

Middlesex Township Comprehensive Plan



February 5, 2003



Gannett Fleming
ENGINEERS AND PLANNERS

Middlesex Township Comprehensive Plan

February 5, 2003

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Prepared by



Gannett Fleming
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Camp Hill PA

MIDDLESEX TOWNSHIP
CUMBERLAND COUNTY, PENNSYLVANIA

RESOLUTION NO. 2003-5

A RESOLUTION OF THE BOARD OF TOWNSHIP SUPERVISORS
IN AND FOR THE TOWNSHIP OF MIDDLESEX, CUMBERLAND
COUNTY, PENNSYLVANIA PURSUANT TO SECTION 302 OF
ARTICLE III OF THE PENNSYLVANIA MUNICIPALITIES CODE,
ADOPTING A COMPREHENSIVE PLAN

WHEREAS, the Pennsylvania Municipalities Planning Code, Act of December 21, 1988, P.L. 1329, as amended (53 P.S. § 10101, et seq.) permits Middlesex Township (the "Township") to adopt a comprehensive plan pursuant to procedures set forth in Article III thereof; and

WHEREAS, the Middlesex Township Planning Commission has developed a Comprehensive Plan in accordance with the provisions of the Pennsylvania Municipalities Planning Code; and

WHEREAS, the Comprehensive Plan has been forwarded to the Middlesex Township Board of Supervisors and the Township has forwarded a copy of the Comprehensive Plan to the Cumberland County Planning Commission, all contiguous municipalities, the Cumberland County Board of Commissioners and the Cumberland Valley School District for review and comment; and

WHEREAS, the Board of Supervisors of Middlesex Township held a public hearing on February 5, 2003 pursuant to public notice and has considered the recommendation and comments of all interested and necessary parties;

NOW, THEREFORE, IT IS HEREBY RESOLVED by the Board of Township Supervisors in and for Middlesex Township, Cumberland County, Pennsylvania, as follows:

1. The Comprehensive Plan attached hereto and incorporated herein by reference consists of the following elements:

a. Text material, consisting of an Introduction, Table of Contents, Goals, Policies and Action Strategies (Land Use Action Plan, Transportation Action Plan, Environmental Resources Action Plan, Housing Action Plan, Public Utilities Action Plan and Service Action Plan, Parks and Recreation Action Plan, Economic Development Action Plan and Cultural Resources Action Plan), Background, Trends and Issues concerning Population, Housing, Environmental Resources, Cultural Resources and Historic Preservation, Land Use, Community Facilities and Services, Community Utilities, Transportation, Economic Profile, Adjacent and Regional Planning, Appendices (References and Community Survey Results) and 20 Specified Tables.

b. Maps and Figures of a Future Land Use Map, Transportation Map, Township Population 1950-2000, Township Population Pyramid 1970-2000, Population Projections, Environmental Features Map, Farmland Soils and Agricultural Security Areas, Existing Land Use Map, 1999, Community Facilities Map, Sewer and Water Service Areas Map, Roadway Classification and Traffic Volumes Map and Transportation Deficiencies, 1999, Map.

2. The Comprehensive Plan as constituted above is hereby adopted as the Comprehensive Plan of and for Middlesex Township, Cumberland County, Pennsylvania, pursuant to Article III of the Pennsylvania Municipalities Planning Code, effective immediately.

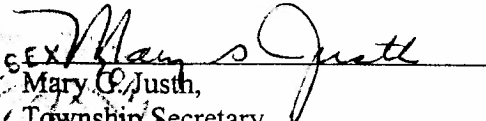
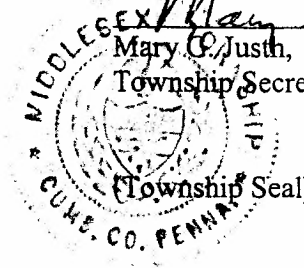
3. The Comprehensive Plan hereby adopted supersedes and replaces any and all previously enacted comprehensive plans of the Township.

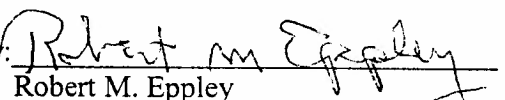
RESOLVED AND ADOPTED this 5th day of February, 2003, by a majority of all of the members of the Board of Supervisors in and for Middlesex Township in a duly constituted public

meeting.

ATTEST:

BOARD OF SUPERVISORS
OF MIDDLESEX TOWNSHIP


Mary C. Justh,
Township Secretary
 (Township Seal)

By: 
Robert M. Eppley
Chairman

WHAT IS A COMPREHENSIVE PLAN?

This comprehensive Plan is the official statement of public policy by the Board of Supervisors pertaining to growth and development in Middlesex Township. It is meant for use by the Supervisors and township staff, other Township boards and commissions, other government agencies, authorities, private citizens, and the business community. The plan is intended as a guide for the legislative decisions and as a reference for needed policy changes. It should serve as the basis for planning improvements and rendering services where the Township is responsible. A comprehensive plan serves as an overall policy guide for the physical development of a municipality.

The Pennsylvania Municipalities Planning Code (MPC) requires that a comprehensive plan consider many factors which influence a community such as location, character, and timing of future development. Essentially, a comprehensive plan provides a blueprint for future housing, transportation, community facilities and utilities, and land use.

HOW IS A COMPREHENSIVE PLAN PREPARED?

A comprehensive plan document consists of three integral components: (1) background studies; (2) the community development goals and objectives; and (3) the plan or plans for future alternative actions regarding land use, housing, transportation and community facilities.

According to Section 301.2 of the MPC:

In preparing the comprehensive plan, the planning agency shall make careful surveys, studies and analyses of housing, demographic and economic characteristics and trends; amount, type, and general location and interrelationships of different categories of land use; general location and extent of transportation and community facilities; natural features affecting development; natural, historic, and cultural resources; and the prospects for future growth in the municipality.

The background studies performed on each category attempt to objectively analyze the community from a number of different perspectives. When completed, each study will then lend support to the development of the plan.

Various sources of information are gathered and used to prepare the studies, such as key person interviews, community survey results, historical records, municipal records, census reports, and geographic information system (GIS) analyses and mapping. Facts and trends are extrapolated from these information sources and are used to develop basic assumptions and forecasts necessary for the development of the comprehensive plan.

ACKNOWLEDGEMENTS

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MUNICIPAL AUTHORITY

Rory Morrison, Operations Manager

ENGINEER

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SOLICITOR

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LAND USE ACTION PLAN

INTENT

Growth and change will occur and are vital to the well-being of Middlesex Township. The Township is committed to achieving a number of objectives regarding the development of land within its boundaries, so that growth is managed, development is consistent and orderly, and growth is beneficial.

Through sound land use planning, the Township ensures that landowners are provided a reasonable use of land while the Township is able to provide services its employers and residents need, efficiently and at affordable and high-quality standards, without requiring unreasonable taxation.

The Land Use Action Plan serves as a guide to the physical development of the Township and reflects the spatial distribution of different land uses.

Goals: Provide for reasonable amounts and distribution of residential and nonresidential land uses in attractive and well-located settings.

Protect sensitive natural, scenic and cultural resources.

FUTURE LAND USE CATEGORIES

Commercial Services

Intent – Manage commercial complexes to facilitate commercial vitality, access and traffic management for office and retail uses.

Mixed Use Commercial Residential

Intent: Promote mixed commercial/ office/ retail/ residential uses.

Mixed Use Village

Intent: Promote integrated, mixed use pedestrian areas with mixed commercial/ office/ retail/ residential uses.

Low Density Residential

Intent: Provide for detached residential development in those areas where public facilities are adequate. Provides for the orderly expansion of residential development and excludes uses not compatible with residential development. Preservation of open space and environmentally sensitive areas should be encouraged.

Medium Density Residential

Intent: Provides residential development that results in an enhanced living environment, based upon the orderly expansion of suburban type residential development. Provides for mixed type of housing uses.

High Density Residential

Intent: Provides for development of multi-family housing and other uses and accessory uses which are compatible with high density housing.

Institutional

Intent: Promotes institutional development and expansion that complements adjacent land uses.

Industrial

Intent: Accommodates existing and proposed industrial development.

Mixed Use - Commercial/Industrial

Intent: Promotes mixed office/ light industrial/ light retail that compliment one another and adjacent neighborhoods.

Agriculture Preservation

Intent: Preserves and protects prime farm soils and other productive farm areas. Limits residential development activity.

Open Space Conservation

Intent: Preserves mountain lands, floodplains, greenways and other environmentally sensitive areas.

Rural Area

Intent: Protects rural character, conserves forested areas while allowing limited development.

Transportation

Intent: Designation for interstate highways, state and local roads, interchange/ ramp areas, and railways.

LAND USE POLICIES

1. Encourage priority consideration be given to agricultural, recreational, commercial office, and residential land uses.
2. Encourage open space development that provides and protects open areas.
3. Focus on the protection of the Conodoguinet Creek and LeTort Spring Run, and encourage development of facilities to promote public use of and access to these waterways.
4. Create a development theme for the Township that honors the Township's historic rural character.

5. Encourage new residential and nonresidential development to locate only in areas adequately served by infrastructure or which can be planned with adequate infrastructure consistent with other goals of this Comprehensive Plan.
6. Identify areas suitable for growth and areas for preservation.
7. Protect prime agricultural lands and Agricultural Security Areas (ASAs) from encroachment by non-agricultural development in areas where strong land owner support is expressed.
8. Encourage new industrial and light industrial uses to occur as infill development adjacent to similar existing uses, in areas adequately served by infrastructure and only where vehicular access is adequate, but preserve adequate buffers to existing residential areas without adding traffic impacts.
9. Coordinate land use with adjacent municipalities and other regional planning bodies.
10. Manage commercial strip development along the Miracle Mile/ Harrisburg Pike/ U.S. Route 11 corridor.
11. Give priority to promoting the reuse of existing vacant structures, especially commercial/ business/ industrial buildings.

ACTION STRATEGIES**Land Use Recommendations**

1. See Future Land Use Map.
2. Consider creating a zoning ordinance to encourage greater use of residential development, unified planning districts, and cluster/ open space residential development.
3. Encourage and support sound new residential and nonresidential development proposals only within appropriate areas that are or can be adequately served by infrastructure, as designated on the future land use map.
4. Continue to maintain an up-to-date and cumulative listing of all major developments approved at the rezoning, land development or subdivision stages.
5. Establish transitions using factors such as building scale, intensity of use, and adequate buffering between semi-compatible land uses by requiring adequate distance, screening, setbacks, vegetative buffers, or combinations of these means.
6. Consider amending the Zoning and Subdivision and Land Development Ordinance to provide performance standards to manage development along U.S. 11. Performance standards would include height, setbacks, impervious coverage, lighting, signage, and landscaping.

7. Consider amending the Zoning Ordinance to minimize the expansion of preexisting nonconforming uses.
8. Perform a feasibility study to determine what level of development in the area between Clemson Drive and Carlisle Springs would support extension of water and sewer utilities to Carlisle Springs residents. If the study shows that a reasonable level of development would support extension of these utilities, the Future Land Use Map would be amended and the appropriate parcels rezoned to accommodate desired development.

Agricultural Preservation

9. Consider the support of special techniques to protect agricultural land uses such as effective agricultural zoning, agricultural security areas, purchase of agricultural easements, and the Act 319 (Clean and Green) tax relief program in areas where farming is the recommended or existing land use.
10. During subdivision and land development reviews, scrutinize the extension of central water and sewer services and new roads into areas where farming is the recommended land use.
11. Consider the primary function of rural areas is to maintain open space, protect native habitats, allow for large-lot residential development or compatible development, allow for agricultural activities, and provide potential sites for community facilities.
12. Consider amending the Zoning Ordinance to create an Agricultural Zoning District in those areas with high concentrations of parcels enrolled in the Agricultural Security Area program. Consider establishing low densities for single family residential development to support agricultural land uses.

Environmental Protection

The Natural Areas Inventory that was completed for the Tri-County Region in 2000 can be utilized as a planning tool in this area.

13. Consider amending the Zoning Ordinance to require a 100 foot buffer from stream centerlines or 75 foot buffer from the top of streambanks, whichever is greater, to better protect the Conodoguinet Creek and LeTort Spring Run.
14. Consider the recommendations contained in the 2000 Cumberland County Greenway Study.
15. Consider establishing greenways and/ or linear parks along the Conodoguinet Creek and LeTort Spring Run.

Organizational

16. Maintain representation on the Central Cumberland County Task Force, and on regional development or other regional planning bodies.

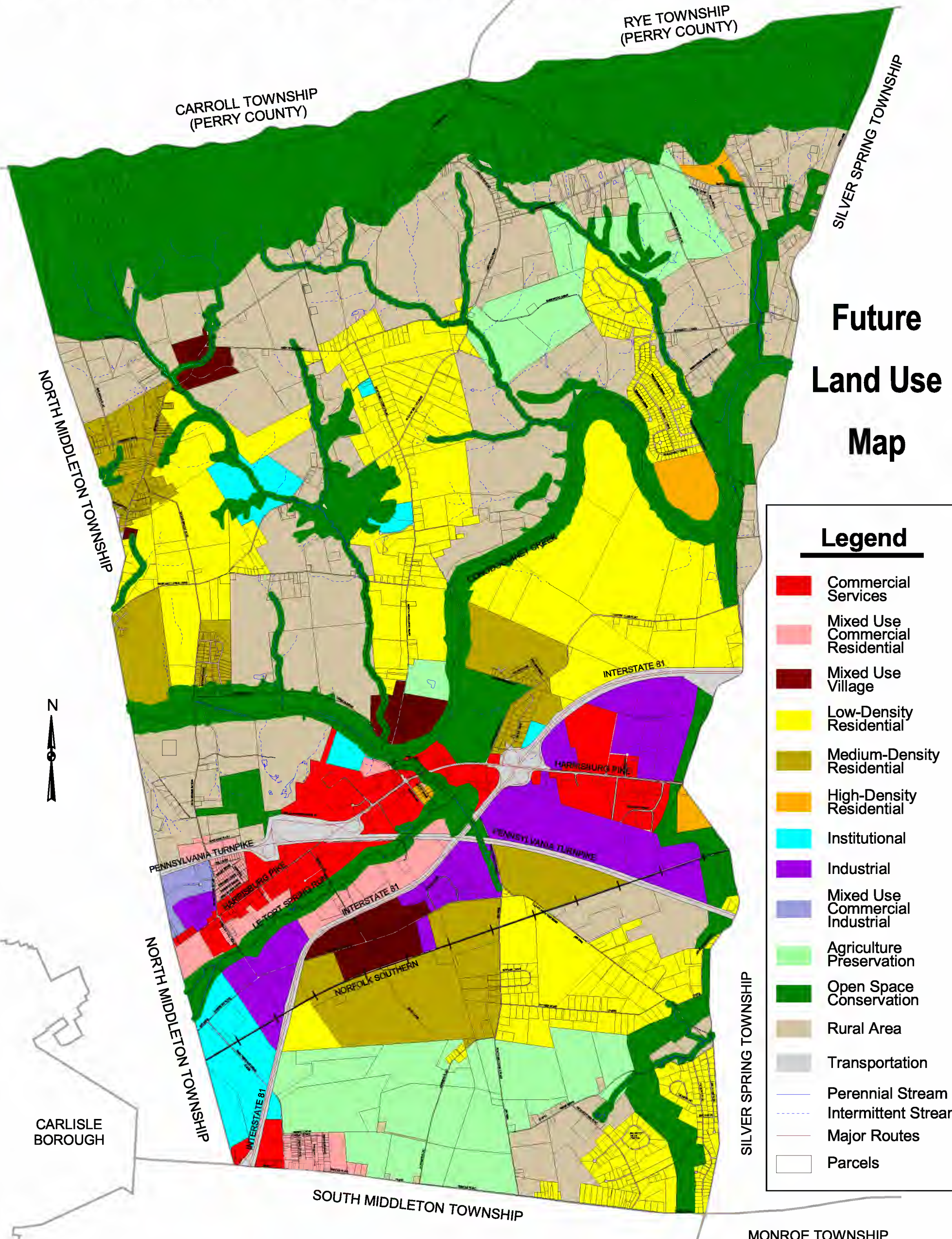
17. Inform adjacent municipalities about land use matters involving parcels that abut neighboring municipalities and amend, where necessary, in accordance with the Pennsylvania Municipalities Planning Code.

Other Considerations

18. Consider amending the Zoning Ordinance to provide for improved advertising signage control, where appropriate.
19. Consider amending the Zoning Ordinance to provide for improved on- and off-site lighting control.

MIDDLESEX TOWNSHIP

(Cumberland County, Pennsylvania)



Future Land Use Map

Legend

- Commercial Services
- Mixed Use Commercial Residential
- Mixed Use Village
- Low-Density Residential
- Medium-Density Residential
- High-Density Residential
- Institutional
- Industrial
- Mixed Use Commercial Industrial
- Agriculture Preservation
- Open Space Conservation
- Rural Area
- Transportation
- Perennial Stream
- Intermittent Stream
- Major Routes
- Parcels

TRANSPORTATION ACTION PLAN

INTENT

A well-functioning transportation system is essential to ensure the efficient movement of people and goods, maintain the quality of life, and provide for economic growth and diversification. This Action Plan is designed to promote the safe and efficient movement of goods and people throughout the Township and surrounding jurisdictions.

Goal: Encourage a safe and efficient transportation network that facilitates the movement of people and goods within and through Middlesex Township, and which maintains good levels of service.

TRANSPORTATION POLICIES

1. Coordinate future land use with the existing Township roadway network to minimize adverse and unacceptable impacts.
2. Encourage alternative modes of transportation.
3. Support a greater regional concept of transportation planning through increased cooperation with surrounding townships, the county and the state (PennDOT).
4. Encourage the development of pedestrian walkways and bikeways interconnecting residential areas with schools, recreation facilities and employment and commercial centers.
5. Consider, prioritizing and implementing transportation system improvements.

ACTION STRATEGIES

Transportation Considerations

1. A Future Land Use Map has been developed to plan for the future growth of the Township. As such, the Township should consider that future development is planned in accordance with the Future Land Use Map to maximize accessibility and provide an efficient transportation system for the Township's residents and patrons.
2. Consider the creation of a Greenways/ Trails Committee to oversee the development of a Greenways and Trails Plan for the Township.
3. Participate in initiatives and programs being pursued by surrounding municipalities, the county, and the state for transportation improvement projects, such as the Interstate 81 and PA Turnpike (I-76) Connector Study, commuter/ light rail systems, expanded public transportation routes to more residential areas, park and ride facilities or ride share programs, and the Cumberland/ Perry County Commuter Study.

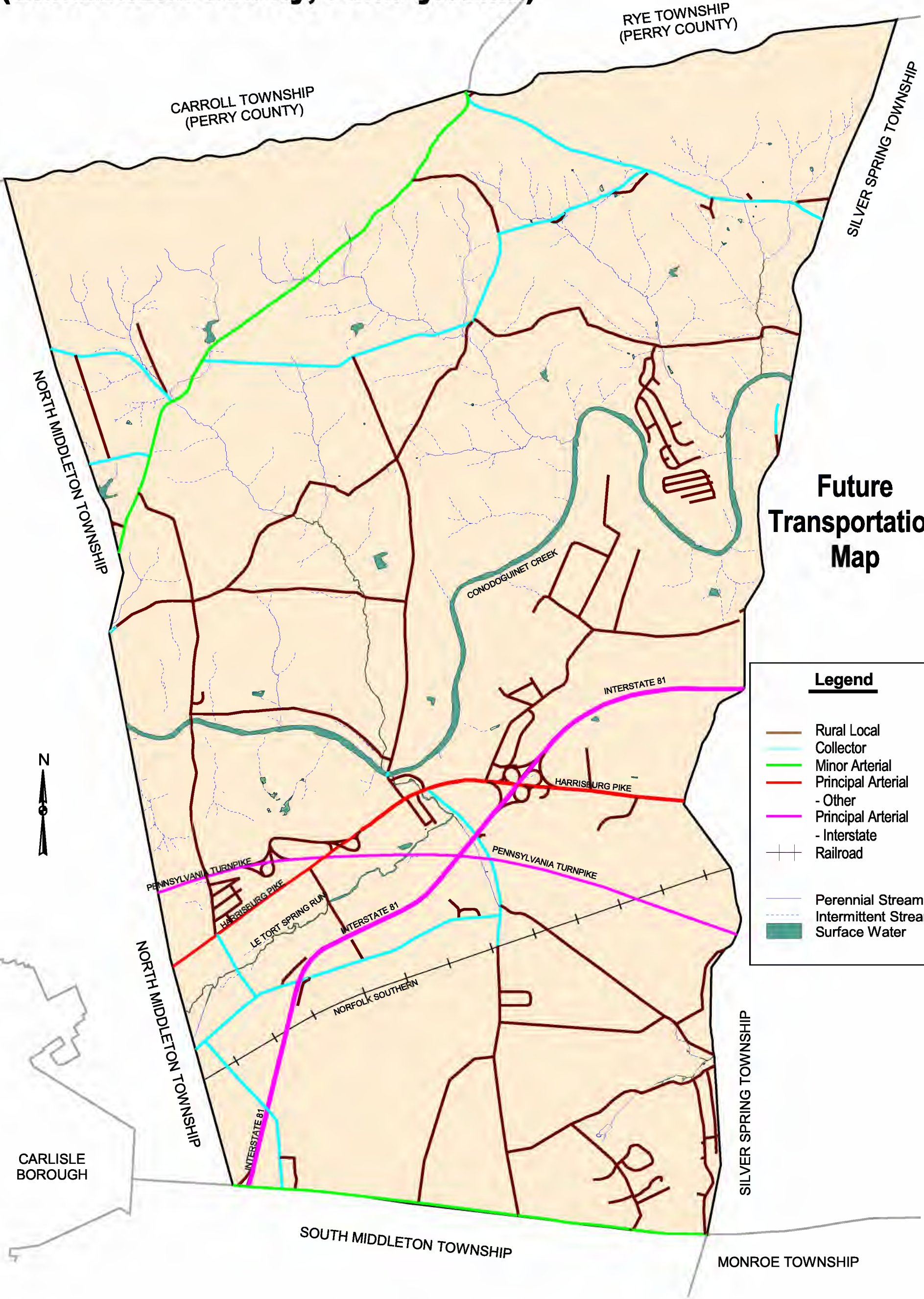
4. The following transportation improvements should be considered for the proposed Army Heritage Center.
 - Widen Army Heritage Drive
 - Claremont Road & Army Heritage Drive – Improved turning lanes.
 - Trindle Road & Army Heritage Drive – Retime signals and provide improvements to turning lanes.
 - Harmony Hall Road and US Route 11 – Retime signals and provide exclusive turn lanes east bound and west bound.

Livable Communities

5. Encourage the concept of liveable communities through the development of pedestrian walkways and bikeways interconnecting residential areas with employment, transportation, business, and recreation.
6. Consider developing a plan and feasibility study for implementing pedestrian and bicycle pathways which promote access between and onto individual sites and from adjoining streets and neighborhoods.

MIDDLESEX TOWNSHIP

(Cumberland County, Pennsylvania)



ENVIRONMENTAL RESOURCES ACTION PLAN

INTENT

The intent of the Environmental Resources Action Plan is to ensure the quality of the Middlesex Township natural environment is maintained and enhanced as future development occurs. With sound protection measures, such as those presented herein, the Townships citizens, business community, and visitors can be confident that a healthy environment coexists with a vibrant economy.

Goal: Sustain and enhance the Township's sensitive natural environmental resources for the benefit of current and future generations.

ENVIRONMENTAL RESOURCES POLICIES

1. Encourage protecting, within reason, the Township's sensitive natural resources including floodplains, wetlands, woodlands, steep slopes, ridge tops of the North Mountain, the Appalachian Trail, LeTort Spring Run, Conodoguinet Creek and other stream corridors.
2. Protect prime agricultural lands and Agricultural Security Areas (ASAs) from encroachment by non-agricultural development.
3. Foster the continuation of agricultural uses on prime agricultural lands and ASAs.
4. Encourage cooperation between conservation groups and public organizations to protect and manage natural resources.
5. Preserve important scenic views that help maintain the rural character of the Township.

ACTION STRATEGIES

Restrict Development in Areas of Sensitive Natural Resources

1. Review the Subdivision and Land Development Ordinance to consider requiring development applicants to provide the following kinds of information with their applications when such information is determined to be necessary to preserve existing environmental features.
 - A description or generalized mapping of natural site conditions with an emphasis on significant environmental features that would be affected by the proposed development or retained upon completion of the project. The mapped information shall address the following, where applicable:
 - Areas that have "severe limitations with regard to soil type and are greater than 15 percent slope".

- Impervious and pervious surfaces.
 - Use of natural ground surface features and drainage patterns for the purpose of managing stormwater runoff.
 - Public water supply.
 - Areas that will remain in a natural or undisturbed state upon completion of the project.
 - Endangered or threatened plant and animal species and species of special concern.
 - 100-year floodplain boundary.
 - A description of mitigation efforts that will occur as part of the proposed development.
 - An impact assessment that discusses the anticipated effect of the proposed development on the environment.
 - Measures that are proposed by the applicant to mitigate the impacts of the proposed development on the environment.
2. Consider amending the Zoning and Subdivision and Land Development Ordinances to protect ridge tops of the North Mountain from development.

Protect and Manage Soils and Natural Vegetation

3. Consider amending the Zoning and Subdivision and Land Development Ordinances to prohibit development in steep slope forested areas.
4. To the extent permitted by law, prohibit clearing areas that have a high potential for erosion (where soils have severe limitations and slope is greater than 15 percent). During the development process, the delineation of site disturbance on a plan, the provision of a narrative description of proposed grading and stabilization methods to be used and/ or similar general information are encouraged as methods to demonstrate an effort to preserve sensitive slope areas. Exact details of these mitigation measures will be developed during the land development plan review process. Consider amending the Subdivision and Land Development Ordinance to require developers to submit NPDES approval forms to the Township for its consideration during the development plan review process.
5. Encourage the use of native plants that are adapted to local soil and weather conditions when revegetating disturbed areas.

Maintain and Enhance Surface Bodies of Water and Watersheds

6. Consider amending the Subdivision and Land Development Ordinance to include monitoring programs to ensure that during and after development, peak stormwater flows do not exceed predevelopment peak flows, in terms of quantity, quality, and volume.
7. Consider establishing requirements to leave a natural undisturbed buffer along all waterways.
8. Recognize the use of no-net-gain standards to prevent nutrient loading, and sedimentation runoff to adjacent waters that result from development-related practices. Recognize similar standards for agricultural practices.
9. Recommend limiting and locating away from water bodies those nonresidential activities that use, store, or manufacture significant quantities of toxic substances.
10. Consider developing criteria in appropriate areas for establishing conservation overlay districts in order to protect surface and groundwater quality.
11. Encourage the minimization of the amount of impervious surfaces of development and redevelopment in order to minimize stormwater runoff through the use of appropriate sustainable design techniques.
12. Encourage the establishment of greenways and/ or linear parks along the Conodoguinet Creek and LeTort Spring Run.

Preserve and Properly Manage Prime Agricultural Soils in Middlesex Township

13. Consider amending the Zoning Ordinance to create an Agricultural Zoning District in those areas with high concentrations of parcels enrolled in the Agricultural Security Area program.

Agricultural Zoning District – For the purpose of preserving and protecting prime farm soils, agricultural security areas and other productive farm areas by Limiting residential development activity.

The intent would be to place greater restrictions than the current Residential Farm Zone which allows 60,000 s.f. minimum lot size.

14. Identify conflicts with areas recommended for agricultural preservation during subdivision and land development reviews.

Work with Conservation Groups and Public Organizations to Protect and Manage Natural Resources

15. Identify the various conservation groups and public organizations, such as the LeTort Regional Authority and others, working to protect and manage natural resources within the Township and encourage them to be more cooperative in their efforts.

HOUSING ACTION PLAN

INTENT

The Housing Action Plan is to provide guidance for meeting the housing needs of current and future residents of Middlesex Township. These needs are expressed in terms of quality, affordability, location, and amenities.

The Housing Action Plan is the Township's commitment to clean, safe, and attractive neighborhoods and to the elimination of substandard housing. This plan recognizes that a variety of housing types must be available to Township residents. Implementation of the policies and action strategies in the Housing Plan will foster the image of Middlesex Township as a good place for residential and other investment.

- Goals:*
- *Create a residential structure and housing pattern that strengthens the sense of community identity, fosters residential stability and character, and enhances the overall quality of life.*
 - *Provide opportunities for future residential development while maintaining the Township's rural character.*

HOUSING POLICIES

1. Assure new residential developments and neighborhoods are harmonious with the landscape and important natural or cultural amenities found within the Township.
2. Assure future housing and neighborhoods are designed and located to provide protection from floods, stormwater damage, erosion, unstable soil conditions and other incompatible uses.
3. Encourage the availability of housing for families of all sizes, all age groups, and various income levels.
4. Provide opportunities for housing types which are sensitive to shifting demographic trends, such as smaller household size and aging population.
5. Support opportunities for the rehabilitation of existing housing stock.
6. Attempt to establish housing densities that are compatible with adjacent areas and the available infrastructure.

ACTION STRATEGIES

Housing

1. Attempt to provide for the location of affordable housing (rental and moderate-cost, multi-family housing), especially in areas convenient to major employment centers and public transportation facilities.

Variety of Housing Types

2. Consider amending the Zoning Ordinance to encourage greater use of unified planning districts.
3. Consider amending the Zoning Ordinance to allow cluster/ open space residential development in certain residential zoning districts.
4. Consider amending the Subdivision and Land Development Ordinance to require wetland delineations and deduct wetland areas from lot calculations.
5. Consider amending Subdivision and Land Development Ordinance to require slope delineations of 15 percent or greater and deduct slope areas of 15 percent or greater from lot calculations.
6. Consider amending Subdivision and Land Development Ordinance to require the identification and delineation of floodplains and deduct floodplains from lot calculations.
7. Consider amending the Zoning Ordinance to include innovative residential development techniques such as unified planning districts and open space development to reduce site development costs.
8. Encourage a variety of housing types and densities in individual developments through local ordinances, in a manner that ensures compatibility and additional open space for those living in that development.

Growth Management

9. Encourage locating new residential developments near existing services such as central sewer and water facilities, adequate public roads and transportation systems, retail facilities, emergency services, recreational opportunities, educational facilities and social services.

Housing Location

10. Encourage and support sound and creative housing proposals within appropriate areas, as designated on the future land use map.

11. During subdivision and land development reviews consider such impacts as noise, air quality, visual blight, glare and vibrations in assessing the suitability of a site for residential development. Consider amending the Subdivision and Land Development Ordinance to provide requirements for considering these impacts.
12. Consider using limited in-fill development practices in situations where there is existing infrastructure to provide housing opportunities that are convenient to jobs, transit services, shopping and supportive programs.

Housing Rehabilitation and Codes Enforcement

13. Enforce housing and building codes to ensure that all housing units and structures comply with Township requirements.
14. Encourage landowners and developers to preserve and rehabilitate sound residential structures and neighborhoods to the extent feasible.

PUBLIC UTILITIES (WATER AND SEWER) ACTION PLAN

INTENT

The intent of the Public Utilities Action Plan is to facilitate the provision of adequate sewer and water facilities in a manner consistent with the Future Land Use Plan. The Action Plan needs to address existing and future conditions that would otherwise impact the natural environment and public health, safety and welfare.

Goal: Promote the orderly expansion of public sewer and water services to meet the existing and planned development needs, while taking into account the impacts to cost, public health, surrounding land use, and environmental conditions.

PUBLIC UTILITIES POLICIES

1. Consider making efficient use of areas that have existing public water and/ or sewer service by allowing more intensive use of the land, without creating unacceptable impacts.
2. Discourage the extension of public sewer and/ or water service to those areas of the Township that are intended for nominal or no development, such as rural and agricultural areas, steep slopes, and floodplains, except where public health needs have been documented.
3. Promote the extension of public sewer and/ or water service systems that are required to protect public health and to support planned growth in appropriate areas, provided the proposed projects are affordable and that all viable alternatives have been considered when cost is a problem.
4. Support efforts to improve and extend water and sewer facilities. Specifically, water and sewer services should be extended to those areas targeted for development in the Future Land Use Plan and where deemed appropriate by the Middlesex Township Municipal Authority. Also, ensure that such improvements are consistent with the rural character of the Township and that they sustain the existing levels of transportation services currently found throughout the Township.
5. Continue to work cooperatively with the Middlesex Township Municipal Authority in addressing the Township's growth management and infrastructure improvement programs.

ACTION STRATEGIES

Growth Management/Sewer Extension

1. Update the Act 537 Plan, as required by law, to accommodate growth as outlined in the Comprehensive Plan.

2. Plan for the future expansion of public sanitary sewer service to the identified areas posing threats to public health, safety, welfare.
3. Accommodate infill of moderate to high density residential and nonresidential development in areas that have public sewer and water or are planned to have public sewer and water service.
4. Support efforts to extend water and sewer facilities to those areas that are consistent with the developing areas as reflected on the Future Land Use Map.
5. Discourage high density development in those areas served only by on-lot systems.
6. Require future development within the developing areas as reflected on the Future Land Use Map to commit to public water and sewer facilities, where required.

On-Lot Facilities

7. Enforce the recently enacted On-Lot Management Ordinance.

COMMUNITY FACILITIES AND SERVICE ACTION PLAN

INTENT

The intent of the Community Facilities and Services Action Plan is to facilitate the provision of adequate community facilities in a manner consistent with future development of the Township. The Action Plan needs to address existing and future conditions that would otherwise impact the public health, safety and welfare of the Township.

Goal: To provide adequate and efficient community facilities and services which meet the needs of Township residents.

COMMUNITY FACILITIES AND SERVICES POLICIES

1. Support and encourage police, fire and emergency services.
2. Support the coordination of, and training and education for police, fire and emergency service personnel.
3. Encourage the Cumberland Valley School District to provide high quality education, while at the same time being mindful of the tax burden placed upon residents.

ACTION STRATEGIES

Police, Fire and Emergency Services

1. Consider the impacts of residential and nonresidential development on the provision of police service.
2. Annually review the monetary support afforded by the Township to fire and emergency service providers.
3. Work with local trucking companies and local and County emergency management officials to discuss issues associated with hazardous materials spills.

PARKS AND RECREATION ACTION PLAN

INTENT

A Township-wide system of well-maintained parks, recreation facilities and public open space that meet a variety of the active and passive recreational needs of Township citizens of all ages is an important service the Township provides to its residents. These parks and open space areas preserve trees and green areas that make the Township more attractive to those who live here, those who visit and those who wish to invest in the Township.

Goal: Maintain a wide variety of safe and adequate recreation facilities and programs that meet the varying needs of all Township residents.

PARKS AND RECREATION POLICIES

1. Continue to develop active and passive recreation facilities at Township parks.
2. Encourage efforts to establish a Township park, or other recreation facilities, in the southern half of the Township, if cost and expected use are feasible.
3. Encourage developers to provide open space and/ or neighborhood parks to serve future residential subdivisions.
4. Promote the development of a Township-wide greenway and/ or bicycle/ pedestrian trail or path system, which could include adequately sized shoulders along Township roads for pedestrian and bicycle use.
5. Encourage joint efforts between various public agencies and private organizations which can result in the provision of additional parks, open space, pathways or recreation facilities.
6. Encourage preservation and retention of natural areas along the Conodoguinet Creek and LeTort Spring Run by promoting recreational uses that are compatible with these undeveloped areas.

ACTION STRATEGIES

Provide Adequate Facilities to Meet the Recreation Needs of the Township Residents

1. Maintain an inventory of existing private sector and other jurisdictional parkland and facilities for use in future park analysis.
2. Develop handicapped "friendly" facilities.
3. Provide a diversification of facilities consistent with available resources.

4. Monitor or the status of the development of recreation facilities at Township parks. (H/ T/ ongoing)¹
5. Consider acquiring land for a park, or recreational facilities, on the south side of Route 11, if determined to be feasible.
6. Periodically evaluate the needs of playing fields in cooperation with local youth sports organizations.

Greenways/Linear Parks

7. Consider creating a Greenways/ Trails Committee to oversee the development of a Greenways and Trails Plan for the Township.
8. Encourage establishing greenways and/ or linear parks along the Conodoguinet Creek and LeTort Spring Run.
9. Contact a local land trust, such as the Central Pennsylvania Conservancy or the Appalachian Audobon Society, to investigate alternative means of park, greenway, and bicycle/ pedestrian trail acquisition.
10. Consider the construction of bicycle trails within the public right-of-way as development occurs and/ or as roadways are upgraded, and encourage linkages of these trails with established trails.
11. Include in planning for the trails and greenways system and working with the various public and private groups that all floodways, existing utility and conservation easements, abandoned railroad beds, and other appropriate sites as potential trail and/ or greenway segments.

Funding of Parks and Recreation Facilities

12. Review and amend, as necessary, the Township's policies regarding developers' dedication or fee-in-lieu of provisions for recreation and open space amenities.
13. Utilize private organizations and businesses to supplement limited public funding for Township recreational facilities and programs.
14. Solicit funding from appropriate governmental agencies for the purpose of acquisition, development, renovation, and maintenance of Township parks, trails, open space, and recreational facilities and site.

ECONOMIC DEVELOPMENT ACTION PLAN

INTENT

Economic development establishes the comprehensive plan's foundation for enhancing and diversification of Middlesex Township's revenue base and job growth. Recognizing that various public and private agencies actively pursue and promote environmentally sound economic development, the Township has a major role in facilitating economic growth through its land use, development and fiscal policies.

Goal: Maintain a healthy business climate to ensure continued, sound economic growth.

ECONOMIC DEVELOPMENT POLICIES

1. Support existing businesses to preserve the tax base and provide employment opportunities.
2. Encourage a mix of employers and employment opportunities within the Township.
3. Encourage economic development activity where there is adequate infrastructure to support such development.
4. Encourage growth industries that are compatible with the Township's work force and Comprehensive Plan.
5. Support the development of the Army Heritage Center in the southwest portion of the Township.
6. Encourage land uses that create the least burden on Township government and generate the most tax revenue.

ACTION STRATEGIES

Cooperation of Township, Businesses and Economic Development Services

1. Encourage local business owners to form business partnerships to promote a plan for marketing and fund raising to support economic development.
2. Encourage communications with existing businesses to identify and address issues that affect retention and expansion of business and industry.
3. Attempt to determine which land uses create the least burden on Township government and generate the most tax revenue.

Create Sites and Opportunities for Expansion of Existing Businesses and Creation of New Businesses

4. Work with economic development agencies to identify appropriate areas for new developments and sites for industries that need special buffering and sites suitable for reuse. This should be performed in accord with the land use policies contained within this plan.
5. Monitor the capacity of the appropriately zoned land to accommodate industries and businesses so as to ensure an adequate inventory of zoned land for these activities.

CULTURAL RESOURCES ACTION PLAN

INTENT

The Cultural Resources Action Plan is to facilitate and encourage the identification and protection of the Township's significant cultural resources (i.e., architectural, archaeological, and historical sites and districts). The Action Plan should also enhance awareness of the history of the Township and the importance of preserving properties that are significantly linked with that history.

Goal: Preserve the Township's cultural heritage and historic resources.

CULTURAL RESOURCES POLICIES

1. Preserve cultural and historic resources and their settings.
2. Promote the use of the Township's historic resources and the existing cultural landscape as a basis for creating strong community character.
3. Encourage the preservation, rehabilitation, and adaptive reuse of historic structures, as identified in the Cumberland County Historical Society's historic structures inventory.
4. Support the identification and designation of properties of national, state and local historic significance.

ACTION STRATEGIES

Inventory and Surveys

1. Develop an inventory of cultural resources (historic and archaeologic places) within the Township (perhaps in cooperation with the Cumberland County Historical Society).
2. Work with the Pennsylvania Historical and Museum Commission to cooperatively maintain an inventory of publicly and privately owned historic sites and districts. This should also include the identification of historic features worthy of preserving.

Preservation

3. Consider the creation of historic districts in accordance with the Pennsylvania Historic District Act.
4. Consider developing guidelines for historic districts to encourage the preservation, rehabilitation and adaptive reuse of historic structures.
5. Encourage the owners of historic properties to maintain and protect their historic structures.

6. During subdivision and land development reviews, document any proposed actions that may impact National Historic properties or properties deemed eligible for the National Register by the Pennsylvania Historical and Museum Commission.
7. Encourage the use of conservation easements or restrictive covenants as appropriate, by private landowners in order to protect and preserve historic sites and sensitive environmental areas.

Organization/Funding

8. Consider establishing a "Township Historical/ Cultural Resources Committee" devoted to protecting and promoting the Township's historical and cultural resources.

INTERRELATIONSHIPS BETWEEN PLAN COMPONENTS AND SHORT/LONG RANGE IMPLEMENTATION STRATEGIES

Each of the individual planning components of the Comprehensive Plan (Land Use, Transportation, Environmental Resources, Housing, Public Utilities, Community Facilities and Services, Parks and Recreation, Economic Development, and Cultural Resources) have been developed with consideration of the impacts and relationships each area has with one another. Each planning component has developed short range and long range Action Planning Strategies that implement the Goals and Policies in each planning component, but they are also coordinated with the Action Planning Strategies in other interrelated planning components.

Each area is interrelated and recommendations in one area may have consequences for one or more of the planning areas. The Land Use Plan, Transportations Plan, and Public Utilities Plan have enormous interactions since decisions in one clearly affects the other. Land use decisions are made based upon the availability of transportation and sewer and water facilities. Land use decisions are also sensitive to environmental areas that may be adversely impacted by poor land use decisions. Environmentally sensitive areas and agricultural areas were mapped so that land use and other decision in the Comprehensive Plan could be made based upon the locations and sensitivities of these areas.

Parks and recreations facilities and initiatives are also interrelated to both land use and to areas of environmental sensitivity. Greenways along the Conodoguinet Creek and the preservations of forested areas in the Blue Mountain range are each examples of the relationships between land use planning, recreation planning and the preservation of environmentally sensitive areas. The Comprehensive Plan makes Park and Recreation recommendations based upon these considerations. Land use decisions are also interrelated to the preservation of cultural resources. The identification of cultural resources impacts land use decisions that are made in the Comprehensive Plan.

Coordination of the various Planning elements in the Comprehensive Plan will maximize the impact of the plan by providing services and infrastructure where they are needed and retaining open space, environmentally sensitive areas and agricultural areas that are desired. These need to be coordinated and balanced with the opportunities for additional development where it can be supported and retains the quality of life in Middlesex Township.

1.0 POPULATION

In order to make sound planning decisions and develop appropriate planning policies, regarding the physical, social and economic development of the Township, and the allocation of municipal resources, it is important to review and analyze the Township's population. A quantitative analysis of population trends and a qualitative analysis of population characteristics are needed to make reasonable projections for future population growth and needs. Land area requirements for future residential, recreation, commercial, industrial and other needs are directly related to the requirements of the population to be served. Projected population demands for service will also determine the number and scope of future schools, transportation facilities, and other public infrastructure.

1.1 HISTORIC AND EXISTING POPULATION

Middlesex Township has experienced a steady increase in population since 1950, as shown in Figure 1-1, Middlesex Township Population 1950-2000. The Township's largest increase in population occurred from 1970 to 1980 when the population grew 1980 by 1,649 or 57.7 percent. Population continued to grow steadily but slower in the next two decades. The Population increased by 1,274 or 28.3 percent from 1980 to 1990 and again by 889 or 15.4 percent from 1990 to 2000.

For comparative purposes, population growth from 1960 to 2000 for Middlesex Township, Cumberland County, and the Commonwealth of Pennsylvania are presented in Table 1-1, Historic Population and Population Growth Trends 1960 - 2000. As presented in the table, Middlesex Township has achieved a significantly higher rate of growth than both Cumberland County and the Commonwealth of Pennsylvania since 1970.

In 1960, Middlesex Township ranked fifteenth among the 34 municipalities in Cumberland County, accounting for 1.9 percent of the County's population. By 2000, the Township rose in rank to the twelfth most populous municipality in the County, comprising 3.1 percent of the County's population.

1.2 AGE AND GENDER DISTRIBUTION

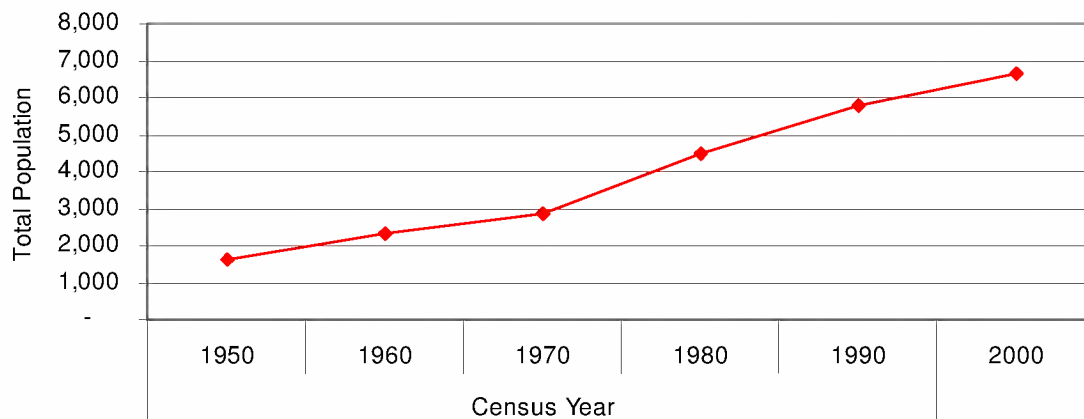
The age and gender distribution of Township residents is a key factor in population growth and in determining the type of public services best suited for the majority of residents. Different age groups have different public service needs that should be considered. Changes in the size and growth rate of the youth age group (children under the age of 15) would have implications on the planning for educational facilities and programs. The age group ranging from 15 to 44 years of age is the segment of the population most frequently engaged in household formation and tends to produce the most children. Any substantial decline or imbalance in the number of residents in this age group impacts the birth rate, thus population increases or decreases. The age group ranging from 25 to 44 years of age is the segment of the population that comprises the majority of labor force and is most frequently engaged in home buying or building. This group tends to be highly mobile and active in community functions. The mature labor force, 45 to 65 years of age, tends to be more settled and at the height of their earning power.

A comparison of the Township's population by age from 1970 to 2000 is presented on Table 1-2. A population pyramid depicting the age and gender distribution of Middlesex Township residents for 1970, 1980, 1990 and 2000 is presented in Figure 1-2.

As presented on the preceding table and figure, the Township's population is aging. The most dramatic changes have been experienced by the age groups at both extremes of the spectrum, in the under 15 and in the 65 and over age groups.

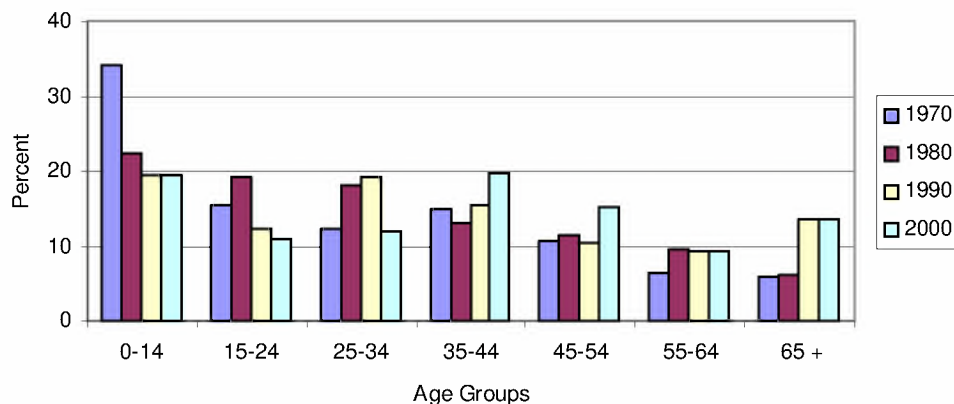
The 65 and over age group increased from 5.8 percent of the Township's population in 1970 to 13.5 percent in 2000. When combined with the population of the 55-64 age group, which also increased since 1970, almost one quarter (22.8 percent) of the Township's population was 55 years or older in 2000.

Figure 1-1
Population, Middlesex Township, 1950-2000



Source: U.S. Census 1950-2000.

Figure 1-2
Population Pyramid, Middlesex Township, 1970-2000



Source: U.S. Census 1970-2000.

Conversely, the under 15 age group has decreased in size, from over one third (34.2 percent) of the Township's population in 1970, to less than one fifth (19.5 percent) of the Township's population in 2000. School enrollment projections from the Cumberland Valley School District show minor increases in the Kindergarten through Grade 12 enrollments for the 1999 to 2001 school years, with most of the growth expected at the high school level.

The large increases in population of upper age groups within the Township indicates that the Township should be concerned with examining whether the Township facilities and services are adequate to meet the current and future needs of its older residents.

Table 1-1
Historic Population and Population Growth Trends for Middlesex Township,
Cumberland County and Pennsylvania 1960-2000

Jurisdiction	Population					Population Growth							
						1960-1970		1970-1980		1980-1990		1990-2000	
	1960	1970	1980	1990	2000	#	%	#	%	#	%	#	%
Middlesex Township	2333	2857	4506	5780	6669	524	22.5	1649	57.7	1274	28.3	889	15.4
Cumberland County	124816	158177	179625	195257	213674	33361	26.7	21448	13.6	15632	8.7	18417	9.4
Pennsylvania	11319366	11800766	11864720	11881643	12281054	481400	4.3	63954	0.5	16923	0.1	399411	3.4

Source: U.S. Census 1960-2000.

Table 1-2
Population by Age Group, 1970-2000, Middlesex Township

Age Group	1970		1980		1990		2000	
	#	%	#	%	#	%	#	%
0-14	978	34.2	1,003	22.3	1,122	19.4	1,298	19.5
15-24	445	15.6	866	19.2	709	12.3	736	11
25-34	349	12.2	821	18.2	1,115	19.3	791	11.9
35-44	429	15	585	13	901	15.6	1,313	19.7
45-54	306	10.7	520	11.5	605	10.5	1,009	15.1
55-64	184	6.5	431	9.6	535	9.3	625	9.3
65 +	166	5.8	280	6.2	792	13.7	897	13.5
Total	2,857	100	4,506	100	5,780	100	6,669	100

Source: U.S. Census 1970-2000.

A shift in the age of the labor force can also be seen between 1990 and 2000. The 15-35 age group decreased from 37.4 percent in 1980 to 22.9 percent in 2000. The 35-55 age group increased from 24.5 percent of the Township's population in 1980 to 34.8 percent in 2000.

With this apparent shift toward an older, more mature labor force who can afford more expensive housing, the Township should be concerned with examining whether or not adequate affordable entry level housing and other Township facilities and services are available to attract persons in the 15-35 age group. These younger persons in the labor force are typically starting families and are a valuable asset to the community since they are generally more active in community functions.

The overall distribution of the Township's population among males and females in 2000 was 3,416 (51.2 percent) males and 3,253 (48.8 percent) females. The distribution of the Township's population among males and females 18 years of age and older in 2000 was nearly even, with 2,560 (38.4 percent) males and 2,528 (37.9 percent) females.

1.3 RACIAL COMPOSITION

The 2000 Census delineates persons by seven racial categories: (1) White, (2) Black or African American, (3) American Indian and Alaska Native,

(4) Asian, (5) Native Hawaiian and Other Pacific Islander, (6) some other race and (7) two or more races. In 2000, 6,401 (96.0 percent) White persons, 100 (1.5 percent) Black or African American persons, 7 (0.1 percent) American Indians and Alaskan Native persons, 53 (0.8 percent) Asian persons, 3 Native Hawaiian and Other Pacific Islander persons, 29 (0.4 percent) persons of some other race and 76 (1.1 percent) persons of two or more races lived in Middlesex Township. The Township's racial composition in 2000 was similar to that of Cumberland County, which was composed of 94.4 percent White persons.

1.4 EDUCATIONAL ATTAINMENT

A comparison of the educational attainment levels of persons 25 years and older in 2000 in Middlesex Township, Cumberland County and the Commonwealth of Pennsylvania is presented on Table 1-3. The educational level of Middlesex Township residents with high school graduate or higher education is approximately equal to levels attained by other Commonwealth of Pennsylvania residents, but the educational level of Middlesex Township residents in all other categories is somewhat lower than the levels attained by other Cumberland County and Commonwealth of Pennsylvania residents.

Table 1-3
Educational Attainment by Persons 25 Years and Older for
Middlesex Township, Cumberland County & Pennsylvania, 2000

Jurisdiction	Middlesex Township		Cumberland County		Pennsylvania	
	#	%	#	%	#	%
High School Graduate or Higher	3807	82.1	124,154	86.1	6,770,179	81.9
Bachelor's Degree or Higher	797	17.2	40,264	27.9	1,847,631	22.4
Graduate or Professional Degree	314	6.8	14,174	9.8	694,248	8.4

Source: U.S. Census 2000

Table 1-4
Income & Poverty for
Middlesex Township, Cumberland County & Pennsylvania, 1999

Jurisdiction	Median Family Income	Median Household Income	Per Capita Income	Percent Persons Below Poverty
Middlesex Township	\$59,250	\$50,471	\$24,902	5.7
Cumberland County	\$56,406	\$46,707	\$23,610	6.6
Pennsylvania	\$49,184	\$40,106	\$20,880	11

Source: U.S. Census 2000

1.5 INCOME

A measure closely related to educational attainment and employment characteristics is income. Income statistics are grouped into three main categories: family income, household income, and per capita income. Median family income is derived by dividing family household income for all families in a group into two equal parts (one above and one below). Median household income is determined by dividing household income, for all households and unrelated individuals in a group, into two equal parts. Per capita income is calculated by dividing the aggregate income for persons 15 years and over by the total number of persons in the group.

Table 1-4 contains median family income, median household income and per capita income for Middlesex Township, Cumberland County and the Commonwealth of Pennsylvania in 1999. As presented in the table, median family and median household income levels in Middlesex Township are somewhat higher than those of Cumberland County and significantly higher than those of the Commonwealth of Pennsylvania. Middlesex Township's per capita income is also higher than that of both Cumberland County and the Commonwealth of Pennsylvania.

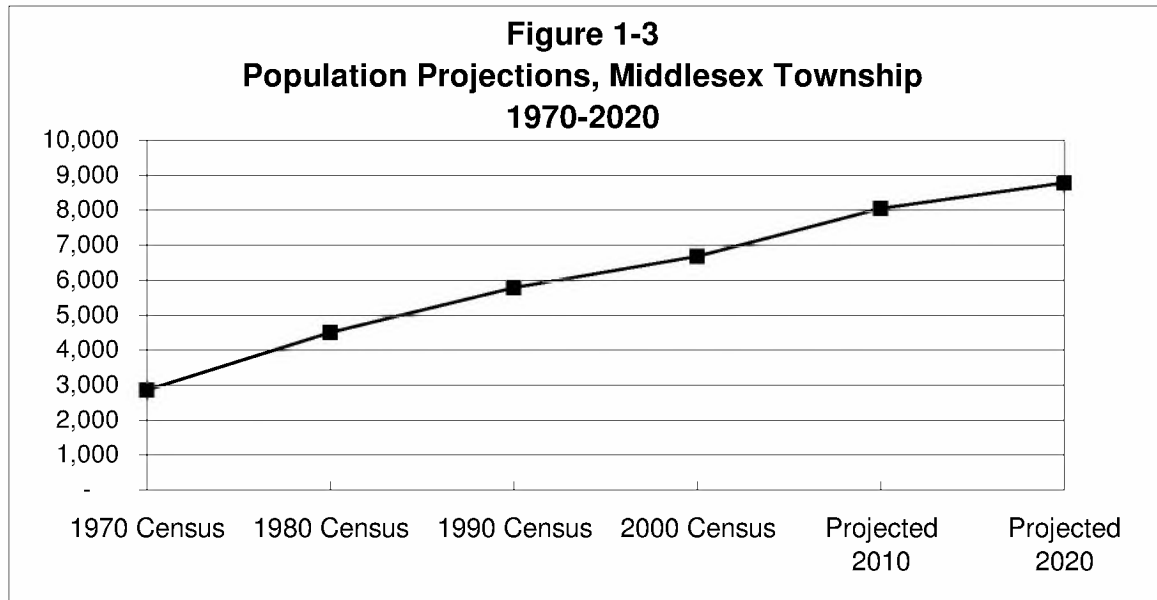
1.6 POVERTY LEVELS

Another indicator of socioeconomics for the Township is the poverty level. According to the 2000 Census, there were 339 persons living in the Middlesex Township who were below the poverty level. The percentage of persons below poverty in Middlesex Township (5.7 percent) is low as compared to the percentage of persons below the poverty level within Cumberland County (6.6 percent) and the Commonwealth of Pennsylvania (11 percent).

1.7 FUTURE POPULATION PROJECTIONS

As evidenced previously in the review of historical population data, Middlesex Township has experienced steady increases in population over the last 30 to 40 years. The rate of population growth peaked from 1970 to 1980. So while the population of the Township has continued to grow, it has grown at a slower pace since 1980.

Future population projections for Middlesex Township are presented on Figure 1-3. Actual population figures from the US Census were used for 1970, 1980, 1990 and 2000. Projections of future population levels for the period between 2000 and 2020 were developed by the Tri-County Regional Planning Commission in 2001 as part of an update to the Cumberland County Comprehensive Plan.



Sources – U.S. Census 1970-2000 and Tri-County Regional Planning Commission, 2001

1.8 TRENDS AND ISSUES

Trends

- ✓ Middlesex Township's rate of growth from 1980 to 2000 has been much higher than either Cumberland County or Pennsylvania.
- ✓ The Township was the 12th most populous municipality in the county in 2000 and population estimates indicate that the Township has maintained this position.
- ✓ Future population growth is projected at 8,039 for 2010, and 8,781 for 2020.
- ✓ A review of age and gender characteristics in the township indicates that the population is aging with approximately 22.8 percent of the population 55 and older in 2000.
- ✓ The total percentage of persons age 55 and older increased from 12.3 percent in 1970 to 22.8 percent in 2000.
- ✓ The total percentage of persons age 15-35 decreased from 37.4 percent in 1980 to 22.9 percent in 2000.

- ✓ The total percentage of persons age 35-55 increased from 24.5 percent in 1980 to 34.8 percent in 2000.
- ✓ In comparison with the Commonwealth and the County, the percentage of Township residents having a high school education, bachelor's degree or graduate or professional degree are equal or somewhat lower in each category in 2000.
- ✓ The Township is predominately white, accounting for 96 percent of the total population in 2000.

Issues

- ✓ An additional 2,112 residents projected by 2020.
- ✓ Aging population.
- ✓ Aging labor force.
- ✓ Housing and services to accommodate future population growth, including adequate supply of affordable entry level housing for younger residents.
- ✓ Zoning policies that will provide for gradual population increases.

2.0 HOUSING

Housing characteristics are influenced by the age, income and other socioeconomic characteristics of the Township's residents. This section of the report describes existing housing types, conditions, vacancies and other factors that characterize the supply of housing in Middlesex Township. Data from the 2000 Census was the primary source of housing statistics. Data on new housing starts, from 1990 to 2000, was used to help identify housing growth trends.

2.1 HOUSING SUPPLY

According to the US Census, the housing supply for Middlesex Township increased by 18.6% (375 units) from 2,017 units in 1990 to 2,392 units in 2000. This represents more growth than the 13.4 percent population increase over the same time period.

2.2 HOUSING TYPE

In 2000 single family housing units (detached and attached) comprised over half, 60.2 percent (1,441 units), of the Township's housing stock. Mobile homes accounted for over one third, 35.5 percent (848 units). Multi-family dwelling units and others accounted for the remaining 4.1 percent (97 units) of the Township's total housing units in 2000. The Township has a substantially lower percentage of multi-family housing types and a substantially higher percentage of mobile homes than Cumberland County as a whole, as presented in Table 2-1.

2.3 HOUSING OCCUPANCY AND VACANCY STATUS

Of the 2,392 total housing units, 2,298 housing units (96.1 percent) were occupied while only 94 were vacant in 2000. The resulting vacancy rate was relatively low at 3.9 percent. Within Cumberland County the vacancy rate in 2000 was 4.5 percent. Both Township and County vacancy rates were low. Typically between three and six percent of the housing units within a community should be vacant to provide opportunities for mobility and housing choice.

2.4 OCCUPIED DWELLINGS BY TENURE

In 2000, 88.8 percent (2,040 units) of the Township's total housing units were owner-occupied. The remaining 11.2 percent (258 units) were renter-occupied. The percentage of owner occupied units within Middlesex Township was higher than that of Cumberland County (73.1 percent).

2.5 HOUSEHOLD SIZE

The average number of persons per household in Middlesex Township was 2.84 persons in 1980. This number declined to an average of 2.67 persons per household in 1990, then declined further to 2.65 persons per household in 2000. Table 2-2 indicates the distribution of household size for Middlesex Township in 2000. Two person households are most prevalent in Middlesex Township, accounting for 36.6 percent of all households. One person households are the next most common household size, followed by three person and then four person households.

This table also indicates the distribution of household size for owner-occupied and renter-occupied units. For owner-occupied units the two person household size is the most common and the three person household size is the second most common. For renter-occupied units the one person household size is the most common and the two person household size is the second most common.

2.6 HOUSING VALUE

The median value of owner-occupied housing units in Middlesex Township was \$92,100 in 1990 and increased to \$141,400 in 2000. The median value of owner-occupied housing units in Middlesex Township in 2000 exceeded the \$120,500 median value of owner-occupied housing units reported for Cumberland County in 2000. Middlesex Township was ranked second among all municipalities in Cumberland County for median value of owner-occupied housing units in 2000.

**Table 2-1
Housing Types for
Middlesex Township and Cumberland County, 2000**

Housing Units	Middlesex Township		Cumberland County	
	Total Housing Units	Percent of Total	Total Housing Units	Percent of Total
Single Family				
1 unit, detached ¹	1,391	58.2	53,203	61.2
1 unit, attached ²	50	2.1	11,054	12.7
Multi-Family ³				
2 units	27	1.1	3,105	3.6
3 or more units	70	2.9	13,431	15.5
Mobile Homes/Other	848	35.5	6,126	7.0
Boat, RV, Van, etc.	6	0.3	32	0.0

Source: U.S. Bureau of Census, 2000.

- ¹ A building arranged or designed to provide living facilities for one family entirely separated from any other building or structure by space on all sides.
- ² A dwelling designed, occupied or used by one family, having two (2) party walls in common with other buildings and no side yards, commonly called row houses or townhouses.
- ³ A building designed, occupied or used by two (2) or more families living independently of each other; including apartment houses.

**Table 2-2
Household Size by Tenure
Middlesex Township, 2000**

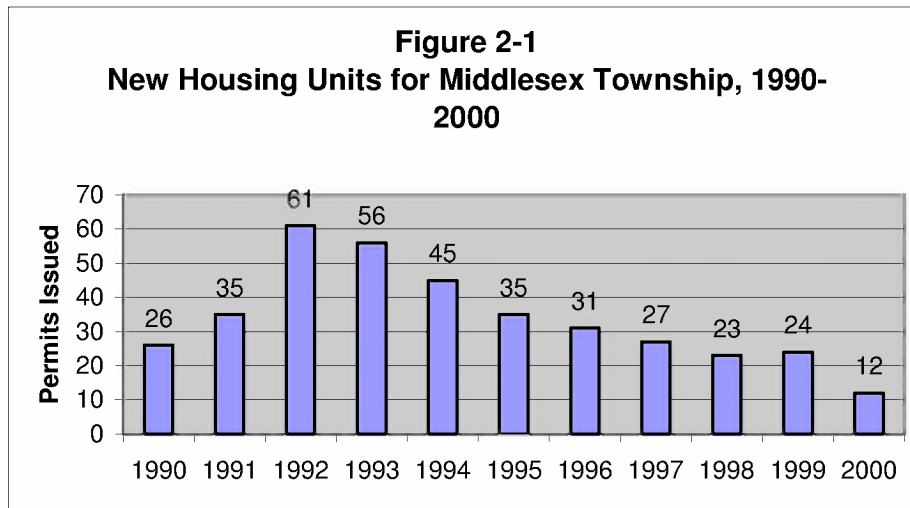
Household Size	Total		Owner-Occupied		Renter-Occupied	
	Number	Percentage	Number	Percentage	Number	Percentage
1 person	459	20	355	17.4	104	40.3
2 persons	841	36.6	780	38.2	61	23.6
3 persons	422	18.4	389	19.1	33	12.8
4 persons	376	16.4	344	16.9	32	12.4
5 persons	137	6	116	5.7	21	8.1
6 persons	43	1.8	38	1.9	5	1.9
7+ persons	20	0.8	18	0.9	2	0.8
Total	2,298	100.0	2,040	100.0	258	100.0

Source: U.S. Bureau of Census, 2000.

2.7 HOUSING GROWTH TRENDS 1990 TO 2000

Middlesex Township experienced moderate housing growth between 1990 and 2000. As presented in Figure 2-1, 375 new housing units were constructed from 1990 to 2000. New home construction peaked in 1992 with 61 new units being constructed. The number of new units

constructed each year has gradually declined since peaking in 1992. The vast majority of the residential growth has been in single family detached housing. Typical single-family homes are being constructed on one half acre or larger lots, are somewhat large in size with 2,000 to 2,400 square feet of living space, and priced between \$130,000 and \$250,000.



Source: Cumberland County and Middlesex Township

2.8 Trends and Issues

Trends

- ✓ In 1990 housing units totaled 2,017. In 2000 housing units had increased by 375 to a total of 2,392 units.
- ✓ The Township has 58.2 percent of its housing in single family units (1,391 units). However, 35.5 percent of the housing stock is mobile homes (848 units). The 97 multi-family units only account for 4.1 percent of the total housing stock.
- ✓ The Township has a substantially higher percentage of mobile homes and a substantially lower percentage of multi-family housing than Cumberland County as a whole. This generally reflects rural housing trends where there are large numbers of mobile homes because of inexpensive land prices and relaxed

zoning controls. A lower amount of multi-family housing is usually indicative of a lack of available public sewer and water utilities.

- ✓ New housing construction totaled 375 units between 1990 and 2000. For this period, new housing construction was highest in 1992 and 1993.
- ✓ Most new residential construction has been single family housing units.
- ✓ New residential construction is mostly relatively large expensive single family homes valued from \$130,000 to \$250,000 with 2,000 to 2,400 sq. ft. of living space.
- ✓ Persons per household were 2.67 in 1990 and decreased to 2.65 in 2000. This reflects a national trend of decreasing household size as family size shrinks and the nation continues to age.

Issues

- ✓ Shrinking household size will place new demands on housing styles.
- ✓ Provide for a wider range of housing styles, sizes and prices.
- ✓ Provide for affordable entry level single family and multi-family housing.

2.9 COMMUNITY SURVEY RESULTS

- Over 70 percent of the respondents rated the quality of their neighborhood as high (41.5%) to moderate (29.9%).
- 18.8 percent of the respondents rated the quality of their neighborhoods as very high.
- A small majority of respondents (50.4%) did not wish to see residential development encouraged within the Township.
- However, if development occurs, the majority of respondents (73.7%) would like to see single-family detached housing encouraged within the Township.
- The majority of respondents (77.2%) lived in single-family detached homes (as compared to 58.2% reported in the 2000 census). 16.5% of respondents indicated that they lived in mobile homes (as compared to 35.5% reported in the 2000 census).

3.0 ENVIRONMENTAL RESOURCES

An inventory and analysis of the natural resources of Middlesex Township is essential to the development of goals, objectives, and policies that will direct future land use and public service decisions. An understanding of the Township's natural environment is important not only for planners, developers, and Township officials, but also for the citizens of the Township as well. The wise use of natural resources provides us with essentials for human living. However, excessive use of land and natural resources may adversely affect the ecological functions and values they provide.

The natural environment and its positive impacts to the overall quality of life have been cited as one of the primary values that attract people to Middlesex Township. This creates increased demand for new housing and other development, and increases the need to manage growth and avoid adverse impacts on the natural environment. For the community's long-term health and quality of life, the Township and landowners collectively need to balance the use and conservation of natural resources.

3.1 SURFACE WATER

Surface waters include streams and ponds that provide aquatic habitat, carry or hold runoff from storms and provide recreation or scenic opportunities. These features are often highly valued for their aesthetic qualities.

The Conodoguinet Creek and the LeTort Spring Run are the principal surface water features found within Middlesex Township. Both are designated as Cold Water Fisheries (CWF) by the Pennsylvania Department of Conservation and Natural Resources (PADCNR).

The Conodoguinet Creek meanders in an easterly direction through the center of the Township. Within the Township steep wooded slopes typically border the stream channel and its floodplain. The Conodoguinet Creek has PNDI acknowledgment for containing unique fish life.

LeTort Spring Run, which is a tributary of the Conodoguinet Creek, is designated as a Pennsylvania Scenic River by PADCNR. LeTort Spring Run has Pennsylvania Natural Diversity

Inventory acknowledgment for containing unique plant and animal life. LeTort Spring Run is a renowned trout fishing stream. It is considered one of the finest limestone trout streams in the nation.

The LeTort Regional Authority, an independent municipal body, is responsible for protecting the public's health and safety by working to reduce the possibility of property damaging flooding throughout the watershed, and by encouraging recreational use of the LeTort Spring Run. Authority members include Cumberland County, Borough of Carlisle, and Middlesex, North Middleton and South Middleton Townships.

The entire Township is drained by the Conodoguinet Creek and its tributaries. The main channel of the Conodoguinet drains the northern portion of the Township. LeTort Spring Run drains much of the southern portion of the Township. Hogestown Run, which is a tributary of the Conodoguinet Creek, drains the southeastern corner of the Township.

3.2 FLOODPLAINS

For regulatory purposes, the National Flood Insurance Program defines floodplains by the 100-year or base year flood event, which has a one percent chance of being equaled or exceeded in a given year. A floodplain is divided into the floodway and the flood fringe. The floodway is the stream or river channel and adjacent land area that carry the base flood without cumulatively increasing the base flood elevation more than one foot. The flood fringe is the portion of the 100-year floodplain outside the floodway.

Floodplains serve the purpose of holding and carrying excess water runoff from heavy precipitation. Floodplains provide natural areas for the infiltration of rainfall and wildlife habitat. They can also afford scenic and recreational opportunities. Floodplains are generally flat or gently sloped, low-lying areas adjoining a watercourse, which make these areas not only attractive, but serious hazards for development. Preserving floodplain areas from development is crucial in minimizing potential damages to property and risk of injury due to flooding.

The Federal Insurance Administration's (FIA) Flood Hazard Boundary Map for Middlesex Township, published in June 1981, serves as the official resource for determining floodplain location. Floodplains have been delineated along the two major water courses within the Township, the Conodoguinet Creek and the LeTort Spring Run (Figure 3-1). Floodplains along these two watercourses comprise about 860 acres.

3.3 WETLANDS

According to the U.S. Fish and Wildlife Service, "Wetlands are areas where water is the primary factor controlling the environment and the associated plant and animal life. These transitional habitats occur between upland and aquatic environments where the water table is at or near the surface of the land, or where the land is covered by shallow water that may be up to six feet deep." Wetlands can be valuable natural resources and serve as flood and water storage areas, wildlife habitats, and fish spawning areas. Wetlands can also provide recreational, scientific, and educational opportunities. To protect wetlands values, federal and state statutes have been implemented to regulate the use of wetlands.

The National Wetlands Inventory (NWI) of the U.S. Fish and Wildlife Service has mapped wetlands nationwide based on aerial photography interpretation. While these maps prove to be valuable for desk-top reviews and evaluations, they also have certain limitations. On-site investigations are needed to determine accurate limits and acreage of wetlands. Therefore, these maps should only be used as a planning tool, and should not be used for regulatory, jurisdictional wetland delineations.

Based on NWI maps, Middlesex Township contains approximately 395 acres of wetlands (Figure 3-1). Most of the wetlands are located along the Conodoguinet Creek and the LeTort Spring Run. Other wetland areas are present along Spring Run and several other tributaries to the Conodoguinet Creek in the northern portion of the Township, and along Hogestown Run in the southeastern portion of the Township. One other small concentration of wetland areas is shown southwest of the South Middlesex Road/Horners Road intersection in the south central portion of the Township.

3.4 SENSITIVE GEOLOGICAL AND GROUNDWATER AREAS

A groundwater aquifer is a geologic formation or structure which stores and transmits water in usable quantities. The areas where water enters the aquifer are termed recharge areas. An understanding of local groundwater sources is important in the allocation of future land use so as to protect important groundwater recharge areas, assure adequate water supply for rural neighborhoods reliant on wells, and plan for sewage facilities.

For the purposes of this plan, 100 gallons per minute (gpm) calculated median sustained yield or greater is considered *high*, 50 to 100 gpm is considered *moderate*, and less than 50 gpm is considered *low*. Classifications were based on geologic and hydrologic information as described and illustrated in the Pennsylvania Topographic and Geologic Survey publications, *Groundwater and Geology of the Cumberland Valley, Cumberland County, Pennsylvania* (Becher and Root, 1981) and *Groundwater Resource of the Gettysburg and Hammer Creek Formations, Southeastern Pennsylvania* (Wood, 1980).

High groundwater recharge/yield areas include the Rockdale Run formation (405 gpm median sustained yield), which protrudes across the south central and southeastern portions of the Township. Moderate groundwater recharge/yield areas are comprised of the St. Paul formation in the central portion of Township, the Zullinger formation in the southwestern and south central part of the Township and the Stonehenge formation in the southeast corner of the Township. Median sustained yields for these formations range from 57 to 82 gpm. Low groundwater recharge/yield areas are underlain by the Stoufferstown, Shadygrove, Chambersburg, and Martinsburg formations. The Stoufferstown and Shadygrove formations are found in the southern portions of the Township. The Chambersburg formation runs across the middle of the Township and the Martinsburg formation covers the entire northern part of the Township. Reported median sustained yields for low recharge/yield areas vary from 11 to 32 gpm.

MIDDLESEX TOWNSHIP
(Cumberland County, Pennsylvania)

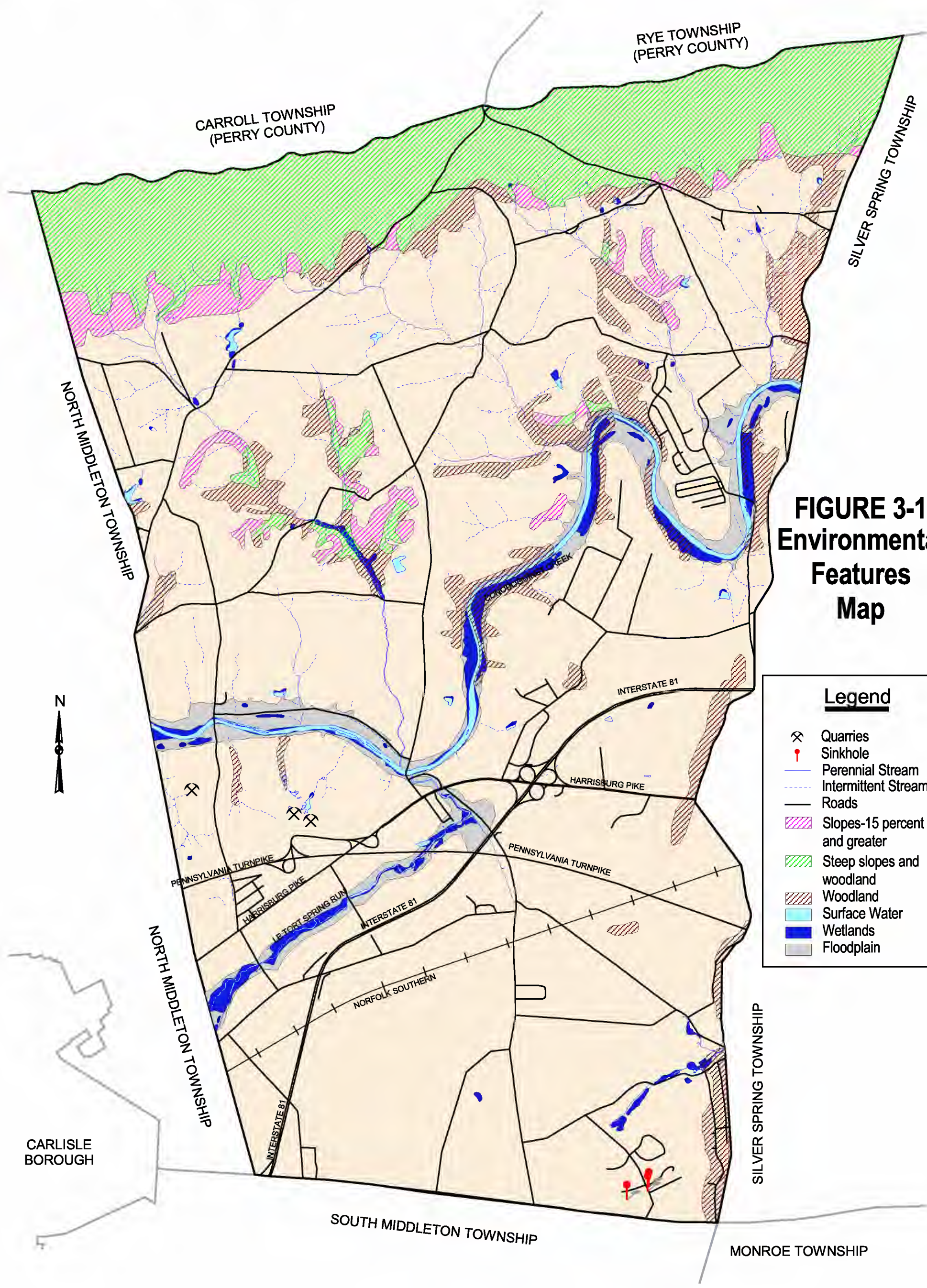


FIGURE 3-1
Environmental
Features
Map

Legend

- Quarries
- Sinkhole
- Perennial Stream
- Intermittent Stream
- Roads
- Slopes-15 percent and greater
- Steep slopes and woodland
- Woodland
- Surface Water
- Wetlands
- Floodplain

According to the Pennsylvania Geological Survey, 3 sinkholes have been identified within Middlesex Township (Figure 3-1). These sinkholes are located in the southeastern portion of the Township along Hickorytown Road.

3.5 STEEP SLOPES

Slope is the amount of rise or fall for a given horizontal distance. It is a measure of the steepness of the land. The slope of land can influence the physical and economic feasibility of various land uses. For example it is harder to build on a steep slope than on a gentle one, and it is harder to farm steep land than flat land. Steep slopes have a high potential for erosion and present a number of constraints and challenges to the site development process. For planning purposes, areas with slopes of 15 percent or greater should require special site planning and should also be avoided when possible.

Large concentrations of steep slopes are found along the Blue Mountain in the northern portion of the Township. Small areas of steep slopes occur along Spring Run and other small streams running out of the Blue Mountain toward the Conodoguinet Creek (Figure 3-1).

3.6 PRIME AGRICULTURAL SOILS AND FARMLAND PRESERVATION

Prime agricultural soils are one of the Township's most valuable natural resources. The identification of prime agricultural soils is important in maintaining or preserving land for future farming activity. Prime agricultural soils are those soil types designated by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) as being best suited to producing food, feed, forage, fiber, and oil-seed crops. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment. It has the soil quality, growing season, and moisture supply needed to produce a sustained high yield of crops while using acceptable farming methods. Prime farmland soils are usually classified as capability Class I or II on a scale of I to VII.

Soils types designated by the NRCS as prime farmland are listed in Table 3-1. Prime farmland soils are primarily concentrated in the southern portion of the Township.

**Table 3-1
Prime Farmland Soils**

Abbreviation	Unit	Slope
BuB	Buchanan gravelly loam	3 to 8 percent
DuA	Duffield silt loam	0 to 3 percent
DuB	Duffield silt loam	3 to 8 percent
EdB	Edom silty clay loam	3 to 8 percent
HaA	Hagerstown silt loam	0 to 3 percent
HaB	Hagerstown silt loam	3 to 8 percent
HuA	Huntington silt loam	0 to 5 percent
Mf	Middlebury soils	0 to 3 percent
MnA	Monongahela silt loam	0 to 3 percent
NeB	Neshaminay gravelly silt loam	3 to 8 percent

Farmland soils of statewide importance are predominantly used for agricultural purposes within a given state but have some limitation(s) that reduce their productivity or increase the amount of energy and economic resources necessary to obtain productivity levels similar to prime farmland soils. Farmland soils of statewide importance are usually classified as capability Class II or III.

Soils types designated by the NRCS as statewide important are listed in Table 3-2. Farmland soils of statewide importance are generally found in the central and northern portions of the Township, excluding the steep slope areas along the Blue Mountains.

Together, prime farmland soils and soils of statewide importance comprise 11,764 acres of land within the Township. As shown on Figure 3-2, these soil types encompass over two thirds of the Township's total land area.

MIDDLESEX TOWNSHIP

(Cumberland County, Pennsylvania)

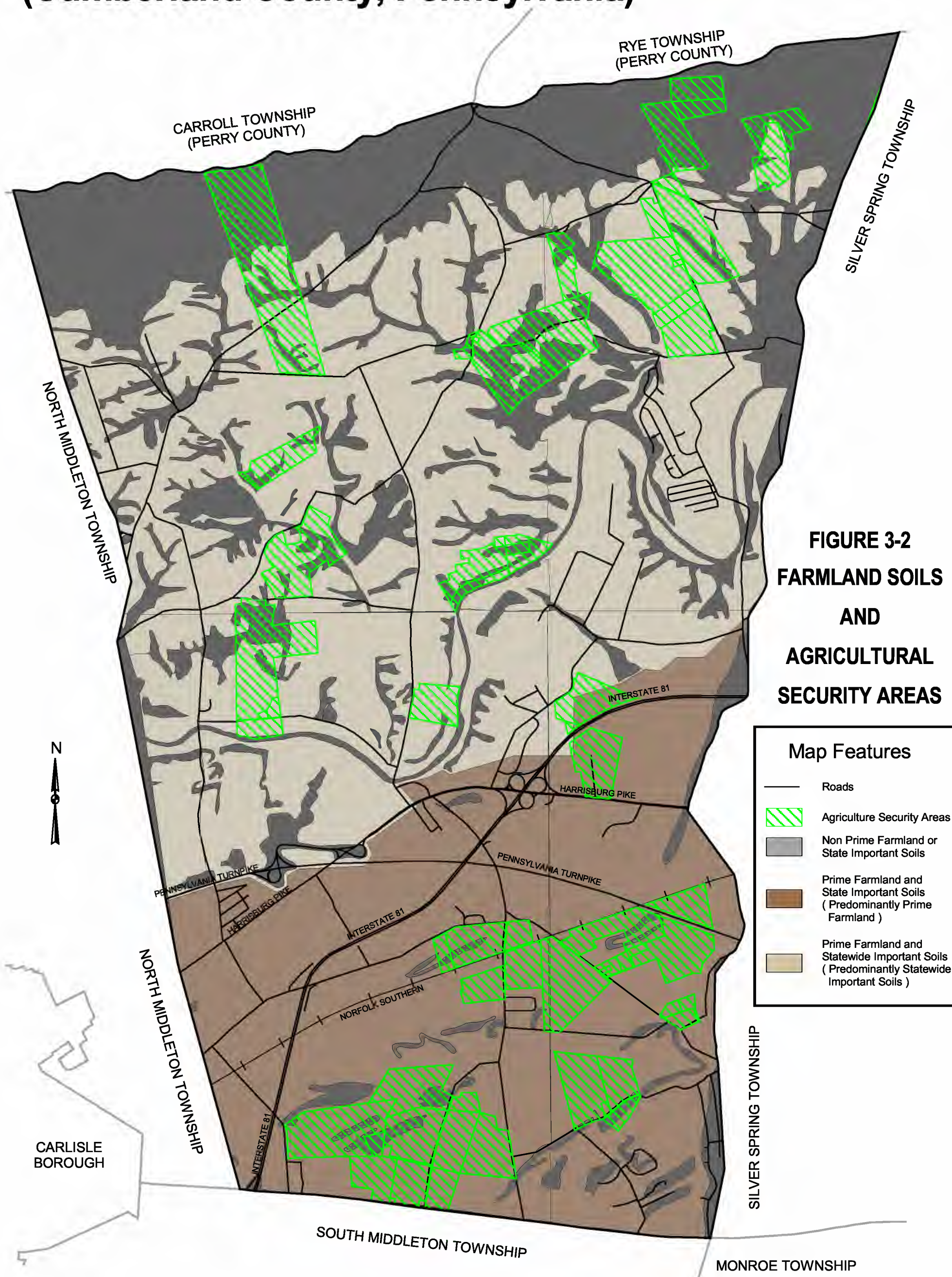


FIGURE 3-2
FARMLAND SOILS
AND
AGRICULTURAL
SECURITY AREAS

Map Features

- Roads
- Agriculture Security Areas
- Non Prime Farmland or State Important Soils
- Prime Farmland and State Important Soils (Predominantly Prime Farmland)
- Prime Farmland and Statewide Important Soils (Predominantly Statewide Important Soils)



CARLISLE
BOROUGH

Table 3-2
Soils of Statewide Importance

Abbrevia- tion	Unit	Slope
Aw	Atkins silt loam	level
BdC	Bedington shaly silt loam	8 to 15 percent
BeB	Berks shaly silt loam	3 to 8 percent
BeC	Berks shaly silt loam	8 to 15 percent
BpB	Blairton silt loam	3 to 8 percent
EdC	Edom silt clay loam	8 to 15 percent
HaC	Hagerstown silt loam	8 to 15 percent
Me	Melvin silt loam	level
MnB	Monongahela silt loam	3 to 8 percent
MnC	Monongahela silt loam	8 to 15 percent
NeC	Neshaminy gravelly silt loam	8 to 15 percent
Ty	Tyler silt loam	level
Wa	Warners silt loam	level

Approximately 2,420 acres of land are currently enrolled in Agricultural Security Areas (ASA). Properties enrolled in ASAs are depicted on Figure 3-2.

3.7 WOODLANDS

Woodlands are tracts of land dominated by trees, including tree lines. Woodlands reduce stormwater runoff, prevent erosion, aid aquifer recharge areas, provide valuable wildlife habitat, absorb noise, reduce wind, reduce the effects of air pollution, and enhance the natural and scenic character of the Township. They are a valuable resource, which should be protected from indiscriminate cutting, particularly on steep slopes, on floodplains, and along streams, where they prevent erosion and serve as a natural buffer.

Large tracts of woodlands are predominantly found in the northern portion of the Township along the steep slopes of the Blue Mountain (Figure 3-1). Because of extensive agriculture and development elsewhere in the Township, woodlands throughout the remainder of the Township are spotty. They are generally associated with some hilltops, slopes, intermittent and small streams, and reaches of the Conodoguinet Creek. However, with the development of farmland, particularly on large lot subdivisions, some areas are reverting back to woodland through natural succession.

3.8 NATURAL HABITAT

Natural habitats of threatened or endangered wildlife species are important natural resources that should be identified and protected. For the purposes of this plan, the Pennsylvania Natural Diversity Inventory (PNDI), managed by the Pennsylvania Department of Conservation and Natural Resources (DCNR), was consulted for information regarding the location of natural habitats of threatened or endangered species. Habitats of threatened and endangered species were identified in Middlesex Township along the LeTort Spring Run and the Conodoguinet Creek. The Natural Areas Inventory that was completed for the Tri-County Region in 2000 can also serve as a reference for natural habitat protection.

Natural habitat for other wildlife species is provided in the wooded areas along the Blue Mountain. State Game Lands No. 230, which is located in the northwestern portion of the Township and extends westward into North Middleton Township, plays host to many game and non-game wildlife species.

3.9 SCENIC VIEWS

Scenic views are important to residents from the standpoint of maintaining property values and quality of life. There are a number of scenic views in the Township that help to make it a desirable community in which to live and work. Some of the key vistas are from the hills in the center and southern portions of the Township looking toward the Blue Mountain to the north. Scenic views are afforded from Sterretts Gap looking south across the farmland areas. Points along the Conodoguinet Creek and LeTort Spring Run also provide scenic views. The remaining farmland and open space in the Township also provide views that are important to the rural/semi-rural atmosphere and setting of the Township. Preservation of scenic views to the extent possible is key to maintaining the Township's character.

3.10 TRENDS AND ISSUES**Trends**

- ✓ The Township's rich diversity of natural resources has greatly contributed to its development and character.
- ✓ The Township's resources of prime farmlands, steep sloped wooded areas and the LeTort Spring Run need to be protected as valuable resources.
- ✓ Recent trends in population growth and development patterns have impacted natural resources.
- ✓ Proper management of these resources is vital for sustaining the Township's quality of life and scenic beauty and for continued economic growth.

Issues

- ✓ Amend zoning ordinance to protect natural resources such as: steep slopes; wooded areas; flood plains; and prime farmlands.
- ✓ Provide for environmental assessments of large subdivision and land developments in the zoning ordinance.
- ✓ Preserve open space through the use of open space zoning and dedication of lands to the Township.
- ✓ Preserve the areas along the Conodoguinet Creek and provide for recreational access.
- ✓ Preserve the areas along LeTort Spring Run and provide for recreational access.

3.11 COMMUNITY SURVEY RESULTS

- Over 80 percent of the respondents rated the quality of life as high (52.4%) to moderate (31.1%).
- 11.9 percent of the respondents rated the quality as very high.
- The majority of respondents were satisfied to very satisfied with:
 - General township appearance (84.2%)
 - Open space (79.9%)
 - Air quality (78.6%)
- The majority of respondents were generally satisfied with:
 - Water quality (60.7%)
- The majority strongly agree to agree with the following statements:
 - More farmland/open space should be preserved (88.7%)
 - Agricultural lands within the Township should be preserved and farm activity encouraged (90.1%)
 - Woodlands need more protection (84.0%)
 - Scenic areas need more protection (82.4%)
- The majority of respondents agree to strongly agree with the following statement:
 - Flood-prone areas need more protection (67.0%)

4.0 CULTURAL RESOURCES AND HISTORIC PRESERVATION

Early settlers of current day Cumberland County and Middlesex Township were of Scottish-Irish descent. The proprietary authorities decided to set aside land in a new county, Cumberland County, as an exclusive Scots-Irish preserve. Cumberland County was created in 1750, carved from the western end of Lancaster County.

The geopolitical origins of Middlesex Township are as follows:

- 1730** - part of Pennsborough Township, Lancaster County;
- 1745** - part of West Pennsboro Township, Lancaster County;
- 1750** - part of Middleton Township, Cumberland County;
- 1810** - part of North Middleton Township; and
- 1859** - Middlesex Township

The Township was named after its oldest village, Middlesex. The Village of Middlesex is one of the oldest settlements in Cumberland County. The settlement pattern, at that time, was for the first arrivals to buy land at the power sites along the rivers and streams. In 1727 John Chambers, Sr. settled where the LeTort Spring flows into the Conodoguinet Creek, on a grant of land given by William Penn. Here, he established the first grist (flour) mill in the Cumberland Valley. This grist mill supplied flour to troops during the Indian War of 1756. By the Indian War of 1756, the Village of Middlesex consisted of several dwelling houses, the aforementioned grist mill, a saw mill and a distillery.

The mill at Middlesex played an important role in the American revolution. During revolutionary times, the mill was owned by Robert Callender and then Ephraim Blaine. Ephraim Blaine was Deputy Commissary General for the Middle District of the Continental (American) Army. During the Revolutionary War Colonel Blaine and Mr. Callender supplied flour and meal to the American Army.

Also during Revolutionary times, the first wrought iron cannon in America was made in Middlesex by William Denning. Mr. Denning was an artillery officer in the Army of the Revolution. He made two wrought iron cannons in Middlesex and a third near Mt. Holly Springs. During the 1800s, the Village of Carlisle Springs

became a popular resort destination. Carlisle Springs was famous for its mineral and sulphur springs, and featured a 200-room hotel. This hotel burned down around 1867 and Carlisle Springs never regained its popularity as a resort.

The Village of Hickorytown was another early settlement within Middlesex Township. This small village is situated on Trindle Road near its intersection with South Middlesex Road, along the Township's southern border with South Middleton Township.

From its initial settlement during colonial times through today, farming has been and continues to be an important aspect of the Township's character. However, the character of the Township changed dramatically with the construction of the Pennsylvania Turnpike in 1940. The Pennsylvania Turnpike was the nation's first super highway. The Pennsylvania Turnpike connected eastern Pennsylvania with western Pennsylvania cutting through the Allegheny Mountains. The eastern terminus of the Pennsylvania Turnpike was in Middlesex Township, thus setting the stage for the tourist and trucking industries in the area, and the need to provide services to the traveling public. The subsequent extension of the Turnpike eastward from Middlesex Township to Philadelphia and the construction of I-81, has resulted in increased demand to serve the traveling public and the transportation industry.

Middlesex Township is now famous for the so-called "Miracle Mile", a 1.2-mile stretch of U.S. Route 11 that connects the Pennsylvania Turnpike with I-81. This section of roadway is reportedly the second most heavily traveled segment of roadway in the country for trucks. Truck stops, restaurants, hotels/motels, gasoline service stations and similar commercial establishments dot the landscape adjacent to the Miracle Mile.

There are no structures or historic districts currently listed on the National Register of Historic Places within Middlesex Township. However several locally important historical resources are found within the Township. These resources are described briefly below:

Ephraim Blaine's grave site is located off Mill Road along the banks of the Conodoguinet Creek, just east of its confluence with the LeTort Spring Run.

Folklore tells of David Lewis, a local folk hero known as "Lewis the Robber," who hid in a cave along the Conodoguinet Creek near the above mentioned grave site of Ephraim Blaine.

A point in Middlesex, just south of Sterretts Gap is recognized as the furthest northward advance of Lee's Army during the Civil War. On Sunday, June 28, 1863, a detachment of about 20 Confederate Cavalry men traveled north from Carlisle. The Rebel detachment rode as far north as the Joseph Miller farm, situated below Sterrett's Gap, before turning back to Carlisle. A plaque commemorating this event has been placed at the John Kutz farm (formerly Joseph Miller farm) on Spring Road.

About 20 structures have been inventoried and identified as being potentially eligible for listing on the National Register of Historic Places. These structures mainly include 19th Century residences and barns scattered throughout the Township. These potentially historic structures, which also include a stone double arch bridge on Hollowbrook Road and a 1940s garage in Carlisle Springs, are on file at the Cumberland County Historical Society.

The Township also recognizes several areas as historic districts, although no formal boundaries for these districts exist. The Township's historic districts include the villages of Carlisle Springs, Donnellytown, Drytown, Hickorytown, Middlesex, and the Miracle Mile.

4.1 TRENDS AND ISSUES

Trends

- ✓ Historic considerations play an integral role in the enhancement of the natural, rural and suburban landscapes.
- ✓ The diversity of cultural and historic resources have greatly contributed to the development of the Township rural and village communities.
- ✓ County and local officials, and residents recognize the value of conservation, rehabilitation, restoration or adaptive reuse of historic features and styles to preserve the Township's past.

Issue

- ✓ Create historic districts in the villages of Middlesex and Carlisle Springs.

4.2 COMMUNITY SURVEY RESULTS

- The majority of respondents agree to strongly agree with the following statement:
 - More historic areas should be preserved (76.1%)

5.0 LAND USE

Important components of any comprehensive plan are the study and mapping of existing land use. This analysis takes a look at land use within the Township at a point in time, allowing for the examination of past and present development trends which have shaped the Township into its present form. The study and mapping of existing land use provides a picture of land use patterns and, together with other factors, outlines restrictions and opportunities for future land use planning. Information on existing land uses was obtained from available digital data available from Tri-County Regional Planning Commission and updated by Gannett Fleming and Middlesex Township staff.

Existing land use is depicted on Figure 5-1, Existing Land Use. Table 5-1 shows the number of acres devoted to the various land use categories.

Table 5-1
Existing Land Use - 1999
Middlesex Township

Land Use	Acres
Residential	2,191
Commercial	389
Industrial	539
Recreation	437
Public/Institutional	265
Transportation	540
Subtotal Developed	4,361
Agricultural	7,650
Vacant	4,500
Subtotal Undeveloped	12,150
Total	16,511

Source: Gannett Fleming

Just over one-quarter (26.6 percent) of the Township's land, has been developed. The remainder of the Township's land area is considered undeveloped; either in agricultural use or undeveloped/vacant land.

5.1 RESIDENTIAL

Residential land uses include single-family detached, single-family attached (town houses), mobile homes, duplexes, apartment buildings and other multi-family housing units.

Residential development is the by far the dominant developed land use type, comprising 13.3 percent of the Township's land. Residential development within the Township is dominated by single-family detached housing units. Single family residential development is present throughout much of the Township. Much of this single family residential development is linear in nature, having occurred along or situated just off rural roadways. Several of the newer developments have occurred as moderate sized subdivisions. There are four mobile home parks within Middlesex Township; Country Manor, Mountview, Regency Woods North and Regency Woods South. There are very few multi-family residential developments currently situated within the Township.

5.2 COMMERCIAL

Commercial land uses generally include those establishments engaged in retail trade or services. This category generally includes restaurants, shopping centers, convenience stores, motels/hotels, professional and medical offices, and other retail outlets.

Commercial land uses occupy a small portion (2.4 percent) of the Township's overall land area. Commercial land uses are concentrated along the U.S. Route 11 Corridor, the so-called "Miracle Mile." Outside of the Miracle Mile area, there are a few scattered commercial uses within the Township.

MIDDLESEX TOWNSHIP

(Cumberland County, Pennsylvania)

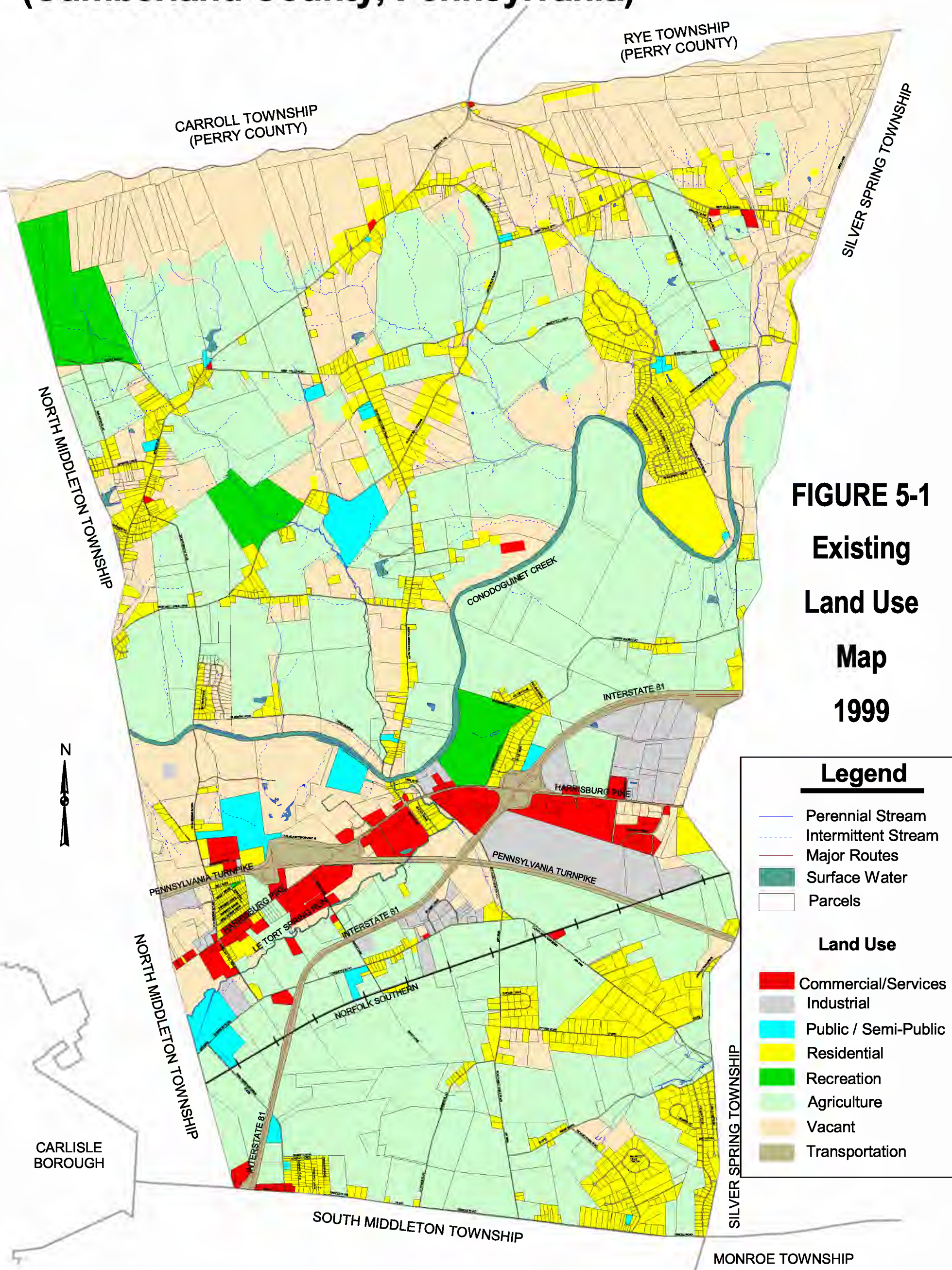


FIGURE 5-1
Existing
Land Use
Map
1999

Legend

Perennial Stream

Intermittent Stream

Major Routes

Surface Water

Parcels

Land Use

Commercial/Services

Industrial

Public / Semi-Public

Residential

Recreation

Agriculture

Vacant

Transportation

The Miracle Mile encompasses a 1.2-mile stretch of U.S. Route 11 that connects the Pennsylvania Turnpike with I-81. This section of roadway is reportedly the second most heavily traveled segment of roadway in the country for trucks. Truck stops, fast-food and sit-down restaurants, hotels/motels, gasoline service stations and similar commercial establishments dot the landscape adjacent to the Miracle Mile. There are several large office buildings along the Miracle Mile including the Stoner Associates building and the recently expanded Giant Foods Corporate headquarters building. The Miracle Mile has extended east of I-81 as well as west of the Turnpike to encompass virtually all areas adjacent to U.S. Route 15 within Middlesex Township.

5.3 INDUSTRIAL

This land use category generally includes: establishments engaged in transforming raw materials into new products, usually for distribution to other regions and not on sale on-site, and establishments engaged in wholesale trade, storage or distribution with little or no retail trade or service. Typically, industrial development can be further broken down into light industry and heavy industry, with heavy industry more involved in manufacturing and related processes and light industry more geared toward wholesale trade and storage and distribution functions.

Within Middlesex Township, trucking and distribution uses are the more prevalent type of industrial use. Approximately 3.3 percent of the Township's land area is currently occupied by industrial uses. These industrial uses are concentrated in close proximity to U.S. Route 11, I-81 and the Pennsylvania Turnpike. The largest concentration of industrial uses within the Township is along U.S. 11 east of I-81. Several truck facilities are located in this area including Roadway Express, ABF, and Schneider National Carriers, as well as the Flying J, Petro, and Pilot facilities. The Roadway Express truck terminal occupies the largest single parcel devoted to industrial use within Middlesex Township. Another concentration of industrial uses is clustered in the Stoner Drive/Claremont Road area. These facilities are typically light industrial in nature with some warehouse/ distribution uses.

5.4 RECREATION

This land use category includes public and private parks and recreation areas. This category does not include recreation and open space areas found with public and private schools or other similar institutional uses (see public/institutional lands).

Recreation areas are scattered throughout the Township. The largest tracts of land devoted to recreation uses include: the Carlisle Country Club, centrally located within the Township; the Township Park, located on Beagle Club Road; and the eastern portion of State Game Lands Number 230, located in the northwest corner of the Township. Recreation uses occupy about 2.6 percent of the Township's land area. The Appalachian Trail, which runs along the eastern boundary of the Township is another important recreational use. Since portions of the trail are actively farmed, for the purposes of this study, the Appalachian Trail lands have not been classified as recreational.

5.5 PUBLIC/INSTITUTIONAL

Land uses within this category typically involve establishments or properties that provide educational, cultural, or social services for the community. This category includes uses such as public and private schools, municipal offices and grounds, churches, cemeteries, and other similar uses.

Public/institutional uses are scattered throughout the Township with some concentration of institutional uses in the southwestern corner of the Township. Cumberland County and the U.S. Army War College, Carlisle Barracks, both own lands in the southwestern corner of the Township. Several county facilities including the Cumberland County Nursing Home, Cumberland County Prison and the Cumberland County Agricultural Extension Office are situated in the southwest corner of the Township. Public/Institutional uses occupy about 1.6 percent of the Township's land area.

5.6 TRANSPORTATION

This category includes land in transportation use, such as highway and railroad right-of-ways.

In addition to the many miles of local roads found within the Township, several transportation corridors bisect the Township, including: The

Pennsylvania Turnpike, Interstate 81, U.S. Route 11 and Norfolk and Southern (formerly Conrail) railroad right-of-ways. Transportation uses occupy about 3.3 percent of the Township's land area.

5.7 AGRICULTURAL

This category includes all land areas which are currently being used for agricultural purposes. Lands in agricultural use dominate the Township's landscape. Almost half (46.3 percent) of the Township's land area is currently in agricultural use. Concentrations of agricultural lands are found south of the Pennsylvania Turnpike and in the northern portion of the Township between the Conodoguinet Creek/I-81 to the south and the Blue Mountains to the north. These farms provide a pastoral backdrop to many of the Township's scattered residential developments.

Table 5-2
Trends in Land Use: 1982-1999
Middlesex Township (acres)

Land Use	1982	1999
Residential	1,866	2,191
Commercial	368	389
Industrial	50	539
Public/Institutional	254	265
Recreation		437
Transportation		540
Subtotal Developed	2,538	4,361
Agriculture	11,442	7,650
Vacant	2,596	4,500
Subtotal Undeveloped	14,038	12,150
Total	16,576	16,511

Sources: 1982 Buchar-Horn, Inc.,
Tri-County Regional Planning
Commission. and
1999 Gannett Fleming, Inc.

5.8 VACANT

Lands that are presently not in use have been classified as vacant. These lands may include wooded areas, unimproved areas not used for agriculture or recreation, and improved areas or buildings that are not occupied.

Over one quarter (27.2 percent) of the Township's land area is presently vacant. Vacant lands are scattered throughout the Township, with the largest concentration of vacant lands being the wooded, steep sloped area along the Blue Mountains. A second area of concentrated vacant lands is in the west central portion of the Township between the Pennsylvania Turnpike and the Conodoguinet Creek.

5.9 TRENDS AND ISSUES

Table 5-2 presents a comparison of existing land use with previous land use studies performed within the Township. Please note that the results from the various land use studies vary due a variety of factors such as differences in classification of land uses differences in available base mapping, differing quantification techniques and differing levels of detail.

As presented in Table 5-2, the amount of developed land continues to increase, while undeveloped lands within the Township have decreased in area. All of the developed land use types experienced growth from 1982 to 1999, with industrial land uses experiencing the largest increase in acreage.

Trends

- ✓ Residential development is the dominant land use in the Township. The Township can be characterized as a "bedroom" community with most residents working elsewhere.
- ✓ Much of the residential housing is clustered along existing roadways with some newer planned subdivisions such as the Ridings and the Meadows.
- ✓ The Township has four sizable mobile home parks, Country Manor, Mountview, Regency Woods North and Regency Woods South.
- ✓ Commercial development is clustered

	along Route 11 and in the village of Middlesex.		water facilities.
✓	The village of Carlisle Springs is primarily residential in character. This village and the village of Middlesex represent the areas of high density or mixed use land uses in the Township.	✓	Preservation of prime farmland - effective agricultural zoning.
		✓	Amend zoning ordinance - review and revise all districts, densities and permitted uses.
✓	Industrial development is located in the I-81, PA Turnpike and U.S. 11 areas. It is characterized by firms engaged in trucking and distribution. Several existing and planned warehousing and distribution operations are underway in the Route 11 and South Middlesex Road area.	✓	Provide for various housing styles and densities.
		✓	Designate areas for growth and areas for preservation.
✓	The Township has substantial areas of prime farmland but remain few working farms remain.	✓	Review use of village districts in zoning ordinance.
		✓	Evaluate land uses adjacent to interstate highways and make recommendations for changes.
✓	The open areas south of I-81 contain the best farmland, however they are also the most vulnerable to development because of access and the potential for sewer expansion.	✓	Signage control - amend zoning ordinance.
		✓	Mountain land development - steep slope land use controls.
✓	The areas north of the Conodoguinet Creek are poorer soils for agricultural activity but should be considered for development activity. Currently public sewer is limited in this area.	✓	Address Claremont Road and Shady Lane land use needs.
5.10 COMMUNITY SURVEY RESULTS			
✓	There is very little high density or multi-family housing in the Township.	•	The majority of respondents would like to see the following land uses encouraged: • Agricultural (62.6%) • Residential (51.5%) • Recreational (47.1%)
✓	The southwestern corner of the Township is mainly institutional uses with the county facilities, U.S. Army War College and the prospect for the Army Heritage Center.	•	The majority of were satisfied to very satisfied with: • Fast food (84.7%) • Convenience stores (81.3%) • Motels/lodging (77.6%) • Automotive repair/service (70.3%)
✓	Largest land use increases from 1982-1999 have been industrial land uses.	•	The majority of were satisfied with: • Restaurants (67.4%) • Banks (61.2%) • Lawn and garden centers (54.5%) • Supermarkets (53.5%) • Laundry/dry cleaners (45.5 %)
Issues			
✓	Attract jobs and employment.		
✓	Provide for shopping and other convenience uses.		
✓	Identify and develop a town center.		
✓	Provide for open space zoning.		
✓	Maintain natural and scenic amenities.		
✓	Programmed expansion of sewer and		

- More than one quarter of the respondents were dissatisfied to very dissatisfied with:
 - Shopping malls (33.1%)
 - Movie theaters (25.5%)
- The majority of respondents disagree to strongly disagree with the following statement:
 - We need more heavy and light industry (69.9%)
- The majority of respondents strongly disagree to disagree with the following statements:
 - We need more trucking/ warehouse/ distribution centers (85.1%)
 - Small scale commercial development should be encouraged outside the Route 11 corridor in closer proximity to residential development (59.6%)

6.0 COMMUNITY FACILITIES AND SERVICES

A study of the community facilities and services that a municipality offers to its residents is necessary to identify any current inadequacies and future needs. Many of Middlesex Township's community facilities and services are overseen and managed on a daily basis by Township staff. The Township staff works with a number of boards and commissions to help meet the needs of the Township residents. Some community facilities and services (such as schools) are overseen and managed by others. This section provides a discussion of existing conditions and issues associated with the provision of community facilities and services within Middlesex Township.

6.1 POLICE

The Middlesex Township Police Department provides police protection services for the Township. The Middlesex Township Police Department, which is housed within the Township Municipal Building Complex at 350 N. Middlesex Road, currently has seven full-time and seven part-time officers, including a K-9 unit. The Police Department also has one full-time clerical staff and one part-time clerk. The Township employs a Police Chief as the top officer in charge. Emergency dispatching is handled through Cumberland County. Governed by a county agreement on intermunicipal coverage, the Middlesex Township Police Department assists adjoining municipalities, who, in turn assist Middlesex Township on an as needed basis.

The Department has seven vehicles, including four marked cars and three unmarked cars. The Department is highly computerized and tied into the Harrisburg Metro computer system. The Department conducts DARE programs for the Township. They also conduct other public safety programs for community organizations upon request.

Federal Bureau of Investigation (FBI) standards recommend a level of service of 1.0 to 1.3 officers/1,000 persons in an urban-suburban area. Based on the provision of seven full-time officers and the Township's 1996 estimated population of 6,258, the level of service provided by the Middlesex Township Police Department is 1.12 officers/1,000 persons; which falls within the 1.0 to 1.3 officers/1,000 persons range, as recommended by FBI standards.

6.2 FIRE

Middlesex Township is served by four fire companies based in neighboring communities including; New Kingstown Fire Company, Union Fire Company; North Middleton Fire Company and Shermansdale Fire Company. Emergency dispatching is handled through Cumberland County. The Township contributes to the local fire companies.

The New Kingstown Fire Company is located on Locust Point Road just south of U.S. Route 11 in the village of New Kingstown, within Silver Springs Township. The fire company's primary service area consists of the southwestern portion of Silver Spring Township and the southeastern and east central portions of Middlesex Township. The New Kingstown Fire Company's major equipment includes:

- Dodge Brush Truck/Mini Pumper (1977, refurbished 1998);
- G.M.C. Darley Engine (1983);
- Mack Tanker (1995).
- E-1 Class A Engine (1998); and
- Chevrolet Squad Truck (1998).

The Union Fire Company is located at 35 West Louther Street in the Borough of Carlisle. The fire company's primary service area is central and eastern Carlisle, the south west and southeast corners of North Middleton Township and the southwestern portion of Middlesex Township. The Union Fire Company's major equipment includes:

- Dodge four wheel drive power wagon/brush truck (1976);
- Pirch Class A Engine (1984);
- Seagrave Class A Engine (1992);
- Chevrolet Utility Truck (1993); and
- Dodge Ram Brush Truck (1996).

The North Middleton Fire Company has two stations; the larger located at 310 North Middleton Road, and the other located at 310 Fern Avenue, both in North Middleton Township. The fire company's primary service area is the north, central, and east central portions of North Middleton Township and the west central portion of Middlesex Township. The North Middleton Fire Company's major equipment includes:

- Jeep Truck used as brush truck (1968);
- Baker aeroscope ladder truck (1974, refurbished in 1987);
- R Model Mack Engine (1976);
- Mack CF Engine (1990);
- Mack Tanker (1995); and
- E-1 Engine (1998).

The Shermansdale Fire Company is located at 5450 Spring Road in Carroll Township, Perry County. The fire company's primary service area is Carroll Township, the western portion of Rye Township and the northern portion of Middlesex Township. The Shermansdale Fire Company's major equipment includes:

- Chevrolet Tanker (1973);
- GMC Utility truck ;
- Kovak Engine; and
- Tanker/Engine (1998).

The National Board of Underwriters recommends a maximum four mile radius to a fire company. The American Planning Association's "Small Town Planning Handbook" contains the standards presented in Table 6-1.

The Township is adequately covered in terms of engine or pumper companies for residential development. However, most of the commercial and industrial development along the U.S. Route 11 corridor is located one to three miles from the closest fire company. This distance is greater than the one mile radius suggested by the "Small Town Planning Handbook".

The primary issue of concern confronting the area fire companies is volunteer staffing levels, especially during daytime hours.

Several other needs/issues were identified by the Middlesex Township Fire Chief as follows:

- "Knox Box" system for commercial and industrial buildings;
- Fire or smoke alarm ordinance;
- Potential for hazardous materials spills at trucking facilities and the ability of trucking companies to properly handle and quickly notify the proper authorities;
- Annual review of funding support to fire and emergency service companies serving the Township; and
- Upgrade communications equipment.

6.3 AMBULANCE/EMERGENCY SERVICE

Middlesex Township is served by two ambulance and emergency services companies; Carlisle Community Ambulance, and Silver Spring Ambulance. Silver Spring Ambulance's service area within Middlesex Township is confined to the northeast portion of the Township. Carlisle Community Ambulance is responsible for emergency service coverage for the remainder of the Township. Emergency dispatching is handled through Cumberland County.

6.4 HOSPITALS

There are no hospitals located within Middlesex Township. Three hospitals are located nearby, including Carlisle Hospital in Carlisle, Holy Spirit Hospital in Camp Hill, and Seidle Memorial Hospital (Pinnacle) in Mechanicsburg.

6.5 SCHOOLS

Middlesex Township is in the Cumberland Valley School District. The school district, which is independent of the Township, also includes Hampden, Monroe and Silver Springs Townships. One elementary school is situated within Middlesex Township. Middlesex Elementary School, which is located on N. Middlesex Road, serves grades K through 5. This school building was replaced and now can accommodate a larger enrollment of 675 students. Minor increases in enrollment are projected by the Cumberland Valley School District. No other new school facilities within Middlesex Township are proposed at this time.

Table 6-1
Recommended Distribution Standards for Fire Protection

Type of Land Use	Suggested Service Radius	
	Engine or Pumper Company	Ladder Company
Commercial/Industrial	.75-1.0 miles	1.0 mile
High to Medium Density Residential	2 miles	2.0 miles
Scattered Residential	3-4 miles	3.0 miles
Rural Low Density Residential	4-6 miles	-----

Source: Small Town Planning Handbook, American Planning Association.

Students from Middlesex Township in grades 6-8 attend the Eagle View Middle School. Students in grades 9 - 12 attend Cumberland Valley High School. Both of these schools are located in Silver Springs Township.

Other public and private schools serving the Cumberland Valley area include Cumberland-Perry Voc-Tech in Silver Springs Township, Trinity High School in Shiremanstown, Harrisburg Academy in Wormleysburg, Good Hope Baptist School in North Middleton, and St. Patrick School in South Middleton.

Dickinson College and the U.S. Army War College are both located nearby in Carlisle.

6.6 LIBRARIES

There is no public library within Middlesex Township. The Cumberland County Library System offers 8 branch libraries, with the Bosler Library in Carlisle being the closest. Township residents may also use the Dickinson College Library. The U.S. Army War College Library is open to the public during normal working hours but books are not available for loan.

6.7 PUBLIC PARKS AND RECREATION

Recreational facilities available to Middlesex Township residents within the Township include public municipal and institutional facilities and private institutional facilities. Two parks are owned by Middlesex Township and collectively occupy about 130 acres (Figure 6-1). The two parks include one community park and one small

neighborhood park. A description of each facility is as follows:

Middlesex Township Park: This 127-acre site is located along Beagle Club Road in the northwest quadrant of the Township. This facility functions as a community park. Recreation facilities include seven baseball/softball fields, two multi-purpose fields, one basketball court, one volleyball court (sand), one tennis court, one playground, several hiking trails, two pavilions, one concession stand, and one community center/arts building with rest rooms. The park is bisected by Spring Run. The existing concession stand and community center, playground, tennis, basketball and volleyball courts, as well as some of the ball fields, are located on the south side of Spring Run.

Proposed expansion plans for this park include additional fields, trails, restroom facilities on both sides of Spring Run, a concession stand north of Spring Run and a bridge over Spring Run serving to connect the facilities within the park.

Anderson Park: This park is a small neighborhood park/playground less than 1 acre in size. This park is located at the intersection of Valley Drive and Hill Drive. The only facilities available at this small park are playground equipment.

Township park lands are acquired in a number of ways as per a recent amendment to the Middlesex Township Subdivision and Land Development Ordinance. The subdivider or developer of a subdivision or land development for residential and non-residential purposes must either pay a fee for use by the Township

MIDDLESEX TOWNSHIP

(Cumberland County, Pennsylvania)

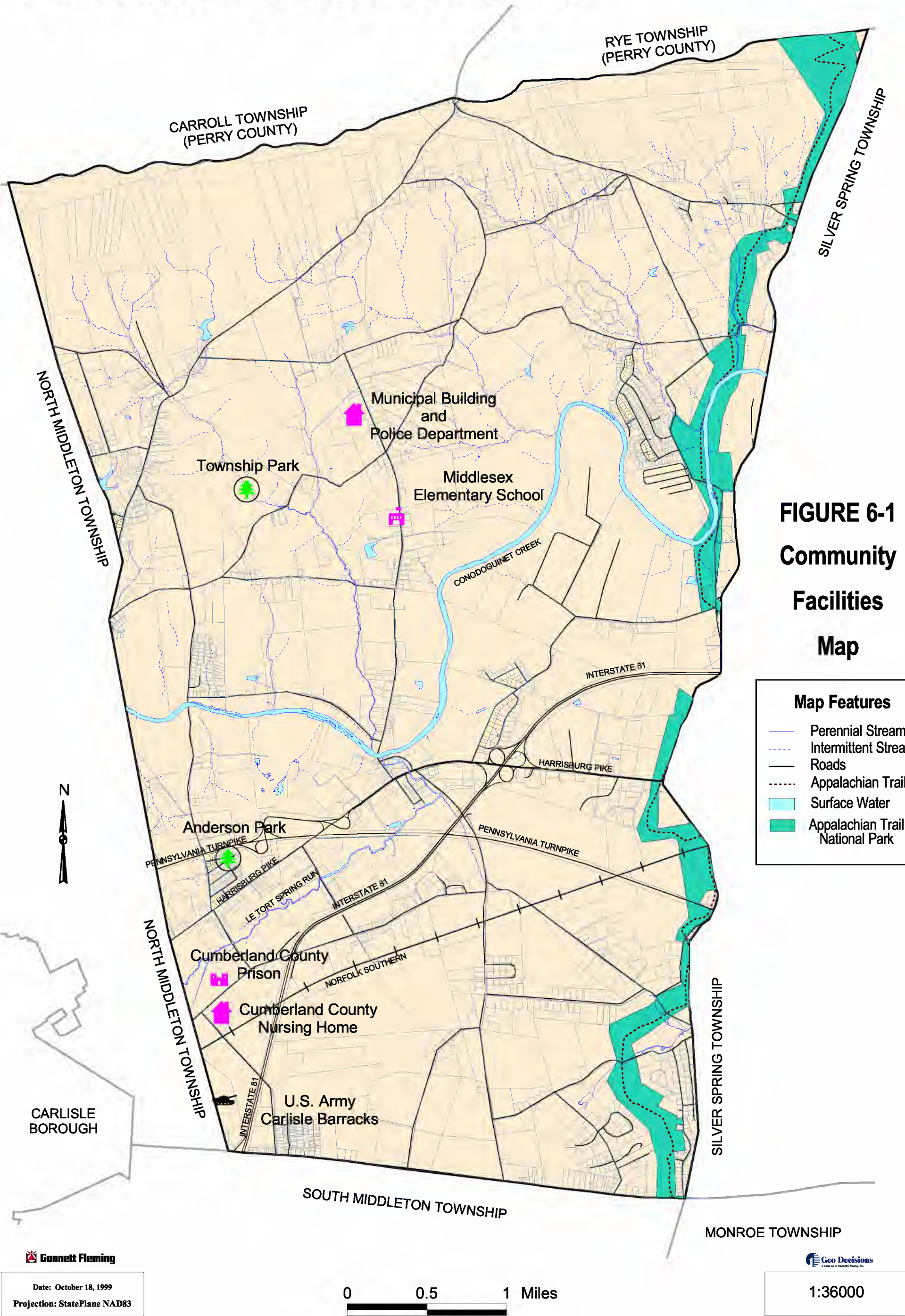


FIGURE 6-1
Community
Facilities
Map

Map Features	
	Perennial Stream
	Intermittent Stream
	Roads
	Appalachian Trail
	Surface Water
	Appalachian Trail National Park

Supervisors for Township recreational purposes, or provide a suitable and adequate recreation area, to serve the needs of future occupants of the subdivision or land development. For residential subdivisions a minimum of 0.27 acres per dwelling unit shall be set aside for recreation. For non-residential developments, a minimum of 10 percent of the gross land area being developed shall be set aside for park or recreation use.

Moneys from the Recreation and Land Acquisition and Improvement Fund may be used for developing capital improvements in new or existing recreation areas in the Township. Authorization of expenditures from the fund must be made by the Board of Supervisors after taking into consideration recommendations by the Park and Recreation Board.

In addition to the Township-owned parks, residents benefit from other public and semi-public facilities.

Middlesex Elementary School: The grounds adjacent to the school provide one softball field and playground equipment.

Carlisle Country Club: The Carlisle Country Club provides semi-public recreational facilities in the form of an 18-hole golf course, tennis courts and a swimming pool.

Appalachian National Scenic Trail: The Appalachian National Scenic Trail is a 2,160-mile long unit of the National Park Service (NPS). The Appalachian Trail is a continuously marked footpath that extends along the crest of the Appalachian Mountain Range traversing 14 states from Georgia to Maine. This trail traverses Middlesex Township, along the Township's eastern boundary with Silver Spring Township for approximately 10 miles.

Through a partnership agreement with the NPS, all day-to-day trail and land management activities are the responsibility of the Appalachian Trail Conference (ATC), a private, non-profit organization. The ATC, in turn, has allocated these activities to trail maintaining clubs. The portion of the Appalachian Trail that traverses Middlesex Township is maintained by the Cumberland Valley Appalachian Trail Management Association and the Mountain Club of Maryland.

Eagles Club Recreation Area: The Eagles Club owns lands on the east side of Wolf's Bridge Road just north of the Pennsylvania Turnpike. The lands

are used for picnics, family reunions, scouting and other social outings.

State Game Lands 230: The eastern portion of State Game Lands 230 extends into the northwest corner of the Township. This portion of State Game Lands 230 is comprised of wooded mountain lands and unused farmland.

Recreation Programs and Activities: Recreational activities are operated by the Middlesex Township Parks and Recreation Department, which is supported by the borough, the Township. The Department offers a wide range of activities to residents. Several organizations offer youth sports programs. A comprehensive park, recreation and open space plan was prepared for the Township in 1995.

6.8 SOLID WASTE SERVICE

In the Spring of 1999 the Township instituted township-wide residential pickup of garbage and recyclables. Collection of refuse from businesses, institutions, apartment buildings and mobile home parks will remain to be performed on an individual contractual basis with private haulers. Business, institutions, apartment buildings and mobile home parks are also required to contract with private haulers for the weekly collection of recyclables. The Township also instituted an annual cleanup this Spring, so that bulk items could be left at the curbside and be picked up by the Township's contractor.

There are no dumps, landfill sites, incinerators or other disposal facilities located in Middlesex Township.

6.9 OTHER PUBLIC BUILDINGS AND LANDS

The Middlesex Township Municipal Complex is located at 350 N. Middlesex Road. The complex consists of 3 buildings. The main building, which was constructed in 1995, houses the Middlesex Township offices, the Middlesex Township Municipal Authority offices and the Police Department. The Township's Public Works garage and a maintenance building are also located at this site.

6.10 TRENDS AND ISSUES**Trends - Community Facilities and Services****Police**

- ✓ Using level of service criteria from the FBI, it would appear that the level of police protection is adequate.
- ✓ The Township will need to review police staffing level each year to ensure adequate levels of service.

Fire Protection and Ambulance/Emergency Service

- ✓ Attracting and maintaining a trained force of volunteer fireman and rescue personnel is a continuous concern throughout the Township.
- ✓ Frequently review equipment needs to assure that Township needs are being met.

Hospitals

- ✓ Three hospitals are located nearby: Carlisle Hospital; Holy Spirit Hospital in Camp Hill; and Seidle Memorial Hospital (Pinnacle) in Mechanicsburg.

Schools

- ✓ Middlesex Township is located within the Cumberland County School District. In 1999 the Township will open the doors to a new elementary school, the Middlesex Elementary School on North Middlesex Road. Students for the Township attend middle school at Eagle View Elementary School in Silver Spring Township and they attend high school at Cumberland Valley High School also in Silver Spring Township.
- ✓ There are a variety of private schools in the vicinity but none are located in Middlesex Township.

Libraries

- ✓ There are no public libraries in the Township. The Bosler Library in Carlisle which is part of the Cumberland County Library System is the closest facility to the county. The Dickinson College library and the Army War College library are both available to Township residents.

Public Parks and Recreation

- ✓ Middlesex Township currently owns two park facilities: Middlesex Township Park (127 acres) on Beagle Club Road and Anderson Park (1 acre) at Valley and Hill Drive.
- ✓ The Township requires developers to pay fees or dedicate land for recreational purposes.
- ✓ A parks and recreation plan was prepared for Monroe Township and Middlesex Township.
- ✓ The Middlesex Township Park is quite large and there are plans for expansion of facilities at this park.
- ✓ The Middlesex Park is centrally located for access by Township residents. However there are no public park facilities located south of U.S. Route 11.
- ✓ Current park facilities should meet the needs of current and project population growth.
- ✓ The Township is host to a portion of the Appalachian Trail, which extends from Maine to Georgia.

Solid Waste Services

- ✓ In 1999 the Township contracted with a private waste hauler to provide pick up of residential solid waste and recyclable.

Other Public Lands

- ✓ Middlesex Township owns and maintains their municipal complex on North Middlesex Road.
- ✓ The new Township building, opened in 1995 is the focal point of this facility.

Issues

- ✓ Increase police and emergency services to meet population and employment growth.
- ✓ Locate a parks facility south of PA Route 11.

6.11 COMMUNITY SURVEY RESULTS

- Over 80 percent of the respondents rated the quality of life as high (52.4%) to moderate (31.1%).
- 11.9 percent of the respondents rated the quality of life as very high.
- Over 80 percent of the respondents rated Middlesex Township government as moderate (46.6 %) to high (34.0%).
- The majority of respondents were satisfied to very satisfied with the following Township services:
 - Snow removal (84.3%)
 - Police protection (81.8%)
 - Fire Protection (80.4%)
 - Emergency medical (76.7%)
 - Trash removal (67.6%)
- The majority of the respondents were satisfied with the following Township services:
 - Vehicle traffic management (55.4%)
 - Parks (52.9%)
 - Playgrounds (47.7%)
 - Open space/passive parks (47.2%)
 - Citizen input into community decisions (47.3%)
 - Building permits, codes, inspections (45.0%)
- One third or more of the respondents were either dissatisfied or very dissatisfied with:
 - Recycling (33.1%)
 - Planning/zoning/subdivision & land development (34.1%)
- The majority had no opinion on:
 - Sports programs (45.0%)
 - Swimming/water activities (51.4 %)
 - Fitness programs - adults (56.8%)
 - Warm weather activities (48.3%)

- ✓ Develop park facilities and recreation programs to meet future growth and needs.
- ✓ Increase fee-in-lieu rates for developers to support parks and recreation programs.
 - Cold weather activities (54.8%)
 - Senior citizen activities (62.6%)
- The majority of respondents were satisfied to very satisfied with:
 - Public schools (74.7%)
 - Technical/vocational training (55.0%)
 - Emergency medical care (61.0%)
- The majority were satisfied with:
 - Medical doctors (51.1%)
 - Dentists (47.5%)
 - Prescription drug service (48.6%)
- The majority of respondents had no opinion on:
 - Psychological/counseling services (55.0%)
 - Retirement/managed care facilities (50.2%)
- The majority of residents agree to strongly agree that:
 - Increase fees from developers for purchase of parklands/open space for development of recreational facilities (58.4%)
- The majority of respondents indicated that there were enough of the following recreation facilities:
 - Community parks (54.2%)
 - Open space/passive recreation (45.0%)
 - Trails-hiking and biking (47.1%)
 - Football fields (45.4%)
 - Softball/baseball fields (57.9%)
 - Soccer fields (49.9%)
- Over one third of the respondents indicated that there were not enough swimming/water activities (37.3%)

7.0 COMMUNITY UTILITIES

Existing utilities operating within the community were identified. Information on service areas, capacities, current inadequacies and future needs were collected.

7.1 SEWER SERVICE

Middlesex Township is currently served by municipal wastewater treatment facilities in only two locations: (1) a collection and conveyance system along and adjacent to U.S. Route 11 and (2) a collection and conveyance system along N. Middlesex Road (Figure 7-1). Both systems discharge into the Carlisle Region Water Pollution Control Facility, which is located south of the Conodoguinet Creek and west of N. Middlesex Road. This facility is owned by the Carlisle Borough Sewer Authority.

The Carlisle Regional Water Pollution Control Facility has a permitted capacity of 7.0 million gallons per day (mgd). This plant receives an approximate flow of 4.0 mgd. Treated effluent from this facility is discharged into the Conodoguinet Creek just upstream of its confluence with Spring Creek. The Carlisle Borough Sewer System Authority has discharged in conformance with their National Pollutant Discharge Elimination System (NPDES) permit.

The treatment plant's capacity allocation is as follows: Carlisle Borough - 4.33 mgd, South Middleton Township - 0.51 mgd, and Middlesex Township - 1.77 mgd. Silver Spring Township currently reserves 150,000 gallons per day (gpd) of Middlesex's allocation, with a maximum allowance of 400,000 gpd via intermunicipal agreement. The available reserve capacity for the Township's share is about 800,000 gpd.

Collection and conveyance facilities in Middlesex Township utilizing the Carlisle Regional Water Pollution Control Facility are operated and maintained by the Middlesex Township Municipal Authority. Two wastewater pumping stations are located in within the Township. Flows to the pumping stations during 1998 were within the stations' permitted capacities.

The Middlesex Township conveyance facilities tributary to the Carlisle Regional Water Pollution Control Facility are comprised of approximately 29 miles of sanitary sewer ranging from 8-inch

diameter to 42-inch diameter. There are presently 2 wastewater pumping stations located in the Township; one at Carolina Freight and one at ABF.

Within Middlesex Township there are 4 simplex grinder pumps for commercial establishments and 1 for a residential site. There are also two private package plants located within the Township. One package plant serves the Country Manor mobile home park and the Meadows and the Ridings residential developments. This package plant, with a capacity of 185,000 gpd, discharges to the Conodoguinet Creek near Bernheisel Bridge Road. The residents of these developments have had past problems with the sewer service, hazardous substance dumping and water quality and water quantity. The second package plant serves the Regency Woods North mobile home park. It is designed for 35,000 gpd and discharges to a tributary of the Conodoguinet Creek.

Wastewater generated outside the public sewer service areas of Middlesex Township and not treated by package plants, is treated by individual on-lot septic systems owned and maintained by the property owner. The Township employs a licensed Sewage Enforcement Officer (SEO) on staff. The SEO is responsible for reviewing soil horizon and percolation tests to determine the suitability of specific sites in the Township for on-lot sewage disposal. The SEO also reviews on-lot system planning modules, system applications and designs, performs inspections before and during construction of the on-lot system, and investigates reports of malfunctioning systems.

Several on-lot disposal problem areas have been identified by Glace Associates, the Township's sewage disposal consultant. The Ironstone Ridge, Fetrow Acres and Carlisle Springs area have experienced on-lot systems malfunctions. The Township enacted an On-Lot Management Ordinance in January of 1999. This ordinance requires that all septic or treatment tanks must be pumped out or inspected every three years, or whenever the tank is filled. The pumping and inspection of septic tanks are to be performed by a local septage pumper/hauler that has been licensed to operate in Middlesex Township. The Township was divided into four septage-pumping districts.

MIDDLESEX TOWNSHIP

(Cumberland County, Pennsylvania)

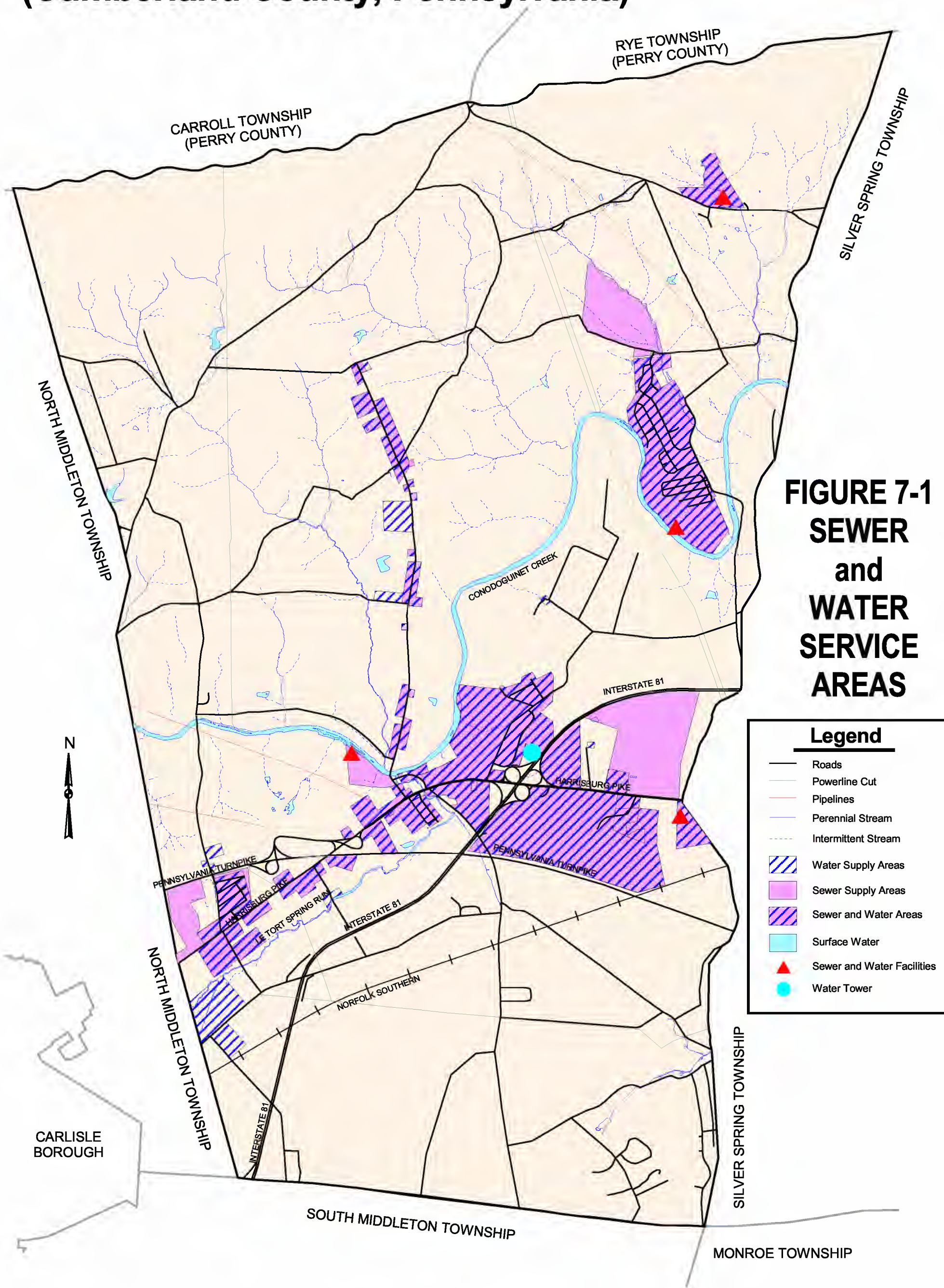


FIGURE 7-1
SEWER
and
WATER
SERVICE
AREAS

Legend

Roads

Powerline Cut

Pipelines

Perennial Stream

Intermittent Stream

Water Supply Areas

Sewer Supply Areas

Sewer and Water Areas

Surface Water

Sewer and Water Facilities

Water Tower

The Township's current Act 537 Official Wastewater Facilities Plan was updated in 1993. A proposed extension to the existing sewer system was identified in this plan for the South Middlesex Road area, from the Pennsylvania Turnpike to Claremont Road. This improvement project was completed during the summer of 1999. Further extension of sewer service westward from South Middlesex to the Stoner Drive light industrial area may take place some time in the future.

7.2 PUBLIC WATER SERVICE

The portions of Middlesex Township that have public water service are similar to but slightly more extensive than those areas that have public sewer service. Public water is supplied from the South Middleton Township Municipal Authority. Middlesex Township purchases 1.5 mgd of water from the South Middleton Township Municipal Authority. A 1.5 mgd looped water storage tank was recently constructed in the northwest quadrant of the I-81/U.S. Route 15 interchange. The Township has ample reserve capacity for its water supply of approximately 1.1 mgd. No significant extensions to public water service areas are planned.

Middlesex Township is currently studying the possibility of developing and maintaining its own source of public water supply. The Township contracted with the ARM Group to perform a comprehensive groundwater availability and well siting study for the southern portion of the Township. The study concluded that there is a reliable supply of groundwater that can be developed from the carbonate aquifers of the Township. The study recommended that four potential well sites, all situated south of the Norfolk and Southern railroad tracks, should be priorities for site acquisition and development.

7.3 ELECTRICITY

Pennsylvania Power and Light (PP&L) is the primary provider of electricity to residents and businesses within Middlesex Township. PP&L currently maintains several substations within or immediately adjacent to Middlesex Township.

7.4 NATURAL GAS

UGI Corporation provides natural gas service to a number of communities in eastern Cumberland County, including Middlesex Township. Natural

gas service is available in the areas surrounding major industry and business centers, as well as to residences along portions of some arterials, and in some subdivisions. Expansion of gas service will probably occur. Those densely developed areas near existing gas lines and those in between current service areas are the most likely areas for expansion. Major industry or institutional uses currently not served may also see natural gas service expansion in the future.

7.5 TELEPHONE

Bell of Pennsylvania provides telephone service and maintains telephone lines within Middlesex Township. Telephone service is available throughout the Township.

7.6 CABLE TV

TV Cable of Carlisle provides cable TV service to a number of communities in central Cumberland County including Middlesex Township. Cable TV service is available throughout much of the Township.

7.7 TRENDS AND ISSUES

Trends - Community Utilities

Sewer Service

- ✓ Public wastewater collection is provided in two areas of the Township: along Route 11; and a pressure system along North Middlesex Road. Both systems are owned and operated by the Middlesex Municipal Authority. Discharge is into the Carlisle Regional Water Pollution Control Facility.
- ✓ Private systems serve the Country Manor mobile home park, the Ridings and the Meadows. A second private plant serves Regency Woods North.
- ✓ Much of the Township is served by on-lot wastewater disposal systems. The Township has adopted an on-lot management district for the management of on-lot systems.

Water Service

- ✓ Public water is supplied by the Middlesex Municipal Authority. Water is purchased from the South Middleton Township Municipal Authority. The Middlesex Municipal Authority is studying the possibility of developing its own source of water supply.

Issues

- ✓ Carefully planned expansion of sewer and water in order not to stimulate growth. Coordinated with land use recommendations.
- ✓ Acquisition of private wastewater systems.
- ✓ Aggressive implementation of on-lot wastewater management systems.
- ✓ Extend sewer along PA Route 34.
- ✓ If the Middlesex Municipal Authority pursues the development of its own water supply, protection will be needed for the selected well sites.

7.8 COMMUNITY SURVEY RESULTS

- The majority of respondents were satisfied to very satisfied with electric utilities (89.1%)
- The majority of respondents were satisfied with Cable TV service (53.4%)
- Of those who are not already connected to public water and sewer services, the majority would rather continue with the status quo than be connected.

8.0 TRANSPORTATION

The transportation network of a community is the backbone for its development and prosperity. It can help to attract a thriving society of merchants and residents and is the overall baseplate for community growth. A carefully planned roadway network, designed to properly fit the structure of the community and suit its needs will ultimately mold the framework for its future population. The advancement and success of a community is often influenced by its transportation network, and if poorly planned or maintained, can sometimes deter affluence and overshadow many of the community's positive attributes.

8.1 EXISTING ROADWAY NETWORK

The existing roadway network of Middlesex Township consists of a system of major and minor arterial roadways, collectors and local roads, divided by two interstate highways, Interstate 81 and the Pennsylvania Turnpike, Interstate 76. The local roadways were originally established to connect the various farms within the community. With the major man-made barriers of I-81 and the Pennsylvania Turnpike along with a roadway network initially designed to suit the needs of the local farms, the result is an asymmetric roadway system layout.

The major roadways servicing the Township are as follows:

- The Pennsylvania Turnpike (I-76) traverses the central portion of the Township in an east/west direction. I-76 provides rapid access east to Philadelphia, New Jersey and New York and westward to Pittsburgh and beyond. A single interchange serving the greater Carlisle area is situated in Middlesex Township. The I-76 interchange with U.S. Route 11 is located in the central portion of the Township.
- I-81 traverses the Township in a northeast/southwest direction, from the Township's southwestern corner to its eastern boundary with Silver Spring Township. I-81 is a major north-south route stretching from New York state in the north to Maryland and Virginia in the south. There are two interchanges located

within the Township. A full interchange is located in the east central portion of the Township with U.S. Route 11. A partial interchange with Trindle Road (PA Route 641) is located in the southwestern corner of the Township.

- U.S. Route 11 (Harrisburg Pike or Carlisle Pike) provides east/west access through the central portion of Middlesex Township. The Harrisburg Pike is one of the principle roadways that connect Harrisburg and Carlisle.
- PA Route 641 runs in an east/west direction through eastern Cumberland County connecting Mechanicsburg with Carlisle. Within Middlesex Township PA Route 641 acts as the Township's southern boundary with Monroe Township.
- PA Route 34 (Spring Road) runs in a northeasterly direction across the northwestern portion of the Township. Route 34 provides an important connection from Carlisle to central and eastern Perry County. PA Route 34 is relatively steep north of Carlisle Springs as it ascends the Blue Mountain, crossing into Perry County at Sterretts Gap.
- PA Route 944 (Wertsville and Enola Roads) provides access to the Harrisburg area across northern Cumberland County. PA Route 944 runs in an east/west direction across the northern portion of the Township and along the base of the Blue Mountain.

8.2 ROADWAY CLASSIFICATIONS

Middlesex Township contains interstate highways, principal and minor arterial roadways, collectors and local roads. Table 8-1 summarizes the roadway classifications. All roads not shown on the table are considered local roads. For a graphical depiction of the roadway classifications, see Figure 8-1.

Table 8-1
Existing Roadway Classifications

Classifications	Roadways
Interstate	I-76 & I-81
Principal Arterial	U.S. Route 11
Minor Arterials	PA Route 34, PA Route 641
Collectors	PA Route 944, Sunnyside Drive, Harmony Hall Road, Claremont Drive, Claremont Road and a portion of South Middlesex Road
Local Roads	All others

Source: PennDOT 1999.

Roadway Classification Definitions

Interstate

Limited access highways designed for traffic between major regional areas or larger urban communities of 50,000 or more; these highways extend beyond state boundaries, with access limited to interchanges located by the U.S. Department of Transportation.

Freeway

Limited access roads designed for large volumes of traffic between communities of 50,000 or more to major regional traffic generators (such as central business districts, suburban shopping centers and industrial areas); freeways should be tied directly to arterial roads, with accessibility limited to specific interchanges to avoid the impediment of thru traffic.

Principal Arterials

Roads that provide land access while retaining a high degree of thru traffic mobility and serve major centers of urban activity and traffic generation. They provide a high speed, high volume network for travel between major destinations in both rural and urban areas.

Minor Arterials

Roads that give greater emphasis to land access with a lower level of thru traffic mobility than principal arterials and serve larger schools,

industries, hospitals and small commercial areas not incidentally served by principal arterials.

Collectors

Collector Roads serve dual functions—collecting traffic between local roads and arterial streets and providing access to abutting properties. They serve minor traffic generators, such as local elementary schools, small individual industrial plants, offices, commercial facilities and warehouses not served by principal and minor arterials.

Local Roads

Roads that are local in character and serve farms, residences, businesses, neighborhoods and abutting properties.

8.3 TRAFFIC VOLUMES

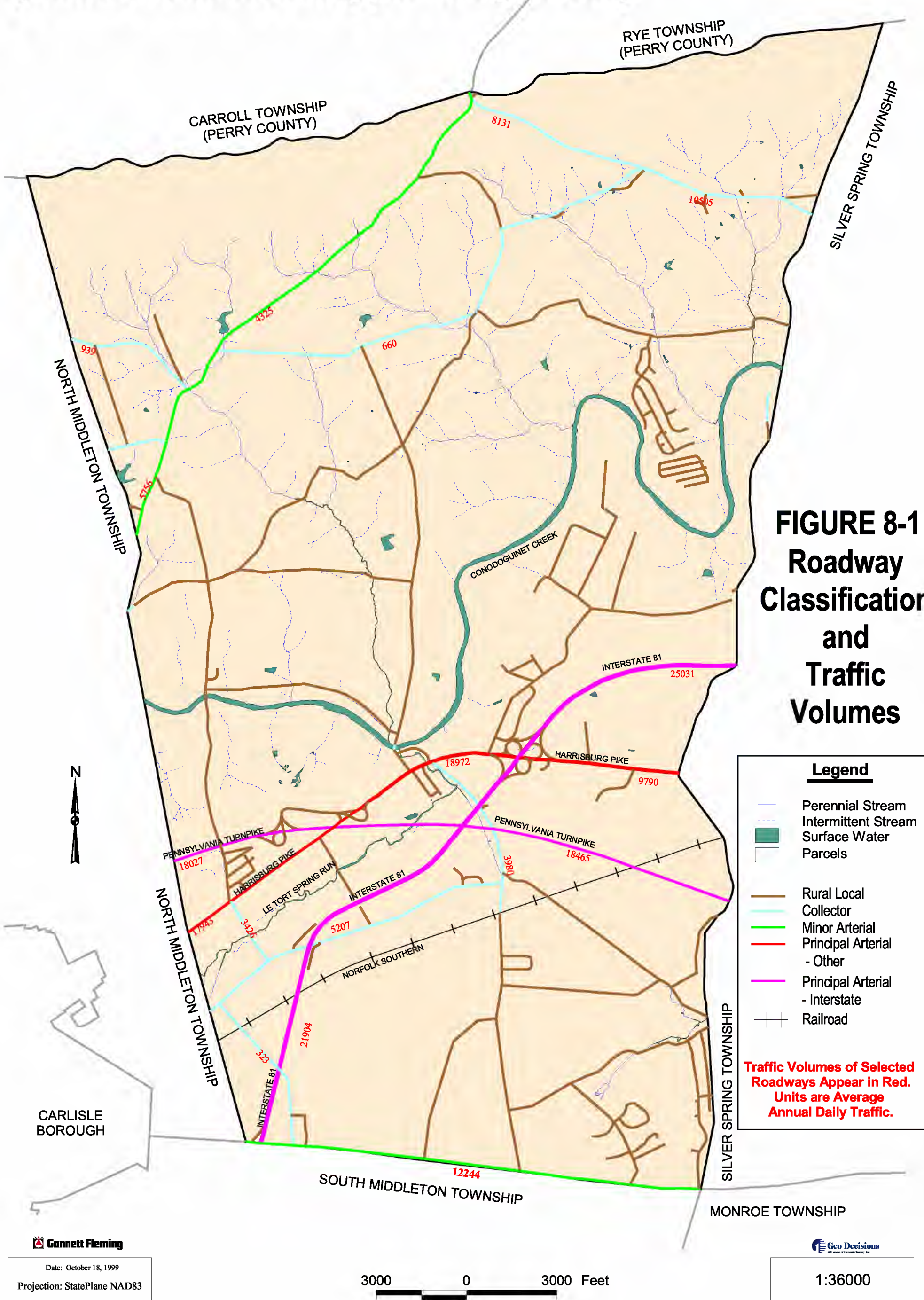
Existing (1995) traffic volumes were obtained from PennDOT for the major roadways in the Township. These volumes are presented on Figure 8-1.

Level of Service (LOS) provides an objective measure of how well a facility operates and is generally estimated utilizing the methodologies contained in the *Highway Capacity Manual* published by the Transportation Research Board. Table 8-2 provides a brief description of levels of service for signalized and unsignalized intersections as well as roadway segments.

Review of traffic studies performed for various proposed developments within the Township indicated that most intersections studied currently operate at acceptable levels of service (LOS A thru LOS C) during peak hour conditions, including several intersections along U.S. Route 11 (See Table 8-3). However, there are several intersections along the PA 641 corridor that experience long delays during the p.m. peak hour period including PA 641 at the I-81 southbound ramps and PA 641 at Claremont Drive/Fairview Drive. Under future conditions, if development occurs as predicted, the levels of service will decrease and improvements will be required to achieve satisfactory operating conditions. An area of particular concern is the Claremont Road area, where nearby industrial and residential development could lead to increased traffic volumes and major roadway improvements such as roadway widening and signalization projects.

MIDDLESEX TOWNSHIP

(Cumberland County, Pennsylvania)



**Table 8-2
Level of Service Definitions**

Level of Service	Roadway Segment	Signalized Intersection	Unsignalized Intersection
A	Primarily free-flow operations. Vehicles are almost completely unimpeded.	Very low delay (<5.0 sec./veh.). Most vehicles do not stop at all.	Delay less than 5.0 sec./veh. Little or no delay to minor street traffic.
B	Reasonable free-flow. Ability to maneuver is only slightly restricted.	Delay in the range of 5.1 to 15.0 sec./veh. More vehicles stop than for LOS A.	Delay in the range of 5.1 to 10.0 sec./veh. Short delays to minor street traffic.
C	Speeds still at or near free-flow speed. Freedom to maneuver is noticeably restricted.	Delay in the range of 15.1 to 25.0 sec./veh. Individual cycle failures may begin to appear. The number of vehicles stopping is significant.	Delay in the range of 10.1 to 20.0 sec./veh. Average delays to minor street traffic.
D	Speeds begin to decline slightly. Minor incidents can be expected to create queuing.	Delay in the range of 25.1 to 40.0 sec./veh. Influence of congestion becomes more noticeable. Individual cycle failures are noticeable.	Delay in the range of 20.1 to 30.0 sec./veh. Long delays to minor street traffic.
E	At capacity. There are virtually no usable gaps in the traffic stream.	Delay in the range of 40.1 to 60.0 sec./veh. Considered to be limit of acceptable delay. Individual cycle failures are frequent.	Delay in the range of 30.1 to 45.0 sec./veh. Very long delays to minor street traffic.
F	Breakdown in vehicular flow. Condition exists in queues behind breakdown points.	Delay in excess of 60.0 sec./veh. Arrival flow rates exceed capacity. Considered to be unacceptable.	Delay exceeds 45.0 sec./veh. Demand volume exceeds capacity. Extreme delays with queuing.

Table 8-3
Existing Traffic Operating Conditions
(Selected Intersections)

Intersection	Level of Service	
	AM Peak Hour	PM Peak Hour
U.S. Route 11/South Middlesex Road	B	B
U.S. Route 11/Harmony Hall Road/Wolfs Bridge Road	C	C
South Middlesex Road/Old Stonehouse Road	A	A
South Middlesex Road/Claremont Road	A	A
Claremont Road/Harmony Hall Road	A	A
Claremont Road/Claremont Drive	-	C
PA 641/Claremont Drive/Fairview Drive	-	*
PA 641/I-81 Southbound Ramp	-	E
PA 641/I-81 Northbound Ramp	-	B

* Volume to capacity ratio greater than 1-2 delay is meaningless.

The U.S. Route 11 corridor between I-81 and the Pennsylvania Turnpike, the so-called "Miracle Mile" carries heavy truck traffic volumes. This section of roadway is reportedly the second most heavily traveled segment of roadway in the country for trucks. U.S. Route 11 serves as the major commercial corridor within the Township, thus generating significant automobile traffic volumes. Additionally, U.S. Route 11 serves as a primary ingress/egress route to the nearby Carlisle Fairgrounds. The Carlisle fairgrounds host to several major "Car Show" events every year. During Car Show events, police details assist in directing traffic along U.S. Route 11. Recent improvements by PennDOT, including signalization and roadway widening projects, have alleviated congestion somewhat for this important transportation corridor.

8.4 ROADWAY CONDITIONS

Several of the Township roads are in need of improvements to facilitate increased safety, promote growth and accommodate the growing needs of the community (see Table 8-4 and Figure 8-2). Potential improvements to existing roadways could consist of pavement overlays, pavement widening, shoulder construction and/or widening and drainage improvements. It should be noted that the majority of roads within the Township provide limited, if any, paved shoulders. Several locations within the Township require attention for geometric improvement. Poor horizontal and vertical geometry is a safety hazard and deters the development of surrounding areas. Roadways that are not in conformance with design and/or construction standards can cause the need for excessive maintenance or repair of rutted roadway or off-road repair for accidents or instances of vehicles "running off the road."

PennDOT currently has two improvement projects planned within Middlesex Township. Both projects involve improvements to Sunnyside Drive. One project involves the realignment of the Turkeyfoot intersection. The other project involves roadway resurfacing and other associated improvements to the entire length of Sunnyside Drive.

8.5 ACCIDENT/SAFETY ANALYSIS

A safety analysis was conducted to identify those intersections, or portions of roadway, which experience a high frequency of accidents. When a predominant accident pattern exists at a particular location, improvements can sometimes be implemented to minimize the frequency of accidents based on an assessment of the probable cause.

Accident information for the Township was obtained from the Pennsylvania Department of Transportation for the years 1993 through 1997. This information identifies groups or clusters of same type accidents, which occur at a specific location. These areas are presented in Table 8-5 and shown on Figure 8-2.

MIDDLESEX TOWNSHIP

(Cumberland County, Pennsylvania)

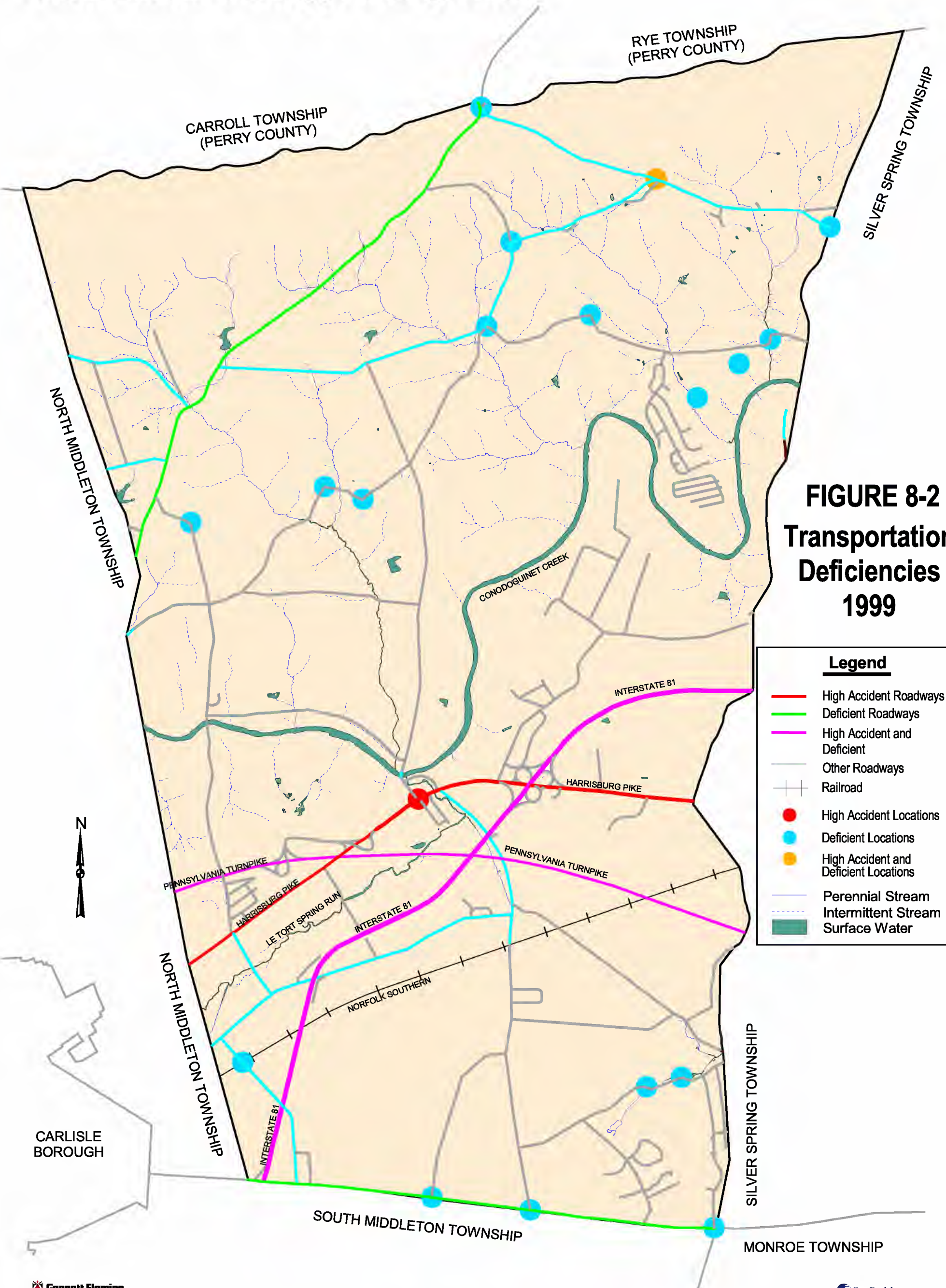


FIGURE 8-2
Transportation
Deficiencies
1999

Legend

- High Accident Roadways
- Deficient Roadways
- High Accident and Deficient
- Other Roadways
- Railroad
- High Accident Locations
- Deficient Locations
- High Accident and Deficient Locations
- Perennial Stream
- Intermittent Stream
- Surface Water



Table 8-4
Transportation Roadway Deficiencies

Location	Deficiencies
Spring Road/ Sunnyside Drive	Skewed intersection, steep grades, sharp curve on Spring Road northbound approach
Sunnyside Drive	Poor roadway surface, steep slope, poor drainage
Wertzville Road/ Deer Lane	Limited sight distance
Turkeyfoot Intersection	Skewed intersection
Wertzville Road/ Mountain Road	90° curve at intersection
Wertzville Road/ Hollowbrook Road/Sherwood Drive	Skewed intersection
Bernheisel Bridge Road	Several 90° curves, poor roadway surface, obstructions close to roadway
Sherwood Drive	Poor roadway surface, several 90° curves
Beagle Club Road	Several 90° curves
Wolfs Bridge Road	Sharp curve, steep grade approaching West Middlesex Road
South Middlesex Road	Poor surface
Appalachian Drive	Narrow roadway, obstructions near roadway, sharp curves
Ridge Road	Narrow roadway, obstructions near roadway, several 90° curves
Trindle Road/Hickory Road	Limited sight distance
Trindle Road/South Middlesex Road	Limited sight distance
Trindle Road at Horner's Road	Limited sight distance
Claremont Drive at Norfolk Southern Railroad Crossing	At-grade railroad crossing with no warning signals

Table 8-5
High Accident Locations
Middlesex Township, 1993-1997

Location	Number of Accidents
Bernheisel Bridge Road	49
Route 11/North Middlesex Road/ Clinton Avenue	25
Turkeyfoot intersection	14
Clemson Drive	11

8.6 WALKING AND BIKING TRAILS

Traffic volumes will continue to increase throughout Middlesex Township, resulting in increased fuel consumption, vehicle emissions, and driver delays. While roadway infrastructure improvements can facilitate mobility to a certain extent, the importance of bicycle and pedestrian systems should be recognized in order to be competitive as a region. Improvements to the overall transportation system, including bicycle and pedestrian facilities, will improve air quality, traffic flow, and reduce noise pollution.

Middlesex Township offers several opportunities for walking and hiking enthusiasts. The Appalachian Trail is a 2,160-mile long trail stretching from Georgia to Maine. The Appalachian Trail traverses Middlesex Township, along the Township's eastern boundary with Silver Spring Township for approximately 10 miles. Several hiking trails are provided at the Township Park.

While the Township does offer several off-road hiking trails, Township roads offer few opportunities for quality walking or biking activities. Few Township roads provide sidewalks and most have limited (narrow), if any, shoulders for walking or biking. There are no bicycle trails within the Township at this time.

8.7 PUBLIC TRANSPORTATION

Public transportation reduces congestion, provides a mode of transportation for those without automobiles, relieves stress on roadways, bridges and intersections, reduces the demand for expensive infrastructure upgrades, increases air quality and reduces health risks. Capitol Area Transit (CAT), based in Harrisburg, provides public transit service for the greater Harrisburg area. Middlesex Township is served by the Carlisle Route C bus route. This bus route primarily follows the Harrisburg/Carlisle Pike between Harrisburg and Carlisle.

8.8 RAIL FACILITIES

There is one railroad right-of-way that traverses the Township. An active Norfolk and Southern (formerly Conrail) freight line traverses the southern portion of the Township. There are several at-grade crossings of this rail line with Township roads. The most significant crossing is at Claremont Drive, where no railroad warning signals or gates are provided for motorists.

There is no passenger rail service operating within Middlesex Township. Preliminary studies are underway examining the feasibility of providing light rail service along the Norfolk and Southern right-of-way, connecting Harrisburg to Carlisle.

8.9 TRENDS AND ISSUES

Trends

- ✓ Middlesex Township is host to a major highway transportation complex including: I-81; I-76 (Pennsylvania Turnpike); and U.S. Route 11.
- ✓ Other major routes include: PA Route 641 (Trindle Road) which forms the southern boundary of the Township; PA Route 34 Spring Road; and PA Route 944 (Wertzville Road).
- ✓ The "Miracle Mile" which is the part of U.S. Route 11 that connects I-81 to I-76 (PA Turnpike) has recently been improved by PennDOT to better accommodate the high traffic volumes in this area especially truck traffic.

- ✓ There are a number of roadways in the Township which have substandard roadway conditions (surface and shoulder) and need improvement.
- ✓ PennDOT is proposing to improve the intersection of PA Route 944 and Bernheisel Road to reduce traffic congestion at this intersection and to improve traffic safety.
- ✓ Public transportation is limited to one bus route along U.S. Route 11 serviced by Capital Area Transit (CAT).
- ✓ The Township is also traversed by a Norfolk and Southern rail line. Potential light rail corridor.

Issues

- ✓ Identify and prioritize roadways needing improvements and the types of improvements. Coordinate these improvements with land use recommendations.
- ✓ Intersection improvements needed at deficient locations.
- ✓ Promote PennDOT improvements to the intersection of Bernheisel Road and Wertzville Road.
- ✓ Encourage the development of pedestrian walkways and bikeways interconnecting residential areas with employment, transportation, business services and recreation services.
- ✓ Provide recommendations for funding roadway improvements by the Township.
- ✓ Determine if new roadways are required to improve traffic movement around the Township.
- ✓ Rehabilitate or replace deficient bridges.
- ✓ Identify land for potential light rail station in the Township.
- ✓ Determine status of I-81/I-76 interchange.

8.10 COMMUNITY SURVEY RESULTS

- The majority of respondents were satisfied to very satisfied with snow removal (84.3%).
- The majority of the respondents were satisfied with vehicle traffic management (55.4%).
- The highest priority transportation problem locations most frequently cited by respondents were:
 - Miracle Mile/Route 11 (28.7%)
 - Turkeyfoot intersection (19.3%)
 - Bernheisel Bridge Road (6.9%)
- The majority of respondents strongly agree to agree with that: truck traffic is a problem along the Route 11 corridor (74.1%).
- The majority of respondents agree to strongly agree that peak hour traffic congestion is a problem along the Route 11 corridor (71.0%).
- The majority of respondents agree that the roadway system in the township is adequate to serve current traffic levels (47.0%).

9.0 ECONOMIC PROFILE

Historically, Middlesex Township's economy has been dominated by one industry, agriculture. From its initial settlement during colonial times through the first half of the 20th Century farming was an important aspect of the Township's economy. However, since the construction of the Pennsylvania Turnpike in 1940 and the subsequent extension of the Turnpike eastward to Philadelphia and the construction of I-81, the Township's economy has changed, focusing more on serving the traveling public and on the transportation industry, than on farming.

This section provides information on the Township's workforce and on the economic activity based within Middlesex Township.

9.1 LABOR FORCE

Table 9-1 presents the number and percentage of Middlesex Township's residents who are employed by industry type. In 1990, the largest proportion of the Township's workforce was employed in the Services industry (29.8 percent), followed by Manufacturing (18.1 percent) and Retail Trade (15.4 percent). Other important industries employing Township residents include Public Administration (10.8 percent) and Transportation, Communications, and Public Utilities (10.3 percent). It should be noted that in 1990, less than 2 percent (51 persons) of the Township's residents were employed in the Agriculture, Forestry, Fishing and Mining industry.

When compared with the employment profile for Cumberland County, as shown in Table 9-1, we find that the breakdown for employment by industry is similar for Middlesex Township and Cumberland County with two exceptions. First, a larger percentage of Middlesex Township residents (18.4 percent) are employed in Manufacturing, than Cumberland County residents (14.2 percent). Second, a lesser percentage of Middlesex Township residents (29.8 percent) are employed in the Services industry than for Cumberland County as a whole (38.4 percent).

Table 9-2 presents the number and percentage of Middlesex Township residents working in the labor force categories defined by the U.S. Census. Employment characteristics in 1990 indicate that over one third (33.6 percent) of the Township's labor force have technical, sales and administrative support occupations, and over one quarter (26.6 percent) are employed as operators,

fabricators and laborers. Managerial and professional occupations (16.3 percent), the so-called "white collar" jobs, are the third most common occupational category for employed Township residents.

Comparing the occupational profile for Middlesex Township with that of Cumberland County in Table 9-2, we find that the breakdown of employment by occupation is similar, but again with two exceptions. Middlesex Township has a greater proportion of its workforce in the Operators, Fabricators and Laborers occupations (26.6 percent) than Cumberland County (16.0 percent). Conversely, Middlesex Township (16.3 percent) has a lesser proportion of its work force employed in Managerial and Professional occupations than Cumberland County (27.3 percent).

9.2 MAJOR EMPLOYERS

Major employers within Middlesex Township are presented in Table 9-3. As seen in this table, several industries dominate this list. The Trucking/Transportation industry is the leading industry in terms of employees within the Township. The top three employers within the Township, Roadway Express, ABF, and Consolidated Freight, are in the Trucking/Transportation industry. Service industries geared toward serving the traveling public, such as hotels, truck stops, restaurants, etc., also employ many persons in Middlesex Township. All American Plazas, the Embers Inn, the Flying J, and the Pilot Corporation are some of the larger employers of persons serving the traveling public. Other large employers within the Township include Giant Foods, whose corporate headquarters are on the Harrisburg Pike, and Cumberland County. Middlesex Township houses several county facilities in the Claremont Road/Claremont Drive area including the Cumberland County Prison, Nursing Home and Agricultural Extension Office.

Table 9-1
Employment by Industry for
Middlesex Township and Cumberland County, 1990
(Persons 16 years and older)

Industry Group	Middlesex Township		Cumberland County	
	#	%	#	%
Agriculture, Forestry, Fishing & Mining	51	1.7	1,961	1.9
Construction	219	7.1	5,589	5.5
Manufacturing	555	18.1	14,395	14.2
Transportation, Communications & Public Utilities	317	10.3	7,964	7.8
Wholesale Trade	208	6.8	4,934	4.9
Retail Trade	472	15.4	17,361	17.1
Services	915	29.8	39,086	38.4
Public Administration	330	10.8	10,400	10.2
Total	3,067	100.0	101,690	100.0

Source: U.S. Census 1990.

Table 9-2
Employment by Occupation for
Middlesex Township and Cumberland County, 1990
(Persons 16 years and older)

Occupation	Middlesex Township		Cumberland County	
	#	%	#	%
Technical, Sales & Administrative Support	1,029	33.6	35,164	34.6
Operators, Fabricators & Laborers	816	26.6	16,330	16.0
Managerial & Professional	500	16.3	27,698	27.3
Service	345	11.2	11,422	11.2
Precision, Production, Craft & Repair	341	11.1	9,373	9.2
Farming, Forestry & Fishing	36	1.2	1,703	1.7
Total	3,067	100.0	101,690	100.0

Source: U.S. Census 1990.

Table 9-3
Top Employers
Middlesex Township, 1999

Employer	Number of Employees
Roadway Express	1264
ABF	817
Consolidated Freight	731
Giant Foods	600
Cumberland County	493
All American Plazas	273
Embers Inn	169
Flying J	165
Cumberland Truck Equipment	146
ERX Logistics	122
Pilot Corporation	120
Stoner Associates	110
Schneider National Carriers	106

Source: West Shore Tax Bureau, September 25, 1998 and Gannett Fleming 1999.

There are two major center of economic activity within the Township. The first and largest is the Miracle Mile and lands adjacent to the Harrisburg Pike. The second and smaller activity center is the Claremont Road/Claremont Drive area.

Economic activity along the Harrisburg Pike began when the Pennsylvania Turnpike opened in 1940. The eastern terminus of the Pennsylvania Turnpike was in Middlesex Township. Thus setting the stage for the tourist and trucking industries in our area, and the need to provide services to the traveling public. Several restaurants and hotels opened along the Harrisburg Pike shortly after the Turnpike opened. The subsequent extension of the Turnpike eastward from Middlesex Township to Philadelphia and the construction of I-81 resulted in increased demand to serve the traveling public.

Truck stops, restaurants, hotels/motels, gasoline

service stations and similar commercial establishments now dot the landscape adjacent to the Miracle Mile. The area along the Harrisburg Pike east of I-81 has become an extension of the Miracle Mile with truck stops, restaurants, hotels as well as several large truck terminals.

Being located at the crossroads of two major highways (the Pennsylvania Turnpike and I-81) has made Middlesex Township a desirable location for the Trucking/Transportation and related industries. One related industry where there is current pressure for development in the area is warehousing and distribution centers. Warehousing and distribution centers, while not truck terminals per say, can and do generate truck traffic.

The Claremont Road/Claremont Drive area serves as the Township's other major employment and economic activity center. Cumberland County owns several hundred acres of lands in this portion of the Township. Several County facilities have been located here, including the Cumberland County Prison, the County Nursing Home and the County Agricultural Extension office. The County has donated land in the southwest corner of the Township for a proposed U.S. Army Heritage Center.

Further east on along Claremont Road are several light industrial and warehousing facilities. The largest concentration of such businesses lies along Stoner Drive. A large warehouse/ distribution center is planned at the eastern end of Claremont Road in the northwest quadrant of the Claremont Road/South Middlesex Road intersection.

9.3 TRENDS AND ISSUES

Trends - Economic Development

- ✓ Although the Township has traditionally been a farming community there is very little active farming remaining. Only 1.7 percent of those employed in the Township are engaged in farming activities.
- ✓ The largest employers are Services (29.8 percent), Manufacturing (18.1 percent) and Retail Trade (15.4 percent).
- ✓ Leading employers are: Roadway Express, ABF and Consolidated Freight, Giant Foods and Cumberland County.

- ✓ Occupational profiles show that the largest occupation for residents of the Township are: technical, sales & administrative support; operators, fabricators & laborers; and managerial and professional.

Issues

- ✓ Make sites available for economic development in the Township.
- ✓ Encourage economic development activity where there is adequate infrastructure to support such development.
- ✓ Amend the zoning ordinance to provide for districts for economic development that will adhere to specific performance standards.
- ✓ Improve the mix of employers and employment opportunities in the Township.
- ✓ Provide employment opportunities close to housing to reduce commuting time .
- ✓ Support Army Heritage Center

9.4 COMMUNITY SURVEY RESULTS

- The majority of respondents were satisfied with employment opportunities in:
 - Offices & professional services (47.7%)
 - Industry/manufacturing (47.6%)
 - Commercial and retail sales (45.4%)
- The majority of respondents disagree to strongly disagree with the following statement:
 - We need more heavy and light industry (69.9%)
- The majority of respondents strongly disagree to disagree with the following statement:
 - We need more trucking/warehouse/distribution centers (85.1%)

10.0 ADJACENT AND REGIONAL PLANNING

An important component of the comprehensive planning process involves the consideration of land use, zoning and planning policies, concerns, and initiatives of adjacent municipalities and county/regional planning agencies. Awareness of land use, zoning and other planning policies, concerns and initiatives of adjacent municipalities is critical to identifying potential conflicts as well as potential opportunities to cooperate with neighboring jurisdictions. Planning policies and initiatives such as comprehensive plans, existing and future land use maps and plans, zoning ordinances and maps, and traffic, stormwater and sewer needs and concerns were gathered from neighboring municipalities and Cumberland County/Tri-County Planning Commission. The following paragraphs summarize the planning policies, concerns and initiatives of adjacent municipalities and Cumberland County/Tri-County Planning Commission.

10.1 SILVER SPRING TOWNSHIP

Silver Spring Township adjoins Middlesex Township along its eastern border. The Silver Spring Township Comprehensive Plan, which was adopted in 1995, designates several different proposed land uses along its border with Middlesex Township.

Starting at the Silver Spring Township's northern border, the steep slopes along the Blue Mountain are designated for "Conservation" uses. Moving southerly from the base of these steep slopes to Sherwood Drive are designated for "Rural Residential" uses. The area from Sherwood Drive to south of the Conodoguinet Creek is designated for "Conservation" uses. The area from just below the Conodoguinet Creek southerly through the Turnpike is designated for "Agriculture" uses. From just south of the Turnpike to U.S. Route 11, land is designated for "Light Industrial" uses. The area south of U.S. 11 and along Appalachian Drive to the Conrail tracks are designated for "Commercial", "High Density Residential", and "Light Industrial" uses. From the Conrail tracks southerly toward Old Stone House Road, lands are designated for "Agriculture" uses. A small area immediately adjacent to Hogestown Run is designated for "Conservation" uses. And lastly, lands from Old Stone House Road southerly to Trindle Road are designated as "Rural Residential".

The future land use patterns proposed for Silver Spring Township along its western border are generally consistent with current and proposed land uses within Middlesex Township along its border with Silver Spring Township.

It should be noted that growth is expected in some western portions of Silver Spring Township that do not directly abut Middlesex Township. This growth will impact Middlesex Township in that Silver Spring Township has reserved 400,000 gpd of capacity from Middlesex Township at the Carlisle Area Sewage Treatment Plant. Sewage from Silver Spring destined for the Carlisle Area Sewage Treatment Plant must use gravity lines within Middlesex Township to reach the treatment plant.

10.2 SOUTH MIDDLETON TOWNSHIP

South Middleton Township borders Middlesex Township to the south opposite Trindle Road. South Middleton Township's current Comprehensive Plan was adopted on December 14, 1999. Abutting areas along South Middleton Township's border with Middlesex Township are designated for "Suburban Community," "Industrial Center" and "Agricultural Reserve" future land uses.

Border areas from the intersection of Interstate Route 81 extending west to the Middlesex Township western boundary are designated as "Suburban Community." These areas are intended primarily for mixed density residential development, with local centers of industrial and commercial uses. These areas require a full range of public services.

Border areas from the intersection of Interstate Route 81 east to approximately 700 feet east of the intersection of Horners Road, are designated as "Industrial Center." Existing land uses include vacant land, agricultural-farming and commercial-retail. These areas are intended to provide additional lands for expansion and new industries in the future in areas with a full range of support facilities including good access to regional highways.

Border areas from approximately 700 feet east of the intersection of Horners Road extending east to the Middlesex Township eastern boundary are designated "Agricultural Reserve." These areas are intended primarily for agriculture related uses and low-density residential development, and are meant to reserve prime agricultural soils, encourage farming activities and retain the rural character of the area. These areas contain rich limestone soils subject to sinkhole conditions that are not readily suitable for suburban development. These areas do not require public utilities.

10.3 NORTH MIDDLETON TOWNSHIP

North Middleton Township borders Middlesex Township to the west. North Middleton Township's current Comprehensive Plan was adopted on November 2, 1995. A variety of proposed land use categories are proposed along North Middleton's border with Middlesex Township. Lands in the extreme southeastern corner of North Middleton Township along Trindle Road are designated for "Suburban Residential" uses. Lands just north of Trindle Road through the Conrail tracks are designated for "Public/Civic" uses. The area north of the Conrail tracks to the LeTort Spring Run are designated for "Industrial" uses. The area immediately adjacent to the LeTort Spring Run is designated for "Conservation" uses. From the LeTort northward to the Harrisburg Pike is designated for "High Density Residential" uses. The area from the Harrisburg Pike north to the Turnpike is designated as "Campus Industrial". The area between the Turnpike and the Conodoguinet Creek is designated as "Suburban Residential" uses. The area from the Conodoguinet Creek northward to West Middlesex Drive is designated for Conservation uses. The area from West Middlesex Drive through Fairview Drive is designated for "Suburban Residential" and "Conservation" land uses. The area from Fairview Road north to Wagner Drive is designated as "Conservation" and "Rural Residential" uses. Lands between Wagner Drive and S.R. 944 are designated for "Agriculture" and "Conservation" uses. Lands northward from S.R. 944 to the ridge of the Blue Mountain are designated for "Public/Civic" and "Conservation" uses.

10.4 CARROLL TOWNSHIP (Perry County)

Carroll Township abuts Middlesex Township to the north, west of S.R. 34. Carroll Township's Comprehensive Plan was adopted August 1987.

Future land uses proposed in this plan along its border with Middlesex Township include "Conservation" use west of S.R. 34 and residential uses along S.R. 34.

10.5 RYE TOWNSHIP (Perry County)

Rye Township borders Middlesex Township to the north, east of S.R. 34. Rye Township adopted its Comprehensive Plan on June 28, 1999. The future land use plan from the Comprehensive Plan designates land along its southern border with Middlesex Township for "Conservation" and "Public/Semi-Public" uses.

10.6 CUMBERLAND COUNTY/ TRI-COUNTY PLANNING COM- MISSION

Two completed county/regional studies contain data, analysis and/or recommendations that may be pertinent to future planning in Middlesex Township. The Cumberland County Greenways Study was completed in 2000 and the Cumberland/Perry Counties Safety and Congestion Management Study was completed in 2002. Middlesex Township Supervisors signed a resolution in support of the results and recommendations of the Safety and Congestion Management Study in December 2002.

In addition, there are several initiatives at the regional/county planning level which provide data, analysis and/or recommendations that would be pertinent to future planning in Middlesex Township. These initiatives include the Cumberland County Comprehensive Plan Update, the development of a regional Growth Management Plan, and the Cumberland County Open Space Study. While these initiatives, which are currently in progress, may contain some pertinent information for the Middlesex Township Comprehensive Plan Update, these studies are not expected to be completed until after mid-2003.

10.7 TRENDS AND ISSUES

Trends - Adjacent and Regional Planning

- ✓ Middlesex Township needs to be aware of the zoning and development activities in adjacent municipalities so that compatible land use and development activities can be implemented.
- ✓ Allow for compatible transportation

improvements.

- ✓ Middlesex Township is already involved with adjacent municipalities. They purchase their water from South Middleton Township, discharge their wastewater into the Carlisle Regional wastewater treatment facility and receive fire protection from fire companies outside of the Township.
- ✓ Allow for compatibility of sewer and water needs.
- ✓ Prepared a joint parks and recreation plan with Monroe Township.
- ✓ Coordinate with Central Cumberland Task Force.

Issues

- ✓ Adopt land use measures that are consistent with those in the adjacent Township.
- ✓ Where there are inconsistencies establish a dialogue with the municipality to seek compatibility of uses.
- ✓ Amend the zoning ordinance to ensure consistency.

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Middlesex Township Comprehensive Plan Summary of Community Survey Results

2,372 community surveys were mailed to Township residences and businesses on Tuesday January 4, 1999. 794 responses were completed and mailed back to the Township prior to February 4, 1999, representing a 33.3 percent response rate. An additional 13 surveys were mailed back to the Township after February 4, 1999. These 13 surveys were forwarded to Gannett Fleming on March 17, 1999. Gannett Fleming tabulated and analyzed a total of 807 surveys, representing a 34.0 percent response rate

Most but not all questions were answered on all survey forms. Some respondents indicated that they did not feel comfortable responding to certain questions or statements if they had: not lived in the Township long; not used a service or facility; or were not familiar with a particular service or facility. Others simply did not answer all questions, giving no reasons for nonresponses. For the purposes of this survey those answers left blank have been treated as no opinion/no response.

Question 1 asked people to rate the overall quality of life in Middlesex Township. Over 80 percent of the respondents rated the quality of life as high (52.4%) to moderate (31.1%). 11.9 percent of the respondents rated the quality as very high.

Question 2 asked people to rate the quality of their neighborhood. Over 70 percent of the respondents rated the quality of the neighborhood as high (41.5 %) to moderate (29.9%). 18.8 percent of the respondents rated the quality of their neighborhoods as very high.

Question 3 asked people to rate how well Middlesex Township government operates. Over 80 percent of the respondents rated Middlesex Township government as moderate (46.6 %) to high (34.0%).

Question 4 inquired as to why people choose to live in Middlesex Township. One half (49.9%) of the respondents chose to live here because of the Township's safe and attractive living environment. Other frequently cited reasons for living here included: quality of schools (42.1%); location relative to employment (42.0%); happened to find a home (39.0%); affordable cost of living (37.9%); good place to raise children (35.9%); stay close to family and friends (33.2%); and proximity to services/cultural/retail centers (22.8%).

Questions 5 through 12 asked people to rate satisfaction with various services, facilities and opportunities.

Question 5 - Township provided services

The majority of respondents were satisfied to very satisfied with the following services:

- Snow removal (84.3%)
- Police protection (81.8%)
- Fire Protection (80.4%)
- Emergency medical (76.7%)
- Trash removal (67.6%)

The majority of the respondents were satisfied with the following services:

- Vehicle traffic management (55.4%)
- Parks (52.9%)
- Playgrounds (47.7%)
- Open space/passive parks (47.2%)
- Citizen input into community decisions (47.3%)
- Building permits, codes, inspections (45.0%)

One third or more of the respondents were either dissatisfied or very dissatisfied with:

- Recycling (33.1%)
- Planning/zoning/subdivision & land development (34.1%)

The majority of respondents had no opinion on:

- Sports programs (45.0%)
- Swimming/water activities (51.4 %)
- Fitness programs - adults (56.8%)
- Warm weather activities (48.3%)
- Cold weather activities (54.8%)
- Senior citizen activities (62.6%)

Question 6 - Environmental quality

The majority of respondents were satisfied to very satisfied with:

- General township appearance (84.2%)
- Open space (79.9%)
- Air quality (78.6%)

The majority of respondents were generally satisfied with:

- Water quality (60.7%)

Question 7 - Education opportunities

The majority of respondents were satisfied to very satisfied with:

- Public schools (74.7%)
- Technical/vocational training (55.0%)

Question 8 - Employment opportunities

The majority of respondents were satisfied with employment opportunities in:

- Offices & professional services (47.7%)
- Industry/manufacturing (47.6%)
- Commercial and retail sales (45.4%)

Question 9 - Shopping/commercial activities

The majority of respondents were satisfied to very satisfied with:

- Fast food (84.7%)
- Convenience stores (81.3%)
- Motels/lodging (77.6%)
- Automotive repair/service (70.3%)

The majority of respondents were satisfied with:

- Restaurants (67.4%)
- Banks (61.2%)
- Lawn and garden centers (54.5%)
- Supermarkets (53.5%)
- Laundry/dry cleaners (45.5 %)

More than one quarter of the respondents were dissatisfied to very dissatisfied with:

- Shopping malls (33.1%)
- Movie theaters (25.5%)

Question 10 - Medical/dental/social services

The majority of respondents were satisfied to very satisfied with:

- Emergency medical care (61.0%)

The majority of respondents were satisfied with:

- Medical doctors (51.1%)
- Dentists (47.5%)
- Prescription drug service (48.6%)

The majority of respondents had no opinion on:

- Psychological/counseling services (55.0%)
- Retirement/managed care facilities (50.2%)

Question 11 - Transportation services

The majority of respondents had no opinion on:

- Bus service (52.0%)
- Taxi service (56.4%)
- Light rail service (57.6%)

Question 12 - Public utilities

The majority of respondents were satisfied to very satisfied with:

- Electric (89.1%)

The majority of respondents were satisfied with:

- Cable TV (53.4%)

Question 13 asked people where they would like to see future residential development encouraged within the Township. The majority (50.4%) responded that they did not wish to see residential development encouraged.

Question 14 asked about the type of housing that they would like to see encouraged. The majority (73.7%) would like to see single-family detached housing encouraged.

Question 15 asked what type of land uses would they like to see encouraged. The majority of respondents would like to see the following land uses encouraged:

- Agricultural (62.6%)
- Residential (51.5%)
- Recreational (47.1%)

Question 16 asked which traffic/transportation problem locations should be given the highest priority. The locations most often cited were:

- Miracle Mile/Route 11 (28.7%)
- Turkeyfoot intersection (19.3%)
- Bernheisel Bridge Road (6.9%)

Question 17 presented a series of statements regarding planning issues and asked people to indicate their level of agreement/disagreement with these statements.

The majority of respondents strongly agree to agree with the following statements:

- More farmland/open space should be preserved (88.7%)
- Agricultural lands within the Township should be preserved and farm activity encouraged (90.1%)
- Woodlands need more protection (84.0%)
- Scenic areas need more protection (82.4%)
- Truck traffic is a problem along the Route 11 corridor (74.1%)

The majority of respondents agree to strongly agree with the following statements:

- Flood-prone areas need more protection (67.0%)
- More historic areas should be preserved (76.1%)
- Commercial development should be confined to the Route 11 corridor (71.1%)
- Peak hour traffic congestion is a problem along the Route 11 corridor (71.0%)
- Increase fees from developers for purchase of parklands/open space for development of recreational facilities (58.4%)

The majority of respondents agree with the following statements:

- The roadway system in the township is adequate to serve current traffic levels (47.0%)
- Stormwater management is sufficient in your area of the Township (51.5 %)

The majority of respondents disagree to strongly disagree with the following statements:

- We need more heavy and light industry (69.9%)

The majority of respondents strongly disagree to disagree with the following statements:

- We need more trucking/warehouse/distribution centers (85.1%)
- Small scale commercial development should be encouraged outside the Route 11 corridor in closer proximity to residential development (59.6%)

Question 18 asked people to how they felt about the number of certain recreation facilities currently provided in the Township: The majority of respondents indicated that there were enough of the following:

- Community parks (54.2%)
- Open space/passive recreation (45.0%)
- Trails-hiking and biking (47.1%)
- Football fields (45.4%)
- Softball/baseball fields (57.9%)
- Soccer fields (49.9%)

Over one third of the respondents indicated that there were not enough:

- Swimming/water activities (37.3%)

Questions 19 and 20 asked about connection to public sewer and water service. About 40 percent of the respondents already have public sewer and water service. Of those who are not already connected to these public services, the majority would rather not be connected to public sewer or water services.

Question 21 asked how many years have you lived in Middlesex Township:

- Over 25 years (25.0%)
- Less than 5 years (23.4%)
- 5 to 10 years (20.3%)
- 11 to 15 years (16.1%)
- 16 to 20 years (7.4 %)
- 21 to 25 years (7.2%)

Question 22 inquired about residence type. The majority, 77.2%, lived in single-family detached homes (as compared to 57.1 % as per the 1990 census). 16.5 % indicated that they lived in mobile homes (as compared to 39.5 % as per the 1990 census).

Question 23 asked about the age group of the respondents:

- 36 to 45 years (27.9%)
- 46 to 55 years (21.6%)
- Over 65 years (19.6%)
- 56 to 65 years (16.1%)
- 26 to 35 years (13.3%)
- Under 26 years (1.1%)

Question 24 asked if there were any children under 18 years of age living at home. The majority of respondents (61.6%) said no.

Question 25 asked respondents where they lived within the Township:

- Area 1 (28.4%)
- Area 2 (41.6%)
- Area 3 (19.1%)
- Area 4 (8.9%)

MIDDLESEX TOWNSHIP COMMUNITY SURVEY (DECEMBER 1998)

Dear Middlesex Township Resident:

Middlesex Township is in the process of updating its Comprehensive Plan. Public participation and involvement are important components in the planning process. The first opportunity for public participation involved a Community Meeting, held on November 12, 1998. This Community Meeting was very successful, with over 40 concerned citizens in attendance expressing their views and concerns on the existing conditions and future directions for the Township. The attached Community Survey provides another opportunity for public participation and involvement in the planning process.

Middlesex Township officials need your help in assessing various aspects of township services, policies and future directions. The Community Survey poses a series of short questions on a variety of the issues and concerns facing the Township. Please spend the short amount of time needed to answer all of the questions and return the completed survey form in the enclosed postage-paid envelope within three weeks. Completed surveys can also be dropped off at the Township Building, 350 N. Middlesex Rd., Carlisle, PA 17013. Completed survey forms will then be compiled and analyzed. The results of the survey will be shared with the community at a future public meeting. Please be assured that all your individual answers and written comments will remain anonymous. Thank you in advance for your time and participation. If you should have any questions about this survey, please feel free to contact the Middlesex Township staff at 249-4409.

Please fill out this questionnaire if you are an adult (age 18 or over) in the household. Please be assured your responses and any written comments will remain anonymous.

1-12. Quality of Life

For Questions 1-3, CIRCLE THE NUMBER that best represents your opinion.

	<u>Very High</u>	<u>High</u>	<u>Moderate</u>	<u>Low</u>	<u>Very Low</u>
1. Taking all things into consideration, how would you rate your quality of life in Middlesex Township?	11.9	52.4	31.1	1.9	0.1
2. How do you rate the quality of your neighborhood?	18.8	41.5	29.9	6.2	1.0
3. In general, how well does Middlesex Township government operate?	5.6	34.0	46.6	5.5	1.6

4. Why do you choose to live in Middlesex Township? (Please check all that apply)

- | | |
|---|--|
| ① <u>33.2</u> Stay close to family and friends | ⑥ <u>42.1</u> Quality of schools |
| ② <u>42.0</u> Location relative to place of employment | ⑦ <u>35.9</u> Good place to raise children |
| ③ <u>4.3</u> Local recreation facilities | ⑧ <u>49.9</u> Safe and attractive living environment |
| ④ <u>22.8</u> Proximity to services/cultural/retail centers | ⑨ <u>39.0</u> Happened to find a home |
| ⑤ <u>37.9</u> Affordable cost of living | ⑩ <u>12.6</u> Other |

For Questions 5-12, CIRCLE THE NUMBER that best represents your opinion.

How satisfied are you with the availability and quality of these elements in your Township?

	<u>Very Satisfied</u>	<u>Satisfied</u>	<u>Dissatisfied</u>	<u>Very Dissatisfied</u>	<u>No Opinion</u>
5. Services - Township Provided					
a. Police Protection	22.7	59.1	7.6	3.8	5.1
b. Fire Protection	19.8	60.6	3.6	1.0	12.5
c. Emergency Medical	15.6	61.1	2.5	0.7	17.2
d. Snow Removal	27.5	56.8	8.7	3.7	2.1
e. Road Maintenance	19.3	62.3	9.9	4.1	2.1
f. Vehicle Traffic Management	9.4	55.4	16.4	7.3	8.1
g. Public Sewers	7.3	35.2	6.6	5.2	36.2
h. Public Water Supply	8.2	35.9	7.9	4.7	34.6
i. Trash Removal	15.1	52.5	9.1	4.8	13.9
j. Recycling	3.0	18.7	13.8	19.3	34.9
Recreation					
k. Parks	6.9	52.9	6.3	1.6	26.0
l. Playgrounds	6.2	47.7	6.1	1.7	32.5
m. Open Space/Passive Parks	6.7	47.2	7.8	2.5	29.0
n. Sports Programs	5.6	34.9	5.6	1.7	45.0
o. Swimming/Water Activities	2.5	21.4	11.3	6.0	51.4
p. Fitness Programs - Adult	1.7	21.3	8.6	2.4	56.8
q. Warm Weather Activities	2.2	34.2	6.3	1.7	48.3
r. Cold Weather Activities	1.4	24.3	9.2	2.0	54.8
s. Senior Citizen Activities	1.9	20.7	3.6	1.5	62.6
Township Management/Government					
t. Citizen Input to Community Decisions	3.6	47.3	13.8	5.3	23.7
u. Planning/Zoning/Subdivision & Land Development	3.6	34.7	24.7	9.4	21.6
v. Building Permits, Codes, Inspections	4.6	45.0	16.5	5.6	24.2
w. Boards/Committees	2.9	42.3	10.0	3.6	34.4

	<u>Very Satisfied</u>	<u>Satisfied</u>	<u>Dissatisfied</u>	<u>Very Dissatisfied</u>	<u>No Opinion</u>
6. Environmental Quality					
a. Air Quality	13.8	64.8	9.4	3.4	5.2
b. Water Quality	10.8	60.7	12.6	3.7	8.6
c. Open Space	14.1	65.8	7.6	2.8	5.0
d. General Township Appearance	12.1	72.1	7.1	1.9	2.7
7. Education Opportunities					
a. Public Schools	25.9	48.8	4.6	1.6	15.5
b. Technical/Vocational Training	15.2	39.8	2.2	0.6	35.7
c. Adult Career Development	10.0	34.3	3.7	0.6	43.6
d. Higher Education/College/University	8.7	31.5	5.1	0.7	44.9
e. Libraries	8.7	33.1	12.0	2.2	35.4
8. Employment Opportunities					
a. Industry/Manufacturing	5.1	47.6	6.6	1.9	31.4
b. Trucking/Transportation	7.9	42.6	7.9	6.2	28.0
c. Commercial/Retail Sales	5.6	45.4	11.6	2.7	27.4
d. Office & Professional Services	4.6	47.7	9.2	1.7	29.2
9. Shopping/Commercial Facilities					
a. Convenience Stores	13.8	66.5	9.7	2.8	3.2
b. Super Markets	14.3	53.5	16.5	4.1	7.3
c. Shopping Malls	8.9	41.4	23.2	9.9	11.8
d. Banks	11.8	61.2	12.8	2.6	7.7
e. Automotive Repair/Service	9.5	61.8	8.2	2.1	12.4
f. Fast Food	12.6	72.1	5.5	1.2	5.3
g. Movie Theaters	5.2	40.0	20.2	5.3	21.8
h. Restaurants	9.9	67.4	12.5	2.9	4.2
i. Lawn & Garden Centers	6.3	54.5	11.2	2.6	18.6
j. Laundry/Dry Cleaners	4.3	45.5	13.5	2.7	27.5
k. Alcoholic Beverage Retailers	5.9	38.0	11.3	4.6	32.5
l. Motels/Lodging	10.7	66.9	2.0	1.0	15.1
10. Medical/Dental/Social Services					
a. Medical Doctors	7.3	51.1	11.8	1.1	23.2
b. Dentists	6.2	47.5	11.8	1.1	27.0

	<u>Very Satisfied</u>	<u>Satisfied</u>	<u>Dissatisfied</u>	<u>Very Dissatisfied</u>	<u>No Opinion</u>
c. Psychological/Counseling Services	1.9	26.6	6.7	1.0	55.0
d. Nursing Homes	3.5	44.1	3.5	0.7	41.4
e. Emergency Medical Care	7.7	53.3	4.1	1.1	27.4
f. Prescription Drug Service	7.8	48.6	8.4	1.4	26.9
g. Retirement/Managed Care Facilities	2.5	32.1	4.8	1.6	50.2
11. Transportation Services					
a. Bus	1.1	18.0	13.8	6.4	52.0
b. Taxi	1.2	20.1	9.1	3.7	56.4
c. Light Rail	0.4	9.4	13.0	8.7	57.6
12. Public Utilities:					
a. Water	7.9	39.8	9.8	5.2	29.0
b. Natural Gas	9.8	33.6	5.5	4.6	38.3
c. Electric	18.2	70.9	2.9	0.6	4.2
d. Cable TV	10.3	53.4	12.9	6.2	13.5

13-16 Planning/Development/Growth Management

13. Where would you like to see future residential development encouraged to locate within the Township? (Please check one)

- ① 10.2 North of Route 11 ③ 23.0 Both north and south of Route 11
 ② 8.1 South of Route 11 ④ 50.4 Do not wish to see residential development encouraged

14. What types of housing you would like to see encouraged in Middlesex Twp. ? (Please check all that apply):

- ① 7.6 Mobile Homes ④ 73.7 Single-Family Detached Homes
 ② 8.1 Duplexes (Twins) ⑤ 5.7 Apartment Buildings
 ③ 16.5 Townhouses ⑥ 14.7 Other _____

15. What types of land uses would you like to see encouraged in Middlesex Twp.? (please check all that apply):

- ① 10.8 Commercial ③ 21.1 Office/Professional ⑤ 51.5 Residential ⑦ 5.1 Other _____
 ② 62.6 Agricultural ④ 5.7 Industrial ⑥ 47.1 Recreational

16. Highest priority should be given to addressing transportation/traffic problems at the following location(s):

- a. Miracle Mile/Rt. 11 28.7 b. Turkey Foot 19.3 c. Bernheisel Bridge Rd. 6.9

17. Planning Statements.

How do you feel about the following statements? (please circle one response per statement)

	<u>Strongly Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Strongly Disagree</u>	<u>No Opinion</u>
a. More farmland/open space should be preserved.	61.7	27.0	4.8	0.5	3.7
b. Agricultural lands in the Township should be preserved and farm activity encouraged.	58.9	30.5	5.0	0.7	2.6
c. Flood-prone areas need more protection.	24.5	42.5	10.7	1.4	16.2
d. Woodlands need more protection.	43.1	40.9	5.0	0.4	7.2
e. Scenic areas need more protection.	42.6	39.8	5.1	0.4	8.3
f. More historic areas should be preserved.	36.2	39.9	7.7	0.2	11.8
g. We need a greater diversity of housing types.	5.6	21.1	38.2	14.1	15.7
h. We need more heavy and light industry .	3.0	13.0	35.2	34.7	9.2
i. We need more trucking/warehousing/distribution centers .	1.4	4.8	25.0	60.1	5.7
j. We need more office/business parks .	3.1	26.4	32.3	25.5	9.1
k. Commercial development should be confined to the Route 11 corridor.	26.6	44.5	12.9	4.7	7.3
l. Small scale commercial development should be encouraged outside of the Route 11 corridor in closer proximity to residential development.	23.7	29.0	30.6	7.6	
m. Truck traffic is a problem along the Route 11 corridor.	41.9	32.2	15.6	2.2	5.1
n. Truck traffic is a problem elsewhere in the Township.	18.5	23.8	37.5	3.7	12.5
o. Peak hour traffic congestion is a problem along the Route 11 corridor.	30.0	41.0	15.9	1.7	8.2
p. Peak hour traffic congestion is a problem elsewhere in the Township.	12.9	30.0	35.3	3.4	14.7
q. The roadway system in the Township is adequate to serve current traffic levels.	2.5	47.0	32.1	8.8	6.1
r. Public transportation is currently meeting the needs of the Township.	1.5	20.7	25.7	11.4	36.4
s. Water and sewer service should be expanded into new areas to accommodate new growth or incorporate problem areas.	13.4	38.3	15.9	9.5	20.0
t. Stormwater management is sufficient in your area of the Township.	7.1	51.5	12.8	6.9	18.6
u. Township developments include sufficient open space .	6.2	41.0	20.3	5.9	21.8
v. Increase fees from developers for purchase of park lands/open space for development of recreational facilities.	22.8	35.6	14.1	3.6	20.0

18. Township Recreation Facilities

Circle the number that best describes how you feel about the number of facilities currently provided in Middlesex Township.

		<u>Not Enough</u>	<u>Enough</u>	<u>Too Many</u>	<u>Undecided</u>
a.	Community Parks	24.7	54.2	0.5	14.5
b.	Neighborhood Play Parks		31.2	43.6	0.2
c.	Open Space/Passive Recreation		30.0	45.0	0.6
d.	Trails-Hiking & Biking		31.0	47.1	0.6
e.	Indoor Recreation Facilities		27.9	40.5	0.7
f.	Arts and Crafts Facilities		22.9	35.7	1.0
g.	Basketball Courts	19.0	42.1	0.9	30.1
h.	Tennis Courts		22.6	37.7	0.7
i.	Football Fields		13.0	45.4	0.5
j.	Softball/Baseball Fields		10.3	57.9	2.9
k.	Soccer Fields		13.1	49.9	1.9
l.	Swimming/Water Activities		37.3	26.4	0.4
m.	Other _____		3.2	2.0	0.5
					7.9

19-20. Public Sewer and Water Service

19. Would you like your home connected to public sewer service?

24.7 Yes 33.7 No 38.3 I am already connected

20. Would you like your home connected to public water service?

20.6 Yes 34.6 No 41.6 I am already connected

21-22. Residence Tenure and Type

21. How many years have you lived in Middlesex Township? (Please check one)

① 23.4 less than 5 years ③ 16.1 11 to 15 years ⑤ 7.2 21 to 25 years
② 20.3 5 to 10 years ④ 7.4 16 to 20 years ⑥ 25.0 over 25 years

22. Please check the one choice listed below that best describes the residence in which you now live.

① 16.5 Mobile Home ⑤ 0.1 Apartment Building
② 0.1 Duplex (twin) ⑥ 0.4 Apartment in a Private Home
③ 0.4 Townhouse ⑦ 4.3 Other _____
④ 77.2 Single Family Detached Home

23. Your Age (please check one answer).

① 1.1 Under 26 ② 13.3 26-35 ③ 27.9 36-45 ④ 21.6 46-55 ⑤ 16.1 56-65 ⑥ 19.6 Over 65

24. Are there any children under 18 years of age living in your household?

37.1 Yes 61.6 No

25. Where do you live? (See the map below)

28.4 Area 1

41.6 Area 2

19.1 Area 3

8.9 Area 4

MIDDLESEX TOWNSHIP MAP

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Please put the completed survey forms inside the enclosed postage paid envelope and either drop-off or mail back to **Middlesex Township, 350 N. Middlesex Rd., Carlisle, PA 17013** within three weeks of receiving this survey.

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