial Development	Total
Spring Mount	11	22	65	98
Zieglerville	31	29	38	98
Delphi	13	36	49	98

Rural Resource Conservation Area:

	Higher Priority For Commercial Development	Medium Priority For Commercial Development	Lower Priority For Commercial Development	Total
Spring Mount	7	30	47	84
Zieglerville	26	27	31	84
Delphi	9	34	41	84

Question 12: Please order the following list of possible features of new development from highest to lowest priority (1=high, 5=low):

	1	2	3	4	5	Total
Sidewalks or paths for connectivity and safety	48	28	81	21	5	183
Parks or recreation areas	17	99	36	18	14	184
Through-streets for access and connectivity	6	12	23	49	91	181
Natural open spaces	109	24	20	24	10	187
Pedestrian lighting	7	22	26	67	60	182

Question 13: If you have additional comments regarding development features, please share them here:

This wordcloud was generated from the responses submitted for this question. The size of each word is proportional to its frequency among these responses:





This question received 74 responses:

Again, look to Skippack Village: is has sidewalks where the people need them..where they shop. Not to take a few long distances from home to shop. Most will drive anyway. The LAST thing we need in the Zieglerville round-about are is more light pollution!

Again, please dont ruin this beautiful peaceful quiet area.

Against developing due to the increase in traffic.

Another concern is light and noise pollution. Pedestrian lighting and businesses that promote late night night life are not desirable.

Any development should maintain a similar building style to surrounding structures.

Any lighting considered should follow the guidance of the International Dark Sky Association

As mentioned above houses tend to be built closer to the main highways passing through the villages. I think this makes it difficult in the future to widen or improve existing roads as development brings more traffic to the area. Think this building code should be re-thought!

Brings in a larger tax base

Can the township have the position of "no development" whatsoever?

Commercial development will NOT WORK on 73/29 in Lower Frederick Twp. because of all the huge strip malls with in a 10 miles radius of the twp. People want 1 stop shop and could not be bothered to make several stops at specialty stores. You should concentrate on residential development behind these main sts. The circle has worked beautifully with the 3 main stores around it, but that is as far as it should go. People basically just drive through this area on their way to another destination. Small business has not worked in this area for at least 20yrs. For example-Bergey Chevolet rarely had any customers in its front sales area; the service area kept them going, and now Sacks uses it for parking and storage. Leidy's hardware store is from the past and they only have a few customers/day. Reiter's garage was a perfect small business because they had been at the school house for many years. They were lucky that they were able to get another small private business in their building, plus the apt upstairs to keep the schoolhouse intact. Little's has been in place for many years and has pick up/drop services so it works.

Continuing to encourage development by small and local businesses should be prioritized.

Could there be other spots to get on the perk trail? It would be nice if some of the older historic buildings could be fixed up. I am thinking of the buildings along main St Schwenksville.

Development is great, but can the area handle the traffic?

Development should be held to current zoning or increases to 1 acre lot minimum

Developments should"blend" with the rural feel.

Do

Establishing connectivity via sidewalks/paths and through-streets are of equal importance.

Facades of building should be uniform style

I agree that small businesses should be expanded, but do not like the idea of clustered housing. Housing with at least 1 third of an acre would be more appealing

I am strongly opposed to further development on the open space near Little's

I feel like this question is leading me down a road I don't agree with. I don't want change; I don't want a town look. I want the rural character we have NOW - no sidewalks, but instead, trails. NO street lights. NO additional roads.

I hope that future development follows the current rules/zoning. No overlays. No "hardships" that aren't really hardships.

I love the country living feeling here as opposed to city life but I don't think sidewalks and lighting should be a priority.

I would love to see commercial development happen without it being Dunkin Donuts, Starbucks, Target, or Fast Food. We would love to see small business thrive. Royersford is really a prime example of a town that has a ton of potential with a brewery (Tuned Up), coffee house, ice cream shop, etc. If it's possible to develop and enhance without it becoming a strip mall, we're all for that. We're also very much for adding sidewalks from residential neighborhoods to the trail.

I would prefer to see development AWAY from Rts 29 and 73 so that they remain arteries for "through traffic". To access shops like the ones around Rita's Ice you have to get off Rt 29/73 and drive down a short access road so that shoppers are away from the noise and stink of the major roads - I like this model of development if we are to have it.

If any development in this area occurs, commercially, would like to have another dining option.

Keep it rural!

Large building lots without the high density.

Light pollution is an enemy of a rural environment.

Lighting is pollution and thus should be directional and carefully installed. It also enhances character when done right.

Limit development. Maintain large lot sizes for future homes. Limit commercial properties.

Lower Frederick needs to remain rural as possible. Route 29 through Schwenksville can not handle anymore traffic and our back roads can not handle traffic trying to avoid that area. If land is developed into homes it needs to be more then 2 acres a home not like that awful development that was just allowed on zieglerville road. The homes are ugly boxes on the crazy small lots.

Lower Frederick should try to obtain open space easements wherever viable. I am in favor of an open space fund.

Maintain rural areas with natural habitats. Rebuild and rework Zieglerville with the empty buildings along Route 29 and add smaller businesses with sidewalks using town-like settings.

Make sure the developers put in adequate stormwater management.

Minimize light pollution as much as possible.

n

n/a

N/A

N/a n/a

Na

Need to keep light pollution at a minimum. we are losing our dark skies. Change law in township requiring certain types of lighting. I don't need anymore LEDs blinding me.

No more parks, we enough

No new buildings.

No.

None



None

None

None

None at this time

Our police do not enforce speed limits throughout tour township and in our communities adding more roads is definitely not a priority

Our zoning, SALDO, CPVRPC Comp. Plan, and the Township associated plans all need to align, be kept updated, and be enforced.

Parking should not be the dominant feature of new commercial development. The business, in attractive structures, should be the prominent feature with adequate parking as less prominent feature.

Parks and open spaces should be interchangeable in my opinion.

Pedestrian crossing signs, water fountain or a rolling marble ball in the middle of traffic circle

Please do not bring in tacky buildings. Continue to bring in buildings that conform to the buildings that are currently at Zieglerville central. Do not over-build. keep the integrity of the area.

Please do not re-zone existing lots so people can subdivide and have more houses built

Please no high end commercial- stick with building the beautiful unique character that we could have- definitely "redo" Main Street in Schwenksville.

roadways very poor, dangerous abandon houses in township, water supply system piping extremely old and constantly rupturing and providing dirty muddy water.

Route 29 that travels through Zieglerville already has high traffic volume. Original Village Mixed Use was not supposed to increase vehicle travel to the area. However WaWa and CVS and Dunkin Donuts have now been allowed in the Zieglerville Village area. Zieglerville does not have to continue to look like every other "developed" place in the US. Encourage small commercial use or continued dwelling in the brick and wood homes that already line the village. Discourage tearing down structures to develop mixed use.

stop developing this beautiful re.gion for your gains

Stop pushing for development! Go back to one of the first questions and focus on RETAINING our rural and historic character. ENHANCE only what we already have in the 2 villages. Delphi should not be included in the scope of village development. Leave it alone.

There is a great deal of space around Zeiglerville that could allow the ville]age to expand and still be walkable between homes and businesses.

Walkable and pedestrian scale

We already have several nice parks, so there is little to no development there Dash just improvement.

We do not support commercial development in Lower Frederick Township. Everything we need is already available here.

We don't need more roads

We need to invest in lighting and safety in the townhouse community. Also need to connect to the trails and community shopping.

Why don't we merge municipalities with Schwenksville and create a main street where it already exists

why isn't Schwenksville Borough included in the development plans? Wawa in Z'ville killed the only store/gas station, and the main street is blighted

Would love a community pool.

Question 14: The following are some of the common features of Traditional Neighborhood Development. Please order them from highest to lowest priority for Lower Frederick (1=high, 6=low):

	1	2	3	4	5	6	Total
Development with a variety of housing types	49	22	11	24	22	42	170
Streets designed for low speeds and include sidewalks	54	44	30	16	19	11	174
Buildings are near the street, parking is beside or behind buildings	10	24	42	36	37	22	171
Development has connected streets and small block sizes	5	8	32	31	43	51	170
Buildings face the street with entrances, windows, and porches.	16	37	32	38	28	21	172
Smaller-scale commercial uses, within walking distance of residential areas	41	39	27	27	19	24	177

Question 15: If you have additional comments regarding the elements of Traditional Neighborhood Development, please share them here:

This wordcloud was generated from the responses submitted for this question. The size of each word is proportional to its frequency among these responses:



This question received 58 responses:

a good mix of land uses makes a more interesting village.	



Again, I chose to live here to keep away from busy streets and an easy commute to work. The traffic here has increased tremendously over the last several years. Can this are handle more people living here. The roads here are not sufficient for the number of people living here already. Road development needs to happen first!!!!!!!!!

Again, I feel that I'm not given many options (all are pro-development). I'd like to see trails connecting housing with commercial areas, limited further development, and buildings not close to the street. NO LIGHTING that will create light pollution in the night sky. (Lighting should be full cut-off lighting).

All of these elements should be considered paramount with TND.

An emphasis on walking/biking to local commercial areas should be pursued.

Building residential close to/ on the main sts. will be a very hard sell. Having a connecting maze of streets invites crime...easy access in and out. Bldgs should always have their fronts to the street as this should be the best looking side of the bldg. Again polish and class. No "Cookie Cutters" Think outside the box people. College kids are the future.....ask THEM what THEY want so you don't end up with a bunch of empty bldgs due to being short sighted.

Buildings should be allowed to orient to maximize solar energy collection.

Development should focus on Neighborhoods with 2 acre lots

Do not allow muti-unit housing, like apartments or townhomes.

Green-scaping and green spaces should receive a high priority to the planning for all neighborhoods. Asethetic consideration to such things as signage is also important and should be appropriate and not excessive (size and amount).

I think all areas should have different size homes available.

I'm not sure what you are trying to get at with this question. It has leading undertones. The zoning that exists is fine. Work hard to make and keep LF special!! The only zoning changes I would support are those that seek to preserve natural/open space, historic buildings/bridges/structures. We have made it too easy to have LF's unique character destroyed, and then we're only ordinary. Nothing special about ordinary, you can get ordinary in most of the US, but you can only find what LF has, here.

I'd rather see a common parking area for a cluster of shops than on the side or behind each shop. The common parking area should not be some vast area of macadam but separated into smaller areas with trees, flower beds etc. interspersed.

If developing is coming please safeguard our area against overdevelopment.

It's better to build single houses with bigger lots and further apart than townhomes. Don't build so much and don't build houses too close to each other that this becomes busy and noisy. Don't ruin this beautiful peaceful and quite place.

Items ranked 1, 2 & 3 are of equal importance.

Keep it rural as possible

Less townhomes

maintain the beauty of the town... Don't cram houses and apartments into these spaces.

make sure to have sufficient parking or the street will be a mess

Modern fire ems police statioms centrally located

n

N/a

n/a

LOWER FREDERICK TOWNSHIP

COMPREHENSIVE PLAN

N/A
N/a
Na
No
No cookie cutter developments. Keep with the area. Single family homes. Do not bring anymore townhomes.
NO HIGH DENSITY HOUSING
No more development density beyond already existing
NO TOWNHOUSES OR DEVELOPMENTS ITH MORE THAN 25 HOMESWHERE THERE IS WATER AND SEWER EXISTING
No.
None
Please do not allow this beautiful area to become an over populated, inflated fast moving lifestyle area. People buy houses and move to this area to get away from the hustle and bustle. Please do not bring it here.
Please do NOT over populate and/or over build up our little communities. Go out of your way to inform the current residents BEFORE you make decisions!!
Please not too many housing developments; if any
Seems the TND is designed to usher in more high-density row homes. Doesn't the township already have its share of these? With their 2.5 cars and woefully inadequate parking?

Shared parking lots. Incorporate places to sit and visit with friends (benches).

Single structures. No twins and townhouses

Skippack has that New Hope vibe. Ever been to small towns along Cape Cod. Why can we not create that we have the creeks as our backdrops!

Streets should be designed to keep traffic speed to a minimum. My lane has become a speedway for traffic coming off gravel pike to avoid the traffic lights at Spring Mount RD and at Game farm. When we moved in here many years ago speed limit was 25 then when we complained about the traffic speed and asked for speed bumps to slow traffic down the township upped the speed limit to 30 and would not concider speed bumps because the road is stated to be a fast way to get to the other side of the township AND IT IS CER-TAINLY A FAST ROUTE!

Support small businesses non high density. Residential single family homes preferred.

The idea of mixing commercial and residential is not ideal. It would be better to keep the two separate. Also, more townhouses would add to the high density which would not be desirable.

There are no desirable answers for question 14. I prefer not to have development.

There is enough traffic and traffic issues around this area, we most certainly do not need additional homes and extra cars to add to it. Any new homes should be single family homes with large lot sizes.



Thinking along the lines of my development, Noe of this really applies, but in the lines of new development, which brings the shops and stores to the residential areas, I am not sure i like that idea.

Though we are residents of the high density housing in Lower Frederick, we believe the township should avoid creating more of these developments. The additional residents create traffic on roads that are not designed to handle it. I moved here from Delaware County and the lack of traffic is something that makes me so happy I made this decision. For new neighborhoods, the development on Snoopy Road is an eyesore. It is too modern for the area. Mature landscaping should be maintained, and home designs should be smaller and more traditional. As far as commercial use, any additional commercial buildings should be limited to Gravel Pike and the area around the rotary, or minimal additions in Spring Mount utilizing existing historic buildings.

Underground utilities in all new development and utilities placed underground for all renovations with the goal of all village utilities underground eventually.

Uniform styles for new construction

We would like to know why LFT feels it is necessary to build more and more locations. Utilize existing building and include parking, sidewalks, etc. Re-do what already exists.

When designing high density development, keep in mind that most families own 2-3 vehicles. Parking becomes an unsightly issue if roads and parking are not properly planned (e.g., TH Properties' "Northgate" off of E. Buck Road in Pennsburg - YUCK!).

Question 16: In which area(s), if anywhere, should Lower Frederick apply **Traditional Neighborhood Development guidance for new development?**

Zieglerville	Spring Mount	Rural Areas (in neighborhood lotting)	More design guidance is not needed	Other (please specify)
90	71	33	37	31

This wordcloud was generated from the responses submitted for this question. The size of each word is proportional to its frequency among these responses:



The 31 respondents who answered "other" wrote:

All areas to keep control of development.

As farms are sold off, they should be the premier developments with open space and large individual lots with custom exterior look.

Be involved and don't let builder or developer change plans or threaten to back out. Invite the appropriate builders to our area.

businesses in the main part of Schwenksville- we already have sidewalks!

Commercial areas

Delphi

Delphi

Delphi

Dont know what this question means. Don't build more in Spring Mount or Zieglerville.

Existing areas are developed enough already

I am not sure what is the current guidance.

I do not believe we need developments in this area. Lower frederick needs to remain rural

I don't know enough about TND to comment. Why follow a guidance of "traditional" when each community is unique?

more design guidance is needed; I want to preserve the beauty of the area and not to cut down trees.

N/A

No development?

No developments

NO more building!

None

none

None

None!!

Not familiar with current guidance

Not neighborhood lotting - individual housing on larger lot sizes so that they can pay for their own Open Space

Not sure, shouldn't develop at all

Our zoning, code and availability of sewer does not allow for TND in Rural Resource areas of the township. Delphi was not included, had it been, I would have chosen that area for development guidance as well

Prefer not to have over-development of the area.

The TND should be positioned wherever public sewer lines are either already in place or in development.

Townhouses do not qualify for small-town, historic locations unless you intend to build a city, rather than small history town life.

We do not need any more development. We need to preserve the beauty and openness of our area.

We do not need more development otherwise we will not longer be "rural"



Question 17: Please order the following housing types from most suitable to least suitable for development in the Future Growth Area (1=most suitable, 6=least suitable):

	1	2	3	4	5	6	Total
Twin or duplex house	10	97	31	14	10	4	166
Mixed-use (apartments above commercial space)	9	20	43	43	28	23	166
Single-family house	141	9	5	9	3	7	174
Small condominium building (3-5 units)	3	10	26	47	71	6	163
Townhouse	11	29	54	40	24	8	166
Large condominium building (6+ units)	0	0	5	10	27	122	164

Using the answers given for question 6, the responses from this question can be grouped together by respondents living in the Future Growth Area (Zieglerville and Spring Mount) and those living elsewhere, in the Rural Resource Conservation Area. Respondents from both areas showed broad agreement on the relative rankings of the given housing types.

Future Growth Area:

	1	2	3	4	5	6	Total
Twin or duplex house	8	50	13	11	3	2	87
Mixed-use (apartments above commercial space)	4	11	21	25	16	11	88
Single-family house	77	8	3	3	2	1	94
Small condominium building (3-5 units)	0	4	15	25	39	3	86
Townhouse	6	16	31	19	14	2	88
Large condominium building (6+ units)	0	0	4	3	12	67	86

Rural Resource Conservation Area:

	1	2	3	4	5	6	Total
Twin or duplex house	2	45	18	3	7	1	76
Mixed-use (apartments above commercial space)	5	9	20	18	12	11	75
Single-family house	62	1	2	6	1	5	77
Small condominium building (3-5 units)	3	6	11	22	30	2	74
Townhouse	5	13	23	19	10	5	75
Large condominium building (6+ units)	0	0	1	7	15	52	75

Question 18: If you have additional comments regarding housing types, please share them here:

This wordcloud was generated from the responses submitted for this question. The size of each word is proportional to its frequency among these responses:



This question received 62 responses:

AFFORDABLE single homes on 1.25 acre lots. Did I mention AFFORDABLE!

Again, my answer for #17 would be "none".

Again, share housing and natural habitat spaces.

All housing in the future growth area should be single homes on at least an acre

All of the above are equal.

All of these housing types should be acceptable in the growth area under the assumption that a 6 unit condo is low profile.

Condominiums and apartments should be avoided.

Development should not go higher than 4-5 stories.

Do not want large condo/apartment buildings at all

Don't build any apartment buildings or condos, and preferably not townhomes either. It will ruin this quiet and peaceful community

Housing types should house as few people as possible. More population is not recommended

I did not see anywhere to comment on ADUs so I am doing so here. Zoning for ADUs should require rental only to immediate family members in perpetuity in order to discourage rental units being constructed under the premise of ADUs.

I do not support any further housing development. We have enough! Any further development is going to detract from the rural and historic character of LF, and ultimately increase taxes to support the volume. Stop!



I don't think that 29 can handle dense population increases in the area.

I like the idea of the same number of people living closer together if the township gets more open space out the deal. I'm not sure which of the above options fits that vision.

I manage a 275 unit apartment community in Phoenixville. I do not want to see this type of construction brought to lower Frederick. I moved here to enjoy the rural nature of the area.

I think it is good to have variety.

I'd like there to be very little new single-home or dense housing development

Large concentrations of housing defeats the idea of rural

Learn to use common sense and not personal feelings.

LESS is BEST!

limit the townhouses

Muti-unit housing lowers surrounding property values, increases congestion of our streets and schools, and detracts from the rural character of our community.

n

N/a

N/a

n/a

N/A

N/a

n/a

Na

Need to take care of the development we have.

No condos, no townhouses, no twins

No development?

NO HIGH DENSITY HOUSING

No large condominiums

No.

None

None

None

None

Only single family homes. No communities with condo fees.

Our taxes are pretty high in our opinion, I would not opposed to having business or taxpayers (through residential property) offset that somehow. My understanding is the more renters (the more taxes for the homeowners), so it would be my preference not to offer more apartment living.

Please Keep a classy looking home build and not just boxes for people

Prefer future growth to be single family homes on larger lots rather than clusters. People move out here to not be on top of their neighbors.

Same answer, traffic!!!!!!!!

Single family attached housing (2 to 4 attached units) should be enabled in the village associated future growth area developments.

Single-family homes bring pride in ownership; the rest of your selections bring only commuters. Or worse.

SMALL single family is a preference

The area is not large enough or well suited for multi unit housing. The area will lose its character and it will cause residents to move out

The only homes that should be allowed to be developed in our area should be single family homes on large, open lots.

There is a HUGE need for small, single family homes!

This area is the last one in Montgomery County to be developed. Try to give it class and polish and think in the present and future. If you tear down all the old bldgs, future people will not have any identity with their past.

townhomes, small condominiums and large condominium buildings don't bring people to the community that will stay in the community. Would rather have people who move into the community care about the community. Long term residence.

very small amount of development; single family only

We do not need apartments -- increase lot size and bring along a different clientele... We want permanent residents and not transients.

We have enough hide density housing in this township.

We much prefer single-family homes with larger lot sizes. We would like to see our community as rural as possible.

Why does the area have to be more populated at all?

With additional development/traffic, please keep in mind that your plan should also include road improvements to accommodate higher volumes. Where possible, please utilize roundabouts and other forward thinking traffic control devices.

Question 19: In your opinion, how suitable are ADUs in each Future Land Use area?

	Highly Suitable	Slightly Suitable	Neutral/No Opinion	Slightly Unsuitable	Highly Unsuitable	Total
Future Growth Area	63	44	43	9	16	175
Rural Resource Conservation Area	60	37	45	16	20	178

Using the answers given for question 6, the responses from this question can be grouped together by respondents living in the Future Growth Area (Zieglerville and Spring Mount) and those living elsewhere, in the Rural Resource Conservation Area. Respondents from each area answered this question similarly, with mixed results but a generally favorable view of accessory dwelling units throughout the township.



Future Growth Area:

	Highly Suitable	Slightly Suitable	Neutral/No Opinion	Slightly Unsuitable	Highly Unsuitable	Total
Future Growth Area	35	20	22	4	11	92
Rural Resource Conservation Area	31	22	24	4	13	94

Rural Resource Conservation Area:

	Highly Suitable	Slightly Suitable	Neutral/No Opinion	Slightly Unsuitable	Highly Unsuitable	Total
Future Growth Area	28	24	19	5	4	80
Rural Resource Conservation Area	29	13	20	12	7	81

Question 20: How would you rate the goal of Historic Preservation?

Extremely important	Very important	Somewhat important	Not so important	Not at all important	Total
77	65	34	8	1	185

Using the answers given for question 6, the responses from this question can be grouped together by respondents living in the Future Growth Area (Zieglerville and Spring Mount) and those living elsewhere, in the Rural Resource Conservation Area. Respondents in both areas rated historic preservation as a an issue of importance in the community.

Future Growth Area:

Extremely important	Very important	Somewhat important	Not so important	Not at all important	Total
44	30	20	2	1	97

Rural Resource Conservation Area:

Extremely important	Very important	Somewhat important	Not so important	Not at all important	Total
30	32	14	6	0	82

Question 21: How would you rate the importance of creating incentives to encourage the preservation or reuse of historic buildings:

Extremely important	Very important	Somewhat important	Not so important	Not at all important	Total
87	53	39	6	1	186

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Appendix D

Methodology

MONTGOMERY COUNTY BOARD OF COMMISSIONERS

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MONTGOMERY COUNTY **PLANNING COMMISSION**

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> SCOTT FRANCE, AICP Executive Director

September 21, 2021

SUBJECT: Population Forecast and Zoning Capacity Methodologies

TO: Boards and Committees of Lower Frederick Township

FROM: John Miklos, Community Planner

Purpose

The Village Development & Community Character section of Lower Frederick 2040 contains two analyses assessing the township's potential future need for housing and current zoning's ability to accommodate the projected development. The first of these two analyses is presented in Figure 5.6 Forecasted Housing Need. The second of the two is presented in Figure 5.9 2020 Zoning Capacity Analysis. These two plan components provide information in support of section §1103(a) of the Pennsylvania Municipalities Planning Code (MPC) which states:

The comprehensive plan that is the subject of an agreement may be developed by the municipalities or at the request of the municipalities, by the county planning agency, or agencies in the case of a plan covering municipalities in more than one county, in cooperation with municipalities within the area and shall include all the elements required or authorized in section 301 for the region of the plan, including a plan to meet the housing needs of

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present residents and those individuals and families anticipated to reside in the area of the plan, which may include conservation of presently sound housing, rehabilitation of housing in declining neighborhoods and the accommodations of expected new housing in different dwelling types and of appropriate densities for households of all income levels.

The conclusion of the two analyses, as presented in the comprehensive plan, is that the township's current zoning provides sufficient opportunities for development to accommodate Lower Frederick Township's projected population growth over the next 20 years. The township's projected growth over the next 20 years is a slower rate of population increase than the township's average over the past century.

Forecasted Housing Need Methodology

The forecasted housing needs analysis uses population growth projections and demographic data from the US Census Bureau to estimate how many new homes would be needed in the township, if the projected population growth were to occur. The analysis evaluates housing need projected for the year 2040. The Delaware Valley Regional Planning Commission (DVRPC) is the source of the population projections. DVRPC publishes projections of future population growth and employment growth for 5-year time increments, out to 30 years in the future. These projections are updated every five years. The projections used for this analysis were published by DVRPC in 2015. In that publication, (DVRPC's 2045 Municipal-Level Population Forecasts. https://www.dvrpc.org/webmaps/ PopForecast/) Lower Frederick's population was projected to grow to 5,355 by the year 2040.

Using the latest available percentage of the township in populations living in group quarters, published by the US Census Bureau, as the assumed percentage in group quarters in 2040, the projected group quarters population in 2040 was calculated. The projected group quarters population was then subtracted from the projected township population to give the projected population living in households: 5,344 people.

This projected population living in households was then allocated into households using an assumed average household size for the township in 2040, given as a range from 2.5 to 2.6 people per household. This range of average household sizes was drawn both from long-term trend in the average household sizes of the country, state, and county converging within this range, and the use of projected household sizes within this range in the comprehensive plans of other municipalities throughout southeast Pennsylvania. For the assumed average household sizes, the township's projected number of households in 2040 was 2,055 to 2,138 households.

To calculate the number of housing units needed for the projected number of households, the latest available housing unit vacancy rate of 4.56% (published by the US Census Bureau) was used as the assumed vacancy rate in 2040. Adding the projected number of vacant housing units to the number of housing units occupied by the projected households gave the estimated total number of housing units needed by 2040: 2,154 to 2,240 housing units.

In 2020, the US Census Bureau reported that Lower Frederick Township contained 1,930 housing units, meaning that 224 to 310 units would need to be constructed over the next 20 years to reach the



estimated number of housing units needed by the projected population of the township in the year 2040, given the assumptions described above. At the time of writing, three significant residential developments amounting to 119 new housing units are proposed in the township.

Zoning Capacity Analysis Methodology

The zoning capacity analysis uses a methodology similar to the one used to generate the build-out analysis in the Lower Frederick Open Space Plan, prepared in 2006. The purpose of the build-out analysis was to estimate the maximum total amount of housing units that could possibly be developed in the township under the zoning ordinance then in effect, and indicate their geographic distribution throughout the township. This analysis highlighted the importance of open space preservation for protecting natural resources. In Lower Frederick 2040, the zoning capacity analysis serves a similar function, though its focus is on the relationship between the estimated maximum total amount of housing units allowed under current zoning and the forecasted housing need described above. This analysis begins with the township's zoning ordinance. The current boundaries of the zoning districts were mapped and the land area of each district was tabulated. The use regulations of each zoning district was then examined. Only zoning districts that allow residential uses were relevant to this analysis and studied in later steps. For each zoning district that allows residential development the maximum development density was determined. The maximum development density was calculated from the dimensional requirements of various residential development options permitted in each district. In most of the zoning districts examined in this analysis the strictest limit on development density came from the stated maximum development density given in text of the zoning ordinance:

Zoning District	Maximum Development Density (Dwelling Units per Acre)
R1 Rural Residential	0.5 DU/acre
R2 Low Density Residential	1 DU/acre
R3 Medium Density Residential	4 DU/acre
R4 High Density Residential	6 DU/acre

In the remaining zoning districts, the maximum residential density allowed by zoning was calculated from minimum lot size requirements:

Zoning District	Residential Development Option	Maximum Residential Development Density (Dwelling Units per Acre)
VC Village Commercial	Single apartment mixed-use §170-65.B	4.356 DU/acre
VMU Village Mixed-Use	Four units mixed-use §170-86.C	11.616 DU/acre

Having determined the maximum development density for each residential zoning district, the developable land area in each district was then determined. Using land use data provided by the Montgomery County Board of Assessments and maintained by the Montgomery County Planning Commission, parcels identified as "undeveloped", "agriculture", and "country estate" land uses were identified in each of the five residential zoning districts and their acreages totaled. These potential development areas were then evaluated for the presence of environmental constraints that reduce the developable area of the parcels.

This stage of the analysis used GIS data from the USDA, DEP, and DCNR to ascertain the locations and extent of natural features identified in the township's ordinances as Environmental Adjustment Factors (i.e., diabase bedrock, floodplain areas, hydric soils, wetland areas, water bodies, water courses, and steep slopes). The areas of each natural feature within the potential development parcels were measured and the corresponding factor was then applied to calculate the developable area within the potential development parcels.

The next step, after determining the approximate amount of developable land in the township, was to allocate the developable land to the zoning districts with residential development options. The previously-determined maximum residential development density was applied in each zoning district, after one final adjustment to the developable area. To determine the maximum number of potential residential units that could theoretically be constructed on the developable land in each zoning district, practical considerations of site design and roadways must be accommodated. This was done by reducing the total developable area in each district by 20%. This factor is applied to account for the space in a residential development that is used for street rights-of-way. After this final adjustment, the remaining developable land in each zoning district was evaluated for the maximum number of residential units that could theoretically be developed under current zoning:

Existing Housing Units	1,930	Percent of Potential Units	
Potential Housing Units	1,354		
R1	674	49.8%	
R2	147	10.9%	
R3	55	4.1%	
R4	88	6.5%	
VC	1	0.1%	
VMU	388	28.7%	
Total Zoning Capacity	3,284		

The zoning capacity analysis found that the two zoning districts with the greatest amount of potential for residential development were the R1 Rural Residential District and the VMU Village Mixed Use District. The R1 district currently accounts for nearly half of the township's potential residential



development, despite having the lowest residential development density at 0.5 dwelling units per acre. In Lower Frederick, R1 zoning covers 3,983 acres, accounting for over three-quarters of the township. The VMU district, in contrast to the R1 district, was determined to have the highest residential development density of any zoning district in the township, with the current mixed-use apartment option accommodating up to 11.6 dwelling units. The higher development density in the VMU means that it can accommodate 28.7% of the township's potential housing units while only totaling 146 acres, or 2.8% of the township's land area. Other, less dense, residential development options are also permitted in the VMU district.

The results of the zoning capacity analysis differ from those of the 2005 build-out analysis. The earlier build-out analysis reported that Lower Frederick had 1,824 housing units, and had potential to accommodate an additional 1,005 units, for a total zoning capacity of 2,829 units. As is noted in the comprehensive plan, the township's zoning was largely the same for each analysis, and had a negligible effect on the potential residential development found by each analysis. While some of the difference may be attributable to changes in the mapped extents of various natural features and, consequently, the total developable area of the township, the reliability of these data sources suggest that this is also a minor effect. The primary reason for the apparent increase in zoning capacity stems from a change in methodology from the build-out analysis to this zoning capacity analysis. The earlier analysis assessed the VMU district for potential single-family development, and found it to have the potential for 56 units. The new zoning capacity analysis evaluated the VMU district for a denser residential development type, resulting in a greater amount of potential development.

The zoning capacities determined by in both the 2005 and 2020 analyses are greater than the amount of residential development that is predicted by population forecasts and long-term development trends. Lower Frederick is not likely to be fully built-out within the foreseeable future and current zoning provides sufficient zoning capacity to accommodate the amount of development that is likely to occur in the township over the next two decades. Lower Frederick's surplus zoning capacity may present the township with opportunities to adjust its zoning to encourage open space preservation and limit the extent to which new development expands the reach of the water and sewer infrastructure.

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