

Spring 2013

Comprehensive Plan



A Vibrant Tomorrow, Starting Today

Planning the community's next decade

of positive, coordinated growth

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A Vibrant Tomorrow

Planning the community's next decade of positive, coordinated growth

South Fayette Township's 2013 Comprehensive Plan
Executive Summary

Planning for the Next Decade

South Fayette's residents, businesses and leaders are committed to the philosophy of preparation. The community offers its residents affordable public services, distinct suburban and rural character as well as a notable quality of life.

The Township experienced significant growth: a 17.5% increase in population between 2000 and 2010. As the growth and development continues, so does the appreciation for its quietude and familiarity.

The community of South Fayette provides its residents and businesses many advantages and opportunities. These valued assets can remain at the forefront of the Township's identity.

The Township Comprehensive Plan builds on these attributes to present a series of recommendations aimed to ensure the continued desirability of living, working and playing in South Fayette.



Comprehensive Plan Goals

The Comprehensive Plan goals were refined throughout the planning process to ensure that desires were matched with the realities of the community's capacity to see them through.

- Promote development which respects existing land use patterns and conserves sensitive natural resources.
- Encourage a continued diversity of housing types to support long-term residency.
- Coordinate expansion of municipal services and staff concurrent with community growth.
- Cooperate with local and regional entities to improve the aesthetics, functionality and safety of the community's key transportation corridors.
- Develop a community-wide trail system which links residents to recreation in the Township and beyond its borders.
- Maintain the community's appeal, attractiveness and quality of life with respect to land use, civic amenities and environmental resources.
- Balance development impacts relative to municipal and school district revenues, costs and services.
- Pursue short-term planning and policy initiatives in context of their long-term potential.

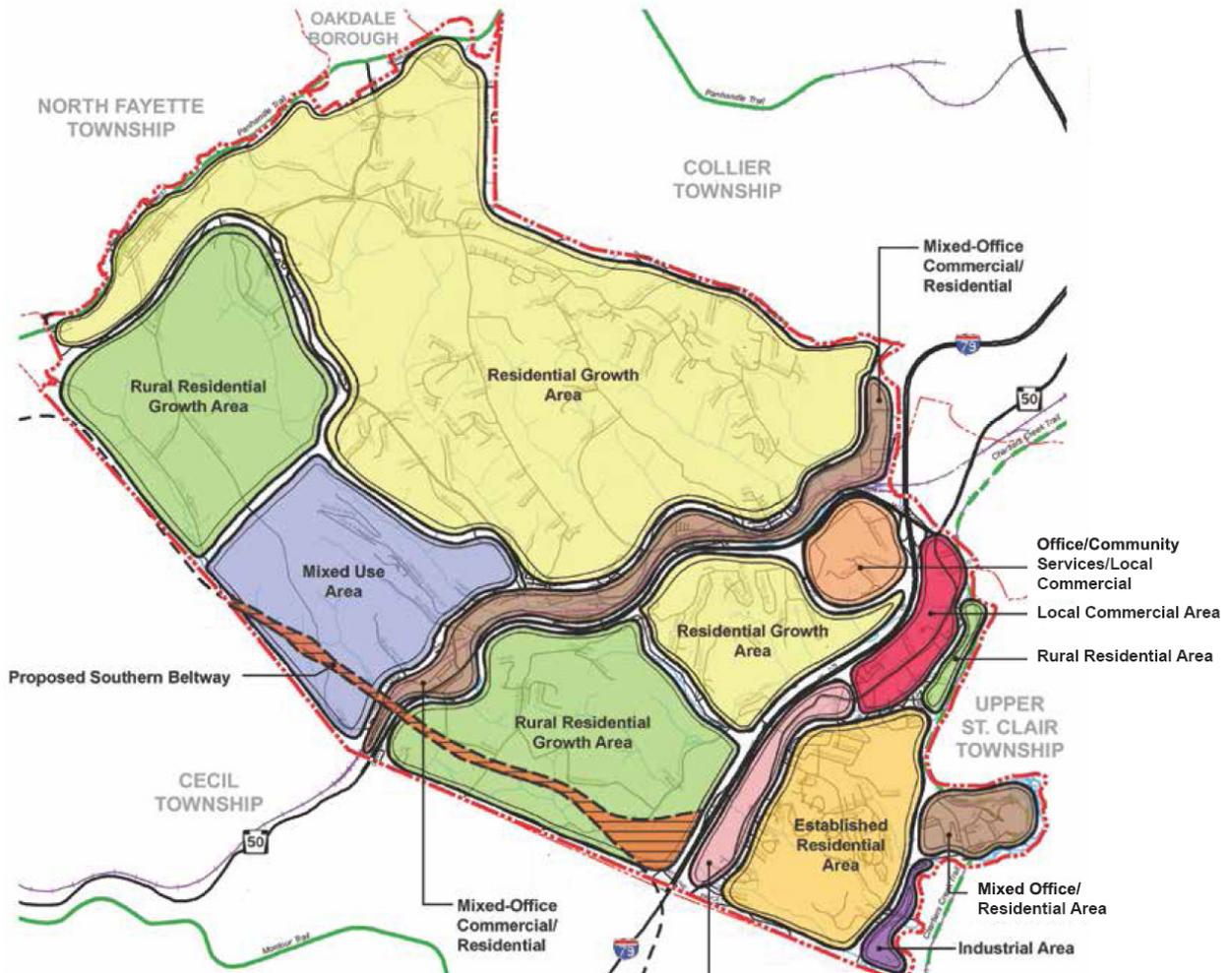


Future Land Use and Housing

Land use and housing assumptions were made based on population, permitting and development trends, input from a community-wide survey, citizen participation and potential build-out/development scenarios under current zoning. There is capacity at build-out for an additional 20,000 residents within the Township. While most would agree that South Fayette’s population may never reach that number, the land capacity and policies in place provide the opportunity for such.



Future Land Use and Housing Plan



EXECUTIVE SUMMARY



Residential Growth Area

This land use includes single family, town homes/ duplexes, and multi-family housing.

Rural Growth, Rural Residential

This land is largely agricultural, residential, wooded or open space. It is best suited for low-impact / non-industrial type uses.

Mixed- Office, Commercial / Residential

The land along the Route 50 corridor is a prime location for commercial developments, and also for higher-density (multi-family) residential uses.

Local Commercial

Land near the junction of Route 50 and I-79 is some of the most commercially valuable land within the Township. By combining office, commercial, and residential land uses within this space, a wide variety of development types are available.

Mixed-Office / Community Services / Local Commercial

Located directly adjacent to the Route 50 / I-79 interchange, this land use could provide for an easily accessible Town Center, and a diverse central point for the Township could be defined.

Office / Flex

This land use combines primarily office space along with medical or other special uses. Similar to Local Commercial, this land use would be located where the existing vehicular circulation infrastructure would provide easy access to the major roadways in the Township.

Established Residential

This land use is primarily single-family, with some multi-family uses.

Mixed-Office / Residential

This land use has potential for mixed office and residential space. Existing, although aged, utilities and vehicular circulation infrastructures are present.

Industrial: Industrial land use currently exists successfully in this area. Due to the viability of this land for industrial space, such land uses should be encouraged to continue.

Civic Amenities and the Pedestrian Network

The future quantity, location and service areas of these civic amenities are highly dependent upon the population and the patterns of land use. As the population increases or the land use patterns shift, it may become necessary to re-evaluate the types and locations of services that are provided as well as the means of funding such civic improvements or enhancements.

Trails

Based on information gathered, the lack of pedestrian connections between neighborhoods, commercial areas and other recreation facilities was noted as an untapped opportunity. One item that may largely define a unified network for pedestrian access is the natural topography and potential conservation corridors within the community. By utilizing areas that are already designated for limited development and/or not viable for development due to slopes or proximity to waterways/wetlands. A clearly defined system of pedestrian-oriented paths (including trails, bike lanes, bikeways and/or conservation easements) could enable residents to safely bike, run or walk throughout South Fayette Township.

Pedestrian Network

The limited comprehensive sidewalk and pedestrian network within the Township provides the opportunity to include pedestrian routes in all new development as well as to “retrofit” older developments to accommodate pedestrian circulation and connections.

Because of the open rural and suburban nature of the Township, the way that pedestrian routes and buffers are designed will be an important factor in not only the community’s infrastructure and amenities but also in the the overall wellness of the population.

Where opportunities exist, the communities should explore the feasibility of strategically incorporating conservation easements into future subdivisions/ land developments where practical. Through this process, the community can turn its share-the-road routes (designated in the short-term) into a distinctive system inter-connecting residential, non-residential and institutional uses. Concurrently, the Township may want to evaluate the feasibility of amending its ordinances to ensure that pedestrian facilities such as sidewalks, bike paths or other such publicly accessible

easements are incorporated into future development.

In addition to several trail/greenway links, cooperative effort trails are a unique opportunity for the Township. In developing these types of trails, the Township should work with the utility companies to address any security issues that may be present. Several examples of these types of relationships exist and could be used as guides in successfully completing this joint project.

Community Gateways

Gateways establish a unique identity for communities and provide memorable visual icons. Whether through signage, special landscaping, or another common element, gateway designs should complement the character and quality of South Fayette Township’s other amenities.

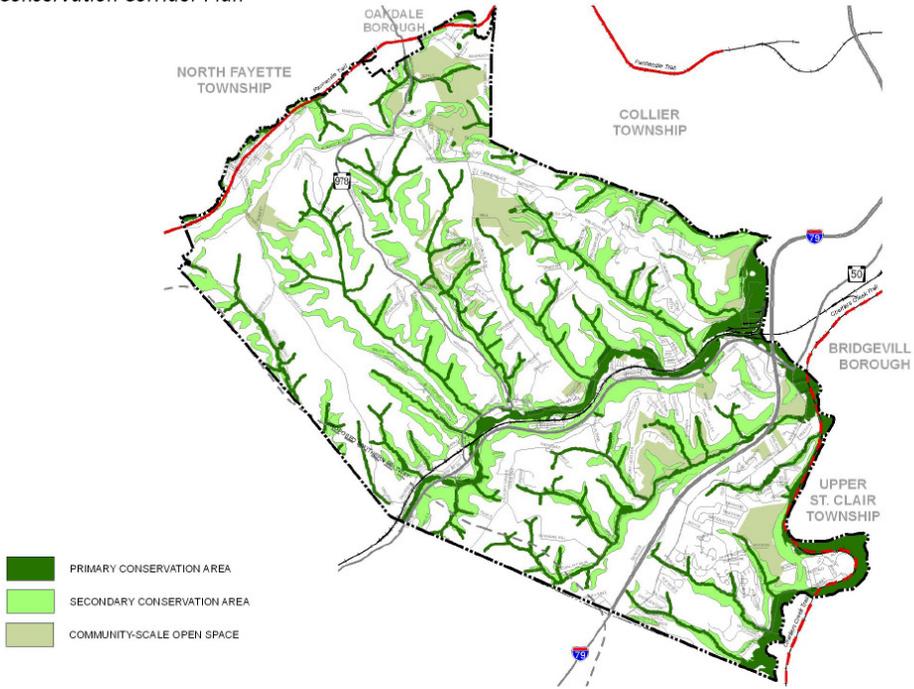
Potential major gateways are primarily located along arterial roads and the I-79 interchange. Minor gateways are generally proposed at the intersections of collector roads and the Townships’ boundaries.

Public Facilities and Recreation The extent and quality of municipal services and community-oriented facilities contribute to the communities’ perception of “livability.” To ensure that the continued level of civic outreach can be maintained as the Township’s population expands, South Fayette Township should periodically evaluate and plan for the expansion of these types of facilities as necessary.

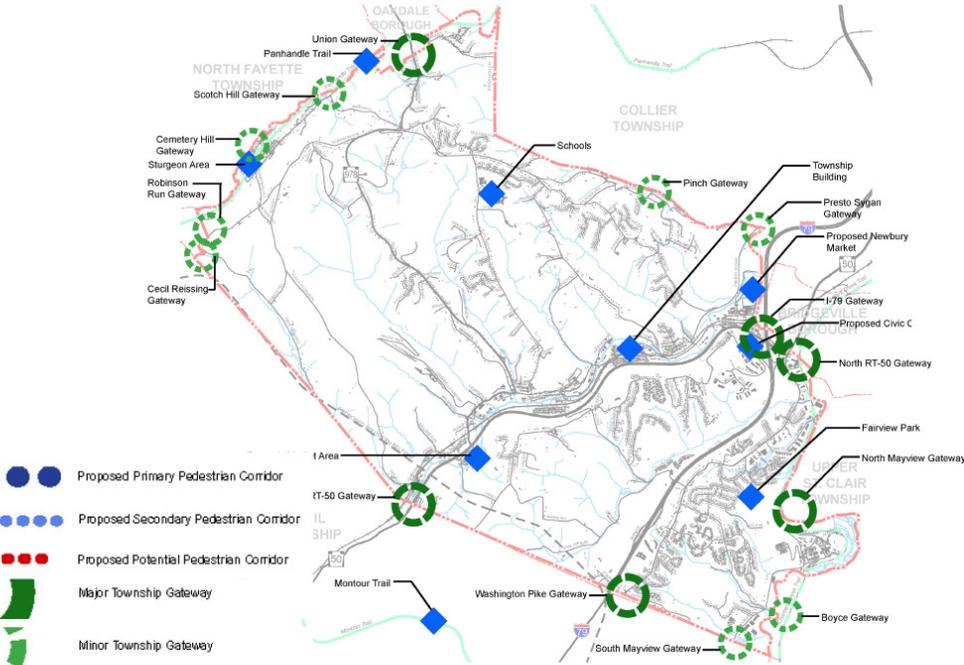


EXECUTIVE SUMMARY

Conservation Corridor Plan



Pedestrian Destination Map



Transportation

The Comprehensive Plan considers growth impacts on the community's transportation network.

Roadway Network

Recommendations for the roadway network emerge in context of the transportation evaluation completed concurrently with the Comprehensive Plan.

The transportation study involved:

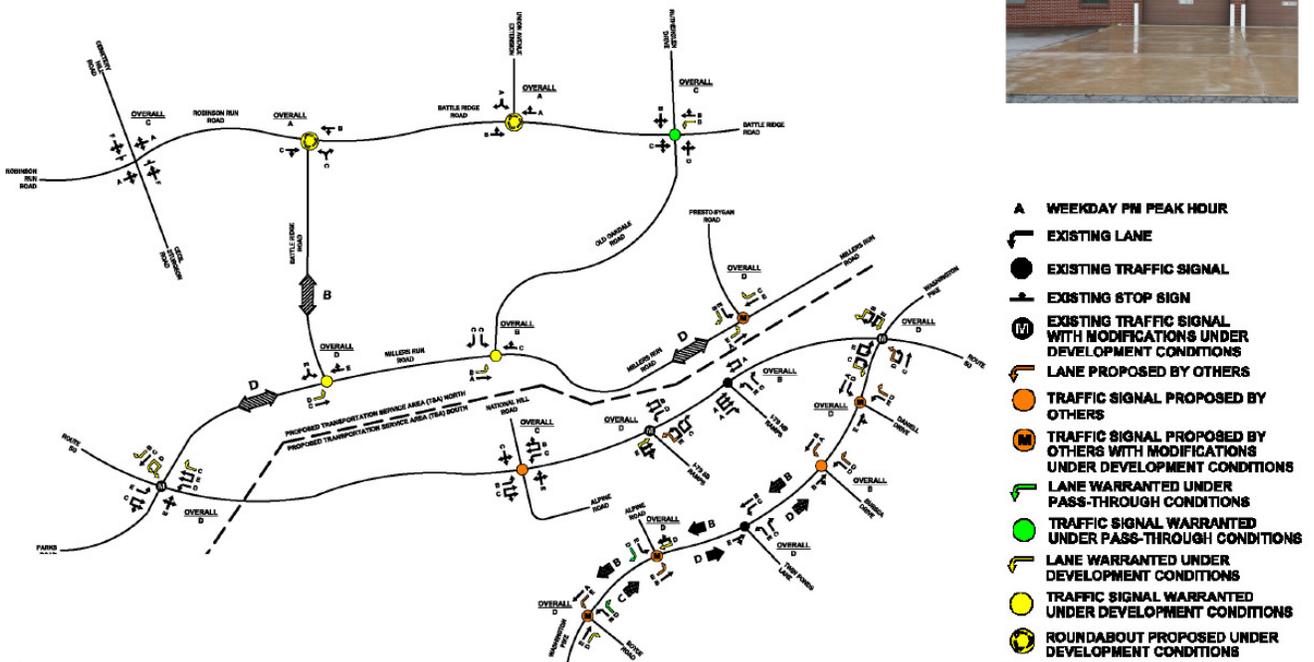
- Appointment of a transportation impact fee advisory committee (TIFAC) and designation of the geographic areas of the municipality that will be subject to the transportation impact fee ordinance by resolution of the Board of Commissioners
- Completion and approval of a roadway sufficiency analysis for the TSA's, identifying traffic deficiencies

and needed improvements attributable to existing traffic, future traffic not originating from the service areas (i.e., pass-through traffic), and future traffic originating from new development within the service areas for preferred levels of service during the designated peak-hour of study.

Historic data research and presentation, basic permitting and land use trend analysis, and future land use assumptions based on community consensus were all considered. Basic trend analysis and land use assessments were developed in partnership between South Fayette Township officials and employees, consultants, and members of the Comprehensive Plan Steering Committee and members of the Traffic Impact Fee Advisory Committee.



Weekday Afternoon Peak Hour Levels of Service with Improvements



Core Strategies

To ensure the community's vibrancy today continues on through the coming decade, a series of recommendations have been created. The recommendations are the essential strategies for the community to reach its long-term goals set out as part of this Comprehensive Plan process. While build-out is a consideration, these strategies should be pursued over the next decade to ensure the impacts of continued growth are shaped in the way the community desires.

Governmental Collaboration

- Establish a procedure to insure continuous and on-going coordination with respect to the long-range planning efforts of South Fayette Township.
- Create a Communications Diagram and Responsibilities Matrix to facilitate communication and cooperation between the Township's Board of Supervisors, the Planning Commission, the Municipal Staff, the general public as well as the Municipal Authority, School District and Allegheny County.
- Define a proactive agenda with neighboring communities and public agencies to coordinate "developments/redevelopment of regional impact" that may adversely affect the Township's traffic network.

Zoning and Subdivision Ordinance

- Require applicants to map and calculate associated resources applicable to designated Natural Infrastructure Corridor criteria.
- Update the equation for developable area, open space and pedestrian circulation systems and document on a plan.
- Create incentives for developers for redevelopment in targeted near-term growth areas.
- Target strategic underutilized areas along Washington Pike concurrent to roadway improvements.
- Expand Planning Commission involvement by requiring conceptual plan review prior to subdivision and/or land development application.
- Adopt design guidelines to shape safety and improvement of the Township's various roadway corridors.
- Revise land use regulations and/or introduce ordinance process diagrams in a manner that makes the regulations easily navigable by users.

Overall Community Planning

- Promote the development of a conceptual plan and update related provisions/guidelines for the western PED land in the Township. Meet with landowners to cooperatively evaluate the trade-offs of different land use scenarios.
- Encourage more frequent, formalized discussions between the Township and the South Fayette School District to track physical and fiscal impacts of population growth on both entities.
- Evaluate all planning and capital improvements efforts in context of "How does this project uphold or enhance the quality of life in South Fayette?"
- Promote semi-annual events that join older residents and school-aged children/families together in exploring something past and present that is interesting about the community.
- Continue to promote a diverse residential housing stock that complements established neighborhood development and responds to various price/age interests.
- Support non-residential development and redevelopment in concert with balanced transportation and infrastructure improvements.

Operations and Capital Improvements

- Develop a community-wide walking and bicycle trail system which can be financed through a combination of municipal capital improvements and private-sector development.
- Promote a community-wide pedestrian connection to the South Fayette Township Civic Center.
- Construct a unified Township-wide wayfinding/gateway system.
- Prepare and update budget estimates for the capital improvement projects suggested by the Comprehensive Plan.
- Provide annual updates to the Township's capital improvement program in anticipation of upcoming Comprehensive Plan actions.



“Before everything else, getting ready is the secret of success.”

Henry Ford



South Fayette’s residents, businesses and leaders are committed to the philosophy of preparation. As a result, the community offers its residents **affordable** public services, **distinct** suburban and rural character as well as a **notable** quality of life. Over the past decade, growth in the Township has continued: foremost, its population has increased 17.5% between 2000 and 2010. As the community’s growth and development continues, so does the appreciation for its serenity and neighborliness. These valued assets are at the forefront of the Township’s identity. Evidenced through this planning process, the community of South Fayette provides its residents and businesses many advantages and opportunities. The Township Comprehensive Plan builds on these attributes to present a series of recommendations aimed to ensure the continued desirability of living, working and playing in South Fayette.

Introduction

This Comprehensive Plan represents a milestone in South Fayette’s history. The reasons are two-fold: the community evaluated what its long-term growth, commonly referred to as “build-out,” could be. Uniquely, this assessment is not based on projections from past population trends but from the capacity that the land has in concert with the Township enacted policies. Build-out is going to take many, many decades – in fact, there is no specific timeframe established; what is most important to consider is that long after this Comprehensive Plan and many other updates to it, policies and plans established will shape the community’s character and quality of life.

In turn, as part of the build-out assessment, several significant technical models were conceived and performed to determine potential demands for land use, transportation and infrastructure. Furthermore, the traditional components of the Comprehensive Plan have been pursued with a policy-changing Act 209 Transportation Study. Using information from these models, Part One of the Comprehensive Plan summarizes the Township’s policies and plans with respect to future growth and development. Within this discussion, an overview

In order to help develop a successful strategy for community and economic development, public input was gathered and analyses were completed. In determining trends of the Township’s current community and economic development environment, a number of key planning factors emerged all of which focused on one thing: maintaining and/or enhancing the quality of life in South Fayette.

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of preferred direction, or vision, is outlined and followed by a series of strategies for realizing the vision. To continue strengthening South Fayette's livability and to achieve the community's goals, several key actions must occur.

All in all, the Comprehensive Plan's recommendations are based on dialogue, public outreach and technical analyses completed as part of this planning process. The actions outline preferred directions to implement the Comprehensive Plan's goals.

A Common Belief

Plan participants, representing a broad spectrum of interests, identified several common themes that are relative to the positive trends the municipality possesses and on which it can capitalize. When asked to sum up their overall feelings towards South Fayette Township (more specifically, "Why do you live in South Fayette Township?"), the overwhelming response was the overall quality of life. Residents generally feel that the quality and reputation of the school district is perhaps the strongest selling point for new residents moving to South Fayette Township and for keeping residents here. Many participants are products of the South Fayette Township school system, and several have children or relatives currently at school in the system. Residents are

PART ONE: CORE STRATEGIES FOR ACTION |

pleased with the exemplary reputation of the School District and its continued efforts to improve and be competitive with other area school districts.

The geographic location of the Township is also considered to be a positive quality of South Fayette Township. It is in close proximity to Downtown Pittsburgh and other regional cities as well as regional-scale shopping centers without having to deal daily with their traffic. Also, the Township has easy access to interstate highways, as well as the Pittsburgh International Airport.

South Fayette Township has been referenced as a “well-guarded secret in western Pennsylvania.” Whether a life-long citizen of South Fayette Township or a newer resident raising a family, many agree the community’s overall rural and family-based atmosphere is considered to be one of the Township’s most endearing and attractive qualities. Residents are appreciative of South Fayette’s quiet, family-oriented character that comes with a rural community, and residents agree that South Fayette Township is a very safe community found to be a good location to raise a family and develop long-term friendships. The agricultural presence, or “country” atmosphere, coupled with a rich history and a variety of incomes and traditional neighborhoods represented throughout the community, dispels the homogeneous-type community atmosphere

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that can easily be found in surrounding communities. As part of the Comprehensive Plan discussions, these characteristics came out to be at the heart of the good value of an investment in South Fayette Township.

Comprehensive Plan Goals

Whether playing a game, building a house or planning for growth, there is a set of goals for any endeavor. The Comprehensive Plan goals were refined throughout the analysis process to ensure that desires were matched with the realities of the community's capacity to see them through. These goals include:

- ❖ Promote economic development which respects existing land use patterns and conserves sensitive natural resources.
- ❖ Encourage a continued diversity of housing types to support long-term residency.
- ❖ Coordinate expansion of municipal services and staff consistent with community growth.
- ❖ Cooperate with local and regional entities to improve the aesthetics, functionality and safety of the community's key transportation corridors.
- ❖ Develop a community-wide trail system which links residents to recreation in the Township and beyond its borders.
- ❖ Maintain the community's appeal, attractiveness and quality of life with respect to land use, civic amenities and environmental resources.

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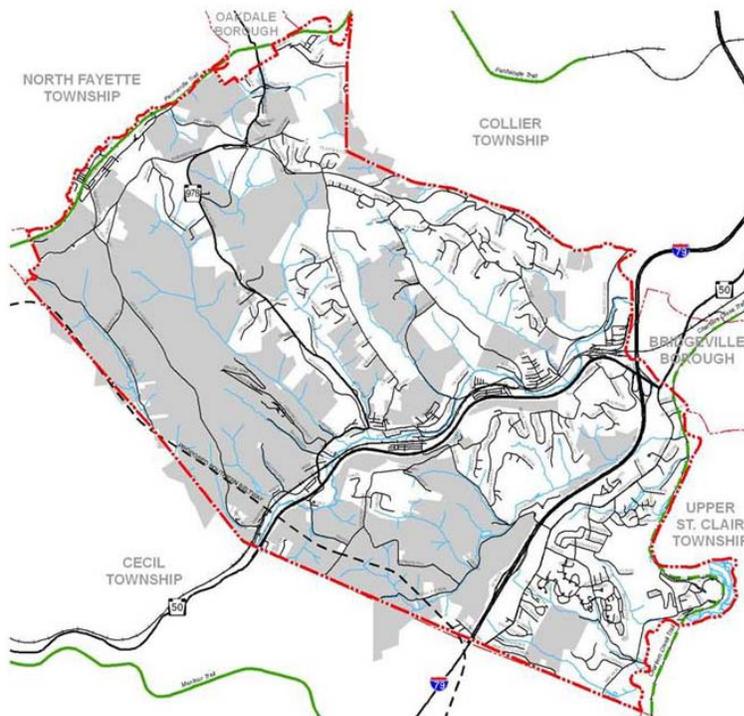
- ❖ Balance development impacts relative to municipal and school district revenues, costs and services.
- ❖ Pursue short-term planning and policy initiatives in context of their long-term potential.

Overall Planning Recommendations

The Comprehensive Plan's recommendations take several inter-related characteristics of the community into mind:

- 1. future land use and housing;**
- 2. economic development;**
- 3. transportation;**
- 4. infrastructure and energy resources;**
- 5. civic amenities; and**
- 6. regional relationships.**

These recommendations consider what the effect of future development could be in context of today and at build-out. While each topic is important in its own right, their collective effect will shape how everyday Township life interfaces with development, desired conservation of natural resources and its overall community character.



*As of 2010, about 6,000 acres (in gray)
in the Township were undeveloped or
classified as open space.*

1. Future Land Use and Housing

Land use and housing assumptions were made based on population, permitting and development trends, input from a community-wide survey, citizen participation and potential build-out/development scenarios under current zoning. Based upon current land characteristics and policies, there is capacity at build-out for an additional 20,000 residents within the Township. While most would agree that South Fayette's population may never reach that number, the land capacity and policies in place provide the opportunity for such. The Future Land Use map depicts the potential Future Land Use for South Fayette Township. It is intent of the Township that the Township be developed in such a manner as to promote the development of compatible land uses with both existing and future land uses.

As part of development, redevelopment and conservation moving forward in the Township, it is also noteworthy to identify several of the "Places" called out as part of Allegheny County's Comprehensive Plan *Allegheny Places*: a Village Place to the west of the former Koppers Site, a Village Place where the Mixed Use/PED Planned Economic Development District exists and a Rural Place in the northwest corner of the Township next to McDonald Borough.

To complement land use policies, the Township also has the opportunity consider housing policies identified in *Allegheny Places*:

- Support existing fair housing policies that protect the right to housing regardless of race, disability and other federally and locally protected classes.
- Promote accessible and visitable housing in communities with desirable amenities.
- Promote the use of green building techniques and energy efficient housing design.

Residential Growth Area

Residential Growth land use includes single family, town homes/duplexes, and multi-family housing. Located along the north / northwest portion of the Township, as well as land areas situated between Route 50 and I-79, this land use designation makes up approximately 40% of the total Township. The larger piece of land, currently largely residential, agricultural, and open space, lends itself to residential development due to easy accessibility to a majority of the major thoroughfares, as well as the already established roadway network. The smaller piece of land nearer the center of the Township is easily accessible to a potential town center and also currently contains a useful established utilities infrastructure. The

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vibrancy of Newbury Square's mixed residential uses is also included within this area.

Rural Residential Growth Areas

Two blocks of land along the Southwest border of the Township are designated as a Rural Residential Growth Area. As of 2012, these land areas are largely agricultural, residential, wooded or open space. The nature of development to date and topography combined with the emerging opportunities of the Southern Beltway makes these areas well suited for 1) strategically placed residential development, 2) strategically placed mixed use non-residential development as well as 3) retaining the historic rural nature where possible.

Mixed Use Areas

The Township's planned economic development district (PED), located adjacent to the Rural Residential Growth Areas, is poised to gain potential development opportunity with convenient access slated to/from the Turnpike Commission's proposed adjacent Southern Beltway. It is the intent of the Township that the Township be developed in such a manner as to promote the development of compatible land uses with both existing and future land uses.

Mixed Commercial or Industrial / Residential

The land along the Route 50 corridor contains great value by virtue of its accessibility and high traffic volume. The accessibility makes for a prime location for commercial, industrial developments, and also for higher-density (multi-family) residential uses. Also, by combining these three types of uses together, an increase in potential for attracting people interested in living, working, and shopping exists without the need to travel great distances.

Mixed-Office / Commercial / Residential

Land near the junction of Route 50 and I-79, including the emerging Newbury Square, is some of the most valuable non-residential land within the Township, given the amount of visibility afforded from busy thoroughfares. By combining office, commercial, and residential land uses within this space, a wide variety of development types are available, ensuring that potentially valuable land does not go wasted. These land uses may also attract commuters looking for a place to live with easy direct access to I-79.

Mixed Use Office / Local Commercial

Located directly adjacent to the Route 50 / I-79 interchange, this area offers opportunity for the expansion of quality mixed use, office and other commercial services. As the community continues

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to expand its population and delivery of services, a true sense of place and community identity will become increasingly more important as part of any future development/redevelopment. A proposed bank and a UPMC Children's medical office building are planned projects on parts of the previous cinema property on Route 50.

Local Commercial

Much of existing commercial is concentrated in one area, along Washington Pike. This defines the consumer experience to one central location and bolsters the overall traffic and visibility to all these commercial businesses. However, responsible commercial expansion throughout the Township as supported by proper zoning is encouraged.

Office / Flex

Office / Flex land use combines primarily office space along with potentially some medical or other professional-oriented/service uses. Considerations for vehicular circulation and infrastructure are notable would provide easy access to the major roadways in the Township. By locating this relatively quiet '9 to 5' land use adjacent to Existing Residential Development and Rural Development, the risk of conflicts between the two land uses is minimal. Considerations for zoning controls such as parking/loading, lighting and

landscaping are likely to be important in context of existing surrounding land use activity.

Established Residential

This land use, Established Residential, is exactly as its name suggests, a large block of land, near the southeast corner of the Township, that has become successfully established as residential use. The area is primarily single-family, with some multi-family uses near its center. Because of how well this area works, along with the existing functional infrastructure, it is suggested that no major modifications take place within this land use.

Mixed-Office / Residential

At the far eastern edge of the Township, where the currently vacant Mayview Hospital facilities exist, there lies potential for mixed office and residential space. Existing, although aged, utilities and vehicular circulation infrastructures are present, and the proximity to Chartiers Creek provides an inviting environment for combined uses of office space and residential development.

Industrial

Industrial land use currently exists successfully at the southeastern corner of the Township, along Chartiers Creek. Due to the viability of this land for industrial space, such land uses should be encouraged to continue.

2. Economic Development

As evidenced by the completed build-out analyses, the Comprehensive Plan sought to evaluate the relationships of land use and development impacts. Through sound land use policies, businesses of desirable scale and the Township's strategy for upholding vitality and vibrancy is to encourage land uses which aid in supporting the municipal services needed in order to continue providing a desirable quality of life for South Fayette Township residents.

In addition to the expanding development of Newbury Market and frontage of along Interstate 79, potential redevelopment along Washington Pike, areas surrounding the proposed Township Civic Center, Route 50 as well as within the Planned Economic Development districts are all opportune areas for continued growth and expansion of community and regional investment and service. Economic development of the community's non-residential sector is critical and integral to the Township's continued quality of life. The Turnpike Commission's announcements of the Southern Beltway project continuing to move forward is a facet of planning that the Township aims to dedicate itself to supporting this effort and planning for future growth associated with it. It is intent of the Township that the Township be developed in such a manner as to promote the

development of compatible land uses with both existing and future land uses

The community as a whole can realize positive outcomes fiscally, physically and for resident quality of life with a well-planned economic development effort. The introduction of an organized publicly-focused partnership with a mission of promoting quality economic development could introduce the means to find the proper balance between commercial and residential goals.

3. Transportation

In addition to understanding how the Township's land use patterns may ultimately change with continued growth, the Comprehensive Plan considers growth impacts on the community's transportation network. The introduction of access to the Southern Beltway equates to a new "front door" to the Township. The way in which this transportation improvement is balanced with land use, infrastructure and civic amenities will be a defining point for the community's quality of life over the coming decades.

Recommendations for the roadway network emerge in context of the Transportation Study completed concurrently with the Comprehensive

Plan. Both build-out and the future year 2030 were considered as part of the planning efforts.

The Transportation Study involved:

- ❖ Appointment of a transportation impact fee advisory committee (TIFAC) and designation of the geographic areas of the municipality that will be subject to the transportation impact fee ordinance by resolution of the Board of Commissioners
- ❖ Meeting minutes prepared by the TIFAC
- ❖ Development and adoption of a land use assumptions report (LUAR) for the Township and its designated geographic areas, called transportation service areas (TSA's), which together with existing development are the subject of the roadway sufficiency analysis and development of a transportation capital improvements plan (CIP).
- ❖ Completion and approval of a roadway sufficiency analysis for the TSA's, identifying traffic deficiencies and needed improvements attributable to existing traffic, future traffic not originating from the service areas (i.e., pass-through traffic), and future traffic originating from new development within the service areas for preferred levels of service (LOS) in terms of desired traffic operations during the designated peak-hour of study.

PART ONE: CORE STRATEGIES FOR ACTION |

Historic data research and presentation, basic permitting and land use trend analysis, and future land use assumptions based on community consensus were all considered. Population and land use data were collected from South Fayette Township, the Southwestern Pennsylvania Commission, and the United States Census Bureau. Current land use data are based on South Fayette Township GIS database updates as of September 2009 and field verified for accuracy. Basic trend analysis and land use assessments were developed in partnership between South Fayette Township officials and employees, consultants, and members of the Comprehensive Plan Steering Committee and members of the Traffic Impact Fee Advisory Committee.

A full copy of the Transportation Study with recommendations is included as a supplement to this Plan.

To support the needed economic development described in the previous section, an adequate transportation system is essential. These both lead to generating the tax revenues needed to support the municipal services and a desirable quality of life for our residents. Commercial development and the continued profitability of existing businesses is largely dependent on having a convenient, congestion free access for the greatest number of consumer-motorists in the

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larger region. To grow, people must be able to get to and from existing and future real estate sites in the community.

Proper growth of the transportation network will lead to commercial growth and more tax revenues. This will lessen the tax burden places on residents.

South Fayette has several enormous advantages that can make the township attractive to commercial development:

- I-79 runs through South Fayette and has a exit/entrance next to the community's present central business district and its logical expansion to the West.
- Washington Pike is a long-time connection between Pittsburgh and Washington County that parallels I-79. Most East-West roads in the area lead to Washington Pike.
- State Route 50 connects the Eastern portion of the Township and I-79 to vast areas to the West that are prime for development.
- The eventual construction of the Southern Beltway will only strengthen and expand the transportation network.

Although Washington Pike is listed as one of the enormous advantages above, it is also the weakest link of our transportation system. Most of

it is two lanes through the Township and it has long passed its capacity. With 4-lanes to the north and south and major roads leading to it from all directions, it is important to fully investigate the option of expanding Washington Pike to a minimum of four lanes throughout its length to the county line.

4. Infrastructure and Energy Resources

The third component of ensuring that coordinated growth, whether in the coming decade or beyond, occurs within South Fayette is to proactively address infrastructure.

The Municipal Authority

The sanitary sewer system in The Township is owned and operated by the Municipal Authority of the Township of South Fayette. The Authority was incorporated on February 10, 1963. In 1998 the Articles of Incorporation were amended to extend the existence of the Authority until April 1, 2048. The Authority is tasked with prosecution and completion of any and all tasks required to provide sanitary sewer service in the Township and adjacent municipalities as it may become necessary and convenient for the citizens of such municipalities. Presently the Authority is responsible for the operation and maintenance of over 126 miles of sanitary sewer, 4500 manholes

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and 3 pump stations serving 6011 customers in South Fayette Township. The Authority also serves 20 customers in Cecil Township. The Authority jointly owns and manages an interceptor sewer and a pump station in the Robinson Run watershed which serves McDonald Borough, Oakdale Borough, and portions of North and South Fayette Townships. Joint facilities are also constructed in the Thoms Run watershed where the Collier Township Authority operates and maintains the facilities. All of the facilities constructed are for the collection and conveyance of sanitary sewage. Flows ultimately are conveyed through ALCOSAN interceptors to their plant in the Woods Run section of the City of Pittsburgh for treatment.

Capacity Modeling

A detailed infrastructure capacity model and in-depth analysis was created as part of the Comprehensive Plan in context of the calculated build-out population. This model and analysis enable the Township to understand relationships of its total potential growth to its infrastructure needs. In the coming decade, the Municipal Authority of the Township of South Fayette (MATSF) will be able to reference this analysis in context of its required feasibility study work that will comply with the Allegheny County Consent Order. Both the MATSF and the Township

recognize this Comprehensive Plan model and the Consent Order-related work are on two different timescales and with potentially different results. However, the results of both are important to review together in order to affirm what, if any, efficiencies in capital improvements and phasing can be realized. The following summary presents the type and extent of improvements necessary to accommodate the potential additional infrastructure demand which build-out conditions would produce. The complete in-depth Infrastructure Assessment is included as an Appendix.

Stormwater Collection System

South Fayette Township has a diverse stormwater collection system. Each segment of the system was built as homes in each area were developed so the age of the different segments greatly vary as with the homes. New residential developments typically include detention ponds that remain under the ownership, responsibility, and maintenance of each homeowners association.

Approximately 110 known outfall points have been mapped in GIS. The remainder of the system is not mapped so the quantities of pipe and structures are not known. Mapping information for new residential and commercial developments is provided by the developer of each new project.

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That information is entered into the GIS mapping program at the township. The township has plans to hire a consultant to complete the system mapping.

The township is taking steps to comply with the system maintenance, water testing and reporting requirements of the State's Municipal Separate Storm Sewer System (MS4) program administered by the Department of Environmental Protection. The mapping discussed above is the first step in that overall process.

Private Utilities

To complement the public sewerage that is provided by the Municipal Authority, private water, gas, electric, communication and cable services will continue to serve residents.

Energy Resources

South Fayette Township has been at times at the center of the Western Pennsylvania's oil and natural gas discussion. Dialogue has focused on a broad community desire to control the locations and types activity associated with the industry. Minimizing unwanted impacts on quality of life, residential patterns as well as ensuring opportunities for other types of future non-residential development are of utmost importance to the overall community. Considerations for land

use activities, transportation network impacts and long-term resident well-being are significant to considerations in municipal discussion and policy decisions.

5. Civic Amenities Plan

The Civic Amenities Plan encompasses the public places (pedestrian connections, community gateways, public facilities, recreation areas and education) available within the community. The future quantity, location and service areas of these facilities are highly dependent upon the population and the patterns of land use. As the population increases or the land use patterns shift, it may become necessary to re-evaluate the types and locations of services that are provided as well as the means of funding such civic improvements or enhancements.

Pedestrian Connections

Limited pedestrian connections between neighborhoods, commercial areas and other recreation facilities were noted by the public as an untapped opportunity. Natural topography and conservation corridors within the community may largely define a unified network for pedestrian access. A clearly defined system of pedestrian-oriented paths (including trails, bike lanes, bikeways and conservation easements) could

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enable residents to safely bike, run or walk throughout South Fayette Township to desirable existing and future pedestrian destinations. A sampling of those destinations has been identified as part of this comprehensive planning process.

Where opportunities exist, the communities should explore the feasibility of strategically incorporating conservation easements into future subdivisions/land developments where practical. Through this process, the community can turn its share-the-road routes (designated in the short-term) into a distinctive system inter-connecting residential, non-residential and institutional uses. Concurrently, the Township may want to evaluate the feasibility of amending its ordinances to ensure that pedestrian facilities such as sidewalks, bike paths or other such publicly accessible easements are incorporated into future development.

Cooperative effort trails are also a unique opportunity for the Township. In developing these types of trails, the Township should work with the utility companies to address any security issues that may be present. Several examples of these types of relationships exist and could be used as guides in successfully completing this joint project.

Community Gateways

Gateways establish a unique identity for communities and provide memorable visual icons.

Whether through signage, special landscaping, or another common element, gateway designs should complement the character and quality of South Fayette Township's other amenities. To further build community pride, publicly service-oriented groups, such as Boy Scouts, garden clubs, etc., could help design, construct and/or maintain the various gateways. Potential major gateways are primarily located along arterial roads, the proposed Southern Beltway and the I-79 interchange. Minor gateways are generally proposed at the intersections of collector roads and the Township's boundaries. (See Pedestrian Destinations map)

Public Facilities and Recreation Areas

The extent and quality of municipal services and community-oriented facilities contribute to the communities' perception of "livability." Municipal administrative buildings, facilities geared toward protecting public safety, places of worships, open spaces and recreation facilities ensure that the continued level of civic outreach can be maintained as the Township's population expands. South Fayette Township should periodically evaluate and plan for the expansion of these types of facilities as necessary.

Rather than define specific private properties that could be suitable for future park use, the Civic Amenities Plan focuses on Township-controlled

parcels including the land near the I-79 interchange and Route 50 designated as the South Fayette Civic Center. Throughout the coming years, the Township should continue to collaborate with developers to expand this network. Expansion and enhancement of park and recreation facilities should be made in context of the Township's Comprehensive Parks, Recreation and Open Space Plan.

Education

The residents of South Fayette Township are aware of the benefits of quality within public schools, as well as the costs associated with maintaining a high standard for schools.

The South Fayette Township Library, located at the Township Building, is another important facility not only for the collection and distribution of information and resources but is a gathering point for community activities. The facility serves as a meeting spot for all age groups and for many community groups conducting regular meetings as well as special events.

As the Township's school-age population continues to grow, it will be important for Township leadership and residents to proactively work with the school district to plan for adequate facilities and educational opportunities as well as to identify ways that school facilities can be shared for athletic and special events where practical.

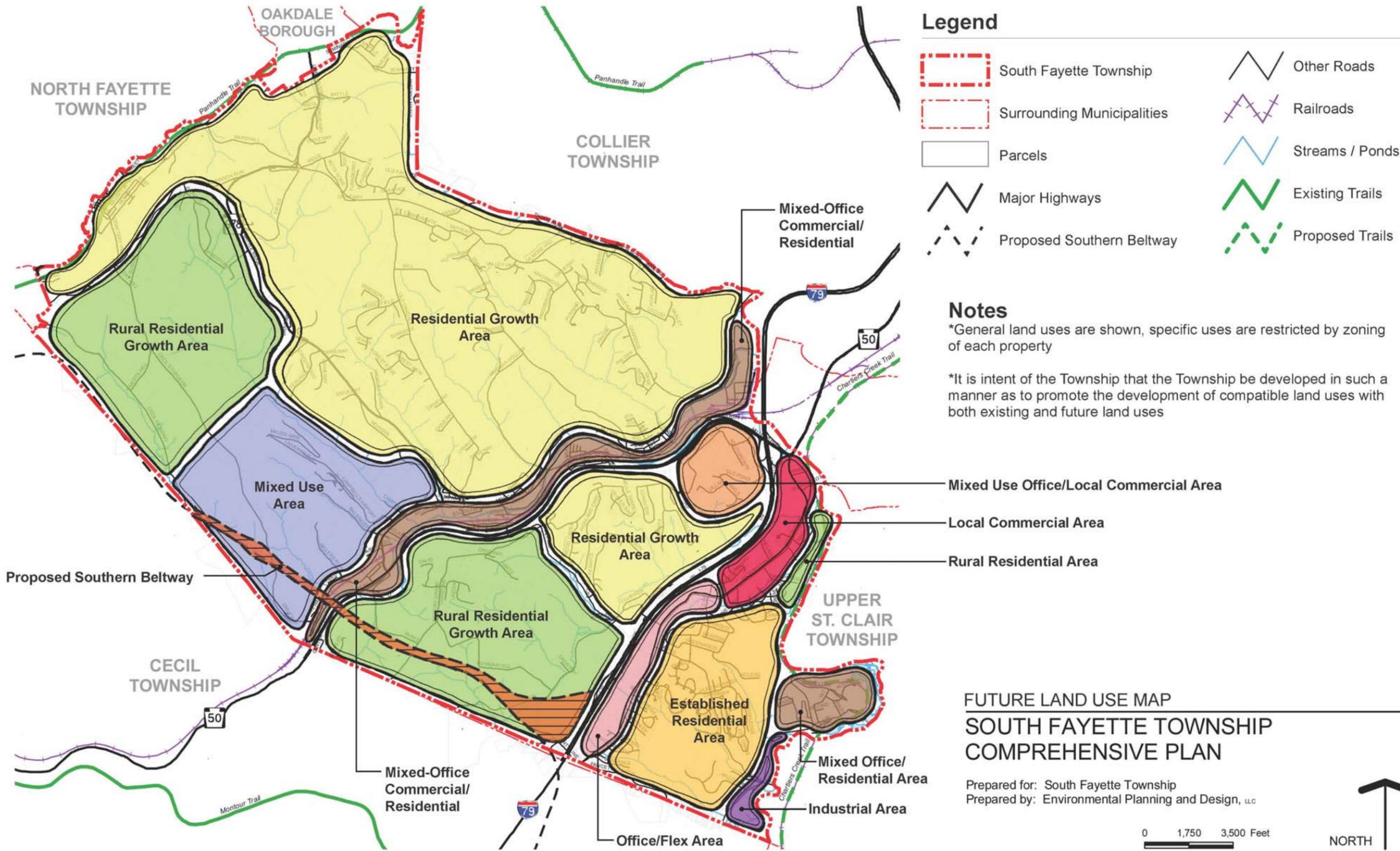
6. Regional Relationships

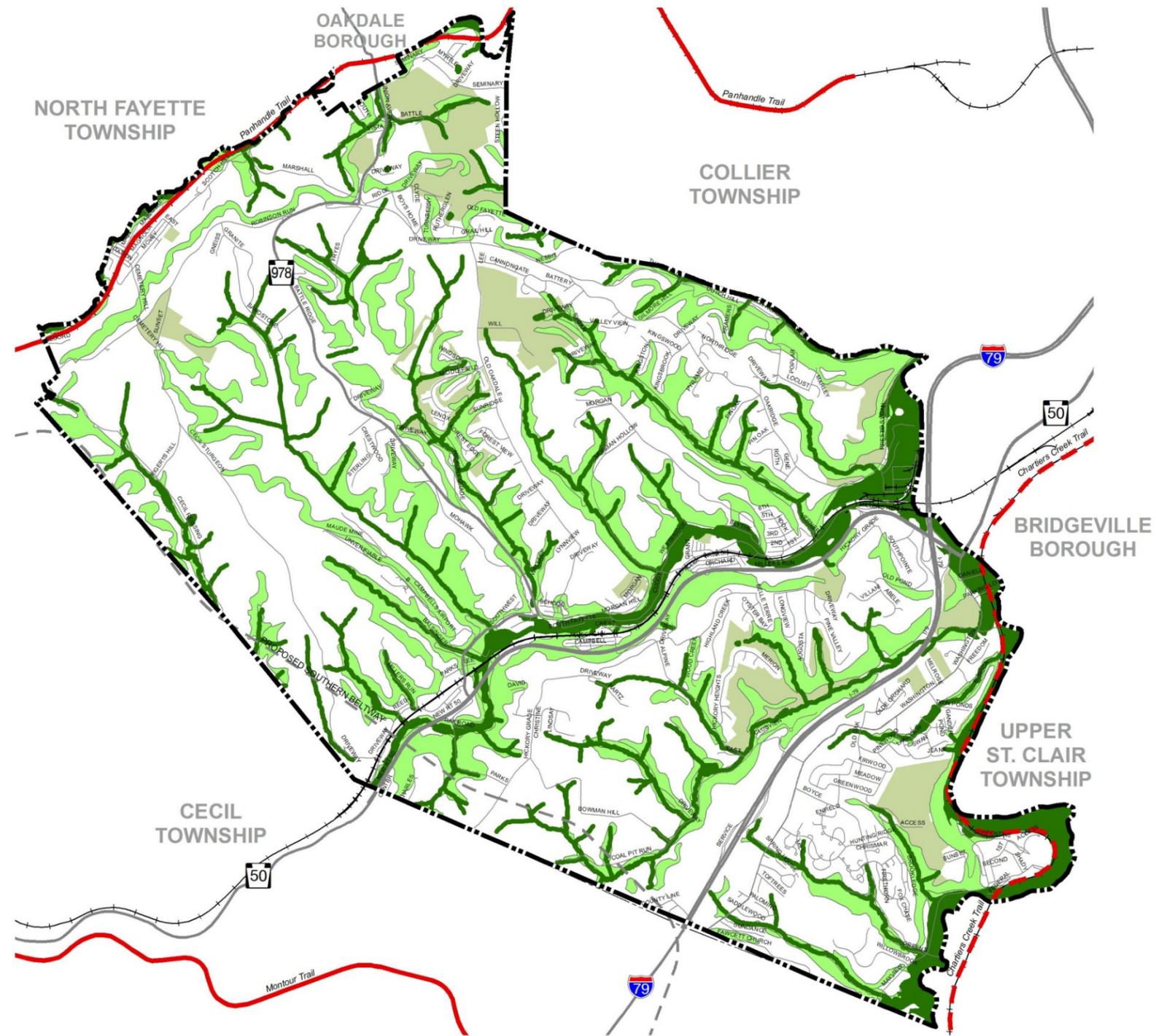
As collaboration among the Township, School District and surrounding communities is crucial to the success of this planning effort, it is also imperative the Township proactively pursue positive planning relationships with surrounding municipalities. Of significant importance are encouraging compatible land use and transportation patterns between South Fayette, Bridgeville Borough, Collier, North Fayette and Cecil Townships. Consideration for optimizing local and regional solutions associated with common transportation corridors, waterways, watersheds and public facilities may be of importance in coming decades to the people of South Fayette. Some specific opportunities for regional discussions and implementation include, but are not limited to:

- The Township and surrounding municipalities to optimize efforts associated with improvements to regional pedestrian-oriented facilities.
- Encouraging partnership between the communities in the development of connector trails and greenways.
- A recreation trail between Upper St. Clair's Recreation facility and South Fayette Township Fairview Park/Mayview site.

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- Work with Collier Township and Oakdale Borough on interconnection of the Boy's Home Park Trails and the Nike Site Park.
- Minimizing negative impacts from increased traffic on regionally significant roadways, such as Route 50.
- Road corridor improvements.
- A regional library effort with Bridgeville and possibly others.





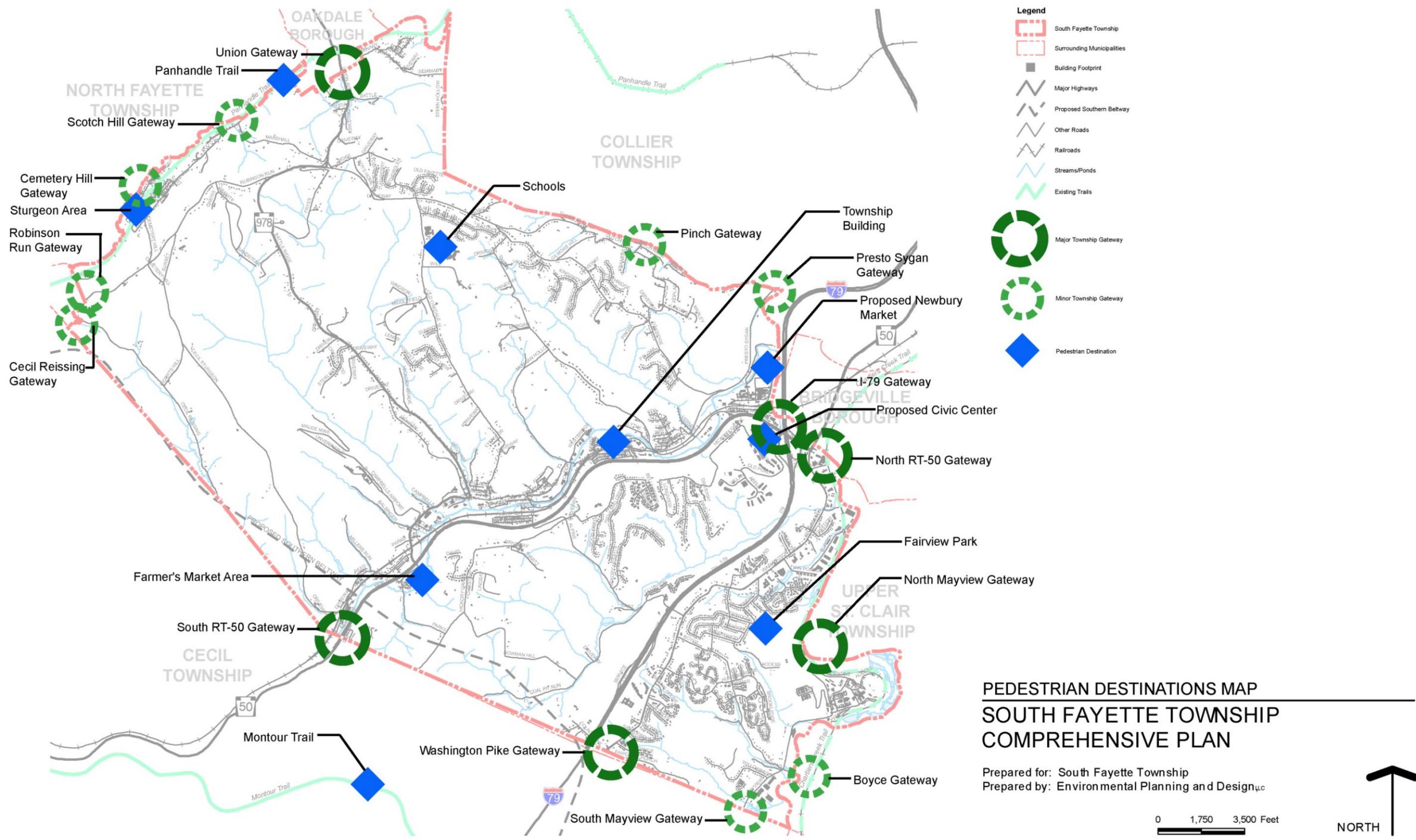
Legend

| | | | |
|--|-----------------------------|--|-----------------|
| | South Fayette Township | | Railroads |
| | Surrounding Municipalities | | Existing Trails |
| | Major Highways | | Proposed Trails |
| | Proposed Southern Beltway | | |
| | Other Roads | | |
| | PRIMARY CONSERVATION AREA | | |
| | SECONDARY CONSERVATION AREA | | |
| | COMMUNITY-SCALE OPEN SPACE | | |

CONSERVATION CORRIDOR CONCEPT PLAN
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN

Prepared for: South Fayette Township
 Prepared by: Environmental Planning and Design, LLC

0 1,750 3,500 Feet
 NORTH



**PEDESTRIAN DESTINATIONS MAP
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC

0 1,750 3,500 Feet



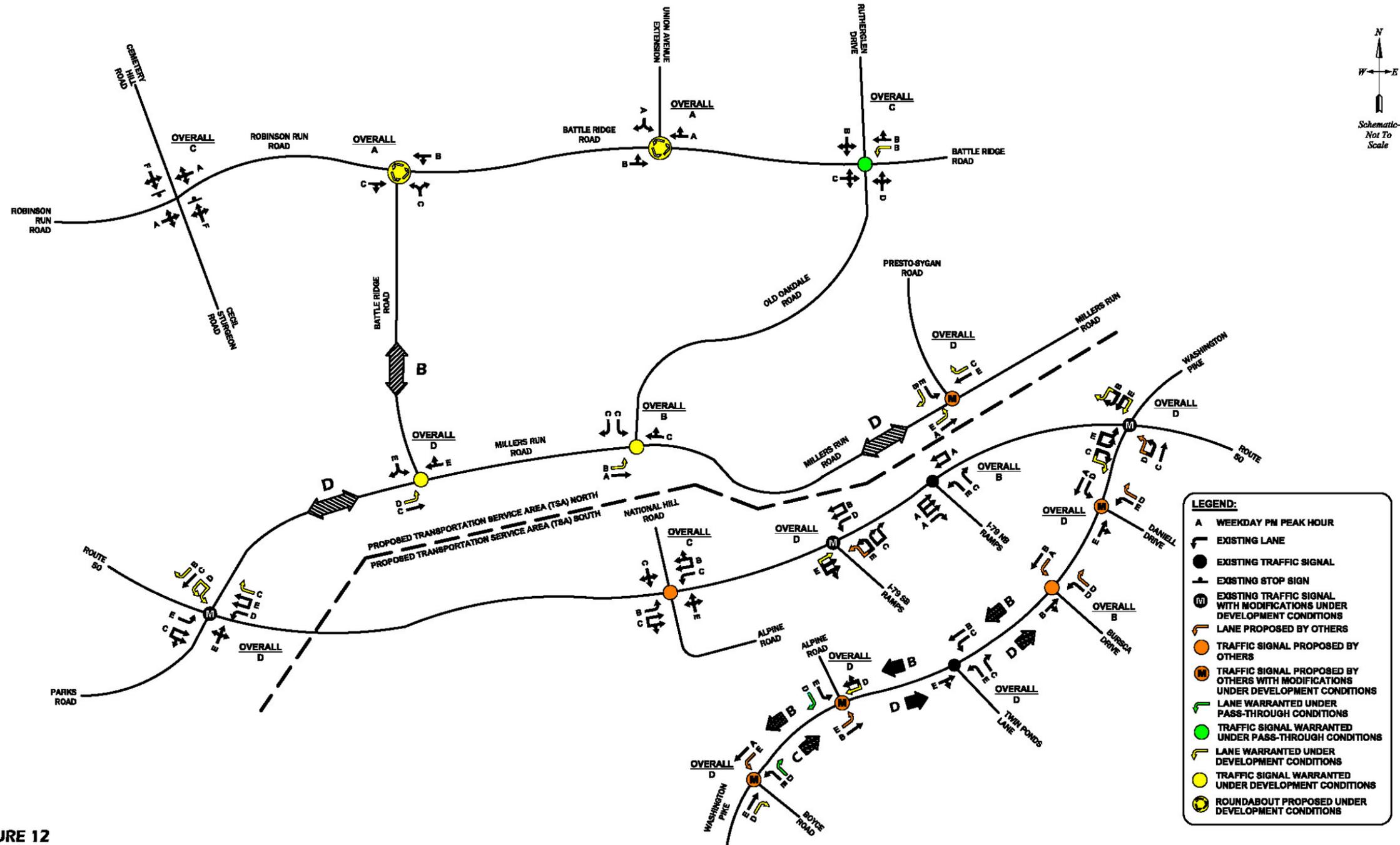


FIGURE 12
 2030 Future Development Weekday Afternoon Peak Hour Levels of Service with Improvements
SOUTH FAYETTE TOWNSHIP ACT 209
 SOUTH FAYETTE TOWNSHIP, ALLEGHENY COUNTY, PA



(3/22/11-LBK) I:\Eng\909423\Drawg\Figures\Figure12.dwg

Core Strategies

To ensure the community's vibrancy today continues on through the coming decade, a series of recommendations have been created. The recommendations are the essential strategies for the community to reach its long-term goals set out as part of this Comprehensive Plan process. While build-out is a consideration, these strategies should be pursued over the next decade to ensure the impacts of continued growth are shaped in the way the community desires.

Compatibility and Inter-Relationships in the Comprehensive Plan

The Comprehensive Plan provides a long-term outline for organizing and optimizing the Township's many planning opportunities. Together through integration of the Comprehensive Plan's various components, the community seeks to have strategy that balances community aspirations and available resources. "Piecemeal" implementation could result in confusion, inappropriate development or potential challenges. Key recommendations, include additional opportunities for planning, policy development, enhanced operations, capital improvements as well as collaboration.

The Township Planning Commission should update the status and priority of these Core Strategies annually and should include them in the

Planning Commission's Annual Report for submission to the Board of Commissioners for review/approval. Each Action Step emerging from the Core Strategies should be evaluated annually in context of implementation priority and percentage complete. The Planning Commission and Action Step's identified leader(s) should collectively categorize the probability (strong, good, minimal) that the identified Action Steps will meet target dates and acceptable quality. For items ranking "good" or "minimal," changes in schedule, resource and scope should then be defined with the Action Step's leader and Board of Commissioners.

Overall Community Planning

- ❖ Promote the development of a conceptual plan and update related provisions/guidelines for the western PED land in the Township. Meet with landowners to cooperatively evaluate the trade-offs of different land use scenarios.

- ❖ Encourage more frequent, formalized discussions between the Township and the South Fayette School District to track physical and fiscal impacts of population growth on both entities.

- ❖ Evaluate all planning and capital improvements efforts in context of "How does this project

PART ONE: CORE STRATEGIES FOR ACTION |

uphold or enhance the quality of life in South Fayette?”

- ❖ Promote semi-annual events that join older residents and school-aged children/families together in exploring historic as well as forward-looking aspects of the community.
- ❖ Continue promoting a diverse residential housing stock that complements established neighborhood development and responds to various price/age interests.
- ❖ Support non-residential development and redevelopment in concert with balanced transportation and infrastructure improvements.

Zoning and Subdivision Ordinances

- ❖ Require applicants to map and calculate associated resources applicable to designated Natural Infrastructure Corridor criteria.
- ❖ Update the equation for developable area, open space and pedestrian circulation systems and document on a plan.
- ❖ Create incentives for developers for redevelopment in targeted near-term growth areas.

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- ❖ Target strategic underutilized areas along Washington Pike concurrent to roadway improvements.
- ❖ Expand Planning Commission involvement by requiring conceptual plan review prior to subdivision and/or land development application.
- ❖ Adopt design guidelines to shape safety and improvement of the Township's various roadway corridors.
- ❖ Revise land use regulations and/or introduce ordinance process diagrams in a manner that makes the regulations easily navigable by users.

Operations and Capital Improvements

- ❖ Develop a community-wide walking and bicycle trail system which can be financed through a combination of municipal capital improvements and private-sector development.
- ❖ Promote a community-wide pedestrian connection to the South Fayette Township Civic Center.
- ❖ Construct a unified Township-wide wayfinding/gateway system.

PART ONE: CORE STRATEGIES FOR ACTION |

- ❖ Prepare and update budget estimates for the capital improvement projects suggested by the Comprehensive Plan.
- ❖ Provide annual updates to the Township's capital improvement program in anticipation of upcoming Comprehensive Plan actions.

Governmental Collaboration

- ❖ Establish a procedure to insure continuous and on-going coordination with respect to the long-range planning efforts of South Fayette Township.
- ❖ Create a Communications Diagram and Responsibilities Matrix to facilitate communication and cooperation between the Township's Board of Commissioners, the Planning Commission, the Municipal Staff, the general public as well as the Municipal Authority, School District and Allegheny County.

Define a proactive agenda with neighboring communities and public agencies to coordinate "developments/redevelopment of regional impact" that may adversely affect the Township's traffic network.

Key Issues and Opportunities

South Fayette Township appeals to many – young, old, individuals and families. The key issues and opportunities which emerge as part of this appeal are predominately related to:

- community growth
- commercial development
- road network
- civic amenities
- taxes and government control

Part Two highlights these attributes in context of completed analyses and feedback received throughout the process including key person interviews, public meetings and a community-wide opinion survey. Following the key issues and opportunities discussion, detailed findings of the completed build-out analysis are provided.

Community Growth/Demographics

As South Fayette Township continues to increase its population, residents agree that efforts need to be made in order to continue to provide the same quality, if not better, of service to citizens while still remaining a competitive and attractive community throughout the region. The location and scale associated with development are important elements to balance as the Township continues to grow.

Opportunities for designated public open spaces and recreation areas are also significant to Township quality of life. Many are currently satisfied with the level of sports leagues and organized recreation opportunities offered, but caution that a growing population will stress the current system, so a plan for expanded opportunities should be taken into consideration. Currently, most of the sports organizations within the Township use sports facilities offered at the schools, as there are few other facilities available. Additionally, it is important to continue and expand non-sports community activities (such as the Easter Egg Hunt and Light Up Night) that appeal to residents of all ages, as they are already successful and well-done activities for the

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community. Summer time recreation opportunities are also important to residents interviewed, and specialized education and recreation opportunities (such as an environmental or agricultural learning camp) were suggested as opportunities that could fit seamlessly into the natural culture and character of South Fayette.

Comprehensive Plans are prepared using a framework of population, household and economic trends. Demographic data available for the preparation of this plan is from the 2000 and 2010 census. Historical reference data was also included where applicable and available.

As the balance of residential growth and School District needs is a fundamental component of a municipality's quality of life, continued, frequent Township and School District collaboration about development patterns is critical to each community's prosperity and success.

Population

South Fayette's population has increased by nearly 40% in the past 50 years.

Table 1: Population Percent Change (1960-2010)

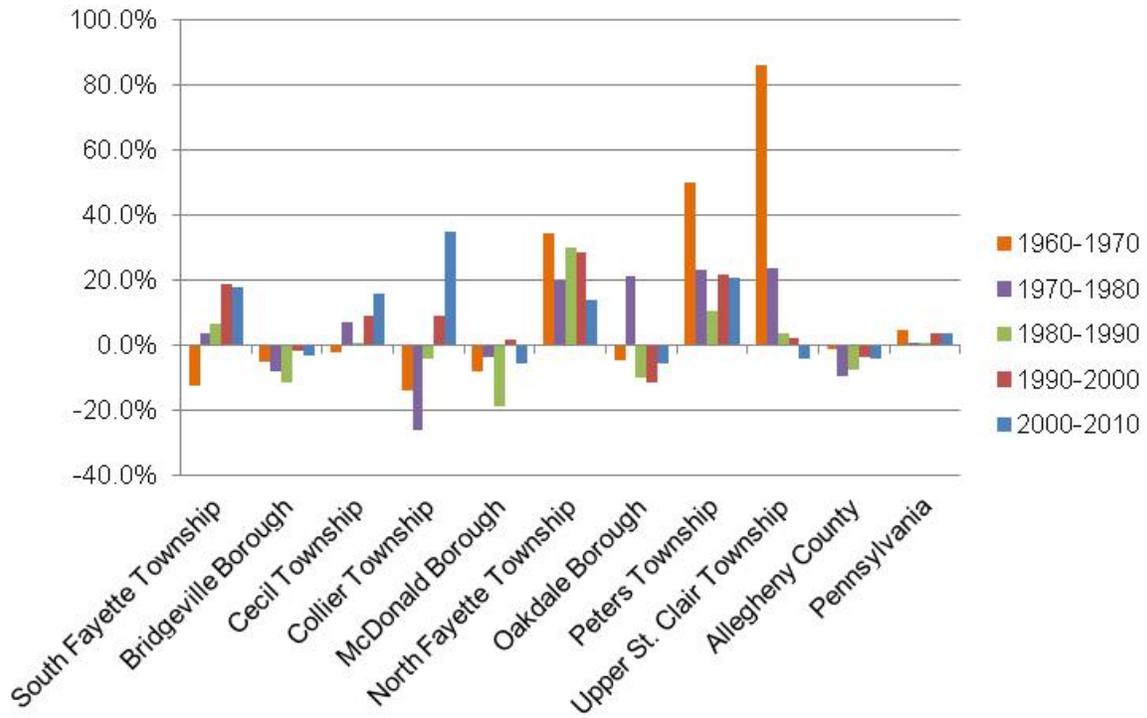
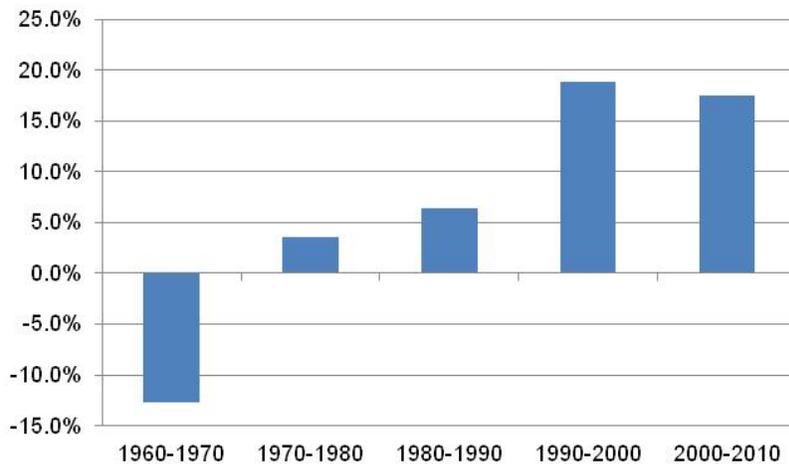


Table 2: Population (1960-2010)

| Location | Years | | | | | |
|--------------------------|------------|------------|------------|------------|------------|------------|
| | 1960 | 1970 | 1980 | 1990 | 2000 | 2010 |
| South Fayette Township | 10,728 | 9,369 | 9,707 | 10,329 | 12,271 | 14,416 |
| Bridgeville Borough | 7,112 | 6,717 | 6,154 | 5,445 | 5,341 | 5,148 |
| Cecil Township | 8,563 | 8,362 | 8,923 | 8,948 | 9,756 | 11,271 |
| Collier Township | 8,021 | 6,874 | 5,063 | 4,841 | 5,265 | 7,080 |
| McDonald Borough | 3,141 | 2,879 | 2,772 | 2,252 | 2,281 | 2,149 |
| North Fayette Township | 4,583 | 6,148 | 7,351 | 9,537 | 12,254 | 13,934 |
| Oakdale Borough | 1,695 | 1,614 | 1,955 | 1,752 | 1,551 | 1,459 |
| Peters Township | 7,126 | 10,672 | 13,104 | 14,467 | 17,566 | 21,213 |
| Upper St. Clair Township | 8,287 | 15,411 | 19,023 | 19,692 | 20,053 | 19,229 |
| Allegheny County | 1,628,587 | 1,605,016 | 1,450,085 | 1,336,449 | 1,281,666 | 1,223,348 |
| Pennsylvania | 11,319,366 | 11,793,909 | 11,863,895 | 11,881,643 | 12,281,054 | 12,702,379 |

Table 3: South Fayette Population Percent Change (1960-2010)



While some surrounding communities have gained population, others have lost population. The state has made relatively slight gains while Allegheny County has lost population.

Households

South Fayette's average household size and average family size are slightly greater than several surrounding communities and Allegheny County. The US Census defines a household to include all the people who occupy a housing unit. (People not living in households are classified as living in group quarters.) A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Further, a family consists of a householder and one or more other people living in the same household who are related to the householder by birth, marriage, or adoption. All people in a household who are related to the householder are regarded as members of his or her family. A family household may contain people not related to the householder, but those people are not included as part of the householder's family in tabulations. Thus, the number of family households is equal to the number of families, but family households may include more members than do families.

Table 4: Household and Family Size (2010)

| | Average household size | Average family size |
|--------------------------|------------------------|---------------------|
| South Fayette Township | 2.41 | 3.07 |
| Bridgeville Borough | 2.4 | 3 |
| Cecil Township | 2.49 | 2.93 |
| Collier Township | 2.28 | 2.84 |
| McDonald Borough | 2.21 | 2.94 |
| North Fayette Township | 2.02 | 2.8 |
| Oakdale Borough | 2.35 | 2.8 |
| Peters Township | 2.88 | 3.2 |
| Upper St. Clair Township | 2.75 | 3.11 |
| Allegheny County | 2.23 | 2.91 |
| Pennsylvania | 2.45 | 3.02 |

Table 5: Average Household Size (2010)

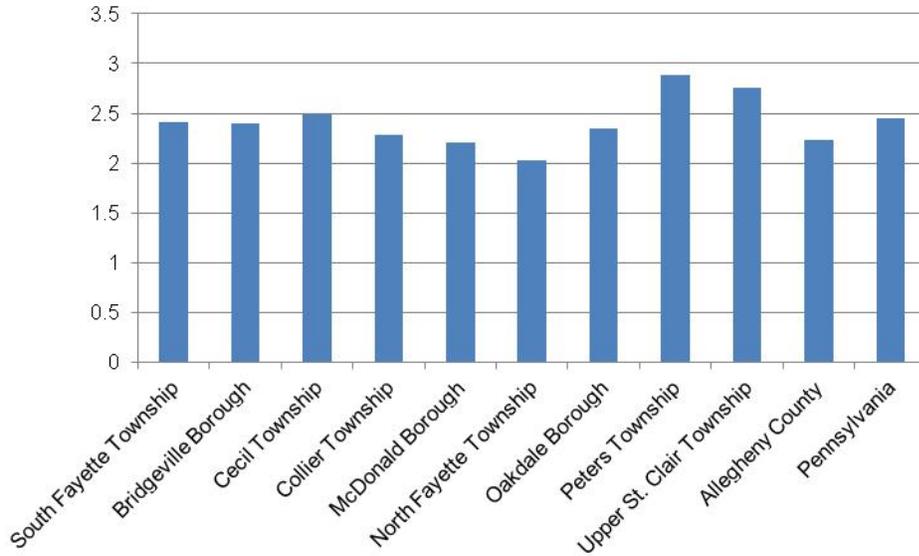
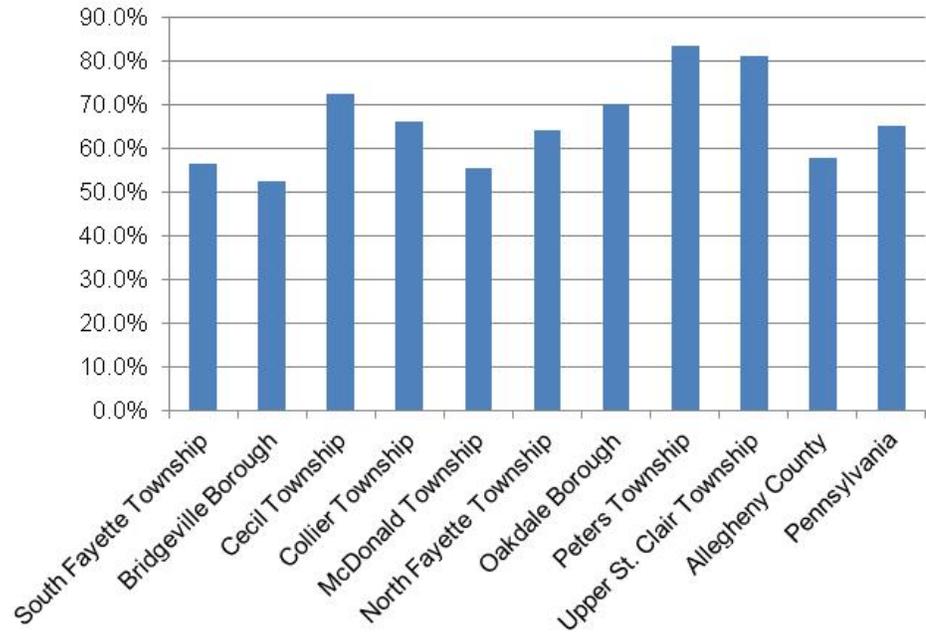


Table 6: Percent of Family Households (2010)

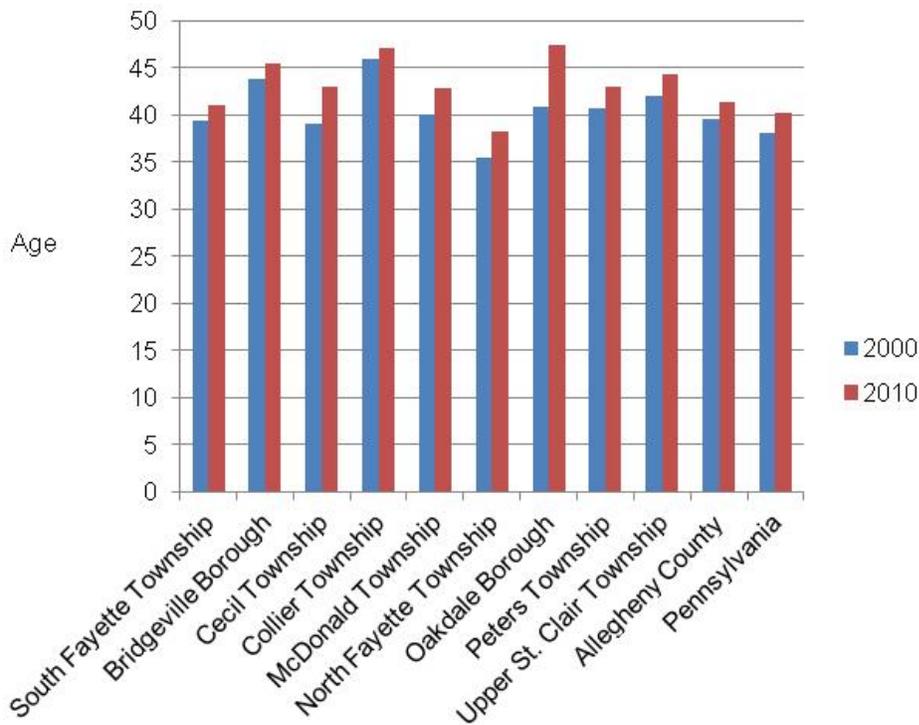


The percentage of family households compared to total households compares family and non-family household units. South Fayette has a relatively comparable percentage (65%) of family households relative to many, but not all, of the surrounding communities.

Median Age

Median age represents the middle age of a community’s residents. The median age of South Fayette’s residents is similar to that of the surrounding communities, the state and Allegheny County.

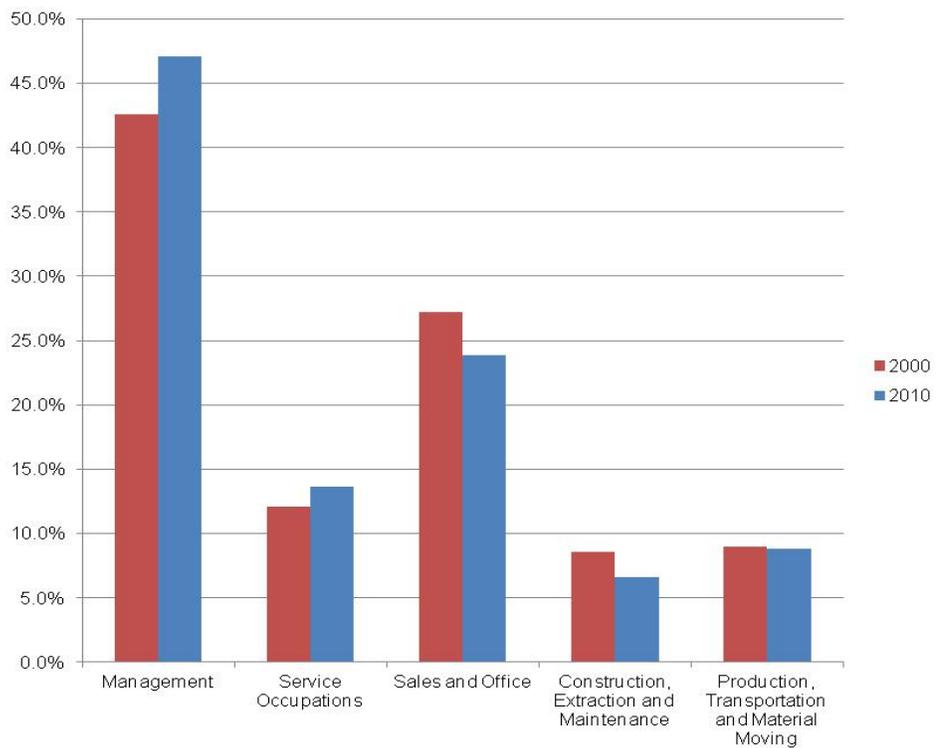
Table 7: Median Age



Occupation

South Fayette residents are increasingly employed in management, the only occupation category to report an increase between 2000 and 2010.

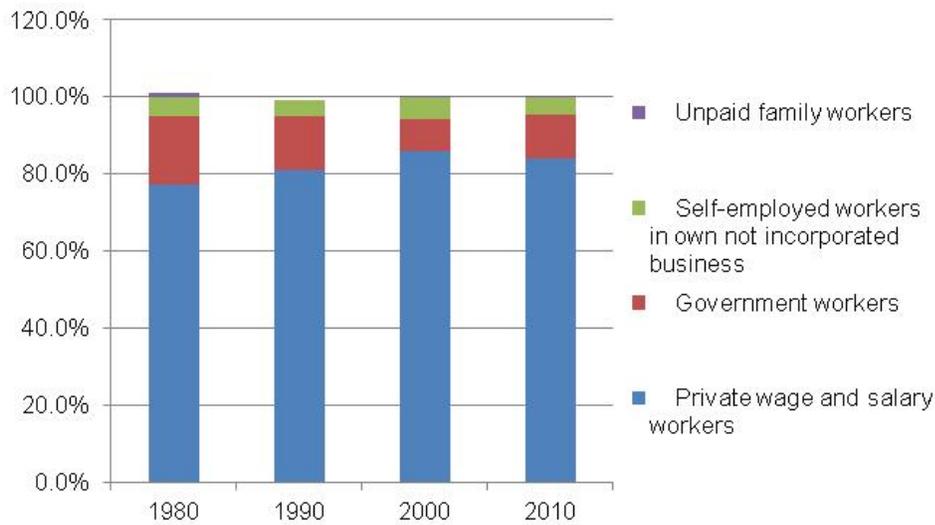
Table 8: Occupation of South Fayette Residents



Class of Worker

South Fayette’s residents are largely private wage and salary workers, something that has remained steady over the past 30 years.

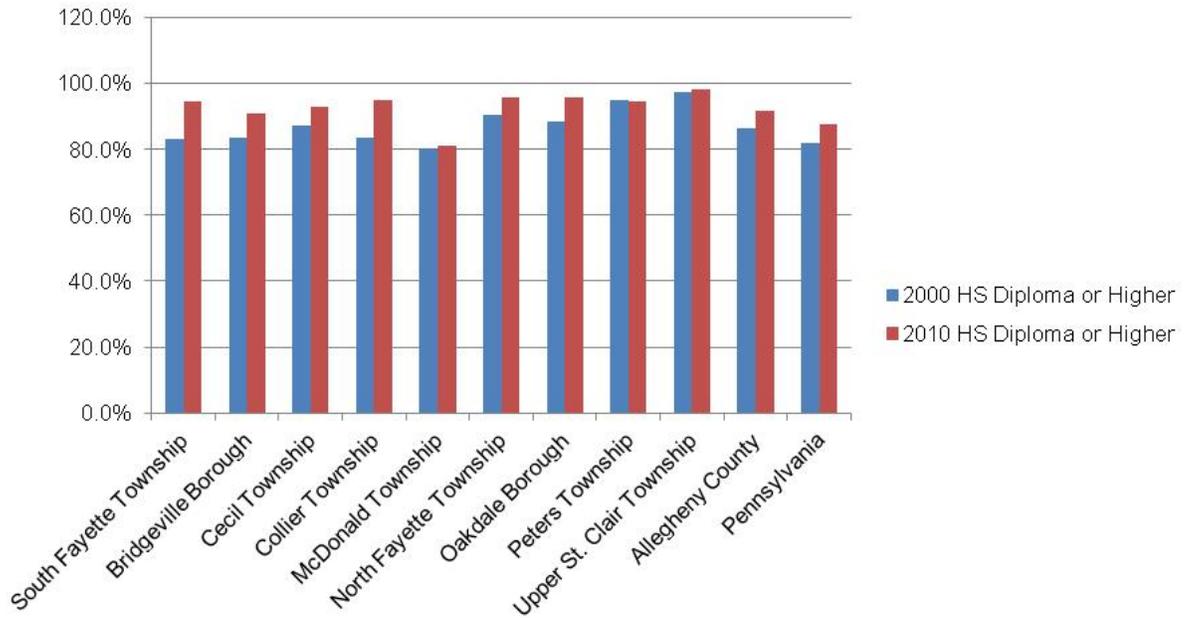
Table 9: South Fayette Class of Worker (2010)



Educational Attainment

South Fayette’s residents are increasingly likely to earn a high school diploma or higher, a trend that holds for the surrounding communities, the state and Allegheny County.

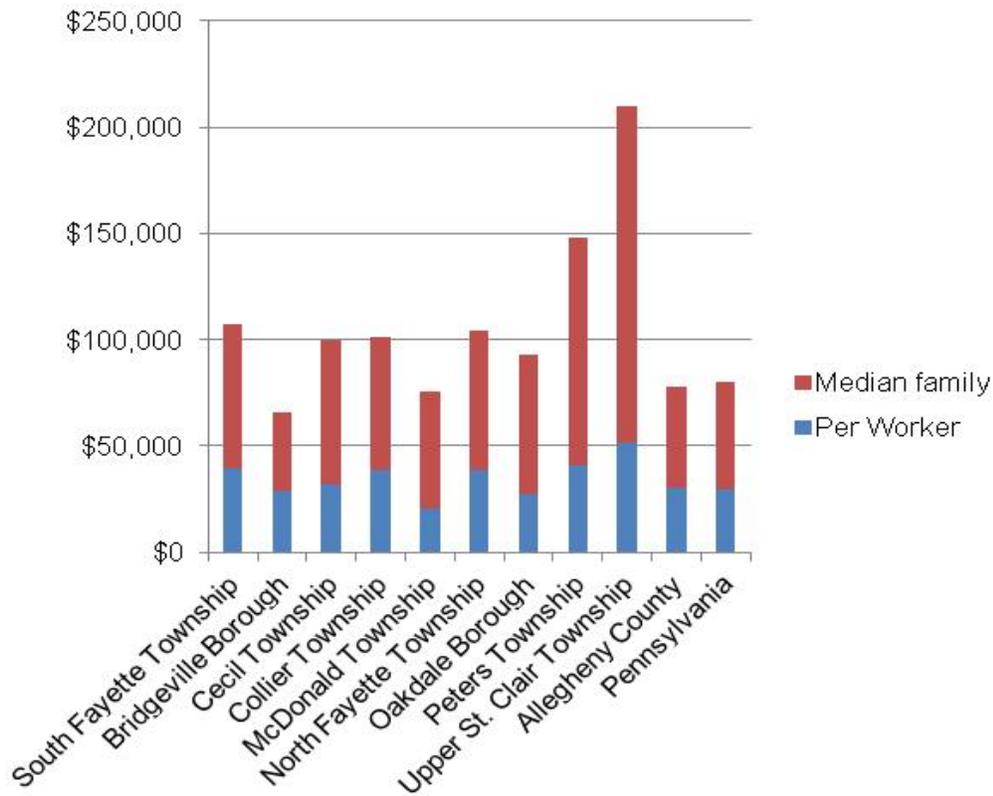
Table 10: Educational Attainment (2010)



Median Income

South Fayette’s income is the third highest of the surrounding communities, the state and Allegheny County.

Table 11: Median Family and Per Worker Income



Housing Stock

Like the state and Allegheny County, South Fayette and all surrounding communities are primarily made up of single family detached homes. McDonald, Oakdale, Peters and Upper St. Clair have the highest percentage of single family detached units. As of 2010, an additional 20.9% of the units within South Fayette were single-family attached dwelling units.

Table 12: Single Family Detached Dwelling Units (2010)

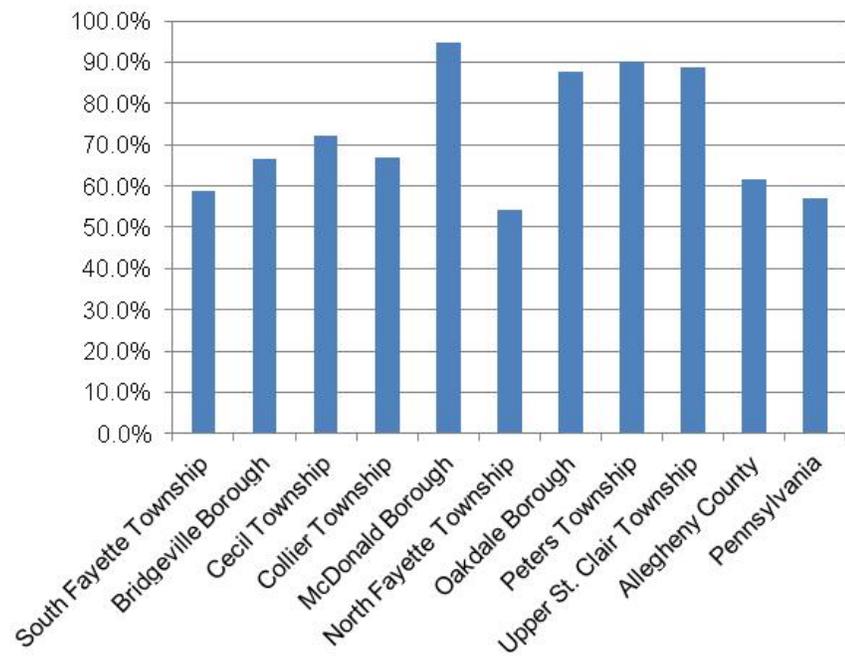
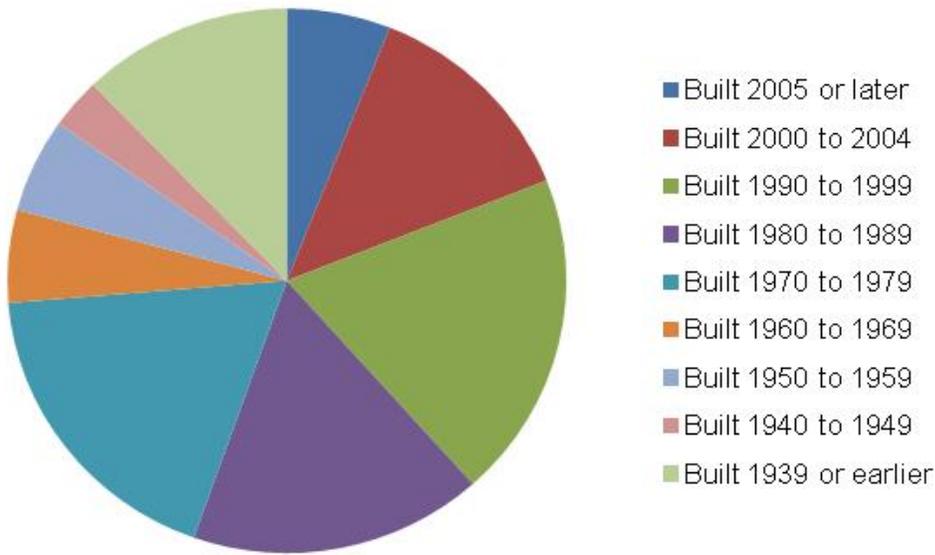
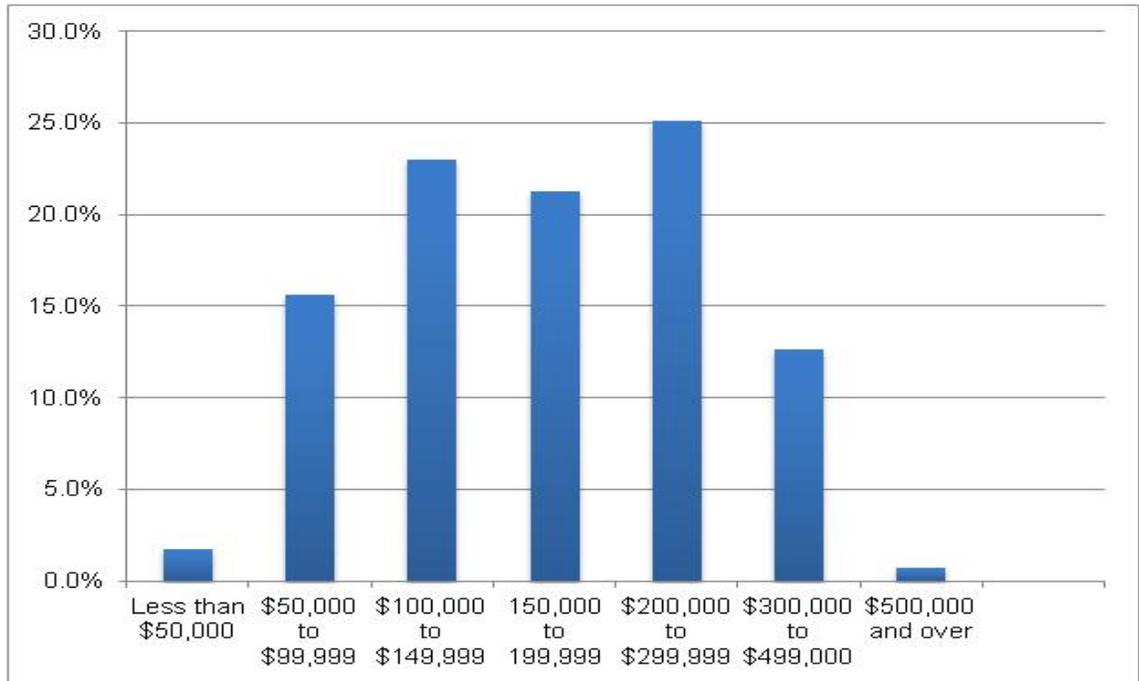


Table 13: South Fayette Year Homes Built (2010)



Much of South Fayette’s housing stock has been constructed in the past 20 years. Inclusive of the existing housing stock in the township, the median year of home construction in South Fayette is 1978.

Table 14: South Fayette Township Housing Values (2010)



As of 2010, the median housing value of a home in South Fayette Township was \$169,000.

Commercial Development

Although opinion varies within the community at large on what opportunities for revitalization efforts are, consistent goals and objectives remain important. Significant interest exists about bringing future development into South Fayette Township, but only if it is done responsibly and will not tarnish the character of the community.

It is generally agreed upon that there is plenty of “room to grow” regarding development but that the location of further commercial development should occur not only in the areas where there is already commercial development, but also where zoning permits and the commercial use will not adversely encroach further into the rural areas of the Township. Development along the Route 50 corridor is considered a positive addition to the community, assuming that provisions are made for traffic increase in and around this area.

Consideration for stores of all sizes, large and small, should continue to be evaluated and introduced in corresponding zoning districts. For trips to restaurants and large specialty stores (or “suburban” stores) like Target and Whole Foods, residents have to travel outside of the community; bringing in these types of stores in a responsible way could help to develop the tax base and encourage Township residents to shop within their own community. Additionally, mixing in areas to

Significant interest exists about bringing future development into South Fayette Township, but only if it is done responsibly and will not tarnish the character of the community.

expand the community's popular farmers' market for local growers and craftsmen to sell their goods within these more commercial areas will help to forge any gap between local agriculture and larger chain retail. A balance of commercial development and housing development will allow the community to reduce the stress of a rapidly increasing population on the school system and associated taxes.

Road Network

With the natural increase in population, as well as an anticipated increase in commercial development, road network issues (both current and foreseeable) need to be addressed in order for the Township to remain attractive to current and incoming residents. The new GetGo gas station along Washington Pike is an example often cited as an illustration of the importance of this issue. Additionally, as development is planned, future renovations to the existing roadways should continue to be studied (such as increasing lane numbers, width, turning lanes, etc.) especially in relationship to the Plan's Transportation Study findings.

Civic Amenities

With growth, there is need for increased civic development throughout the Township. Continued interest in realizing the benefits of a civic/ community center should be encouraged.

Improvements and expansion to the existing library should also be considered to assure the size and programs offered by the library keep up with the increasing demand by a growing community. Additionally, further improvements and enhancements to the existing park system and facilities would be welcome aspect of civic life. The foundation of these enhancements is recommended to go hand-and-hand with the development of a more comprehensive park and open space network including additional publicly accessible open spaces distributed throughout the Township.

During the Comprehensive planning process, civic amenities such as a senior center and a community garden were discussed as the types of features that exist in nearby communities that may also be well-served in South Fayette Township. Although the number of overall amenities that exist may seem low when compared to surrounding communities, residents expressed they are generally satisfied with the current care and quality of the existing facilities and generally supportive of the expansion of these facilities to match the growing population of the Township.

The limited comprehensive sidewalk and pedestrian network within the Township provides the opportunity to include sidewalks in all new development as well as to “retrofit” older

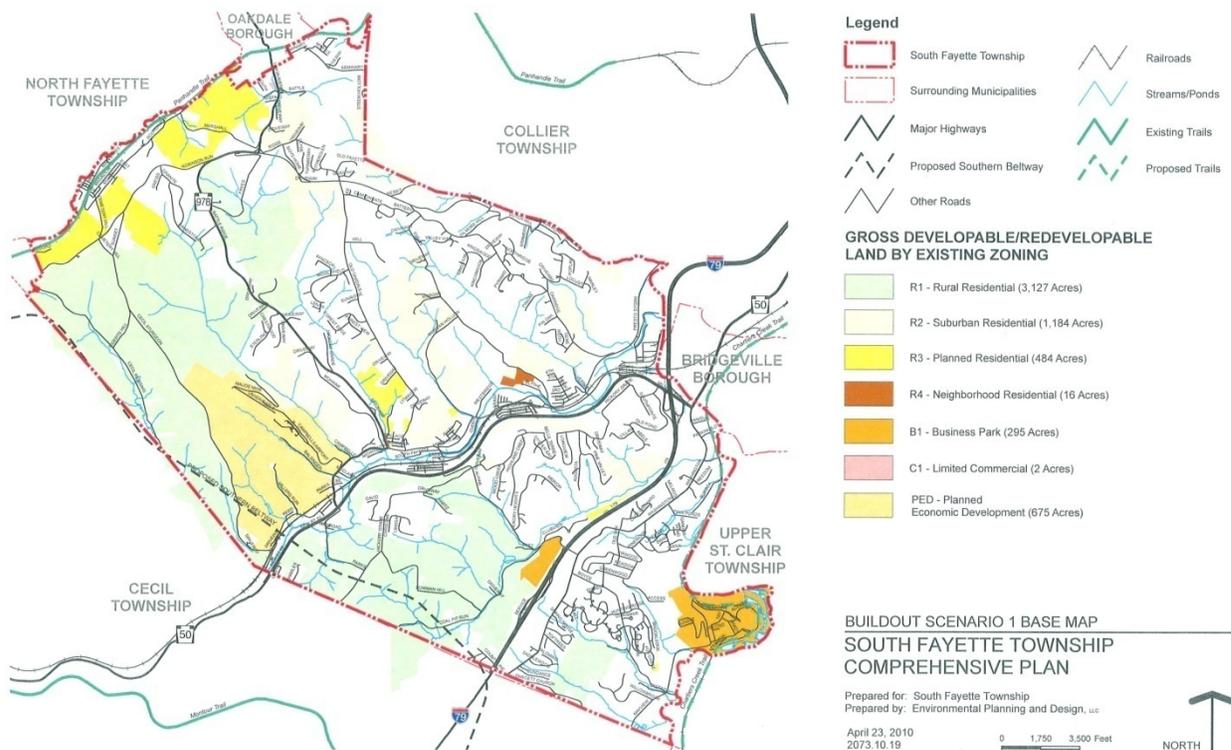
developments to accommodate pedestrian circulation and connections. Because of the open rural nature of parts of the Township, motorists in these areas often have a tendency to drive too fast to make walking safe; incorporating sidewalks and buffers could potentially increase pedestrian and bicycle circulation in these more rural areas. Although different in character, nearby Mount Lebanon is often cited as an example of a local community in which pedestrian and bicycle circulation (especially amongst children) is successfully achieved. Upper St. Clair is also taking initiatives to successfully retrofit sidewalks into existing neighborhoods.

Taxes and Government Control

Among the residential population, opinions on taxes and the municipal government from key persons were not as clear-cut as those regarding the future development of the Township. While most residents feel that the current taxes are too high in South Fayette, they all seem to realize that having a high-quality community with a reputable school system comes at a price. In order to keep the dialogue moving forward in a positive direction, the community could develop an “everyday man’s guide” to explain exactly where taxes are going. This helps establish justification if and when tax increases are being made and for the right reasons.

Comprehensive Plan Build-Out Analysis

The build-out analysis was a fundamental tool used in this planning process to determine the capacity of potential growth of the Township. Available land for development or redevelopment and the zoning district in which it resides was used as the starting point. Factors that limit the amount of land that can be developed such as floodplains, the Township’s open space requirements and infrastructure are considered as part of the analysis. Saleable area was determined using GIS analysis of agricultural, woodland, and re-



developable areas. Utilizing Plan Advisory Team and Township staff input, these areas were defined as part of the build-out analysis scenario to best reflect potential long-term development opportunities.

Developable area (Table 15) was then calculated based on a series of resource and planning considerations. The zoning ordinance requires the subtraction of floodplains, wetlands, and the Township's open space requirement from the total saleable area. Space typically needed for infrastructure, such as roads and utilities, has also been removed from the developable area using an average ratio of 15% commonly applied to broader-scale planning initiatives. The non-residential zoned areas are not required to have any open space dedication according to the Township's ordinances.

Township-wide Analysis

Table 15: Developable Area - Overall Acreage Adjustments

| | A | B | C | D | E | F | G | H | I |
|--------------------------|-----------------------------|--------------------------------|------------------------------|--|---|--|--|------------------------------|---------------------------------|
| | Gross Saleable Area (acres) | Floodplains & Wetlands (acres) | Saleable Area (acres) [=A-B] | Open Space Dedication (Subdivision Ord. percent) | Open Space Requirement (acres) [=C x D] | Remaining Saleable Area (acres) [=C-E] | Infrastructure Area Adjustment Factor ^e | Infrastructure Area [=F x G] | Developable Area (acres) [=F-H] |
| R1 | 3,247 | 128 | 3,119 | 10% | 312 | 2,807 | 15% | 421 | 2,386 |
| R2 | 1,240 | 58 | 1,181 | 10% | 118 | 1,063 | 15% | 159 | 904 |
| R3 | 496 | 13 | 484 | 10% | 48 | 435 | 15% | 65 | 370 |
| R4 | 17 | 2 | 16 | 10% | 2 | 14 | 15% | 2 | 12 |
| B1 | 295 | 115 | 180 | | 0 | 180 | 15% | 27 | 153 |
| C1 | 2 | 1 | 2 | | 0 | 2 | 15% | 0 | 1 |
| PED | 697 | 191 | 506 | | 0 | 506 | 15% | 76 | 430 |
| C2 ⁱ | 5 | 5 | 0 | | 0 | 0 | | | |
| <i>Total^l</i> | 6,000 | | 5,488 | | 480 | 5,008 | | 751 | 4,257 |

Steep slopes were not removed as part of the calculation determining developable area. According to the Township’s zoning ordinance, portions of steep slope areas may not be disturbed; however, they may be included within developable area as they do not impact any initial density calculations.

Key Impacts of the Township-wide Analysis

Within most zoning districts, developable area is approximately 75% of the saleable land. The areas zoned B1 are significantly less than this percentage because of the large amount of floodplains in these areas.

Residential growth areas account for over 80% of the total developable area in the Township.

Nearly 80% of all non-residential developable area is in the PED zoning district.

Community residential growth could potentially increase by two and a half times if full build-out is realized. A breakdown of this calculation for residential and non-residential patterns follows.

Residential Analysis Process

The residential analysis calculates potential impacts of future development by considering the increases in additional:

- dwelling units;
- residents;
- number of new school-aged students; and
- infrastructure demands.

The permissible density for future residential development is based on the density allowed by the zoning ordinance for each zoning district.

Permissible density for residential development within the Planned Economic Development District is uniform across all types of development.

Table 16: Potential Residential Impacts

Chart #2: Potential Residential Impacts

| | A | B | C | D | E | F | G |
|--------------------------|-----------------------------|--|---|---|---|---|--|
| | Developable Area (acres) | Permissible Density (DUs per acre) | Additional Dwelling Units (Total DUs) [=A/B] | Additional Overall Population ^b [=C x avg. persons per household] | Additional Student-aged Population ^c [=C x avg. students per household] | Additional GPD Infrastructure Demand ^d [=D x 100 GPD] | Additional Average Daily Trips [=C x rate per development type] |
| R1 | 2,386 | 0.51 | 4,725 | 11,292 | 1,890 | 1,129,159 | 40,444 |
| R2 | 904 | 0.46 | 1,968 | 4,704 | 787 | 470,435 | 18,429 |
| R3 | 370 | 0.24 | 1,535 | 3,670 | 614 | 366,957 | 13,787 |
| R4 | 12 | 0.14 | 87 | 207 | 35 | 20,694 | 910 |
| B1 | | | | | | | |
| C1 | | | | | | | |
| PED | 86 | 1.00 | 86 | 205.611 | 34 | 20,561 | 905 |
| C2 ⁱ | | | | | | | |
| <i>Total^j</i> | <i>3,758</i> | | <i>8,401</i> | <i>20,078</i> | <i>3,360</i> | <i>2,007,806</i> | <i>74,475</i> |

Key Impacts of Residential Analysis

The greatest potential for residential growth is projected to occur in the R1 residential districts. Although the permissible density for R1 residential is lower than other residential districts, the total R1 developable land is far greater than R2, R3, and R4 combined.

The highest potential for residential growth occurs in the western half of the Township because of the current zoning and the amount of undeveloped land. Residential development could be even higher in this area of the Township if residential is included in new development in the PED zoning district.

Non-Residential Analysis Process

Non-residential impacts of future growth are based on projected floor area ratios (density assumption), infrastructure usage, and additional traffic generated as a result of development. Density assumptions are the primary difference between two options. Option A uses a density ratio similar to that of the Cranberry Woods Development (0.14 floor area ratio) while Option B is based on a density ratio similar to that of the Abele Business Park (0.29 floor area ratio).

The range was identified for reference given the varying scale and types of development which have occurred within Western Pennsylvania. The additional water demand (GPD) calculates additional sewage and water needs. The GPD demand was calculated using International Building Code, PA code, and International Plumbing Code requirements. The average daily trips are based on Institute of Transportation Engineers' standards.

Table 17: Potential Non-Residential Impacts

| | Option A | | | | | Option B | | | |
|--------------------|--|--|--|---|---|--|-------------------------------------|--|---|
| | A | B | C | D | E | F | G | H | I |
| | Developable Area (acres) [as calculated on chart #1] | Density Assumption (Floor Area Ratio) ^a | Developable Square Footage [=A x B x 43,560] | + GPD Infrastructure Demand [=C x rate per dev. type] | + Average Daily Trips [=C x rate per dev. type] | Density Assumption (Floor Area Ratio) ^b | Developable Square Footage [=A x F] | + GPD Infrastructure Demand ^k [=G x rate per dev. type] | + Average Daily Trips [=G x rate per dev. type] |
| R1 | | | | | | | | | |
| R2 | | | | | | | | | |
| R3 | | | | | | | | | |
| R4 | | | | | | | | | |
| B1 | 153 | 0.14 | 934,869 | 171,081 | 8,513 | 0.29 | 1,936,515 | 354,382 | 14,913 |
| C1 | 1 | 0.14 | 9,020 | 1,651 | 1,422 | 0.29 | 18,683 | 3,419 | 2,282 |
| PED | 344 | 0.14 | 2,098,578 | 220,351 | 27,354 | 0.29 | 4,347,054 | 456,441 | 46,450 |
| C2 ^l | | | | | | | | | |
| Total ^l | 499 | | 3,042,467 | 393,082 | 37,289 | | 6,302,253 | 814,242 | 63,645 |

Key Impacts of Non-Residential Analysis

Option B's density ratio produces twice the additional development of that in Option A. The density assumption ultimately impacts the amount of traffic generated and water needed for future non-residential development. Traffic is measured by average daily trips; each time a person leaves a location it is considered one trip.

The largest potential non-residential growth is likely to occur in the Planned Economic Development District (PED). The potential development in this district is 2½ times greater than B-1. This is not surprising because of the large amount of land zoned for PED that is currently undeveloped.

The potential growth for areas zoned as PED could vary significantly because of the large amount of uses allowed (college campus, residential, offices, etc.)

The only potential new C1 development occurs in the northwestern area of the Township. The majority of potential R3 development also occurs in this area.

Existing Transportation Network

A Roadway Sufficiency Analysis, as well as an inventory of physical and operational characteristics of the existing Township transportation system required for the completion of the Roadway Sufficiency Analysis, was completed.

Roadway Characteristics

The South Fayette Township roadway system consists primarily of two-lane, undivided roadways with the exception of Route 50 and a small section of Washington Pike. Existing average daily traffic (ADT) volumes were collected on several of the main roadways within the Township. Major regional access to/from the Township is provided via I-79, Route 50, and Washington Pike (S.R. 3003). Proposed construction of the Pennsylvania Turnpike Southern Beltway will skirt the Township's southern border. The proposed Beltway interchange would provide connection to land in the southwest area of the Township. The Beltway's construction phasing is yet to be determined.

The Township’s roadway network, including both roadway segments and intersections, constitutes the transportation roadway network analyzed pursuant to the Plan’s Transportation Study. The operating characteristics of each of the major study roadways are summarized in Table 18.

Table 18: Current Transportation Network Summary

| Roadway | Class | Owner | Posted Speed Limit (mph) |
|------------------------------------|--------------------------|-------|--------------------------|
| Washington Pike (S.R. 3003) | Urban Minor Arterial | State | 35 |
| Route 50 (S.R. 0050) | Urban Principal Arterial | State | 40-55 |
| Millers Run Road (S.R. 3026) | Urban Collector Street | State | 35 |
| Union Avenue Extension (S.R. 0978) | Urban Collector Street | State | 35 |
| Battle Ridge Road (S.R. 0978) | Urban Collector Street | State | 40-45 |
| Robinson Run Road (S.R. 3024) | Urban Collector Street | State | 40 |
| Boyce Road (S.R. 3006) | Urban Collector Street | State | 35 |
| Presto-Sygan Road (S.R. 3028) | Urban Collector Street | State | 25 |
| I-79 NB Ramp (S.R. 8003) | Urban Principal Arterial | State | 45 |
| I-79 SB Ramp (S.R. 8003) | Urban Principal Arterial | State | 45 |

Existing Transportation Conditions

The evaluation of the existing transportation network is based on the physical (i.e., intersection geometry, lane usage, etc.) and operational (i.e., traffic control, traffic volumes, signal timing/phasing) characteristics of the study intersections and roadways during the weekday afternoon peak hour. Weekday afternoon peak hour was selected as the basis of this Roadway Sufficiency Analysis due to the mix of anticipated residential and commercial development, which typically have a shared peak during the weekday afternoon peak hour. Roadway pavement condition was not considered.

Future Improvements

Currently Washington Pike experiences the most traffic congestion in the Township. The Township staff believes that all of Washington Pike will eventually need to be widened to four lanes to the Washington County line. This could be done in several phases, working from the vicinity of Danielle Drive and working towards the south.

The Township staff also would like to see pedestrian and bicycle transportation improved throughout the Township. Major roadways need to have their paving widened to accommodate this traffic or separate pathways created paralleling the road network. Existing and new developments

should also provide interconnections whenever possible. The first area that would benefit from road widening would be Millers Run Road. When the proposed Newbury Market commercial development opens and the proposed Civic Center site is developed, pedestrian ways from that vicinity and to the west along Millers Run Road will be greatly needed. To complement the widening of Washington Pike, sidewalks and bicycle lanes should be fully considered.

Sanitary Sewer Infrastructure

An evaluation of the available existing sanitary sewer capacity was completed to compare available capacity with the capacity necessary to accommodate additional sewage infrastructure demand. A series of sewershed zones were defined in conjunction with completed traffic analysis. The associated downstream sanitary sewers were the focus of this evaluation. The eastern portion of the Township, almost entirely developed at this time, anticipates that minimum additional sewage flow would be generated in these areas and study was not included. The basis of this capacity analysis was the Allegheny County Sanitary Authority (ALCOSAN) provided Chartiers Creek Planning Basin Hydraulic and Hydrologic (H&H) Model.

Background

To facilitate meeting the objectives of their Consent Decree with the Department of Justice, the Environmental Protection Agency and the Pennsylvania Department of Environmental Protection, ALCOSAN divided their service area into seven planning basins. The area in question for potential land development is located within the Chartiers Creek Planning Basin (CCPB), specifically South Fayette Township. One of ALCOSAN's objectives was to construct an H&H Model of certain portions of their service area that reasonably replicated existing sewer conveyance system conditions observed during an extensive flow monitoring program undertaken by the region in 2008.

Fortunately, the ALCOSAN H&H Model for the CCPB included a significant portion of the sewer system located downstream of the areas identified for potential future development, which became the basis for this analysis. However, since the provided H&H Model did not extend completely into the areas of interest, the model was extended through the use of GIS information as provided by the Client as follows. The map associated with this work depicts the original H&H Model extents (purple lines), the areas where the model was extended (orange lines) and the remaining

sanitary sewer lines not included in the model (green lines).

Flow monitoring data was available from the 2008 regional flow monitoring program for ALCOSAN's Basin Planner in development of this H&H Model.

Evaluation Methodology

The purpose of this evaluation is to determine available capacity, or lack thereof, in sanitary sewers located downstream of potential development areas. Typically during dry weather, sanitary sewer systems are more than capable of conveying observed sewage flows. However, during periods of wet weather, certain systems can become induced with an influx of flow that can cause basement backups and/or overtopping manholes.

Therefore, for this analysis, the ALCOSAN provided H&H Model, modified as described above, was simulated under certain wet weather design conditions. A 2-year, 24-hour SCS Type II design storm during a summer period and the same design storm return frequency utilizing a locally developed rainfall distribution during a winter period was utilized.

Sewage flow is made up of three components: 1) Base Wastewater Flow (BWFF), i.e. sewage; 2) Groundwater Infiltration (GWI); and 3) Rainfall

Dependent Inflow/Infiltration (RDII). Throughout the year BWWF remains fairly constant while both GWI and RDII fluctuate seasonally. This seasonal fluctuation in GWI and RDII can have a significant impact on observed peak flow rates. Therefore, it is typical for any design storm analysis to be performed during both a winter and summer period to account for this fluctuation.

The existing sanitary sewer system was analyzed by estimating existing flows in areas where the model was extended based on meter data and relative sewershed sizes. Potential additional infrastructure impacts were then added to this model and the model was run to determine the impact of additional loading on the sewer systems.

Estimating Existing Flows

Because the ALCOSAN model and flow data were not prepared with the intent of analyzing sanitary sewers for future potential development, it is necessary to make some adjustments to the model and flow information. Specifically, in many cases the flow meters are placed such that they record flow from large sewersheds incorporating several smaller sewersheds. In some cases, in order to analyze the sanitary sewer systems in a more discrete manner relative to potential development areas, it is necessary to divide flow logically into smaller sewersheds. This was done

by comparing the aggregate quantity of inch-miles (diameter of pipes multiplied by length of pipe) in a given subshed with the total number of inch-miles in the meter sewershed. For instance, if a subshed contains 20 inch-miles of sewers and the entire sewershed contains 100 inch-miles of sewers, then it is reasonable to estimate that the subshed represents 20% of the total flow from the sewershed. Refer to Estimates of Existing Sanitary Sewer Loading for Sewer Subsheds for a summary of the estimated flow percentages based on this methodology.

For reference, a summary of the existing infrastructure system is as follows. Initially a treatment plant was constructed along Chartiers Creek downstream of the current location of the Chartiers Creek Pump station along Presto Sygan Road. Sanitary flows were treated at the plant until a permanent connection with ALCOSAN was completed and MATSF began conveying all wastewater generated within its Chartiers Creek Sewage System to the ALCOSAN system at POC C-54-16 on February 17, 1987. The Chartiers Creek Pump Station is rated for an average flow of 2.4 MGD (6.0 MGD peak). The pump station includes three (3) submersible pumps rated at 2100 gpm. The station connects to the ALCOSAN system through a 14" Force Main.

The sewer system begins at the Chartiers Creek Pump Station near the where Millers Run enters Chartiers Creek. A 27 inch interceptor extends upstream along Chartiers Creek to near SR 50 behind 84 Lumber where the sewer branches into two main interceptors. The interceptor was constructed under Contract Number S-1. Construction of these facilities began in 1972.

The first of the main branch interceptor is 24 inches and continues along Chartiers Creek to the former Mayview State Hospital entrance on Mayview Road. The interceptor continues through the former hospital property as an 18 inch sewer to Boyce Road where it reduces to 15 inches and continues along Mayview Road almost to the Washington County Line. Trunk sewers branch off of the 24 inch interceptor. The first branch is the 12 inch Coal Run trunk sewer which follows Coal Run to I-79. Additional branch collecting sewers extend from the main 24 inch and the 12 inch sewer to serve essentially all of the Washington Pike area from Bridgeville to Boyce Road. Two 8 inch sewers extend from the 15 inch interceptor, one to the site of the former Fairview Manor Sewage Treatment Plant, the other to the Hunting Ridge Plan of Lots. These facilities were constructed under Contract Numbers S-2, S-3, and S-8 and the "Boyce Road Extension". Construction of these facilities began in 1973.

The second of the main branch interceptors is 18 inches and follows Millers Run to the area of the new Millers Run Road bridge at Sygan Road where the sewer reduces in size to 15 inches. The 15 inch interceptor continues to follow Millers run to the area where Fishing Run enters Millers Run at this point the interceptor reduces to 12 inches and continues following Millers Run to the Washington County line. Branch sewers extend from this interceptor to serve the Sygan, Morgan, Treveskyn, National Hill, Cuddy and Gladden areas of the Township generally located along SR 50 and Millers Run Road. These Facilities were constructed under Contract Numbers S-4, S-5 and S-6A.

In 1974, a 10 and 8 inch trunk sewer was extended up Sygan Hollow to serve the new South Fayette Junior- Senior High School. These facilities were constructed under Contract Number S-6.

Contract 78-1 extended sewer service to 18 properties along Battle Ridge Road adjacent to the Cannongate development.

In 1980 construction under Contract 79-3 was awarded to extended sewers previously constructed by the private developers of the Fairview Manor Plan. These extensions provided sewers to additional properties along Boyce Road

and Washington Pike. The Municipal Authority took over operations of the complete Fairview Manor sewer system from the Township at this time.

Projects completed in 1982 included a sewer line extension to serve the I-79 roadside rest areas.

Contract 89-1 extended the 12 inch portion of the Coal Run Trunk sewer under I-79 to facilitate further development and extension by private developers in the Coal Run watershed. The extended sewer continues to follow Coal Run to a point near the intersection of Coal Pit and Bowman Roads. Extensions branch off and extend along Alpine Road to serve portions of the Hickory Heights and an additional extension was constructed that extended the sewer along Alpine Road to Hickory Grade road. This project was constructed under Contract 98-1.

Constructed under Contracts 90-1, 2, 3, 4 were all the collector sewers in the Robinson Run watershed. The Authority currently serves 304 residential customers through 10 separate points of connections into the jointly owned and operated Robinson Run Interceptor sewer. The Interceptor sewer extends from the upper end near the McDonald Borough Line and continues downstream along Robinson Run to the Oakdale pump station. Flow is then pumped through a

9600 foot 18 inch force main which is aligned parallel with the Panhandle Trail. Near where Robinson Run passes under Nike Site Road in Collier Township the flow discharges into a 24 inch gravity interceptor that continues 19,000 feet following the alignment of the Panhandle Trail and the Pittsburgh and Ohio Central Railroad to Carnegie where it connects to the ALCOSAN Chartiers Creek Interceptor at POC C-45B-08.

The 109 customers in the Thoms Run watershed are served by branch collector sewers which extend from the Thoms Run interceptor. The Interceptor constructed in 1992 under Collier Township Municipal Authority Contract 6-57-76 is operated and maintained by CTMA. The 15 inch interceptor starts near the intersection of Prestley and Thoms Run Oakdale Road in Collier Township and generally follows the alignment of the road to a manhole near Pinch Road where the sewer reduces to 12 inches. At the intersection of KP Hollow Road the sewer follows the alignment of the stream to a manhole adjacent to Steen Hollow Road where it reduces to 10 inches. The sewer continues to a manhole near the intersection of Nike Site Road where it ends and splits into two 8 inch collector sewers.

In 1993 four contracts were awarded to construct sewer extensions around the Township that would facilitate development in new watersheds.

Contract 93-1 constructed an 8 inch trunk sewer which extends up an unnamed tributary to Chartiers Creek from a point near the end of the Chartiers Creek Interceptor. The sewer extends from Mayview Road to Washington Pike in a valley parallel to Fawcett Church Road serving the Saddlewood, Sundance developments and will soon serve the new Fieldcrest residential development on Washington Pike.

Contract 93-2 was awarded for the construction of the 10 inch Fishing Run Trunk sewer. The sewer begins at a manhole along Millers Run Road and the private Maud Mine Road. The sewer continues up Fishing Run with branches serving the southern side of Mohawk, Battle Ridge Roads and the Sterling Ridge development.

The next contract 93-3 was awarded to construct the 10 inch Dolphin Run Trunk Sewer. The sewer extends up Dolphin Run serving homes along the north side of Battle Ridge Road with additional branches serving developments along Old Oakdale Road including Forest Ridge, Sun ridge and the Berkshires. It will soon serve a new residential development Deerfield Ridge also on Old Oakdale Road.

The final contract in this group 93-4 was awarded to construct the collector sewers in the Thoms Run watershed. These collector sewers serve areas

adjacent to Battle Ridge, Oak Ridge and Dutch Hill Roads.

In 1998 Contract 98-1 was awarded to construct two separate extensions, the first to serve existing properties on the southern end of Boyce Road.

The second extended a branch sewer along Alpine Road starting near Hickory Heights Drive and extending to Hickory Grade Road.

Additionally in 1998 Contract 98-2 was awarded to construct sewers that serve properties along the north side of Oak Ridge Road from Petricca Drive to Dutch Hill Road. The 8 inch sewer starts at the Oak Ridge Pump Station which was constructed to convey the flows generated in this watershed. The 6 inch force main discharges to gravity sewers in the Sygan Hollow sewer shed. Branches were also constructed from the Sygan Hollow truck sewer to serve properties along the southern side of Oak Ridge Road.

Contract 2002-1 was awarded to extend the Fishing Run trunk sewer to serve additional home along Battle Ridge Road and the Granite Ridge Development along Robinson Run Road.

The Municipal Authority awarded the last contract for Authority funded sewer extension in 2006 to construct additional branches from the Fishing Run Trunk sewer to serve properties between 4257 and 4278 Battle Ridge Road. Since 2006 all

sewer extensions have been constructed by developers.

Estimating Additional Infrastructure Demand

The next task in completing this analysis is to add estimated additional infrastructure demand to the model to determine if existing pipes have capacity. The potential additional infrastructure demand from both potential residential and potential commercial/industrial development was estimated.

Refer to Estimates of Potential Sanitary Sewer Infrastructure Demand for Sewer Subsheds for a summary of the potential additional infrastructure demands based on this methodology.

Evaluating Pipe Capacities

In order to evaluate pipe capacities and determine if the existing sewer system is adequate to accommodate existing and potential flow, three steps were taken. First, the existing pipe capacities (full flow capacity) were calculated using the Manning's Equation based on pipe material, slope, and pipe diameter. Next, the sewage flow was determined using the H&H model. In order to estimate total flow without any surcharge or backing up of the sewer system (no pressure flow), the pipes in the model extents were artificially increased in size to allow all flows to pass through the system by gravity only. Finally,

required pipe diameters were determined using the Manning's Equation based on the slopes of the existing pipes, assuming that in most cases that where an increase of sewer size is required, the new sewer would be replaced in a similar alignment to the existing sewers. In addition, where it was necessary to increase the size of a particular pipe segment, but downstream segments could technically remain a smaller size (due to steeper slope), all downstream pipe segments were increased in size. This was done in accordance with sound engineering practice—larger pipes should not flow into smaller ones. Reference the Sanitary Sewer Pipe Capacity Analysis spreadsheets included in Part Three for detailed calculations.

Water

Water is supplied to South Fayette Township by the Pennsylvania American Water Company (PAWC). PAWC provides public water supply to 26 Boroughs and Townships in Washington County along with two Municipalities in Beaver County and 9 Wards of the City of Pittsburgh as well as 30 Boroughs and Townships in Allegheny County which includes South Fayette Township. In South Fayette Township, PAWC provides Potable Water for residential, commercial, industrial, and fire protection uses. Some of the larger water

users are Cintas Uniform Co. and the former Reichold Chemicals.

PAWC has two Water Treatment Facilities in the Pittsburgh area with the Monongahela River being the Source of Supply. The Hays Mine Water Treatment Facility is located 4 miles upstream from the Point in Pittsburgh and is rated for 60 Million Gallons per Day (MGD). The E. H. Aldrich Water Treatment Facility is located 25 miles upstream from the Point and is rated for 48 MGD.

In 2008 the Average Day for the PAWC Pittsburgh Water System was 72.4 MGD with a Peak Day at 91 MGD and a Min. Day of 68.4 MGD. The Historic Peak Day occurred in June 1999 which was 105 MGD.

PAWC operates four Hydraulic Gradients in South Fayette Township area which consist of the Rocky Ridge Tank Gradient, Chartiers Valley Low Service Gradient, South Fayette Booster Gradient and the Sturgeon / McDonald Gradient. A map flow diagram is available on file at the Township Authority offices.

Several larger PAWC transmission facilities pass through South Fayette Township, providing for ample opportunities for expansion of the PAWC system to accommodate any additional development in the Township. In the eastern portion of the Township a 36" Waterline runs along

the Boyce Road, Alpine Road, Abele Drive, and Presto Sygan Road area. This 36" Waterline supplies a 16" Waterline that runs west along Hickory Grade Road towards Cecil Township. A 24" Waterline is also supplied by the 36" Waterline and runs west towards the McDonald area along Millers Run, Sygan Road, various Rights of Ways and Robinson Run Road. The majority of South Fayette Township has a Public Water Supply except for portions of certain areas along Alpine Road, Cecil Sturegon Road, Mohawk Road and Morgan Hollow Road.

Over the last 15 years PAWC has either replaced or upgraded portions of the water distribution system in the South Fayette Township. A few of the larger project are as follows:

- Replacement of 6" Waterline along Washington Pike with a 12" Waterline from Boyce Road to Route 50.
- Replacement of 6" and 8" Waterline along Millers Run Road from Cecil Township to Route 50.
- Replacement of 6" Waterline along SR 978 with a 12" Waterline from Battle Ridge Road to Oakdale Borough.

- Installation of the South Fayette Booster Station and 8" Waterline from Sygan Road to Old Oakdale Road.

As a private water utility, PAWC continues to maintain and upgrade their treatment and distribution systems within their service area, including South Fayette Township. Expansions and upgrades to the system are planned on an ongoing basis to improve service to existing customers as well as provide for service to future development.

Existing Conditions Mapping

A number of existing conditions maps were generated as part of the planning effort to provide context for decisions and to capture a picture of current activity and influence.

Existing Land Use Highlights

This map depicts the current Land Use for South Fayette Township. Included in this map are single family, residential, town homes/duplexes, multi-family residential, institutional, office, commercial, office/commercial, industrial, agricultural land, park/open space, vacant lot, vacant lot with structure, and wooded lot.

Residential

Residential land uses including single-family, townhomes/duplexes, and multi-family units make

up 25% of the total land use. Parcels hosting single-family residential development account for 23% of total land. The remaining residential uses are composed of townhomes/duplexes (1%) and multi-family residential uses (1%). Residential land use accounts for 3,081 of the Township's 12,434 acres.

Office and Commercial

Commercial parcels are generally found in the Southeast section of the Township. Office and commercial property accounts for only 1.6% of the total land area.

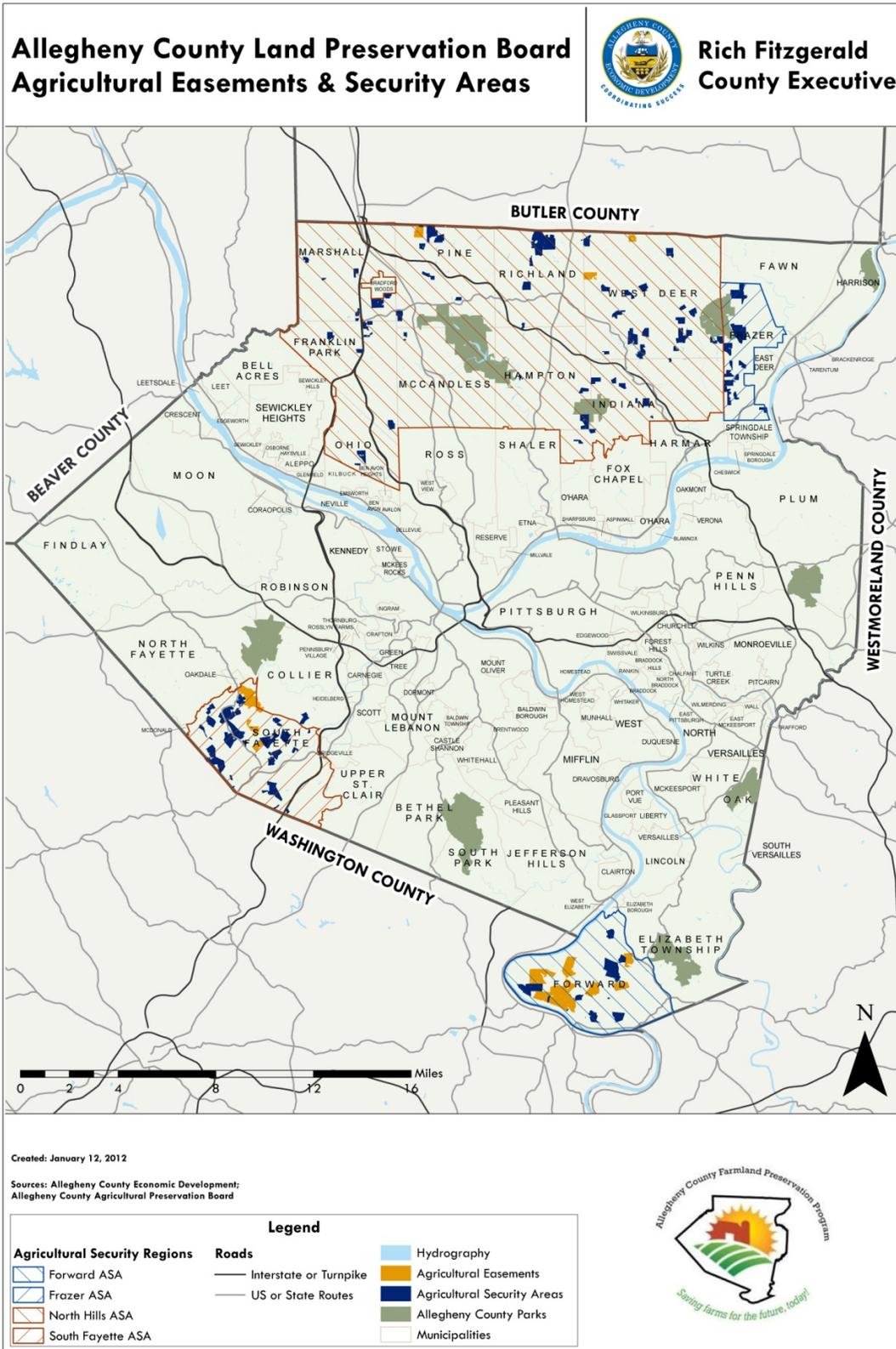
Industrial

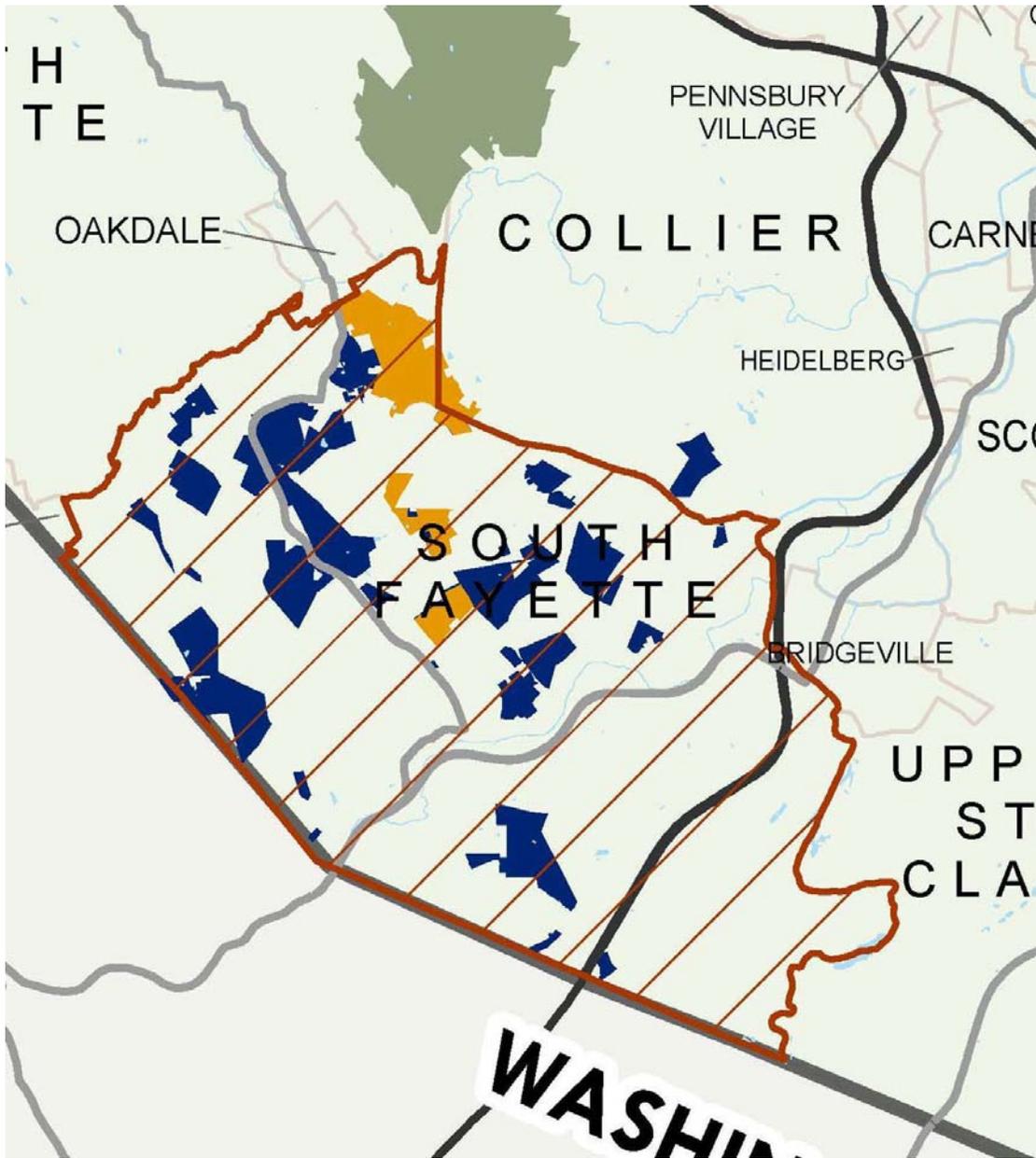
The concentration of industrial development occurs in along Highway 50 and the eastern boundary of the Township. Parcels, and consequently, building footprints, in this area are generally larger and possess access to major roadways. Industrial parcels make up 6% of the total land use of the township.

Agricultural Land

Approximately 24% of the land in South Fayette Township has characteristics generally synonymous with agricultural activities. The Township is located within a designated agricultural security area. The program for agriculture security areas as administered by the

PA Department of Agriculture is a voluntary program. These designations are identified on Allegheny County mapping most recently updated in 2012. Some lands also possess agriculture easements.

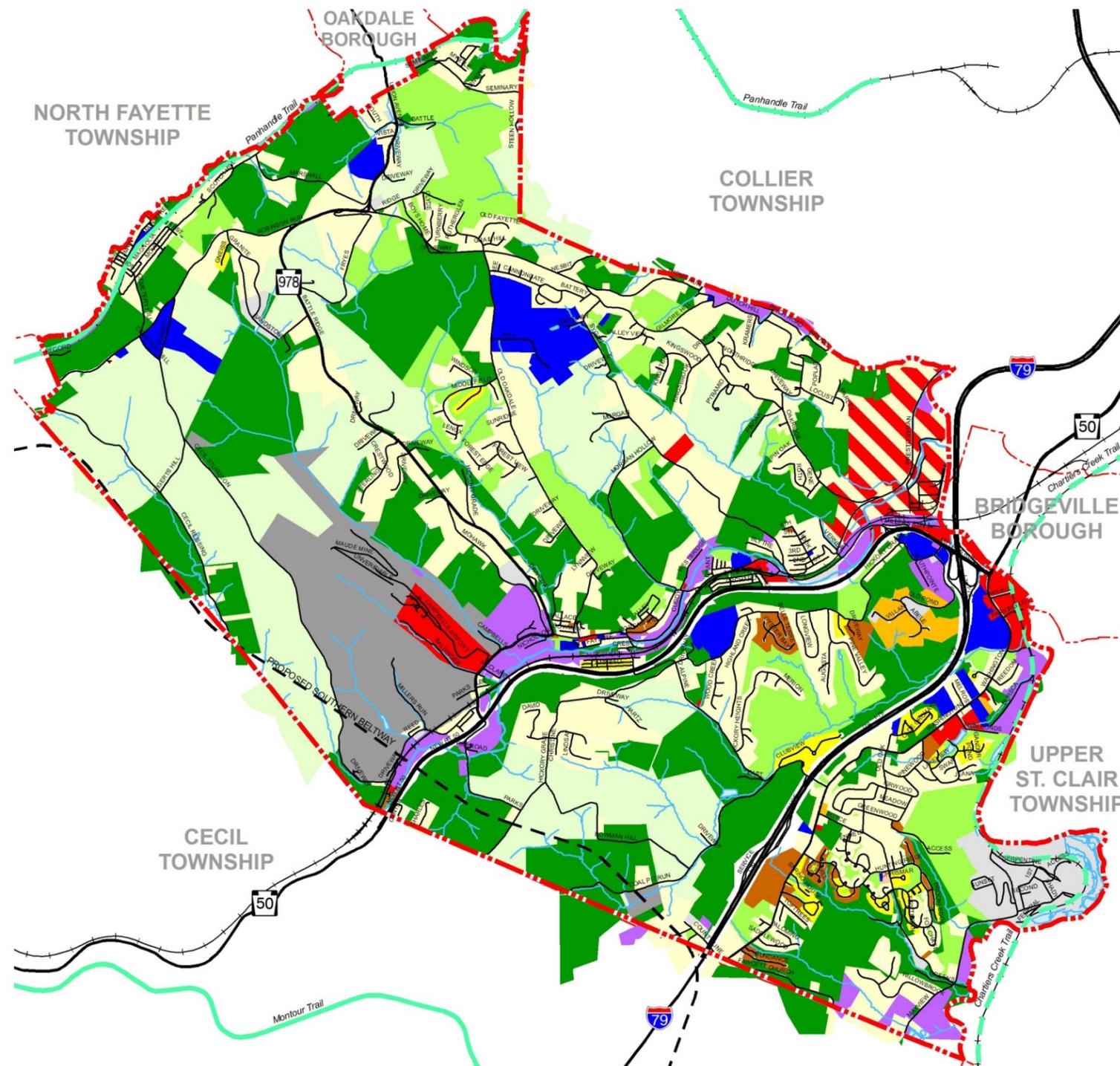




Close-up of South Fayette Township from Agriculture Easements & Security Areas Map

Existing Zoning

The majority of the Township, approximately 69%, is zoned for residential, including rural, suburban, and medium density residential. The majority of non-residential zoning exists adjacent to the existing thoroughfares, specifically, Rt. 50 and the I-79 interchange. A sizeable area of land, 959 acres, near the southcentral portion of the community, has been zoned for Planned Economic Development. The location of this District in relationship to the proposed Pennsylvania Turnpike Southern Beltway offers significant opportunity for local and regional scale non-residential growth and employment.



Legend

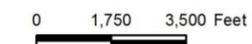
- South Fayette Township
- Surrounding Municipalities
- Major Highways
- Proposed Southern Beltway
- Other Roads
- Railroads
- Streams/Ponds
- Existing Trails
- Proposed Trails

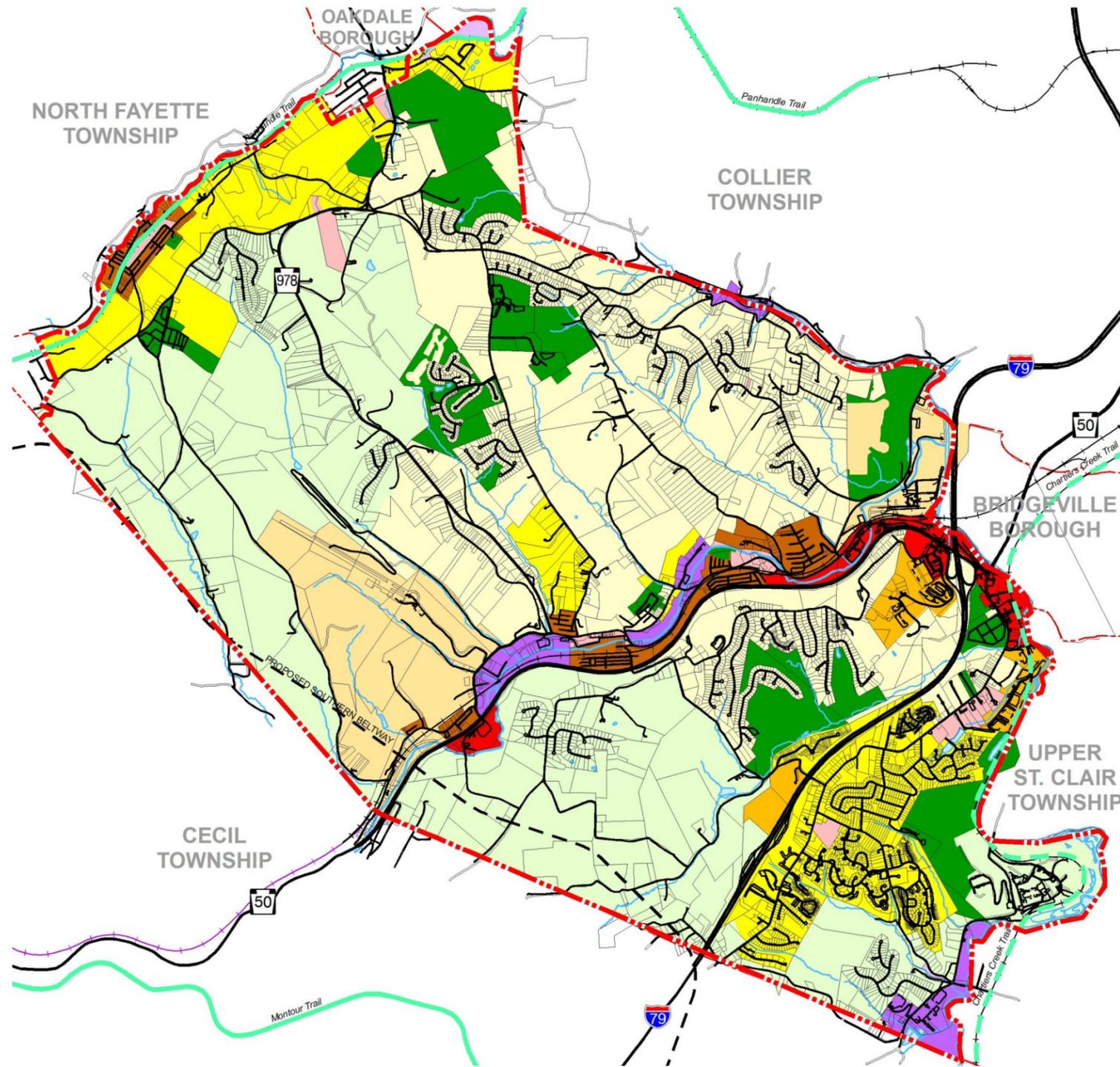
EXISTING LAND USE

- Single Family Residential
 - Town Homes/Duplexes
 - Multi-Family Residential
 - Institutional (School, Municipal, Church, Cemetery, Fire Hall)
 - Office
 - Commercial
 - Office/Commercial
 - Industrial
 - Agricultural Land
 - Park/Dedicated Open Space
 - Vacant Lot
 - Vacant Lot with Structure
 - Wooded Lot/Non-Dedicated Open Space
 - Right of Way
 - Newbury Mixed Use Project*
- * The Newbury Mixed Use Project is currently under development.

**EXISTING LAND USE MAP
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC





Legend

- South Fayette Township
- Surrounding Municipalities
- Parcels
- Major Highways
- Proposed Southern Beltway
- Other Roads
- Railroads
- Streams/Ponds
- Existing Trails
- Proposed Trails

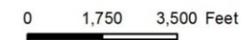
EXISTING ZONING

- R1 - Rural Residential
- R2 - Suburban Residential
- R3 - Planned Residential
- R4 - Neighborhood Residential
- B1 - Business Park
- C1 - Limited Commercial
- C2 - Highway Commercial
- I - Industrial
- I-P - Industrial Park
- PED - Planned Economic Development
- CD1 - Conservation

Note: The Existing Zoning Map is for planning purposes only and is not intended to update or replace the Official Zoning Map. The Official Zoning Map of South Fayette Township is available for viewing at the Township Building.

**EXISTING ZONING MAP
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC



Population Analysis

As of the US 2010 Census, South Fayette Township is home to approximately 14,400 residents. Of these people, the majority reside near the Eastern edge of the study area, near to I-79, with a density between 1.5 to 2 persons per acre. The next highest area of population density is in the Northern portion of the Township, where the density is, on average, between 1-1.5 persons/acre. Nearly half of the study area, located in the largely undeveloped Southwest portion of the Township, contains the lowest population density with less than 0.5 person/acre.

Community Facilities

South Fayette Township contains within its boundaries five (5) public parks, three (3) schools, six (6) churches, a library, three (3) post offices, a golf course, and a municipal center. For the most part, these facilities are located primarily in areas of higher population density, with many of the facilities located along or near Route 50. Potential remains for an even greater amount of these types of facilities, given the amount of non-developed land currently present in South Fayette Township.

Historic Resources

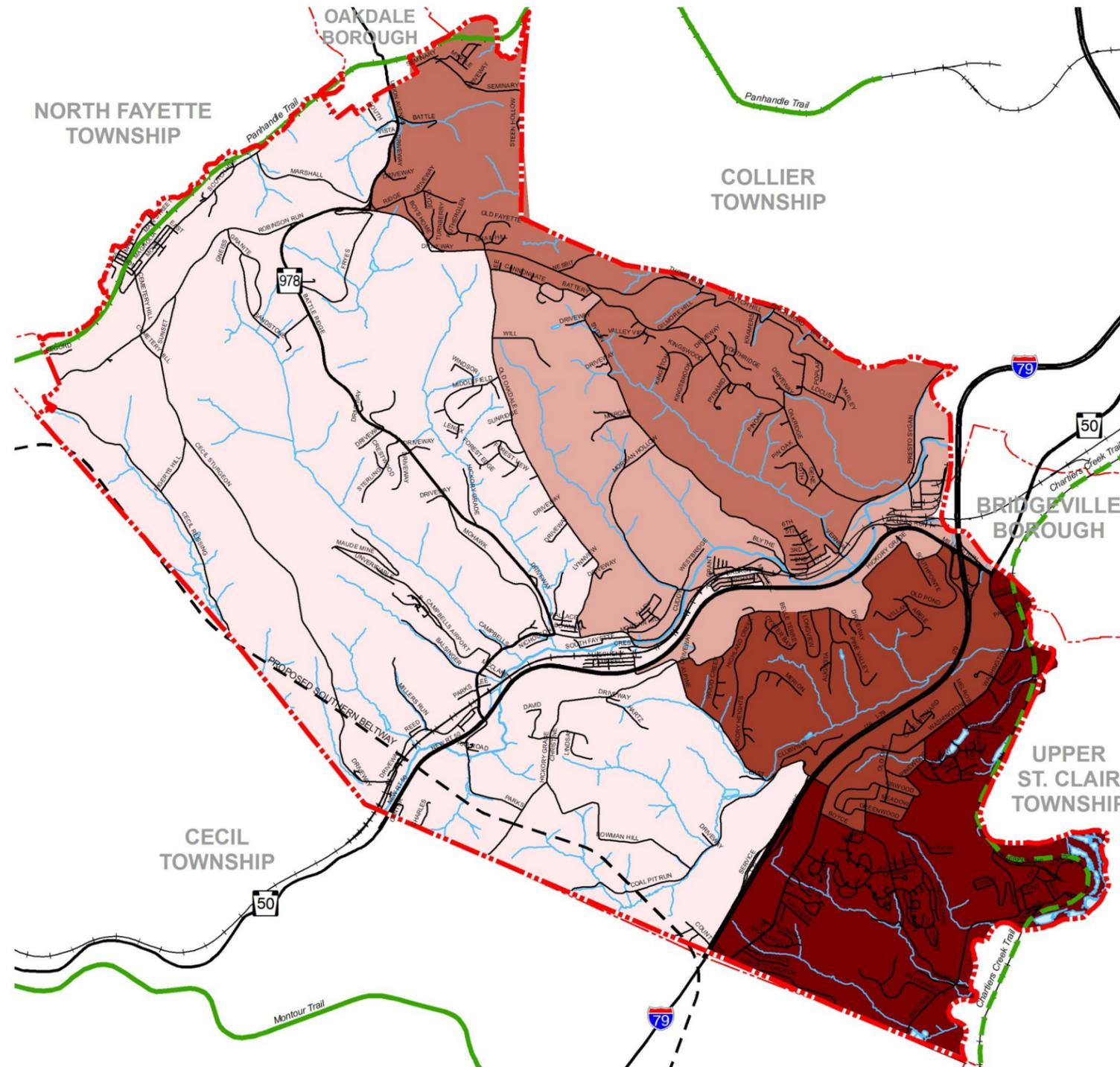
A number of historical locations are found throughout South Fayette Township. While most no longer function in their original capacity, many can be identified through aging foundations and

the historical stories as passed from generation to generation. Cemeteries, schools, hospitals, relics from the Cold War and even the site of a former speedway are contained in South Fayette Township. Sites which possess potential for historical preservation and possible tourism opportunities should become part of the communities overall cultural resource initiatives; opportunities for education should be extended as part of municipal outreach and dialogue with the School District where possible.

Slope Analysis

The slope map depicts the location and extent of grade changes in South Fayette Township. The severity, or percent slope, is represented through a range of colors. Steeper slopes are represented with dark colors.

Based on an analysis of 2-foot contour intervals, approximately 44% of the land has a gradient of 15% or less. Given the general soil types found in the area, development on 0-15% slopes is typically unrestricted unless there is a presence of environmentally sensitive areas. Approximately, 26% of the Township possesses slopes greater than 25% in gradient; these slopes, located predominantly near streams, creeks or other water bodies, are generally more costly to develop and can present greater development challenges than slopes less than 25% in gradient.

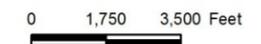


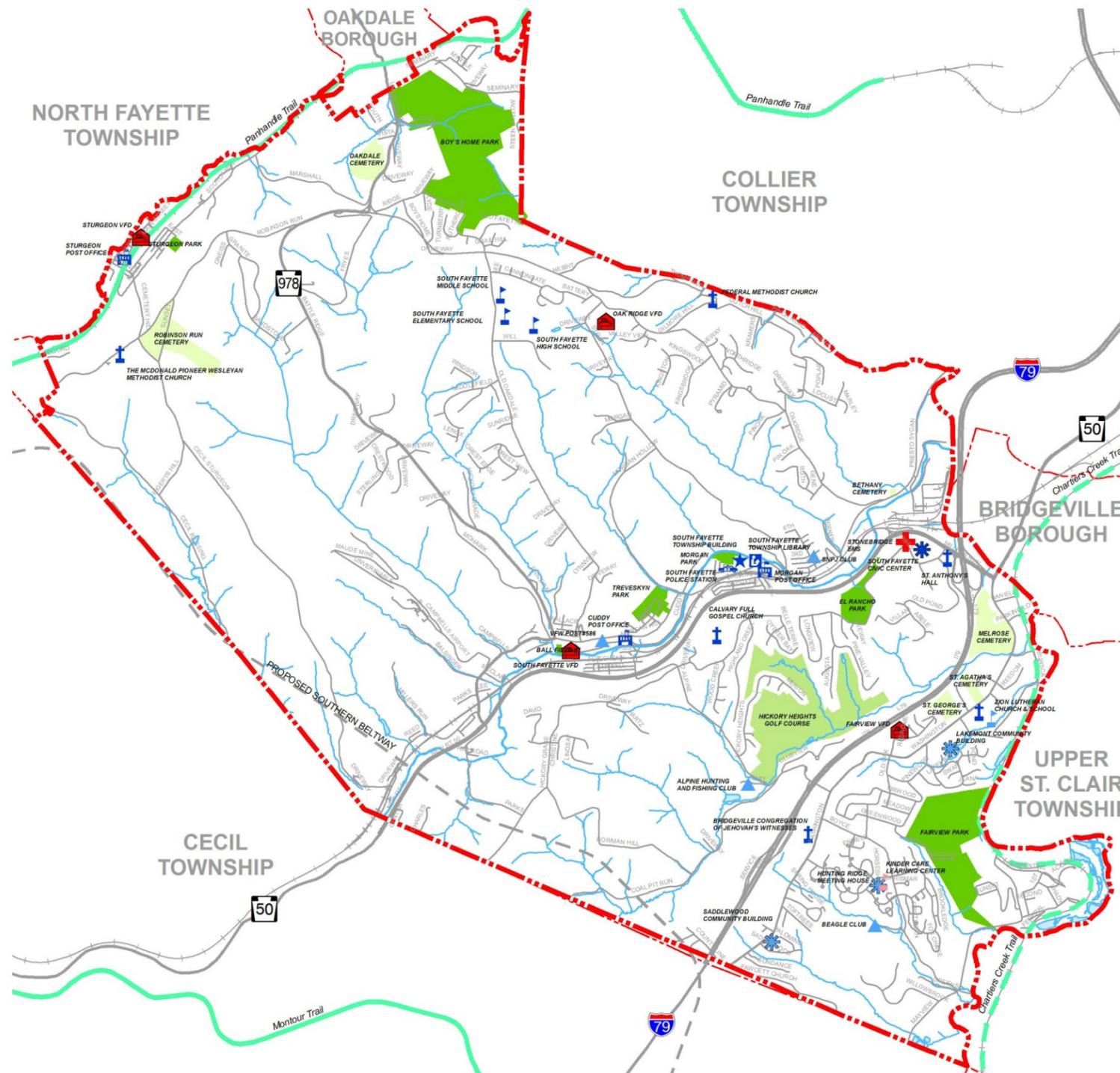
Legend

- South Fayette Township
 - Surrounding Municipalities
 - Parcels
 - Major Highways
 - Proposed Southern Beltway
 - Other Roads
 - Railroads
 - Streams/Ponds
 - Existing Trails
 - Proposed Trails
- | POPULATION DENSITY (persons/acre based on Year 2000 Census) | |
|---|---------------|
| | < 0.50 |
| | > 0.50 - 1.00 |
| | > 1.00 - 1.50 |
| | > 1.50 - 2.00 |
| | > 2.00 |

**POPULATION DENSITY MAP
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC





Legend

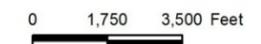
- South Fayette Township
- Surrounding Municipalities
- Major Highways
- Proposed Southern Beltway
- Other Roads
- Railroads
- Streams/Ponds

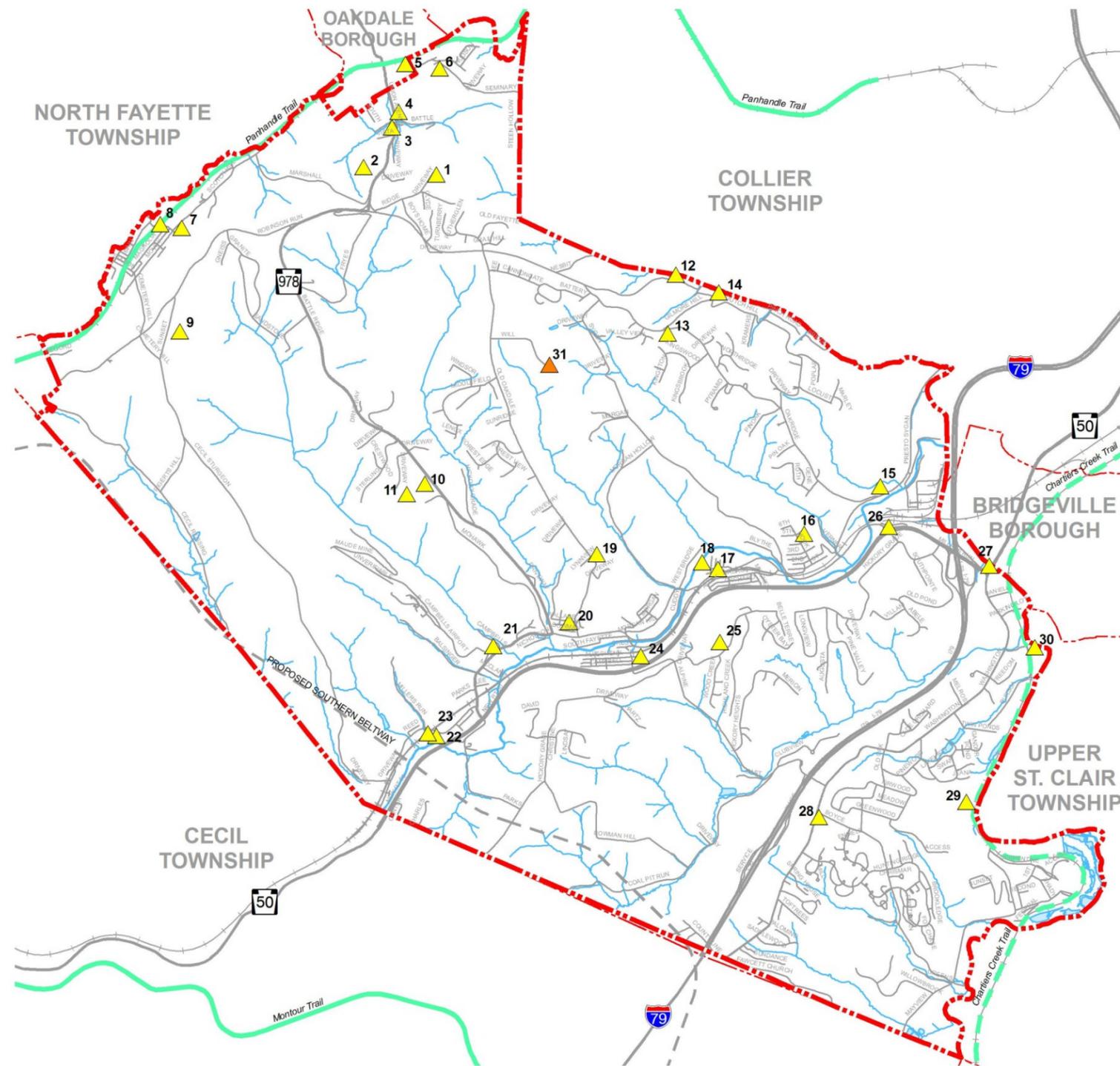
COMMUNITY FACILITIES

- Emergency Medical Service
- Fire Station
- Library
- Places of Whorship
- Police Station
- Township Building
- U.S. Post Office
- Emergency Medical Service
- Public Schools
- Private Schools
- Early Education/Day Care
- Open Space
- Cemetery
- Golf Course
- Park
- Private Community Centers
- Public Community Centers
- Private Clubs/Recreation
- Existing Trail
- Proposed Trail

**COMMUNITY FACILITIES
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC





Legend

- South Fayette Township
- Surrounding Municipalities
- Major Highways
- Proposed Southern Beltway
- Other Roads
- Railroads
- Streams/Ponds
- Existing Trails
- Proposed Trails

HISTORIC RESOURCES

- Eligible for NRHP
- Locally Known Historic Sites (NRHP Status - Ineligible or Undetermined)
- 12** Historic Site ID

| ID | NAME | ID | NAME |
|----|---|----|---|
| 1 | Boy's Industrial Home of Western PA 1900-72 | 17 | Former site of Brown's Hotel 1900 |
| 2 | Oakdale Cemetery | 18 | LaFayette High School est. 1928 |
| 3 | Old German Cemetery | 19 | Oil/Gas Derrick |
| 4 | No 5 Oakdale School | 20 | Cuddy School |
| 5 | Site of Oakdale Elementary School | 21 | McClane Mining Co.'s Maude Mine |
| 6 | Site of Aetna Chemical Explosion of 1918 | 22 | Gladden UP Church est. 1897 |
| 7 | Sturgeon School | 23 | Site of Gladden Primary School |
| 8 | Franco-American Club | 24 | Site of Treveskyn School |
| 9 | Robinson Run Cemetery | 25 | Calvary Full Gospel Church |
| 10 | Mohawk School | 26 | Site of Valley School |
| 11 | Dunlevy Campbell House 1814 | 27 | Former site of Pittsburgh Bridgeville Speedway 1927 |
| 12 | Probable Site of Federal Mine Springs | 28 | Site of Fairview School |
| 13 | Site of Centennial School | 29 | Quarry Cave |
| 14 | Federal School | 30 | Colussy Chevrolet est. 1918 |
| 15 | Bethany Cemetery | 31 | Oakdale Nike Site |
| 16 | SNPJ Club | | |

**HISTORIC RESOURCES
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC





Legend

-  South Fayette Township
-  Surrounding Municipalities
-  Major Highways
-  Proposed Southern Beltway
-  Other Roads
-  Railroads
-  Streams/Ponds
-  Existing Trails
-  Proposed Trails

SLOPES

-  0% - 8%
-  > 8% - 15%
-  > 15% - 25%
-  > 25% - 40%
-  > 40%

**SLOPE ANALYSIS MAP
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC

0 1,750 3,500 Feet



Landform Analysis

The Landform map portrays the topography of South Fayette Township. Elevations ranging from less than 850 feet to greater than 1350 feet are represented on the map illustrating the hills and valleys of the area.

The lowest elevations are typically along the eastern boundary of the Township near Chartiers Creek. Higher elevations are found along the ridges in the western parts of the study area. There is roughly 450 vertical feet of elevation change from low point to high point within the Township.

Hydrology and Watersheds

The hydrology and watersheds map illustrates the streams and ponds in the area as well as watersheds which shows land areas that drain to a common point. South Fayette is composed of seven watersheds of generally similar size, with the exception of the larger Millers Run Watershed. Watersheds are defined by the ridges located in the Township.

Oil and Gas Resources

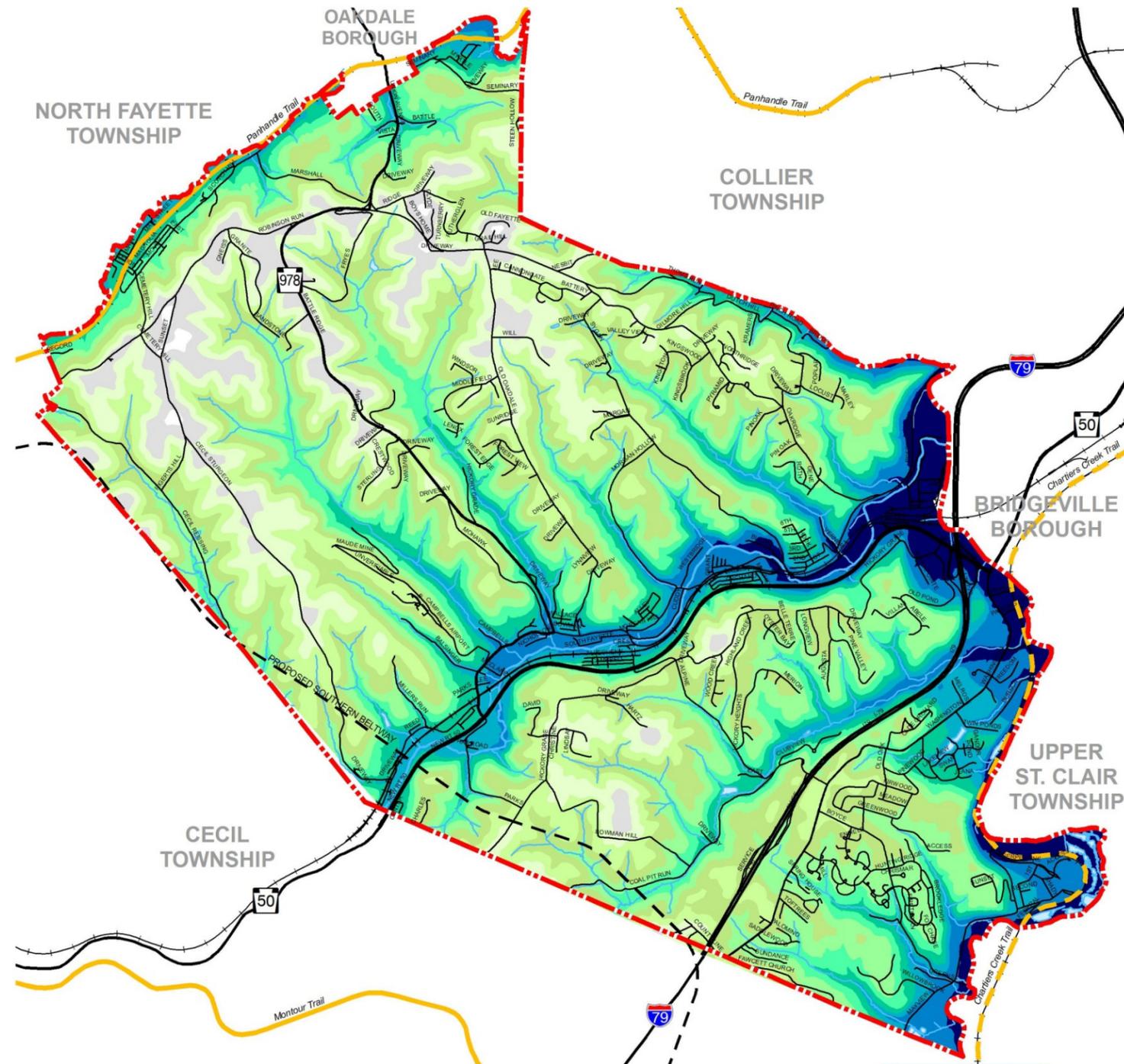
The majority of the land in the Township has been deep mined as determined by the Pennsylvania Geologic Survey. The only areas not deep mined occur in the corridor along Route 50.

As of 2009, approximately 125 active and inactive/abandoned Oil/Gas Mining wells are located within the Township. Of the total, approximately 30 are active, and the majority of these are located near the far western corner of the Township.

Vacant and Potentially Developable Land

The Potentially Developable/Redevelopable Land Map includes three classifications to describe vacancy: vacant lots, vacant structures, and open/wooded lots. Approximately 3,450 acres in the Township are categorized as one of these three vacancy classifications. A majority of this vacant land is classified as open / wooded, and exists among the ridges and valleys at the Southwest portion of the study area. It is noted that some vacant lots have structures, or have in some other way been previously developed, but are currently not being used for any identifiable purpose. Only 1% of the total land was classified as vacant lot or vacant structure. One vacant area of note is the former Mayview State Hospital at the far Eastern corner of the Township. This piece of

land, at approximately 335 acres, contains existing transportation infrastructure, a number of existing structures of varied degrees of maintenance, as well as an existing utilities network. The existing buildings and much of the utility infrastructure are currently being demolished by the new owners that purchased the property from the State in 2010.



Legend

- South Fayette Township
- Surrounding Municipalities
- Major Highways
- Proposed Southern Beltway
- Other Roads
- Railroads
- Streams/Ponds
- Existing Trails
- Proposed Trails

ELEVATION

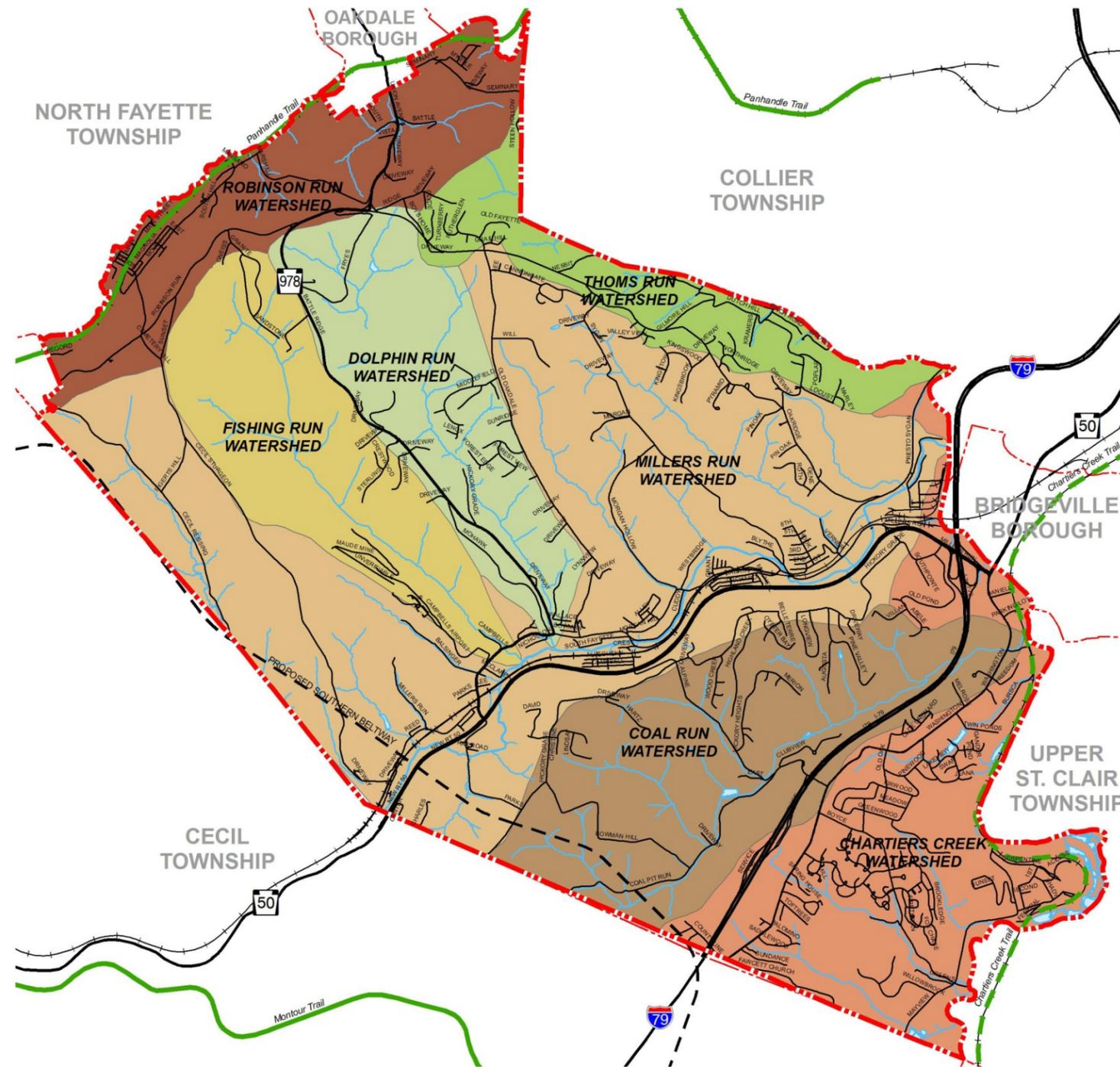
- < 850'
- ≥ 850' - 900'
- ≥ 900' - 950'
- ≥ 950' - 1,000'
- ≥ 1,000' - 1,050'
- ≥ 1,050' - 1,100'
- ≥ 1,100' - 1,150'
- ≥ 1,150' - 1,200'
- ≥ 1,200' - 1,250'
- ≥ 1,250' - 1,300'
- ≥ 1,300' - 1,350'

**LANDFORM ANALYSIS MAP
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC

0 1,750 3,500 Feet

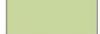
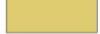
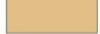




Legend

-  South Fayette Township
-  Surrounding Municipalities
-  Major Highways
-  Proposed Southern Beltway
-  Other Roads
-  Railroads
-  Streams/Ponds
-  Existing Trails
-  Proposed Trails

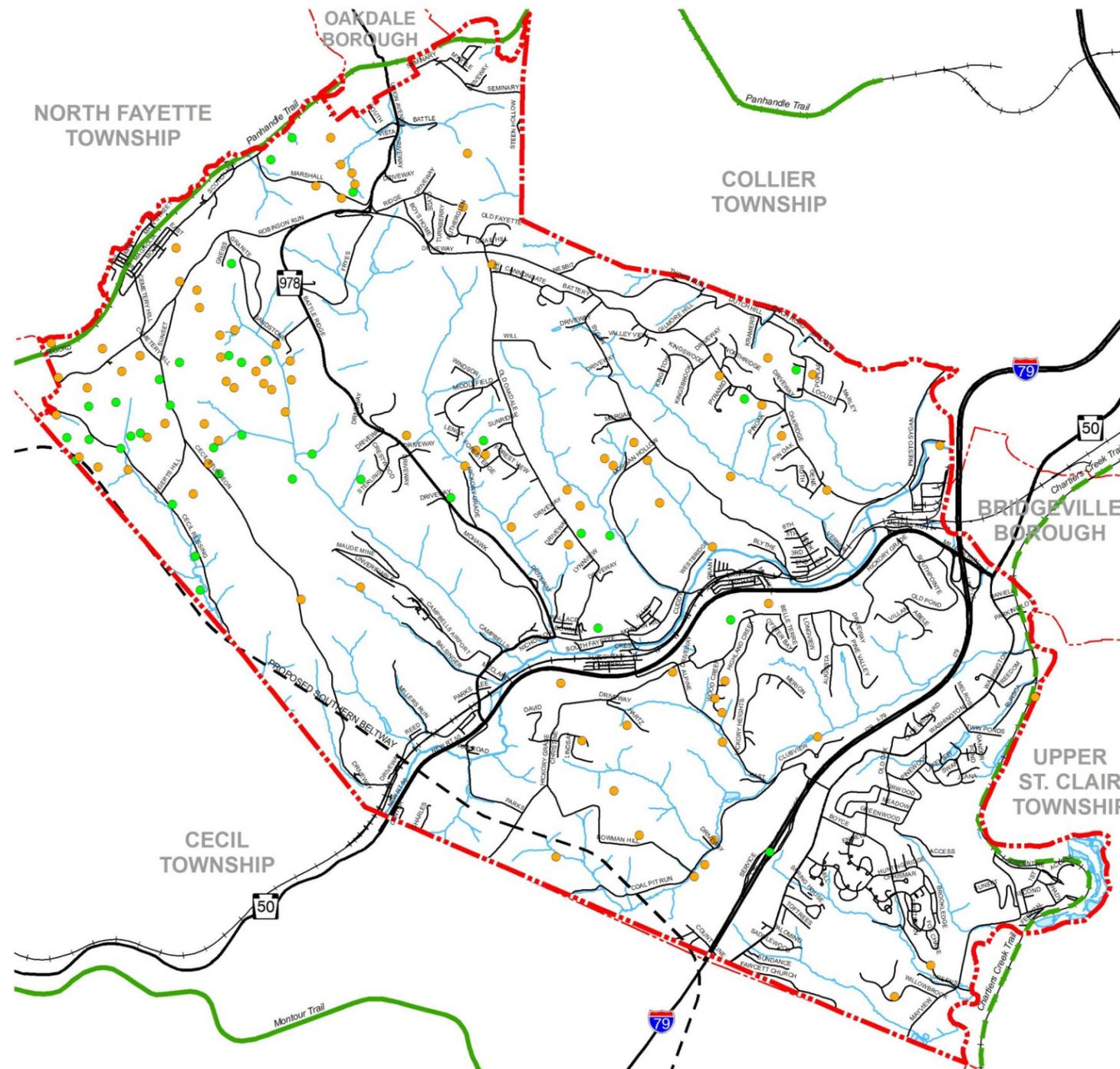
WATERSHEDS

-  Chartiers Creek
-  Coal Run
-  Dolphin Run
-  Fishing Run
-  Millers Run
-  Robinson Run
-  Thoms Run

**HYDROLOGY AND WATERSHEDS MAP
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC





Legend

- South Fayette Township
 - Surrounding Municipalities
 - Parcels
 - Major Highways
 - Proposed Southern Beltway
 - Other Roads
 - Railroads
 - Streams/Ponds
 - Existing Trails
 - Proposed Trails
- OIL/GAS WELLS**
- Active
 - Inactive/Abandoned

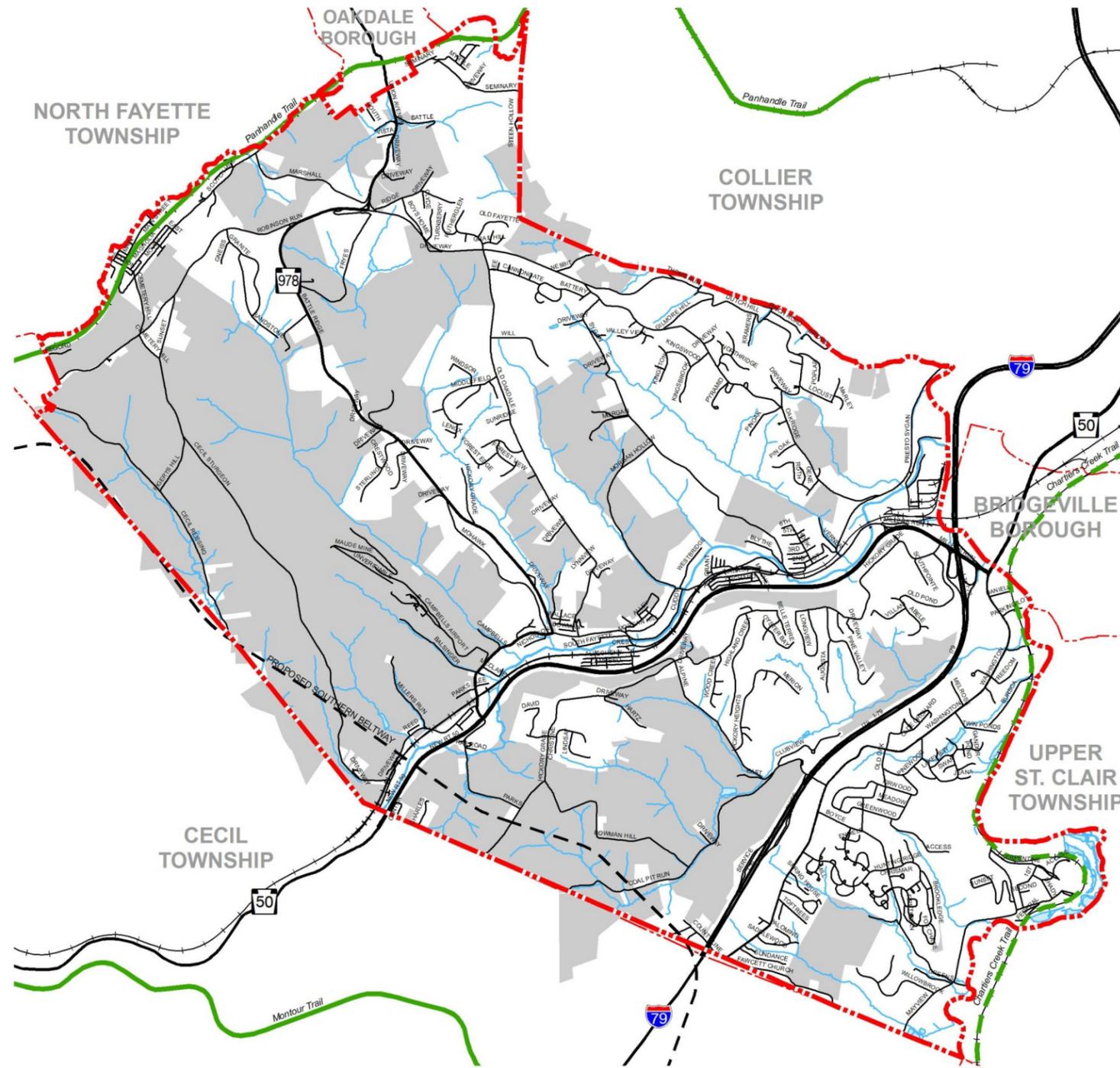
Source: The Oil and Gas Resources Map is based on the Digital Oil and Gas Well Location Map prepared by the Pennsylvania Bureau of Topographic and Geologic Survey, 9/30/2009. More detailed data is available from South Fayette Township.

**OIL AND GAS WELL RESOURCES MAP
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC

0 1,750 3,500 Feet





Legend

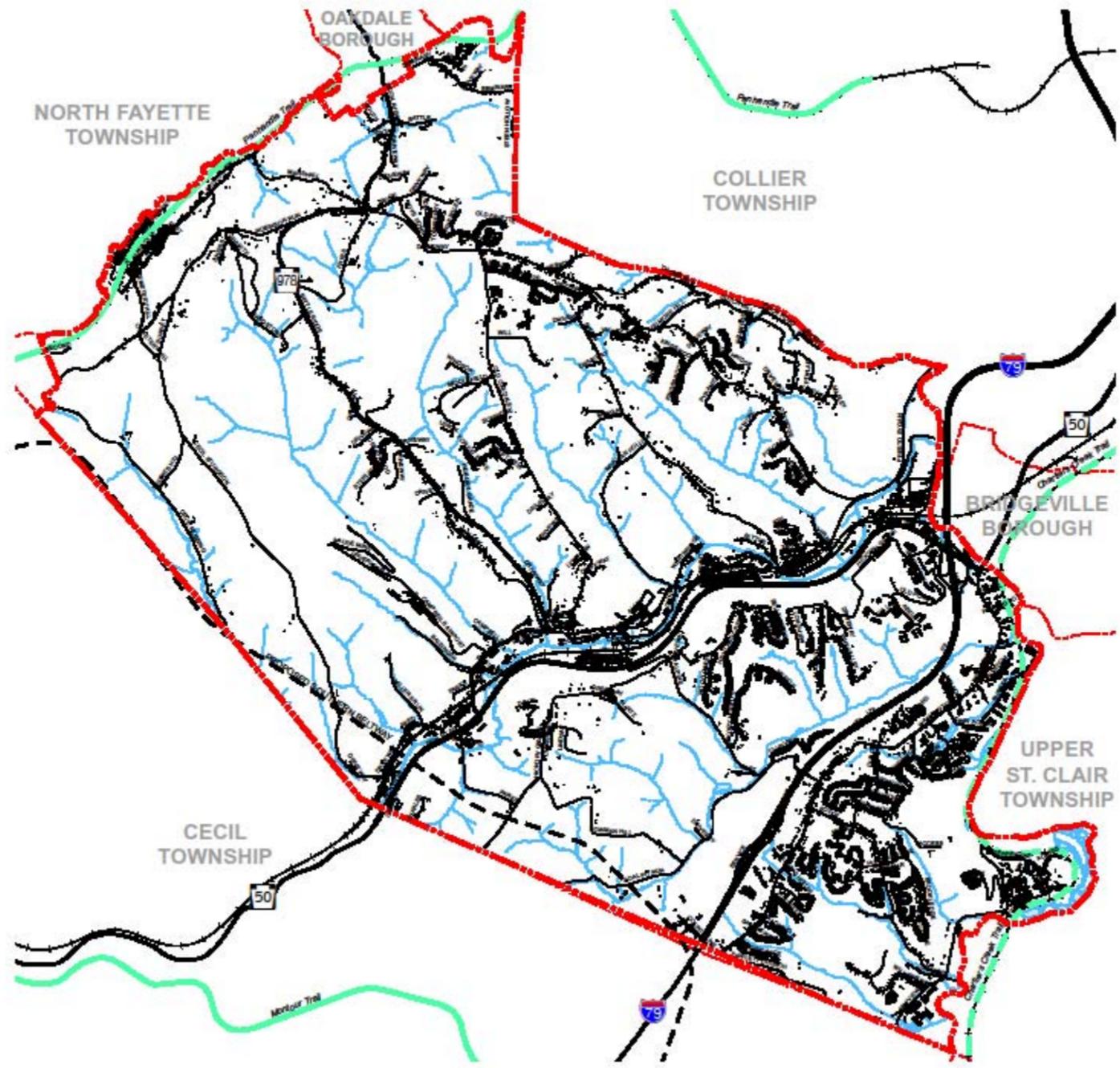
-  South Fayette Township
-  Surrounding Municipalities
-  Major Highways
-  Proposed Southern Beltway
-  Other Roads
-  Railroads
-  Streams/Ponds
-  Existing Trails
-  Proposed Trails
-  Developable/Redevelopable Land (5,748 Acres)

POTENTIALLY DEVELOPABLE/
REDEVELOPABLE LAND MAP
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC

0 1,750 3,500 Feet





- Legend**
- South Fayette Township
 - Surrounding Municipalities
 - Building Footprint
 - Major Highways
 - Proposed Southern Beltway
 - Other Roads
 - Railroads
 - Streams/Ponds
 - Existing Trails
 - Proposed Trails

**BUILDING FOOTPRINT MAP
SOUTH FAYETTE TOWNSHIP
COMPREHENSIVE PLAN**

Prepared for: South Fayette Township
Prepared by: Environmental Planning and Design, LLC
January 18, 2010
2073.09.03



